ORANGE COAST COLLEGE
CATALOG
2018-2019

Revised November 19, 2018

ORANGE COAST COLLEGE

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 25,000 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 and Enrollment Center. OCC will finish construction on our Planetarium this year, a vital science center and extension of the College's commitment to STEM curriculum. This year OCC also will break ground on a new Student Union, a one-stop shop for students to have easy access to the resources they need including dining facilities, administrative offices, and more.

Our students 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. In addition to transfer degrees, the College also offers Associate 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 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 for more information or call us at (714) 432-5072 to speak with one of our staff members.

Orange Coast College

CATALOG

2018-2019

2701 Fairview Road
Costa Mesa, CA 92626

(714) 432-5072

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 and transform lives through education. It's a bold commitment that we're proud to make – and fulfill – to our students and community.

For nearly 70 years, OCC has been a gateway to the highest quality education in California. Our programs are developed to provide the skills, training and knowledge to help you succeed in any career 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 25,000 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. 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.

I pledge to you that the OCC faculty, staff and I 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.

Yours for a brighter future,

Dennis R. Harkins, Ph.D.

Contents

Fall 2018 Calendar

August 24, 2018..Semester Begins
September 3, 2018...HOLIDAY — Labor Day
September 10, 2018...Applications accepted for Spring 2019 Semester, including 2019 Winter Intersession
October 22, 2018...Beginning of second 8-week classes
November 12, 2018..HOLIDAY — Veterans' Day
November 22 – 23, 2018....................................HOLIDAY — Thanksgiving
December 14, 2018..Last day of Fall Semester
December 19, 2018 – January 1, 2019 ....Winter Break

Spring 2019 Calendar

January 2, 2019 ....First day of Winter Intersession
January 21, 2019 ....HOLIDAY — Martin Luther King Jr. Day
January 25, 2019 ....Last day of Winter Intersession
January 28, 2019 ....Semester Begins
February 15, 2019..HOLIDAY— Lincoln's Day
February 18, 2019..HOLIDAY— Washington's Day
February 21, 2019..Mandatory Flex Day
March 25 – 31, 2019..Spring Break
April 1, 2019 ....Beginning of Second 8-Week Classes
May 25, 2019...Last Day of Spring Semester
May 27, 2019...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 - 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

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

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

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

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

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

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 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/commed

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 www.orangecoastcollege.edu/about_occ/Documents/consumer-info-chart.pdf

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.

Non Credit Awards

- Certificate of Competency - This award confirms that a student enrolled in a noncredit program has demonstrated achievement in a set of competencies that prepares students to progress in a career path or to undertake degree-applicable and non-degree applicable credit courses.

- Certificate of Completion - This award confirms that a student has completed a noncredit program that prepares students to progress in a career path or to take degree-applicable courses.

For more information regarding noncredit, please visit 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. 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 infra-structure 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.

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:

1. 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.

2. 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.

3. 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.

4. 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

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) or by students taking the assessment tests in English and Math. For more information, please visit the OCC website at 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.

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 9th through 12th grade, and recommendation for advanced academic or vocational college-level study

Students enrolled as 9th through 12th 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 9th or 12th 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. This includes appropriate assessment scores on math and English placement tests. 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 International students should contact the Global Engagement Center regarding admission to the College at (714) 432-5940 or at occinternational@cccd.edu.

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.

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 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.

Math A030 – Intermediate Algebra: must be successfully completed with a grade of 'C' or better within a five year period of the application date to 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.

- 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

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 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

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 50% 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

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 occresidency@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

- Senate Bill 68 established a complex scheme for determining eligibility for the AB 540 exemption. Under Senate Bill 68, a student is exempt from paying nonresident tuition at the California Community Colleges if the student meets all of the following four requirements, as applicable:

- Non-Resident students who have completed credits earned in California from a California

High School equivalent to three or more years of full-time high school coursework to substitute for three years of high school attendance as long as the student attended a combination of elementary and/or secondary schools in California for a total of three or more years. (AB 2000) The intent of this exemption is to allow students who participate in accelerated learning programs and graduate early to be eligible for the nonresident tuition exemption. (AB 540)

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 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.

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. An application packet can also be downloaded by visiting the Global Engagement Center website at 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.

- Typed written statement (1-2 pages); applicants can discuss their academic goals, experiences and the reasons for their interest in OCC.

- Academic records: All evidence of academic records equivalent to high school graduation or higher, demonstrating successful academic achievement. The transcripts of the original records must be accompanied by a notarized English translation. 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. For applicants in the U.S., an equivalent placement on the OCC English Assessment Test (EAT) can be used to satisfy the English requirement. 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

- 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@cccd.edu, or visit the Global Engagement Center located in Legacy Hall.

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 Global Engagement Center website at orangecoastcollege.edu/global or call 714-432-5909.

Assessment and Placement Test Requirements

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.

Students, who recently (within the last 10 years) attended high school for three or more years, can receive placement into English and math courses based on the courses completed, their grades in those courses, and the cumulative, unweighted high school GPA. Some students may be placed directly in transfer-level English and mathematics courses. Those students, who do not receive placement into transfer level English and mathematic courses, may be directed to take the English and/or mathematics placement tests in order to improve their placement.

Students, who graduated high school more than 10 years ago or who do not have access to their high school transcript, must complete the Placement Form found on the Assessment Center website in order to initiate the assessment process.

Students may also receive placement into English and math courses via the following alternative methods:

- Early Assessment Program(EAP)/California Assessment of Student Performance and Progress (CAASPP)/Smarter Balanced Assessment Consortium (SBAC) results – high school students who received a "Ready"/ "Standard Exceeded" status for English and/ or Math.

- 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.

- Placement test results – students who have taken a placement test at OCC or another accredited

community college within the last two years (excludes ESL).

- Students who possess an associate degree may be exempt from placement testing. Students must provide official transcripts in order to verify satisfactory completion of college-level English and math coursework in order to be exempt from testing.

- Students who possess a bachelor's, master's, or doctoral degree can be exempt from placement testing. Students must provide official transcripts verifying the degree earned.

Students must wait four (4) months before re-taking the English or ESL test. Students must wait four (4) months before re-taking same level math test. Students are permitted to take a different level math test at any time. All test results are valid for two years from the original test date.

Students may not register in a course level higher than what is indicated on their placement results. OCC, in compliance with California Community College State Chancellor's Office regulations, has validated the assessment process used to place students and found it to correlate highly with a student's ability to perform at the level indicated. However, the College recognizes that, on occasion, the assessment process is not always the only indicator to determine a student's placement, and in some cases, other factors may need to be considered. Therefore, students may challenge their placement results for consideration of higher placement 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 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@cccd.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.

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.

Prerequisites and Co-requisites Clearance Process

OCC enforces prerequisites and co-requisites 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 going to the online class schedule and selecting the CRN number of the course.

- Students may be cleared in the registration system for enforced prerequisites and co-requisites in the following ways:

- Successfully completing the prerequisite/co-requisite at OCC.

- Placing into the course via the assessment process from a California Community College (if applicable).

- 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/co-requisite 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;

- $20 health service fee, $16 for summer sessions;

- $21 College Services Charge*, $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 $258 per unit and a Capital Outlay fee of $12 per unit in addition to the Resident fee of $46 per unit, for a grand total of $316 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 automatically will 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.

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.

STEP ONE: Go to MyCoast.cccd.edu
                      Enter your user name
(New users will receive their user name once their application has been processed.
Enter your password (Upper Case First Letter First Name, Lower Case First Letter Last Name followed by your Date of Birth in MMDDYY format, i.e. John Smith February 1, 1999 would be entered as Js020199).

STEP TWO: After logging in click on the Registration link on the left navigation bar.
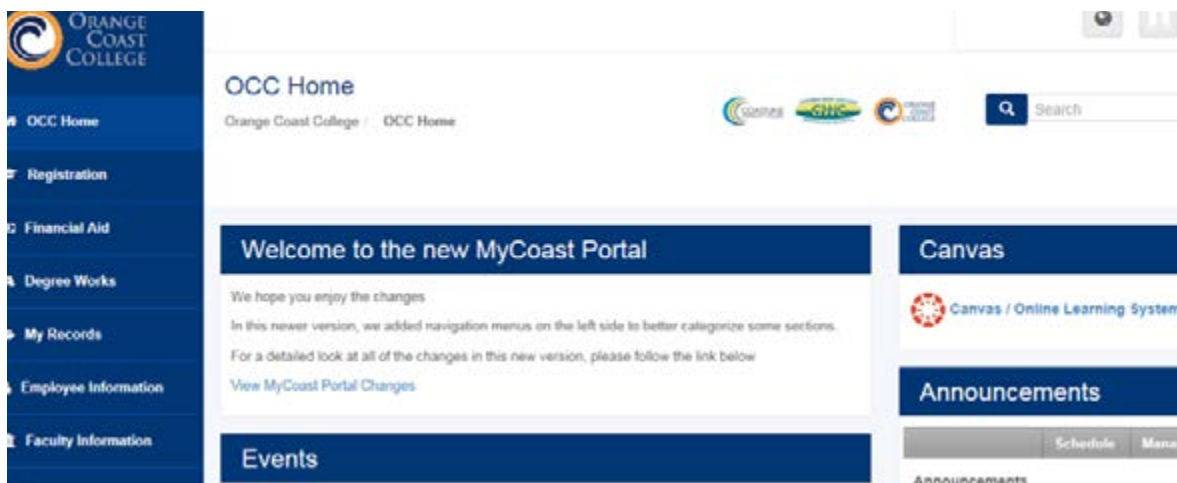
Under Registration Tools you may:
1. Click on "Registration Status" to view your registration appointment time, etc.
2. Under "Schedule Planner", you may use the planner tool to create your class schedule.
3. Click on "Add or Drop Classes" to enroll in classes.

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.

Memorable college experiences often include more than classroom instruction. These activities expand learning and living skills. To this end, student activities and co-curricular programs are an integral part of OCC. Examples of activities offered throughout the year are lecture series, awareness days, clubs, Coast Days, athletics, forensics, leadership opportunities and many more.

A current schedule of student activities is available at www.orangecoastcollege.edu/asocc and in the Associated Students Office.

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 Students' Center and complete a necessary medical verification form prior to participation. For more information, call (714) 432-5528 or email roconnor@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

Assessment Center

The Assessment Center, located on the first floor in Watson Hall, supports students through the assessment process by reviewing transcripts (high school and other college), administering placement tests in English, English as a Second Language (ESL), Math, Chemistry A180, and Spanish, and clearing of course prerequisites. In order to take a placement test, students need to have an OCC student ID number and display a photo ID. Placement testing is available on a walk-in basis during testing hours. For more information visit the Assessment Center's website at www.orangecoastcollege.edu/assessmentcenter or contact the Center at (714) 432-5789 or at 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 our many programs and become involved as a student leader. For more information, please stop by the ASOCC office located in the Student Center.

Jurisdiction of the ASOCC is established in the Coast Community College District's Board Policy 5400. 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

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

Software titles are available at 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

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. 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

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

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:

   a. Be 18 years of age or older
   b. Be a single parent and head of household of a child or children under 14 years of age
   c. 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

Counseling Services

Counseling appointments serve the needs of students seeking academic, career and/or personal 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. For further counseling information call (714) 432-5700.

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 information and assistance to students who are preparing to transfer to four-year colleges and universities. The Transfer Center provides information on transfer programs, general education requirements, and schedules appointments with representatives from four-year colleges and universities as well as offering assistance in the four-year campus application process. Applications for admission to CSU and UC schools are available at the Transfer Center. The Transfer Center also sponsors a "Transfer Day" in the fall and spring semesters with representatives on campus from more than 80 colleges and universities from both California and out-of-state. Transfer planning workshops are offered throughout the academic year. 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, or visit 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 Students 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 disabilities. Once a student has applied to DSPS online, and submitted their medical documentation, the next step is to request to meet with a DSPS Counselor. Conversations between the DSPS Counselor and student are confidential. During the Intake, 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 Education 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.

The DSPS Office is located in the Special Services Building. Check the OCC Disabled Students Programs and Services (DSPS) website for hours of operation.

For more information call (714) 432-5807 or email us at DisabledStudents@occ.cccd.edu

High Tech Center (HTC)

Students registered with Disabled Students' Program and Services (DSPS) are eligible to use the technology in the High Tech Center (HTC), located in the Special Services building. Both PC and Macs are available, as are various assistive hardware and software. At the Center, staff can train students with how to use the online course registration and fee payment system, as well as provide trainings on how to use unfamiliar assistive technology such as speech-to-text, text-to-speech, scanning, and other technology.

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

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. 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 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

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.

- For Direct Loans that originate after July 1, 2012, and prior to July 1, 2014, the borrower must pay interest that capitalizes during the grace period. (Grace period is a six month period of time after a student leaves college or drops below half-time enrollment.)

- 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.

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.

Full Time Student Success Grant (FTSSG)

The Full Time Student Success Grant (FTSSG) was created by California Senate Bill 93, the 2015 Budget Act, was signed by the Governor on June 24, 2015, and includes language initiating a new grant program for California Community College students. The program provides funding to the California Community College Chancellor's Office (CCCCO) to provide for supplemental grants (anticipated ongoing funding) to community college Cal Grant B recipients who have already received a full time Cal Grant B award payment. All 113 California Community Colleges are participating.

Eligibility requirements for the grant:

- California community college student who has received a Cal Grant B, and;

- Is a full-time student. Full time is defined as being in 12 or more units for a primary term.

- For the Coast Community College District, the student will have received a Cal Grant B and will need to be enrolled in 12 units for fall and spring.

Community College Completion Grant (CCCG)

The Community College Completion Grant (CCCG) is a grant that is given to eligible Cal Grant B and Cal Grant C students that have received a Full-time Students Success Grant (FTSSG) award for the same term.

The student must successfully complete a minimum of 15 units per term or be taking enough units to receive the FTTSG and complete their education program in the time frame set up in their Comprehensive Educational Plan. A minimum cumulative 2.0 GPA is required.

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 (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 or visit http://tinyurl.com/occguardianscholars.

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

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.

Contact Us

Please visit the Garrison Honors Center, visit our website at www.garrisonhonorscenter.edu, or call (714) 432-5601 for more information. Please refer to the Garrison Honors Center website for the most up-to-date news and policy information.

Honors Societies:

Alpha Beta Gamma

Orange Coast College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, refer to www.abg.org. For more information about OCC's chapter or for an application, please contact the Academic Honors Office on the fourth floor of Watson Hall, Room 433, call (714) 432-5601, or email abg@occ.cccd.edu

Alpha Gamma Sigma

Alpha Gamma Sigma is the California Community College Scholastic Honor Society, established in 1923. The Orange Coast College Chapter is "Alpha Kappa." Initial membership is granted to applicants who have met the minimum requirements. In order to receive graduation recognition and transcript notation, members must earn permanent status through membership renewals. For full details about membership requirements and benefits, as well as a current application, visit www.orangecoastcollege.edu/academics/AcademicHonorSocieties/alpha-gamma-sigma/Pages/default.aspx or email the chapter at ags@occ.cccd.edu

Mu Alpha Theta

Mu Alpha Theta is a national mathematics honor society for high school and community college students. The Orange Coast College chapter was established in 1971. Eligibility requires completion of at least 12 units of OCC coursework with a cumulative GPA of 3.25, as well as completion of qualifying mathematics courses (Math 157 and higher, excluding Math 160 and Math 220) with grades of A or B only. Candidates for membership will receive an email invitation, or may contact the Honors Office to obtain an application.

For more information, go to www.orangecoastcollege.edu/academics/AcademicHonorSocieties/Mu-Alpha-Theta/Pages/default.aspx or email the chapter at mat@occ.cccd.edu

Mu Delta Rho

Mu Delta Rho is the Pre-Health Honor Society of Orange Coast College. The organization's goals are to recognize the academic achievements of community college students preparing for a health profession, nurture and develop the qualities required to be a good health care practitioner, and encourage members in their pursuit of excellence, knowledge and beneficence. To be eligible for membership, students must submit an application; pay one-time dues; demonstrate qualities of character, citizenship and service (as evidenced by a letter of recommendation); hold a minimum cumulative GPA of 3.0; and have a

minimum GPA of 3.5 in the qualifying allied health or pre-health coursework listed below.

1. Qualifying Coursework for Allied Health Student Eligibility: Completion of 15 units or 50 percent (whichever is less) of required core coursework (prerequisite courses cannot count toward the 15 units) in an OCC Allied Health program. For a list of applicable core courses, refer to the specific allied health program requirements.

2. Qualifying Coursework for Pre-health Student Eligibility: Students preparing for baccalaureate or graduate level health professions must complete at least 15 units of approved prerequisite courses in biology, chemistry, mathematics, physics and other required disciplines.

For more information about Mu Delta Rho, including the application and list of qualifying courses, please refer to the Academic Honor Societies section of the OCC website.

Omega Psi Sigma

Omega Psi Sigma (Alpha Chapter) is the Orange Coast College Honor Society for Political Science. The goals of the society are to recognize academic achievement in political science coursework, to promote scholarly research and participation at academic conferences, to support student efforts for transfer into political science, pre-law and other majors at four-year institutions, and to provide opportunities for student engagement in political issues through raised awareness and experience. The chapter accepts new lifetime members during the spring and fall semesters, and requires a minimum 3.25 cumulative GPA as well as among political science courses. A one-time payment of dues must accompany the application (refundable if the application is not approved). Members in good standing are eligible to purchase and wear honors regalia at graduation.

For the most current information about complete membership eligibility criteria and activities, please visit the chapter website www.orangecoastcollege. edu/academics/AcademicHonorSocieties/omega_psi_ sigma/Pages/default.aspx

Phi Alpha Mu

Phi Alpha Mu was created in 1957 by the Orange Coast College Social and Behavioral Sciences faculty. It grew from a desire to recognize, honor, and encourage outstanding student achievement in OCC social and behavioral sciences courses. The name was derived from Thucydides who, in reporting the Funeral Oration of Pericles, described the Athenians as searching for "wisdom without loss of strength." The name, accordingly, is intended to signify an organic fusion of philosophy, anthropology, and other matters pertaining to the Muses. Thus, through these studies individuals can achieve "wisdom without loss of strength."

Phi Alpha Mu offers open membership enrollment to students during the first four weeks of the fall and spring semesters. Phi Alpha Mu membership benefits include the following:

1. Notation on student's OCC transcript;

2. Commencement regalia and recognition during graduation ceremonies;

3. Leadership, Service and Scholarship portfolio development;

4. Opportunity for club-active society members to compete for scholarship awards.

Qualifications for membership:

Freshman students must have completed a minimum of nine units in Social/Behavioral Sciences courses with a 3.50 grade point average or higher in these courses. In addition, the student's Orange Coast College overall grade point average must be at least 3.0.

Sophomore students must have completed a minimum of 12 units in Social/Behavioral Sciences courses with a 3.50 grade point average or higher in these courses. In addition, the student's Orange Coast College overall grade point average must be at least 3.0.

Qualifying courses include:

American Studies, Anthropology, Economics, Ethnic Studies, Gender Studies, Geography, History, Humanities, Philosophy, Political Science, Psychology, Religious Studies, and Sociology.

Honor Society Membership Dues:

Beginning Fall 2010, lifetime membership dues ($5) must be attached to completed applications in the form of a check or money order made out to the OCC Foundation.

Note: Current enrollment in courses does not count toward qualification. Only OCC courses with grades that are listed and highlighted on the transcripts will be considered.

Phi Theta Kappa

Phi Theta Kappa is the only internationally acclaimed academic honor society serving two-year institutions. The American Association of Community Colleges recognizes Phi Theta Kappa as the official honor society for two-year colleges. The Orange Coast College Chapter is Beta Mu Alpha.

You may be eligible for membership if you meet the following minimum requirements:

1. Twelve (12) semester units of associate degree level coursework.

2. Cumulative GPA of 3.50

3. After acceptance, members must maintain a cumulative GPA of 3.25 or above.

Membership is not automatic. Students will be invited to join following the end of each semester, or may request an application if they feel they meet all the qualification criteria. Applications are submitted to the Academic Honors Office with one-time dues. Acceptance enrolls the student in PTK international, regional and local chapters.

For more information, go to www.orangecoastcollege. edu/academics/AcademicHonorSocieties/ PhiThetaKappa/Pages/default.aspx or email the chapter at ptk@occ.cccd.edu

Psi Beta

Psi Beta is the national honor society for psychology in community and junior colleges.

The purpose of the society is to stimulate, encourage and recognize students' outstanding scholarship and interest in psychology.

Psi Beta offers the experience of leadership, interaction with faculty outside the classroom, participation in community service, and meeting others with the same interests. It offers the opportunity to participate in national, regional and local programs.

Students must have completed at least 12 semester hours, three of which must be in psychology. The student's overall GPA must be 3.0 or better; plus a grade of "B" or better must be received in psychology classes.

There is a one-time national registration fee of $50, which includes a certificate and lapel pin.

Housing

The Global Engagement Center is responsible for housing information for the campus. A current listing of housing options can be found on the Enrollment Center website at www.orangecoastcollege.edu/ enrollment/Pages/Housing-Information.aspx

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.

International ID

The Global Engagement Center is listed as an issuing office for International ID Cards. The Center issues the International Teacher Identity Cards (ITIC),

the International Student ID Cards (ISIC), and the International Youth Travel Cards (IYTC). These cards provide access to special discounts and benefits while traveling internationally. For pricing information and eligibility requirements, contact the Global Engagement Center at (714) 432-5940.

The Learning Center

The Learning Center provides basic skills instruction in reading, writing, spelling, and arithmetic for students with learning disabilities. In addition to basic skills, the program provides English and math tutoring and support services such as test accommodations, note taking, registration assistance, and alternate media for students enrolled in general academic courses. The Center's staff evaluates the learning difficulties of each student and then develops a program which includes a number of teaching techniques and materials. A student may earn 1 to 3 units of credit each semester by enrolling in LRNG 001AD. The Learning Center's phone number is (714) 432-5535 and is located in the Special Services Building.

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

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.

Pirates' Cove

The Pirate's Cove Food Pantry & Resources Hub is designed to meet the immediate needs of OCC students facing food insecurity and lacking resources to fulfill essential needs. Students can access non-perishable and fresh food, linkages to community resources, housing referrals, and assistance with essential needs. Pirates' Cove is located in Journalism 108 and can be reached at (714) 432-6892 and piratescove@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 newspapers, magazines, pamphlets, office paper, computer 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, or call (714) 432-5645.

Student Health Center

The Orange Coast College Student Health Center is open to all OCC students, regardless of whether they have health insurance. 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.

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.

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. OCC's Student Equity Program was created to address gaps in achievement for students with the greatest needs. Through this program the College ensures that, regardless of background, students are supported with the resources and services needed to achieve their educational outcomes, including textbooks, materials, and equipment necessary for success. For more information contact (714) 432-6847.

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. The Student Success Center is located in C&L 103.

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.

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

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.

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 www.orangecoastcollege.edu/student_services/counseling/Pages/umoja.aspx

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

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.

Realizing that veterans are positioned in a unique situation, we strive to help them make the transition from the military to college as easy as possible. The Veterans Resource Center (VRC), provides information on campus-based and external resources available to all veterans.

Some of the on-campus services include, health services, tutoring and direct access to the OCC Veterans Club Association. In addition, the Veterans Resource Center provides information and connections with the local VA office and other community organizations that provide supplemental assistance to Veterans. Interested students should visit the VRC, located in the Student Center, or visit the website at http://www.orangecoastcollege.edu/student_services/veterans/campus-resources.

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.

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/campus-resources

- 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/students/not-using-benefits/.

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.

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 www.rehab.cahwnet.gov

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.

Attendance

In accordance with Distrct 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.

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 use or 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 30-31 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 28 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 33 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 lease 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

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

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 — http://apcentral.collegeboard.com/home

CSU Systemwide Credit for External Examinations Policy — http://www.calstate.edu/AcadAff/codedMemos/AA-2015-19.pdf

2018 IGETC Standards, Policies, and Procedures — http://icas-ca.org/Websites/icasca/images/IGETC%20Standards%20version%201.8%20final%20version.doc.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				*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 & Cultures	N/A / N/A / 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	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
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	Fren A185 / 5 units / Area C1 (AA) / C2 (AS)	C2, 3 semester units	6	3B & 6A, 3 semester units	5.3
French Literature	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 Cultures	N/A / 5 units / Area C1 (AA) / C2 (AS)	C2, 3 semester units	6	3B & 6A, 3 semester units	5.3
Japanese Language and Cultures	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
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

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
AP Economics Exam Limitations*					
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	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	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	Hist A61 & A162 / 6 units / Area D1 (AA) / C2 or D (AS)	C2 or D6, 3 semester units	6	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 grated 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

COLLEGE LEVEL EXAMINATION PROGRAM

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: http://www.calstate.edu/AcadAff/codedMemos/asa-2018-06-attachment-2.pdf

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

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: http://www.calstate.edu/AcadAff/codedMemos/asa-2018-06-attachment-3.pdf

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 3 units	B2 3 units	6	5B (without lab) 3 units	5.3
CHEMISTRY HL	B 3 units	B1 3 units	6	5A (without lab) 3 units	5.3
ECONOMICS HL	D2/D 3 units	D2 3 units	6	4B 3 units	5.3
GEOGRAPHY HL	D2/D 3 units	D5 3 units	6	4E 3 units	5.3
HISTORY (any region) HL	D2/C2 or D 3 units	C2 or D6 3 units	6	3B or 4F 3 units	5.3
LANGUAGE A1 (any language, except English) HL	C1/C2 3 units	N/A	0	3B & 6A (UC only) 3 units	5.3
LANGUAGE A2 (any language, except English) HL	C1/C2 3 units	N/A	0	3B & 6A (UC only) 3 units	5.3
LANGUAGE A1 (any language) HL	C1/C2 3 units	C2* 3 units	6*	3B 3 units	5.3
LANGUAGE A2 (any language) HL	C1/C2 3 units	C2* 3 units	6*	3B 3 units	5.3
LANGUAGE B (any language) HL	C1/C2 3 units	N/A	6*	6A 3 units	5.3
MATHEMATICS HL	A2 3 units	B4* 3 units	6*	2A 3 units	5.3
PHYSICS HL	B 3 units	B1 3 units	6	5A (without lab) 3 units	5.3
PSYCHOLOGY HL	D 3 units	D9 3 units	3	4I 3 units	5.3
THEATRE HL	C 3 units	C1* 3 units	6*	3A 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.

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.

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.

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.

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.

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 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

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 Withdrawl	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 Withdrawl
MW	Military Withdrawal
I-IB, IC, ID, IF, INP	Incomplete
IP	In Progress
RD	Report Delayed

Grade Changes

Petitions to request 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 semester in which the course in question was taken. 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 and recorded as an IB, IC, ID, IF, or INP depending on what 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).

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.

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 (view Board of Trustees – Board Policies).

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.

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.

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.

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.

Chình Sách Bất Kỳ Thị

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 30 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.

Academic Probation

The student has attempted at least 12 semester units at a District college and

1. has a grade point average of less than 2.0 in the most recent semester completed; or

2. has a cumulative grade point average of less than 2.0 in all units attempted.

Progress Probation

The student has attempted at least 12 semester units at a district college and the percentage of units in which the student has been enrolled for which entries of "W," "I," and "NP" are recorded reaches or exceeds 50 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 sub-standard 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 ("IB," "IC," "ID," "IF," or "INP") 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, A 171, 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 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

For more information, please visit the California Community College State Chancellor's Office Complaint Form site at 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 www.orangecoastcollege.edu/student_services/sexual-misconduct

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)

Half-time — A student carrying 6 to 11.99 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 Code of Conduct

Students enrolled at Orange Coast College assume an obligation to conduct themselves in accordance with the laws of the State of California, 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. Being under the influence of drugs and/or alcohol or the existence of other mental impairment does not diminish or excuse a violation of the Code of Conduct.

- Academic misconduct
- Alcohol
- Assault/battery
- Bias
- Continued misconduct or repeat violation
- Dating violence

- Destruction of property
- Discrimination
- Dishonesty
- Disorderly or lewd conduct
- Disruption of educational process
- Disruptive behavior
- Disturbing the peace
- Drugs
- Endangering welfare of others
- Failure to appear
- Failure to comply or identify
- Failure to obtain permits
- Failure to repay debts or return District property
- False report of emergency
- Fighting
- Forgery
- Fraud
- Gambling
- Harassment/bullying
- Hateful behavior
- Hazing
- Infliction of mental harm
- Library materials (defacing, theft, etc.)
- Misrepresentation
- Misuse of identification
- Physical abuse
- Possession of stolen property
- Possession of weapons
- Public intoxication
- Serious injury or death
- Sexual harassment
- Sexual misconduct
- Smoking
- Stalking
- Theft or abuse of District computers or electronic resources
- Theft or conversion of property
- Threat of sexual assault or sexual assault
- Trespass and unauthorized possession
- Unauthorized tape recording
- Unauthorized use of course or copyrighted materials
- Unauthorized use of District keys
- Unauthorized use of electronic devices
- Unauthorized use of property or services
- Unreasonable demands
- Violation of computer usage policy

- Violation of driving regulations
- Violation of health and safety regulations
- Violation of law
- Violation of posted district rules

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.

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).

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.

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. Please note that OCC does not offer same day transcript service.

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 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.

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 24-25 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:** Place at the Math A100 level (or higher) on the math placement test administered by the OCC Assessment Center or successfully complete (grade of "C" or better or "pass") one of the following: Psychology A160, or any math course except Math A005, Math A008, Math A010, Math A020, and Math A220. Electronics Technology A047, Machine Technology A121, or Technology A040 will not fulfill this requirement.

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. For details on each general education pattern, see pages 39-45.

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 pages 42-45 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.

1. **Certificate of Achievement:** Requires 18 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.

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 received 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.

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.

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

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.

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.

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 2018-2019: Option 1

(Orange Coast College General Education)

Orange Coast College grants the degree of Associate in Science. Orange. 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 36-37. 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
   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

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 A150, 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

   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

Associate in Arts General Education 2018-2019: 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 40-41. 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
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
Digital Media Arts and Design A150
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 2018-2019: 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 2018 THROUGH SUMMER 2019.

For courses taken prior to Fall 2018, 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, A120, A130, A185, A280, A285

B2 Life 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
Ecology A100, 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, 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
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, A114, A115, A120, A125, A141, A142, A145, A147, A150, A263, A269
Dance A200, A230
Digital Media Arts and Design A150, 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, 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, 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, A110, A150, 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, 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, A105, A110, A150, A185 or A185H, A190, 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 A113

Economics A110

Emergency Medical Services A100

Family & Consumer Science A180

Food & Nutrition A136, A140, A170

Health Education A100, A112, A122, A136, A270, A271

Human Development A180

Kinesiology A202, A270, A271

Psychology A105, A110, A130, A140, A165, A200, A215

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, A158, A159, A171, A172, A173, A174, A201, A202, A203, A208, A211, A212, A223, A243, A244, A245, A246, A250, A253, A254, A255, A256

Kinesiology A105, A106, A107, A108, A110, A111, A112, A113, A115, A116, A126, A127, A128, A129, A130, A131, A132, A137, A138, A139, A140, A141, A145, A146, A147, A150, A151, A152, A153, A154, A155, A156, A157, A170, A171, A172, A173, A174, A175, A176, A207, A208, A211, A212, A215, A228, A231, A232 A232, A241, A246, A247, A251, A252, A253, A254, A271, A282

Marine Activities A136, A137, A138, A139, A140

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 2018-2019: 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 2018 THROUGH SUMMER 2019**. For courses taken prior to Fall 2018, 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 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 or A160H, A170, A180 or A180H, A182H, A185 or A185H, A230, A235, A260, 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
Digital Media Arts and Design A150
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, 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, A110, A150, 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, 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, A190

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, <u>A100 & A100L</u> or <u>A100H & A100M</u>, A101, A102, A103
Chemistry A100, <u>A110</u>, <u>A130</u>, <u>A180</u>, <u>A185</u>, A220, <u>A220L</u>, A225, <u>A225L</u>
Geography A180 or A180H, <u>A180 & A180L</u> or <u>A180H & A180L</u>
Geology A105 or A105H, <u>A105 & A105L</u> or <u>A105H & A105M</u> or <u>A105 & A105M</u> or <u>A105H & A105L</u>, A110, <u>A160</u>, A185, <u>A185 & A185L</u>
Marine Science A185, <u>A185 & A185L</u>
Physics A110, <u>A110 & A111</u>, <u>A120</u>, <u>A130</u>, <u>A185</u>, <u>A280</u>, <u>A285</u>
Group 5B: Biological Science
Anthropology A185 or A185H, <u>A185 & A185L</u>
Biology <u>A100</u>, <u>A100H</u>, A101, A115, A125, <u>A180</u>, A182, <u>A182 & A182L</u>, A183, <u>A183 & A183L</u>, <u>A185</u>, <u>A210</u>, <u>A220</u>, <u>A221</u>, <u>A225,</u> A283
Ecology A100, A101
Marine Science A100 or A100H, <u>A100 & A100L</u> or <u>A100H & A100M</u> or <u>A100 & A100M</u> or <u>A100H & A100L</u>, A180, <u>A180 & A180L</u>
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)
A. 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**

B. Complete Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Vietnamese A180 or Spanish A160 and A180. Advanced courses will validate this requirement, **OR**

C. 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).

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.

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.

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 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

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

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 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 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

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 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 to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Dance

For UC, see 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 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 to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Film

For UC, see 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 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 Science 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 to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Kinesiology

For UC, see 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 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 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 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 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.

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.

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.

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.

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.

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Accounting (Business and Computing Division)							
Accounting		✓		✓			63
Entry-Level Accounting	✓						63
Business Taxation Competency	✓						63
Cost Accounting Competency	✓						64
Financial Accounting Competency	✓						64
Governmental Accounting Competency	✓						64
Individual Taxation Competency	✓						64
Non-Profit Accounting Competency	✓						64
Payroll Accounting Competency	✓						64-65
Airline Travel Careers — See Hospitality, Travel & Tourism							
Anthropology (Social and Behavioral Sciences Division)							
Anthropology			✓		✓		65-66
Architectural Technology (Technology Division)							
Architecture				✓			66
Architectural Design 1		✓		✓			66-67
Architectural Design 2		✓		✓			67
Design/Build		✓					67
Digital Fabrication for Architecture		✓					68
Environmental Resource Management	✓						68
Integrated Project Design		✓					68
Sustainable Design		✓					68
Art (Visual and Performing Arts Division)							
Art History					✓		68-69
Art Services	✓						69
Ceramics	✓						70
Narrative Illustration		✓		✓			70
Studio Arts					✓		71
Astronomy (Math and Science Division)							
Astronomy				✓			71-72
Athletics (Kinesiology and Athletics Division)							
Athletics		✓					72-73
Aviation Maintenance Technology (Technology Division)							
Avionics	✓						73
Helicopter Theory and Maintenance	✓						74
Airframe		✓		✓			74
Airframe and Powerplant		✓		✓			74-75
Powerplant		✓		✓			75
Aviation Science (Technology Division)							
Aviation Science		✓		✓			75-77
Airline Transport Pilot	✓						77
Commercial Pilot	✓						77
Flight Operations	✓						77
Instrument Pilot	✓						77-78
Private Pilot	✓						78
Unmanned Aircraft Systems	✓						78
Biology (Math and Sciences Division)							
Biology				✓		✓	78-79

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Business (Business and Computing Division)							
Business Administration		✓		✓		✓	79-80
Entrepreneurship	✓						80
Finance	✓						80-81
Not for Profit Management	✓						81
Cardiovascular Technology (Consumer and Health Sciences Division)							
Electrocardiography Technician		✓					81-82
Echocardiography and Vascular Ultrasound				✓			82
Chemistry (Math and Sciences Division)							
Chemistry				✓			82
Communications Studies (Literature and Languages Division)							
Communication Studies					✓		82-83
Mass Communications / Media Studies			✓				83
Computer Information Systems (Business and Computing Division)							
Business Application Development		✓		✓			83-84
Business Information Worker	✓						84
Computer Information Systems		✓		✓			84-85
Computer Programming		✓		✓			85
C++ Programming	✓						85
Java Programming	✓						85
Python Programming	✓						86
Web Design	✓						86
Unmanned Aircraft Systems ▬See Aviation Science							
Information and Communications Technologies							
Enterprise Routing	✓						86
Network Administration and Operations	✓						86
Network Administration - Linux	✓						86
Network Administration - Windows	✓						87
Network Infrastructure	✓						87
Network Professional	✓						87
Network Security	✓						87
Network Services and Applications	✓						87
Network Technician	✓						87
Virtualization and Cloud Computing	✓						88
Computer Science (Business and Computing Division)							
Computer Science						✓	88
Construction Technology (Technology Division)							
Carpentry	✓						88
Concrete and Masonry	✓						88-89
Fine Woodworking	✓						89
Plumbing	✓						89
Residential Electrical	✓						89
Construction Technology		✓		✓			89
Master Construction Specialist		✓		✓			90
Residential Construction Development First Award		✓		✓			90
Residential Construction Development Second Award		✓					90-91
Residential Construction Development Third Award		✓					91
Culinary Arts (Consumer and Health Sciences Division)							
Baking and Pastry - Basic	✓						91
Advanced Baking and Pastry		✓		✓			92
Culinary Arts - Basic		✓					92

Orange Coast College

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Advanced Culinary Arts		✓		✓			92-93
Culinology® & Food Science (Consumer and Health Sciences Division)							
Culinary Food Science Assistant - Level I		✓					93
Culinology® - Level II Professional Level				✓			93-94
Dance (Visual and Performing Arts Division)							
Pilates Instructor		✓					94
Dance Instructor		✓		✓			94-95
World Dance		✓	✓				95-96
Dance			✓				96
Dental Assisting, Registered (Consumer and Health Sciences Division)							
Dental Assisting, Registered		✓		✓			97
Diagnostic Medical Sonography (Consumer and Health Sciences Division)							
Diagnostic Medical Sonography				✓			97-98
Dietetics — See Nutrition and Dietetics							
Digital Media Arts and Design (Visual and Performing Arts Division)							
Graphic Design		✓		✓			98-99
UX Design		✓		✓			99
Economics (Behavioral and Social Sciences Division)							
Economics					✓		100
Display and Visual Presentation — See Fashion							
Education (Consumer and Health Sciences Division)							
Early Childhood Education						✓	100-101
Infant and Toddler Teacher		✓		✓			101
Preschool Teacher		✓		✓			102
Early Childhood Administration		✓		✓			102
Elementary Teacher Education					✓		102-103
Electronics Technology (Technology Division)							
Electro-Mechanical Technician	✓						103
Electronic Reliability Technician		✓					104
Electronics Engineering Technician		✓		✓			104
Industrial Automation Technician		✓		✓			104
Emergency Medical Services (Consumer and Health Sciences Division)							
Emergency Medical Services	✓						105
Engineering (Math and Sciences Division)							
Engineering				✓			105-106
English Department (Literature and Languages Division)							
English			✓		✓		106-107
Fashion (Consumer and Health Sciences Division)							
Industrial Sewing	✓						107
Apparel Construction		✓	✓				107-108
Design		✓	✓				108
Display and Visual Presentation		✓	✓				108-109
Fashion Merchandising		✓	✓				109
Production/Product Development		✓	✓				109
Film & Television (Visual and Performing Arts Division)							
Film & Television		✓	✓				110
Film, Television, & Electronic Media						✓	110-111
Media Arts and Creative Entertainment		✓					111
Fitness Specialist — See Kinesiology							
Food Science — See Culinology®							

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Food Service Management Commercial (Consumer and Health Sciences Division)							
Catering		✓					111-112
Quick Service	✓						112
Restaurant Supervision		✓					112
Restaurant				✓			112-113
Food Service Management Institutional (Consumer and Health Sciences Division)							
Dietetic Service Supervisor		✓					113
Dietetic Service Manager		✓					113
Foreign Languages (Literature and Languages Division)							
Foreign Language			✓				113-114
Spanish					✓		114-115
General Education Transfer Certificates — Refer to the Graduation Requirements section of this catalog							
Certificate of Achievement — CSU General Education		✓					45-46
Certificate of Achievement — IGETC		✓					47-48
Geography (Social and Behavioral Sciences Division)							
Geography			✓		✓		115
Geology (Math and Sciences Division)							
Earth Science				✓			115-116
Geology						✓	116-117
Global Studies (Social and Behavioral Sciences Division)							
Global Studies					✓		117
Health Education - See Public Health							
Heating, Ventilation, Air Conditioning & Refrigeration (Technology Division)							
HVACR Technology		✓		✓			118
History (Social and Behavioral Sciences Division)							
History					✓		118-119
Horticulture (Math and Science Division)							
Landscape Site Design Elements	✓						119
Basic Landscape Design	✓						119
Intermediate Landscape Design and Landscape Specialist	✓						119
Advanced Landscape Design and Landscape Specialist	✓						119-120
The Professional Practice A Lanscape Design & Constuction Busines	✓						120
Retrofitting California Urban Gardens	✓						120
Horticulture		✓		✓			120-121
Hospitality, Travel, and Tourism (Consumer and Health Sciences Division)							
Airline Travel Management		✓					121-122
Flight Attendant and Airline Travel Careers		✓		✓			122
Front Office Specialist		✓					122-123
Hotel Management				✓			123
Human Resource Management		✓		✓			123
Meeting and Event Management		✓		✓			124
Sales and Marketing Specialist		✓		✓			124
Spa Management		✓		✓			124-125
Travel Specialist		✓		✓			125
Interior Design (Consumer and Health Sciences Division)							
Interior Merchandising — Level 1		✓					126
Interior Design Assistant — Level 2				✓			126
Interior Design — Professional Level 3		✓					126-127
Kitchen & Bath — Advanced	✓						127
Journalism (Literature and Languages Division)							
Journalism			✓		✓		127-128

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Kinesiology (Kinesiology and Athletics Division)							
Yoga Instructor Training	✓						128
Athletics Training Level 1		✓					128-129
Fitness Specialist		✓		✓			129
Kinesiology					✓		129-130
Leadership Stuides							
Leadership Studies	✓						130
Liberal Arts							
Liberal Arts			✓				130-131
Management (Business and Computing Division)							
Management Institute	✓						131
Management and Leadership Studies		✓		✓			131-132
Retail		✓		✓			132
Manufacturing Technology (Technology Division)							
CNC Operator	✓						132
CNC Programmer	✓						132-133
Machinist		✓		✓			133
CNC Machine Operator		✓		✓			133
CNC Machine Programmer		✓		✓			133-134
Tooling		✓		✓			134
Marine Science (Math and Sciences Division)							
Marine Science				✓			134-135
Marketing (Business and Computing Division)							
Advertising	✓						135
Entry Level Marketing	✓						135
General Marketing		✓		✓			135
International Business	✓	✓		✓			136
Sales	✓						136
Math (Math and Sciences Division)							
Math						✓	136-137
Medical Assisting (Consumer and Health Sciences Division)							
CCMA Eligible Program		✓		✓			137
Music (Visual and Performing Arts Division)							
Business Employee		✓	✓				137-138
MIDI Applications		✓	✓				138
Music			✓		✓		138-139
Musical Entertainer—Instrumental		✓	✓				139-140
Musical Entertainer—Vocal		✓	✓				140
Studio Guitar Performer		✓	✓				140-141
Natural Science (Math and Sciences Division)							
Natural Science				✓			141
Neurodiagnostic Technology (Consumer and Health Sciences Division)							
Neurodiagnostic Technology	✓			✓			141-142
Nutrition and Dietetics (Consumer and Health Sciences Division)							
Nutrition and Dietetics Technician				✓			142-143
Nutrition and Dietetics						✓	143
Nutrition Education		✓		✓			144
Nutrition and Fitness Education		✓					144
Philosophy (Social and Behavioral Sciences Division)							
Philosophy					✓		145
Photography (Visual and Performing Arts Division)							
Photography — Still		✓		✓			145-146
Photography Digital Technician		✓					146

Degree & Certificate Programs	Certificate of Specialization	Certificate of Achievement	AA Degree Major	AS Degree Major	AA-T Degree Major	AS-T Degree Major	Page #
Digital SLR Photography & Videography		✓					146
Physics (Math and Sciences Division)							
Physics						✓	147
Political Science (Social and Behavioral Sciences Division)							
Political Science					✓		147
Polysomnographic Technology (Consumer and Health Sciences Division)							
Polysomnographic Technology				✓			147-148
Professional Mariner (Consumer and Health Sciences Division)							
Professional Mariner		✓		✓			148-149
Psychology (Social and Behavioral Sciences Division)							
Psychology					✓		149-150
Public Health (Kinesiology and Athletics Division)							
Public Health			✓				150
Public Health Science						✓	150-151
Radiologic Technology — Diagnostic (Consumer and Health Sciences Division)							
Radiologic Technology — Diagnostic				✓			151-152
Real Estate (Business and Computing Division)							
Broker		✓		✓			152
Salesperson	✓						153
Religious Studies (Social and Behavioral Sciences Division)							
Religious Studies	✓		✓				153
Respiratory Care (Consumer and Health Sciences Division)							
Respiratory Care				✓			154-155
Sociology (Social and Behavioral Sciences Division)							
Sociology					✓		155
Speech-Language Pathology Assistant (Consumer and Health Sciences Division)							
Speech Language Pathology Assistant				✓			156
Theatre Arts (Visual and Performing Arts Division)							
Theatre Arts			✓		✓		156-157
Media Arts and Creative Entertainment — See Film & Television							
Welding Technology (Technology Division)							
Welding Technology		✓		✓			158
Basic Welding (SMAW) Skill Certificate	✓						159
Intermediate Welding (SMAW) Skill Certificate	✓						159
Advanced Welding (SMAW)	✓						159
Advanced 1 Welding (FCAW)	✓						159
Advanced 2 Welding (FCAW)	✓						159
Gas Metal Arc Welding (GMAW)	✓						160
Gas Tungsten Arc Welding (GTAW)	✓						160
Orbital	✓						160
Pipe	✓						160

Degree & Certificate Programs	Certificate of Completion	Certificate of Competency	Page #
NONCREDIT CERTIFICATES			
Allied Health (Consumer and Health Sciences Division)			
Personal Care Aide	✓		161
Consumer Studies			
Retail Employment	✓		161
English Language Learning (Literature and Language Divison)			
Grammar Review		✓	161
Language Transition to College		✓	161
Multi-skills English		✓	162
Oral Communication		✓	162
Workplace English		✓	162
Kinesiology (Kinesiology and Athletics Division)			
Lifeguard Training, Professional Rescue	✓		162
Yoga Instuctor Training	✓		162-163
Math (Math and Sciences Division)			
Math Skills Development		✓	163
Tutoring (Library and Learning Division)			
Tutoring Skills and Strategies	✓		163

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
FIRST SEMESTER			
Financial Accounting	ACCT	A101	4
Introduction to Business / Honors	BUS	A100 / A100H	3
Introduction to Computer Information Systems	CIS	A111	3
		Subtotal	**10**
SECOND SEMESTER			
Managerial Accounting	ACCT	A102	4
Accounting with Quickbooks and Excel	ACCT	A110	3
		Subtotal	**7**
THIRD SEMESTER			
Intermediate Accounting 1	ACCT	A212	3
Business Communication	BUS	A139	3
		Subtotal	**6**
FOURTH SEMESTER			
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
		Subtotal	**12**
		Total Units	**35**

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
Human Relations and Supervision	MGMT	A115	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
		Total Units	**11**

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
		Total Units	**14**

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
Total Units			**14**

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
Total Units			**17**

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
Total Units			**17**

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
Total Units			**14**

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
Total Units			**14**

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.

Program Outcome

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
Total Units			**14**

ANTHROPOLOGY

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.

ANTHROPOLOGY

ASSOCIATE IN ARTS DEGREE

Program Outcome

1. Gain an understanding of and an appreciation for human diversity across time and space.

Course			Units
Core Courses - Complete ten (10) units from the following:			
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

	Units
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
Core Courses:			
Cultural Anthropology / Honors	ANTH	A100 / A100H	3
Physical Anthropology	ANTH	A185/A185H	3
Introduction to Archaeology	ANTH	A280	3
Subtotal			**9**
LIST A - Select three to five (3-5) units from the following:			
Physical Anthropology Lab	ANTH	A185L	1
Introduction to Linguistics	ANTH	A190	3
Intro to Statistics / Stats for Behavioral Sciences	MATH/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 And	GEOL	A105 / A105H	3
*General Geology Laboratory / Honors	GEOL	A105L / A105M	1
Environmental Geology	GEOL	A160	4
*Evolution of the Earth And	GEOL	A185	3
*Evolution of the Earth Lab	GEOL	A185L	1
Introduction to Experimental Methods Or	PSYC	A280	4
Introduction to Research Methods	SOC	A200	3
Subtotal			**3-5**

Continued on next page

ANTHROPOLOGY AA-T DEGREE (CONTINUED)

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
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

Subtotal	**3**
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**

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	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**

Course			Units
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 Restricted Electives:

Introduction to Environmental Sustainability	ARCH	A101	1
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
Design/Build 2 for Architecture	ARCH	A202	4

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.

Architectural Design Suggested Electives:

Land and Building Development	ARCH/CNST	A225	3
Building Codes and Standards	ARCH	A250	2
History of Architecture 1	ARCH	A290	3
History of Architecture 2	ARCH	A296	3
Freehand Drawing	ART	A120	3

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

		Subtotal	19

Course			Units
FALL			
Environmental Design Systems	ARCH	A185	4
Architectural Drawing and Design Theory 2	ARCH	A215	4
Architectural Design Restricted Elective(s)	ARCH	(see list)	2
		Subtotal	10
SPRING			
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
		Subtotal	11
		Total Units	40

Architectural Design Restricted Electives:

Introduction to Environmental Sustainability	ARCH	A101	1
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
Design/Build 2 for Architecture	ARCH	A202	4

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 Suggested Electives:

Land and Building Development	ARCH/CNST	A225	3
Building Codes and Standards	ARCH	A250	2
History of Architecture 1	ARCH	A290	3
History of Architecture 2	ARCH	A296	3
Freehand Drawing	ART	A120	3

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.

Course			Units
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 Or	CNST	A116	4
Construction Safety/CAL OSHA	CNST	A165	3
		Total Units	15-16

DIGITAL FABRICATION FOR ARCHITECTURE

CERTIFICATE OF ACHIEVEMENT

Program Outcome

1. 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
Total Units			**12**

ENVIRONMENTAL RESOURCE MANAGEMENT

CERTIFICATE OF SPECIALIZATION

Program Outcome

1. 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
Total Units			**11.5 - 12.5**

INTEGRATED PROJECT DESIGN

CERTIFICATE OF ACHIEVEMENT

Program Outcome

1. 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
Subtotal			**8**

Select one (1) course from the following:

Design/Build 2 for Architecture	ARCH	A202	4
Design/Build 3 Architecture	ARCH	A203	4
Subtotal			**4**
Total Units			**12**

SUSTAINABLE DESIGN

CERTIFICATE OF ACHIEVEMENT

Program Outcome

1. 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			**12**

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

1. Read,write, interpret and understand the major movements and concepts in art history.

2. Conduct original research in the history of art.

3. Understand the significance and application of art historical styles, Cultures, artist and relevant vocabulary in art and design.

4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Course			Units
Core Courses:			
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 and 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
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
FIRST SEMESTER			
Color and Design: Two-Dimensional	ART	A110	3
Exhibition Design 1	ART	A145	3
	Subtotal		**6**
SECOND SEMESTER			
Color and Design: Three-Dimensional	ART	A111	3
Exhibition Design 2	ART	A245	3
	Subtotal		**6**
THIRD SEMESTER			
Contemporary Art History	ART	A102	3
Professional Studies	ART	A180	2.5
	Subtotal		**5.5**
	Total Units		**17.5**

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
FIRST SEMESTER			
Ceramics 1	ART	A150	3
	Subtotal		3
SECOND SEMESTER			
Ceramics 2	ART	A151	3
World History of Ceramics	ART	A148	3
	Subtotal		6
THIRD SEMESTER			
Intermediate Ceramic Design	ART	A152	3
	Subtotal		3
FOURTH SEMESTER			
Ceramics and Its Narrative	ART	A153	3
	Subtotal		3
	Total Units		15

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 publications, editorial illustration and corporate brochures. The emphasis is on hand made creations that can stand on their own but also be adapted to electronic media.

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 skill development in drawing, perspective, and various paint mediums.

3. Create a portfolio utilizing multiple design techniques for the purpose of gaining employment and/or acceptance to an art college or university for advanced learning.

Course			Units
FIRST SEMESTER			
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
	Subtotal		11-12
SECOND SEMESTER			
Life Drawing 1	ART	A121	3
Perspective Drawing	ART	A125	3
Story Illustration Techniques	ART	A143	3
Illustration & Computer Graphics 1 with Adobe Illustrator	DMAD	A190	3
	Subtotal		12
THIRD SEMESTER			
Drawing 2	ART	A124	3
Painting 1	ART	A130	3
Figure Composition	ART	A220	3
Narrative Illustration Restricted Electives	(see list)		2-3
	Subtotal		11-12
FOURTH SEMESTER			
Illustration 2 - Sequential Illustration	ART	A144	3
Professional Studies	ART	A180	2.5
Narrative Illustration Restricted Electives	(see list)		3-4
	Subtotal		8.5-9.5
	Total Units		42.5-45.5

First Semester Narrative Illustration Restricted Electives:

Survey of Modern and Contemporary Art	ART	A102	3
Color and Design Three-Dimensional	ART	A111	3
Life Sculpture 1	ART	A142	3
Screen Process Printing	ART	A175	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

Third/Fourth Semester Narrative Illustration Restricted Electives:

Product Illustration	ART	A118	2
Life Painting 1	ART	A236	3
Printmaking 1	ART	A170	3
Watercolor 1	ART	A263	3
Cartooning 1	ART	A269	3
Rapid Illustration Techniques	DMAD	A117	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
Core Courses:			
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
		Subtotal	**12**
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
		Subtotal	**3**
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
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
	Subtotal		**9-10**
	Program Major Units		**24-25**
	CSU or IGETC for CSU		**37-39**
Transferable electives as needed to satisfy unit requirement			**Varies**
	Total Degree Units		**60**

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 A122 (Programming Concepts/Method 1), Math A185/A185H (Calculus 2), Math A280/A280H (Calculus 3), Math A285/A285H (Linear Algebra and Differential Equations), Physics A280 (Calculus-Based Electricity and Magnetism), and Physics A285 (Calculus-Based Modern Physics).

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
Astronomy Required Courses:			
Introduction to Astronomy / Honors	ASTR	A100 / A100H	3
Introduction to Astronomy Laboratory / Honors	ASTR	A100L / A100M	1
Introduction to Astrophysics	ASTR	A200	3
	Subtotal		**7**
Astronomy Electives - Complete one (1) of the following courses:			
Planetary Astronomy	ASTR	A101	3
Stellar Astronomy	ASTR	A102	3
Cosmology	ASTR	A103	3
	Subtotal		**3**

ASTRONOMY AS DEGREE (CONTINUED)

Math Required Courses - Complete three (3) of the following courses:

Calculus 1 / Honors Or	MATH	A180 / A180H	3
Calculus 1 and 2 Honors	MATH	A182H	4
Introduction to Statistics	MATH	A160	4
Calculus-Based Physics: Mechanics / Honors	PHYS	A185 / A185H	4

Subtotal	**12-13**

Program Major Units	**22-23**

AS General Education Option 1, 2, or 3	**Varies**

Transferable electives as needed to satisfy unit requirement	**Varies**

Total Degree Units	**60**

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
Intercollegiate Athletics Courses - Select three (3) units:			
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 Or	ECOL	A100	3
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 and Appreciation of Cinema	FILM	A100	3
Introduction to Radio, TV and Film	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	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	3
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.

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
FALL			
General Electricity	AMT	A151	3
Aircraft Avionics Circuits	AMT	A182	4
G.R.O.L. Avionics Rules & Regulations	AMT	A188	1.5
		Subtotal	**8.5**
SPRING			
Airframe Communication & Navigation Systems	AMT	A181	2
Airframe & Powerplant Instrument	AMT	A180	2.5
Avionics Installations and Troubleshooting	AMT	A184	4
		Subtotal	**8.5**
		Total Units	**17**

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
FALL			
Theory and Operations	AMT	A140	3
Helicopter Maintenance	AMT	A290	4
		Total Units	**7**

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
FALL			
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
		Subtotal	**15**

Course			Units
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
FALL			
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
		Subtotal	**15**

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.

Course			Units
FALL			
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
	Subtotal		**15**
SPRING			
Airframe & Powerplant Instrument	AMT	A180	2.5
General Blueprint Reading and Drafting	AMT	A155	2
	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 Sys	AMT	A172	4
Powerplant Gas Turbine Engines	AMT	A173	6
	Subtotal		**12.5**
	Total Units		**42**

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
Subtotal			**17**

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
Subtotal			**9**

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
Subtotal			**6**
Total Units			**32**

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.

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
	Total Units		**9**

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
	Total Units		**12**

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
	Total Units		**17**

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 (CONTINUED)

Course			Units
Aviation Navigation	APT	A132	3
Instrument Pilot Aviation Ground School	APT	A134	3
	Total Units		**6**

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

1. 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
	Total Units		**8**

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

1. 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
	Total Units		**14**

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

1. Use the scientific method to design, carry out, summarize & 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, and nutrient flow through an ecosystem).

3. Describe the variations observed in organisms and explain how populations have evolved through time.

Course			Units
Core Courses - List A - Select one option from the following (9-12 units):			
Option 1			
Cell and Molecular Biology	BIOL	A180	4
Diversity of Organisms	BIOL	A185	5
Option 2			
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**
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
Required Core:			
Cell and Molecular Biology	BIOL	A180	4
Diversity of Organisms	BIOL	A185	5
	Subtotal		**9**
List A:			
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
	Subtotal		**22**
	Program Major Units		**31**

CSU General Education Breadth or IGETC for CSU	**37-39**
Transferable electives as needed to satisfy unit requirement	**Varies**
Total Degree Units	**60**

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

BUSINESS ADMINISTRATION CERTIFICATE OF ACHIEVEMENT (CONTINUED)

Course			
Intro to Statistics / Stats for Behavioral Sciences	MATH/PSYC	A160	4
Business Calculus Or	MATH	A140	4
Calculus 1 / Honors Or	MATH	A180 / A180H	4
Honors Calculus 1 and 2	MATH	A182H	5
Total Units			**34-35**

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

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. Demonstrate effective written and/or oral skills.

3. 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
Subtotal			**17**

LIST A - Select one course from the following:

Business Calculus	MATH	A140	4
Finite Mathematics	MATH	A155	4
Statistics	MATH	A160	4
Subtotal			**4**

LIST B - Select two courses from the following:

Introduction to Business / Honors Or	BUS	A100 / A100H	3
Business Communication	BUS	A139	3
Introduction to Computer Information Systems	CIS	A111	3
Subtotal			**6**
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 purse various entrepreneurial interests.

Program Outcomes

1. Function effectively in an entrepreneurial venture and in a supporting role to an entrepreneur.

2. 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.

3. Determine the viability and net cash flows of a small business venture.

Course			Units
Introduction to Entrepreneurship	BUS	A240	3
Introduction to Marketing Or	MKTG	A100	3
Social Media for Business	BUS	A101	3
Professional Selling Or	MKTG	A110	3
Principles of Advertising	MKTG	A130	3
Total Units			**9**

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	ACCT	A101	4
Or			
Managerial Accounting	ACCT	A102	4
Introduction to Business	BUS	A100	3
Or			
Business Law	BUS	A110	3
Business Finance	BUS	A200	3
	Total Units		**10**

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
	Total Units		**9**

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.

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
Introduction to Electrocardiography	CVT	A100	2
Adv Electrocardiography	CVT	A150	2
Cardiac Anatomy & Pathophysiology	CVT	A160	3
	Subtotal		**9.5**

ELECTROCARDIOGRAPHY TECHNICIAN CERTIFICATE OF ACHIEVEMENT (CONTINUED)

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
		Subtotal	**13**
		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
		Subtotal	**12.5**
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
Core Courses:			
Public Speaking	CMST	A110	3
Interpersonal Communication	CMST	A100	3
Essentials of Argumentation	CMST	A220	3
Subtotal			**9**
List A - Complete six (6) units from the following:			
Readers Theatre & Oral Interpretation	CMST	A120	3
Forensics Workshop	CMST	A150	3
Intercultural Communication	CMST	A155	3
Introduction to Mass Communications	CMST	A180	3
Subtotal			**6**
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
Subtotal			**3**
Total Major Units			**18**
CSU or IGETC for CSU			**37-39**
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
Core Courses:			
Introduction to Mass Communications	CMST	A180	3
Media Literacy	CMST	A240	3
News Writing and Reporting	JOUR	A110	3
Subtotal			**9**
Restricted Electives - Complete three (3) courses from the following:			
Public Relations	BUS/CMST	A185	3
Film as Literature / Honors	ENGL	A148 / A148H	3
Newspaper Production Level 1	JOUR	A115	4
Multi-Media Reporting and Producing	JOUR	A116	3
Photojournalism	JOUR	A185	3
Principles of Advertising	MKTG	A130	3
Introduction to Photography / Honors	PHOT	A120 / A120H	3
Or			
Introduction to Digital Photography	PHOT	A123	3
Subtotal			**9-10**
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**

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 APPLICATION DEVELOPMENT

CERTIFICATE OF ACHIEVEMENT

Designed to provide a good foundation for students who are interested in developing computer applications. Students may choose courses in a number of areas to develop a general understanding of the field or they may choose to study a particular specialization or two in greater depth. In today's dynamic and changing technological environment, continuous professional upgrading is a requirement.

Continued on next page

BUSINESS APPLICATION DEVELOPMENT CERTIFICATE OF ACHIEVEMENT (CONTINUED)

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
Introduction to Computer Info Systems	CIS	A111	3
Introduction to C# .NET Programming*	CS	A140	4
Or			
Introduction to VB .NET Programming*	CS	A142	4
Or			
Java Programming 1*	CS	A170	4
Finite Math with Applications	MATH	A155	4
Or			
Calculus 1 / Honors	MATH	A180 / A180H	4
Or			
Business Calculus	MATH	A140	4
		Subtotal	**15**

Specialized Application Development Electives (see list)		**18**
	Total Units	**33**

*Courses may not be used to satisfy both the core requirement and the specialization requirement.

Specialized Application Development Electives - Complete 18 units from the following list of courses. All courses do not need to be taken from the same area.

Introductory Programming Area:

Course			Units
Introduction to C# .NET Programming*	CS	A140	4
Introduction to VB .NET Programming*	CS	A142	4
Java Programming 1*	CS	A170	4

Technical Programming Area:

Course			Units
C++ Programming 1	CS	A150	4
Data Structures	CS	A200	4
Computer Architecture	CS	A216	4
C++ Programming 2	CS	A250	4
Java Programming 2	CS	A272	4
Mobile Application Development in Android	CS	A273	4

Web Development Area:

Course			Units
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
Digital Photo Premiere	CIS	A232	3

Networking Environment/Information Technology Area:

Course			Units
Introduction to Linux: LPI Certification	IT	A106	3
PC Concepts A+Cert Prep	IT	A110	4
Database Design and Data Warehousing	IT	A176	4
Business Intelligence and Data Mining	IT	A177	4
Network and Communication Technologies	IT	A191	4
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

Database Area:

Course			Units
SQL Tuning Workshop	CIS	A178	2
PL/SQL 2	CIS	A179	2
Introduction to Database Concepts	CIS	A182	4
Oracle SQL Programming	CIS	A183	4
Oracle PL/SQL Programming	CIS	A184	3
Oracle Forms & Reports Developer	CIS	A185	4
Oracle Database Administration 1	CIS	A187	4
Oracle Database Administration 2	CIS	A188	3

ASSOCIATE IN SCIENCE DEGREE

Complete the Business Application Development Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

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
	Total Units		**16.5**

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
Java Programming 1	CS	A170	4
Introduction to C# .NET Programming	CS	A140	4
OR			
Introduction to VB .NET Programming	CS	A142	4
Microeconomics	ECON	A170	3
Macroeconomics	ECON	A175	3
Business Calculus	MATH	A140	4
Or			
Calculus 1	MATH	A180	4

Total Units   **32**

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.

COMPUTER PROGRAMMING

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
Data Structures	CS	A200	4
Computer Architecture	CS	A216	4
Software Engineering	CS	A220	4
C++ Programming 2	CS	A250	4
Boolean Algebra & Logic	CS	A257	3
Discrete Structures	CS	A262	3
Calculus 1 Honors	MATH	A180H	4
Or			
Calculus 1 and 2 Honors	MATH	A182H	5
Or			
Calculus 2	MATH	A185	4

Total Units   **34-35**

ASSOCIATE IN SCIENCE DEGREE

Complete the Computer Programming 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

Total Units   **12**

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
	Total Units		**8**

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
Complete five (5) courses from this list:			
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
	Total Units		**10-11**

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
	Total Units		**9**

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
Select one (1) course from the following:			
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
	Total Units		**15-16**

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
	Total Units		**6**

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
Total Units			**17**

NETWORK INFRASTRUCTURE

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
Total Units			**12**

NETWORK PROFESSIONAL

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
Total Units			**17**

NETWORK SECURITY

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
Total Units			**6**

NETWORK SERVICES AND APPLICATIONS

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
Total Units			**9**

NETWORK TECHNICIAN

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
Total Units			**8**

VIRTUALIZATION AND CLOUD COMPUTING

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. 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
		Total Units	**12**

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**

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
		Total Units	**10**

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
	Total Units		**13**

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
Required Courses - eight (8) units from the following:			
Cabinet Making Or	CNST	A114	4
Furniture Making and Design	CNST	A116	4
Steel String Guitar Making & Design	CNST	A126	4
	Subtotal		**8**
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
	Subtotal		**9**
	Total Units		**17**

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
	Total Units		**12**

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 Or	KIN	A203	2
Emergency Medical Responder Or	EMS	A100	4
Current CPR Certification			0
	Total Units		**12 - 16**

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
	Total Units		**25**

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
Core Courses:			
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	CNST	A265	4
Or			
Plumbing 2	CNST	A266	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
Required for First Certificate:			
Construction Safety/CAL-OSHA	CNST	A165	3
Building Code and Law	CNST	A195	3
		Subtotal	**6**

Select twelve (12) units from the following list (no course may be applied to more than one certificate):

Course			Units
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
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
Construction Supervision and Project Management	CNST	A250	3
Business Law for Contractors	CNST	A252	1.5
Masonry Construction	CNST	A260	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.

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
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
Construction Supervision and Project Management	CNST	A250	3
Business Law for Contractors	CNST	A252	1.5
Masonry Construction	CNST	A260	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
Total Units			**18**

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.

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

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
Construction Supervision and Project Management	CNST	A250	3
Business Law for Contractors	CNST	A252	1.5
Masonry Construction	CNST	A260	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
Total Units			**18**

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
Subtotal			**3**

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
Subtotal			**8-9**
SPRING			
Principles of Baking 2	CA	A126	2
Subtotal			**2**
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

1.   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
FALL SEMESTER			
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 & Safety	FSM	A160	3
	Subtotal		13-14
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
	Subtotal		13
FALL SEMESTER			
Principles of Pastry Arts	CA	A226	3
Directed Practice	CA	A237	2
Food Production Management	FSM	A151	2
Menu Planning and Purchasing	FSM	A250	3
Supervision and Training Techniques	FSM	A260	3
	Subtotal		13
	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

1.   Students will be prepared for entry-level employment in a commercial kitchen.

Course			Units
FIRST SEMESTER			
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
	Subtotal		15
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
	Subtotal		12-15
	Total Units		27-30

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

1.   Students will be prepared for employment as professional and competent culinarians.

Required Prerequisites:

Culinary Arts (BASIC) Certificate of Achievement

	Subtotal		27-31

Course			Units
FALL			
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
	Subtotal		13

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
		Subtotal	**11**
		Total Units	**51-55**

Advanced Culinary 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

		Subtotal	**7**

Course			Units
FIRST SEMESTER			
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
		Subtotal	**13**
SECOND SEMESTER			
Pantry	CA	A149	2
Preparatory General Chemistry	CHEM	A130	4
Cultural Foods	FN	A185	2
Directed Practice Culinology/Food Science	FN	A286	2
		Subtotal	**10**
		Total Units	**30**

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

		Subtotal	**30**

Course			Units
FIRST SEMESTER			
Culinary Principles 2	CA	A122	3
General Chemistry A	CHEM	A180	5
Menu Planning and Purchasing	FSM	A250	3
Trigonometry	MATH	A120	3
		Subtotal	**14**

Continued on next page

LEVEL 2 CULINOLOGY® - PROFESSIONAL LEVEL AS DEGREE (CONTINUED)

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
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

Subtotal	**15.5**

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**

Pilates/Dance Conditioning Instructor Suggested Electives:

Anatomy-Physiology	BIOL	A221	4
Dance Profession Seminar	DANC	A205	2
Dance Methodology	DANC	A210	3
Fitness and Health	KIN	A270	3
Movement Analysis	KIN	A272	3
Strength and Conditioning Theory	KIN	A280	3

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
Kinesiology for Dance	DANC	A119	3
Pilates Apparatus/Mat Work Level 1 Or	DANC	A152	2
Pilates Apparatus/Mat Work Level 2	DANC	A153	2
Dance Improvisation 1 Or	DANC	A150	1
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
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 Education	HLED	A100	3
Fitness and Health	HLED	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
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
	Subtotal		**16-19**

Select three (3) units:

Rehearsal & Performance 1	DANC	A201	1
And			
Repertoire 1	DANC	A211	2
Or			
Performing Dance Ensemble 1	DANC	A203	3
	Subtotal		**3**

Select six (6) units of dance technique from at least two (2) different styles:

Course	Dept	Num	Units
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
Required Courses:			
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

	Subtotal	**14**

Restricted Electives - Select at least four (4) units from the following courses:

Course	Dept	Num	Units
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
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

1. 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
FALL			
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

DIAGONOSTIC MEDICAL SONOGRAPHY

ASSOCIATE IN SCIENCE DEGREE

Diagnostic Medical Sonography is a medical imaging modality using high frequency sound to create images of specific areas of the body from 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. This is a 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.

ALH A120 Human Diseases may be taken prior to program start.

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

1. 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

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 courses provide broad-based entry level training for a variety of industries. Students are introduced to a broad range of media, including 2-D and 3-D design, animation, illustration, painting, 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.

Along with the required courses, it is strongly encouraged that students participate in an Internship and enroll in DMAD A202 in your third or fourth semester.

Program Outcomes

1. Demonstrate skill in design utilizing industry standard graphics software.

2. Demonstrate techniques in digital lettering and typography.

3. Prepare digital files for printing.

4. Create a portfolio utilizing a variety of design techniques for the purpose of gaining employment and/or acceptance to an art college or university.

Course			Units
FIRST SEMESTER			
Color and Design: Two-Dimensional	ART	A110	3
Beginning Drawing / Honors	ART	A120 / A120H	3
History of Graphic Design	DMAD	A151	3
Introduction to Computer Graphics	DMAD	A181	3
		Subtotal	**12**
SECOND SEMESTER			
Typography 1	DMAD	A115	3
Rapid Illustration Techniques	DMAD	A117	3
Illustration and Graphics with Illustrator	DMAD	A190	3
Image Manipulation and Graphics with Photoshop	DMAD	A193	3
		Subtotal	**12**
THIRD SEMESTER			
Typography 2	DMAD	A116	3
Graphic Design	DMAD	A182	3
		Subtotal	**6**

FOURTH SEMESTER

Professional Studies	ART	A180	2.5
Designing for Print	DMAD	A183	3
Designing for the Web	DMAD	A200	3

Subtotal	**8.5**

Total Units	**38.5**

Graphic Design Suggested Electives:

Color and Design: Three-Dimensional	ART	A111	3
Application of Color Theory	ART	A112	3
Product Illustration 1	ART	A118	2
Life Drawing	ART	A121	3
Painting 1	ART	A130	3
Story Illustration Techniques	ART	A143	3
Printmaking 1	ART	A170	3
Cartooning 1	ART	A269	3
Introduction to Business	BUS	A100	3
Introduction to Entrepreneurship	BUS	A240	3
Introduction to Web Page Design	CIS	A123	2
Introduction to Dreamweaver	CIS	A128	2
Web Page Design 2	CIS	A129	2
Introduction to JavaScript	CIS	A171	2
Internship	DMAD	A202	2
3-D Computer Graphics Animation	DMAD	A281	3
Video Workshop	FILM	A110	3
Digital Film and Video Editing	FILM	A194	3
Introduction to Humanities	HUM	A100	3
Principles of Advertising	MKTG	A130	3
Introduction to Photography / Honors	PHOT	A120 / A120H	3
Introduction to Digital Photography	PHOT	A123	3
Art Photography	PHOT	A283	4

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 has two pathways and is designed to prepare the student for an entry level position in UX and web design or the animation design industry. Students will gain the knowledge and skills needed to create original digital art used to integrate research, psychology, text, images, animation, video, and other content into effective web designs, interface designs, or 2D and 3D animations.

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 design principle for the web and animation, but also know how to collaborate with fellow designers, stakeholders, clients.

Along with the required courses, it is strongly encouraged that students participate in an Internship and enroll in DMAD A202 in your third or fourth semester. Additionally, the department strongly recommends that students complete PSYC A100 and MATH or PSYC A160 in their elective coursework, all of which fulfill general education requirements.

Program Outcomes

1. Demonstrate skill in design utilizing industry standard UX, web, and animation design software.

2. Design and create website and mobile application projects and prototypes, that demonstrate knowledge of design for different screens, user interface design, and best practices in typography, design and navigation.

3. Demonstrate proficiency in the basic skills of digital animation.

Courses			Units

FIRST SEMESTER

Color and Design: Two-Dimensional	ART	A110	3
Beginning Drawing / Honors	ART	A120 / A120H	3
History of Graphic Design	DMAD	A151	3
Introduction to Computer Graphics	DMAD	A181	3

Subtotal	**12**

SECOND SEMESTER

Typography 1	DMAD	A115	3
Rapid Illustration Techniques	DMAD	A117	3
Illustration and Graphics with Illustrator	DMAD	A190	3
Image Manipulation and Graphics with Photoshop	DMAD	A193	3

Subtotal	**12**

Third and Fourth Semester Coursework will vary depending on whether students are in the UX & Web Design or Animation Track

THIRD SEMESTER - UX & Web Design Track

Graphic Design	DMAD	A182	3
Motion Graphics & Video Compositing w/After Effects	DMAD	A263	3

Subtotal	**6**

FOURTH - UX & Web Design Track

Professional Studies	ART	A180	2.5
Designing for the Web	DMAD	A200	3
Interaction Design	DMAD	A203	3

Subtotal	**8.5**

THIRD SEMESTER - Animation Track

Graphic Design	DMAD	A182	3
3D Computer Graphics Animation	DMAD	A281	3

Subtotal	**6**

FOURTH SEMESTER - Animation Track

Professional Studies	ART	A180	2.5
Motion Graphics & Video Compositing w/After Effects	DMAD	A263	3
2D Animation	DMAD	A280	3

Subtotal	**8.5**

Total Units	**38.5**

UX & Web Design Suggested Electives:

Introduction to Web Page Design	CIS	A123	2
Introduction to Dreamweaver	CIS	A128	2
Web Page Design 2	CIS	A129	2
Typography 2	DMAD	A116	3
Internship	DMAD	A202	2
Intro to Statistics / Statistics for Behavioral Sciences	MATH/PSYC	A160	4
Introduction to Psychology	PSYC	A100	3

Animation Suggested Electives:

Color and Design: Three-Dimensional	ART	A111	3
Life Drawing	ART	A121	3
Story Illustration Techniques	ART	A143	3
Typography 2	DMAD	A116	3
Internship	DMAD	A202	2
Digital Film and Video Editing 1	FILM	A194	3
Story Development and Production	FILM	A240	3
Fundamentals of Music	MUS	A115	3
Recording Techniques	MUS	A261	2
Art Photography	PHOT	A283	4

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 mehods to be eligible for admission (SB 1440 and Education Code 66746) to California State University system schools with similar degrees.

Course			Units
Core Courses:			
Microeconomics	ECON	A170	3
Macroeconomics	ECON	A175	3
Intro to Statistics / Statistics for Behavioral Sciences	MATH/PSYC	A160	4
Business Calculus Or	MATH	A140	4
Calculus 1 / Honors	MATH	A180 / A180H	4
	Subtotal		**14**
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
	Subtotal		**3-4**
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
	Subtotal		**3**
	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 Or	EC	A126	3
Health, Safety, and Nutrition	EC	A127	3
Language Arts for Children Or	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

Subtotal	**32**

Select one (1) course from the following:

Course			Units
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

Subtotal	**0.5-2**

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.

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

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 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
	Subtotal		**32**

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
	Subtotal		**3**

Select two (2) courses from the following:

Current Issues in Early Childhood	EC	A199	0.5-2
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
Adult Supervision in Early Childhood Programs	EC	A277	2
	Subtotal		**1-2.5**
	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

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 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
	Subtotal		**14-15**

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
	Subtotal		**1.5**
	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

1. 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 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
	Subtotal		**48**

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
	Subtotal		**3**

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
	Subtotal		**3**
	Program Major Units		**54**
	CSU or IGETC for CSU		**37-41**
Transferable electives as needed to satisfy unit requirement			**Varies**
	Total Degree Units		**60**

ELECTRONICS TECHNOLOGY

The Electronics Engineering Technology Program at Orange Coast College prepares students for employment and career advancement in the diverse fields and industries that apply electrical and electronic technologies.

The program trains students from a broad range of skill levels. Some of these students will embark on career paths; others will earn career advancement skills. Students enrolled in the program include: High School juniors, seniors and graduates, post-secondary re-entry, assemblers and operators seeking a Certificate of Achievement, technicians earning an Associates of Science degree, Technologist, Engineers, Scientist and project management professionals. Because of the pervasive nature of electronics in our society students seeking or with earned Baccalaureate, Graduate and Post-Doctoral degrees take the courses in the Electronics Technology program for career enhancement.

The EET student that earns a certificate of achievement inculcates life-long learning as a necessary career skill. Therefore, the EET program at OCC encourages all students to earn an Associate in Science degree and or transfer to the four year universities for advanced degrees. The EET graduate is prepared to confidently take third-party certification exams recognized nationally and globally by diverse industry sectors, including but not limited to:

1. CompTia, Certified A+ Technician
2. International Society for Automation, Certified Control Systems Technician
3. ETA-International, Certified Electronics Technicians
4. ETA-I, Biomedical Electronics Technician – BMD
5. FCC, General Radio Operators License

ELECTRO-MECHANICAL TECHNICIAN

CERTIFICATE OF SPECIALIZATION

This Certificate reviews mathematics, arithmetic through trigonometry, in a conceptual, tactile, manner that, helps the student realize the real–world, workplace, value of developing these skills. Training is: interactive, project-based, hands-on, and in a contextual environment that emulates real-world experience

Program Outcomes

1. Inculcates the desire to study Science, Technology, Engineering and Mathematics (STEM) related courses.

2. Empowers the student by developing time management and study skills that increase productivity both on campus and in the workplace.

3. Develop the fundamentals skills for electro-mechanical production technicians: mechanics, electronic assembly, and computer skills.

4. Prepare the student to take the CompTIA A+ Computer Technician certification exam.

Course			Units
Electronic Problem Solving	ELEC	A047	3
Or			
College Algebra	MATH	A115	4
Or			
Trigonometry	MATH	A120	3
Robotics 1 - Mechanics and Design	ELEC	A101	4
Computer Hardware Configuration and Diagnostics	ELEC	A146	3
Safety, Assembly, and Calibration	ELEC	A170	1
	Total Units		**11-12**

ELECTRONICS RELIABILITY TECHNICIAN

CERTIFICATE OF ACHIEVEMENT

The Electronics Reliability Technician Certificate of Achievement prepares students for entry-level employment by developing the fundamentals skills for a technician's knowledge base: electricity, electronics, computer hardware, mechanics, robotics, assembly and test instruments. Training is: interactive, project based, hands on, and in a contextual environment that emulates real world experience.

Program Outcome

1. Develop the fundamental skills for a technician's knowledge base: electricity, electronics, computer hardware, mechanics, robotics, assembly and test instruments.

Required Prerequisites:

Electro-Mechanical Technician Certificate of Specialization

		Subtotal	11-12

Course			Units
D.C. Circuits	ELEC	A150	3
Electronics Laboratory 2	ELEC	A172	1
Robotics 2 - Motors, Transports, and Motor Control	ELEC	A201	4
Server Hardware and Industrial Networks	ELEC	A246	3
		Subtotal	11
		Total Units	22-23

ELECTRONICS ENGINEERING TECHNICIAN

CERTIFICATE OF ACHIEVEMENT

This option prepares the student to perform level 3 technician diagnostics: troubleshooting and repair at level 1 (systems), level 2 (sub assembly), and level 3 (component). Students completing this course of study will be prepared to be successful in any electronic related field. Upon completion the student is encouraged to take the CET (Certified Electronics Technician) exam administered by a third-party agency well recognized by the electronics industry.

Program Outcomes

1. To prepare students for any electronics engineering-related field.

2. To prepare students to take the CET (Certified Electronics Technician) exam.

Required Prerequisites:

Electronics Reliability Certificate of Achievement

		Subtotal	22-23

Course			Units
Symbolic Logic with Digital Applications	ELEC	A135	4
A.C. Circuits	ELEC	A155	3
Electronics Laboratory 3	ELEC	A173	1
Automation 2 - Semiconductors Motor Control	ELEC	A260	4
		Subtotal	12
		Total Units	34-35

ASSOCIATE IN SCIENCE DEGREE

Complete the Electronics Engineering Technician Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

INDUSTRIAL AUTOMATION TECHNICIAN

CERTIFICATE OF ACHIEVEMENT

The Industrial Automation Technician has level 2 (sub-assembly) diagnostic skills. The student will learn how to: install, configure, modify, diagnose, and repair automation control systems. Industry sectors that employ industrial automation technicians in the greater Orange County region include: 1) fabrication & manufacturing, robotic arms, CNC, automated assembly, inventory control, elevator lifts, pharmaceuticals, medical instruments and medical products, and 2) process control, traffic & transportation, food processing, water treatment, power distribution, chemical refinery, oil & gas refineries, climate control, building automation and security systems.

Program Outcomes

1. Perform entry-level maintenance, calibration, and diagnostic procedures on control systems.

2. Transfer to the International Society for Automation CCST (Certified Control Systems Technician) training program.

3. Transfer to the Fanuc Robotics CERT (Certified Electronic Robotics Technician) training program.

4. Transfer to 4-year Engineering Technology programs.

Required Prerequisites:

Electronics Engineering Technician Certificate of Achievement

		Subtotal	34-35

Course			Units
Advanced Digital Applications	ELEC	A245	4
Automation 1- Programmable Logic Controller	ELEC	A253	4
Programmable Logic Controllers Internship	ELEC	A289	2
Electronics Laboratory 4	ELEC	A174	1
		Subtotal	11
		Total Units	45-46

ASSOCIATE IN SCIENCE DEGREE

Complete the Industrial Automation Technician 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 63-64 units for completion.**

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

1. 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.

2. 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
	Subtotal		**3**

Course			Units
Emergency Medical Services	EMS	A150	10
Emergency Medical Services lab	EMS	A150L	1
*EMS Clinical Internship	EMS	A151	1
	Subtotal		**12**
	Total Units		**15**

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 courses 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	3
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		**29-31**

ENGINEERING AS DEGREE (CONTINUED)

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
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	**35-41**
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

Required Core - Complete ENGL A101 or A101H and two (2) additional courses for a total of ten (10) units:

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

Subtotal	**10**

Restricted Electives - Complete a minimum of nine (9) units from Required Core courses not already used or from the following list:

Narrative Journalism	ENGL	A117	3
Introduction to Creative Writing	ENGL	A119	3
Short Story Writing	ENGL	A121	3
Poetry Writing	ENGL	A156	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 Identitiy 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

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**

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
Required Core			
Critical Thinking, Reading, Writing: Literature / Honors	ENGL	A101 / A101H	4
	Subtotal		**4**

List A - Complete six (6) units from the following list:

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
	Subtotal		**6**

List B - Complete six (6) units from List A not already used, or choose from the following list:

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
	Subtotal		**6**

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

1. 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
	Total Units		**11.5-13**

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

1. 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.

APPAREL CONSTRUCTION CERTIFICATE OF ACHIEVEMENT (CONTINUED)

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

		Total Units	44

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.**

DESIGN

CERTIFICATE OF ACHIEVEMENT

Completion of the Design certificate program prepares students for careers in the fashion industry and in related businesses.

Program Outcome

1. 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 Or	ART	A110	3
Applied Color and Design Theory	FASH/ID	A175	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

		Total Units	44.5

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

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.

2. 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
FALL			
Color & Design: Two-Dimensional Or	ART	A110	3
Applied Color and Design Theory	FASH	A175	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
		Subtotal	15
SPRING			
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 Or	PHOT	A120	3

Introduction to Digital Photography	PHOT	A123	3
	Subtotal		**13**
	Total Units		**28**

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

1. 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 Or	ART	A110	3
Applied Color and Design Theory	FASH/ID	A175	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 Or	MKTG	A110	3
Retail E-Commerce	MKTG	A200	3
Retail Buying	MKTG	A220	3
	Total Units		**43**

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

1. 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
	Total Units		**43.5**

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.

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
SEMESTER 1			
Video Workshop	FILM	A110	3
Digital Film and Video Editing 1	FILM	A194	3
		Subtotal	**6**
SEMESTER 2			
Television Production 1	FILM	A155	3
Story Development & Production	FILM	A240	3
		Subtotal	**6**
SEMESTER 3			
History and Appreciation of Cinema*	FILM	A100	3
Or			
Introduction to Radio, Television, and Film*	FILM	A150	3
		Subtotal	**3**
SEMESTER 4			
Field Production and the Documentary*	FILM	A265	4
Or			
Digital Cinema*	FILM	A270	4
		Subtotal	**4**
		Restricted Electives	**10**
		Total Units	**29**

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 and 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
Introduction to Radio, Television, and Film*	FILM	A150	3
Film and Video Sound	FILM	A193	3
Digital Film and Video Editing 2	FILM	A195	3
Introduction to Visual Effects	FILM	A196	3
Production Management	FILM	A210	3
Social Media Marketing	FILM	A215	3
Directing Theory	FILM	A253	3
Television Production 2	FILM	A255	3
Special Projects	FILM	A260	2
Television Lab	FILM	A261	2
Cinematography	FILM	A262	3
Digital Film and Video Editing 2	FILM	A264	3
Field Production and the Documentary*	FILM	A265	4
Digital Cinema*	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
Required Core - Select two courses from the following list for a total of six (6) units:			
Introduction to Mass Communications	CMST	A180	3
History and Appreciation of the Cinema	FILM	A100	3
Introduction to Media Writing	FILM	A106	3
		Subtotal	**6**
List A - Complete six (6) units from the following list:			
Film and Video Sound	FILM	A193	3

Video Workshop	FILM	A110	3
Or			
Television Production 1	FILM	A155	3
		Subtotal	**6**

List B - Complete three (3) units:

Introduction to Radio, Television, and Film*	FILM	A150	3
		Subtotal	**3**

List C - Complete three (3) units from the following list:

Introduction to Computer Graphics	DMAD	A181	3
Digital Film and Video Editing 1	FILM	A194	3
Story Development & Production	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

MEDIA ARTS AND CREATIVE ENTERTAINMENT

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.

CERTIFICATE OF ACHIEVEMENT

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
FIRST SEMESTER			
Video Workshop	FILM	A110	3
Acting Fundamentals	THEA	A106	3
Or			
Acting for Camera and Stage	THEA	A115	3
		Subtotal	**6**

SECOND SEMESTER			
Story Development & Production (Film Production)	FILM	A240	3
Directing	THEA	A275	3
		Subtotal	**6**

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
Digital Film and Video Editing 1	FILM	A194	3
Social Media Marketing	FILM	A215	3
Digital Cinema	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
		Subtotal	**5**
		Total Units	**17**

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

1. 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
		Subtotal	**13**

CATERING CERTIFICATE OF ACHIEVEMENT (CONTINUED)

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
	Subtotal		**4-6**
	Total Units		**17-19**

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

1. 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
	Total Units		**15**

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

1. Prepare students for entry-level employment as competent Food Service

supervisors and meet the needs of the local hospitality/food-service industry.

Course			Units
FIRST SEMESTER			
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
	Subtotal		**12**
SECOND SEMESTER			
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
	Subtotal		**14**
	Total Units		**26**

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

	Subtotal		**26**

Course			Units
THIRD SEMESTER			
Introduction to Nutrition Concepts	FN	A140	2
Or			
Nutrition	FN	A170	3
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
	Subtotal		**12-13**
FOURTH SEMESTER			
Catering	FSM	A284	3
Restaurant Management	FSM	A285	3
Introduction to Psychology / Honors	PSYC	A100 / A100H	3

Subtotal			**9**
Program Major Units			**47-48**
AS General Education Option 1, 2, or 3			**Varies**
Total Minimum Degree Units			**62-63**

Food Service Management Commercial Suggested Electives:

Beginning Computer Keyboarding 1	CIS	A090	1.5
Emergency Medical Responder	EMS	A100	4
Or			
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
Total Units			**21.5**

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, 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. Students completing this certificate join the Dietetic Managers Association and take the National Certification exam.

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

Subtotal			**21.5**

Course			Units
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
Subtotal			**18.5**
Total Units			**40**

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
Complete fours (4) semesters of one language - French, German, Italian, Japanese, or Vietnamese:			
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
		Subtotal	**18-20**

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:

Course			Units
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**

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
Core Courses:			
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
		Subtotal	**20**

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

Subtotal	**3-5**
Program Major Units	**23-25**
CSU or IGETC for CSU	**37-39**
Transferable electives as needed to satisfy unit requirement	**Varies**
Total Degree Units	**60**

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

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**

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.

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
Core Courses:			
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
Statistics	MATH	A160	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
Core Courses:			
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
	Subtotal		**16**

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 Geology	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

Subtotal	**8**
Program Major Units	**24**
AS General Education Option 1, 2, or 3	**Varies**
Transferable electives as needed to satisfy unit requirement	**Varies**
Total Degree Units	**60**

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
Core Courses:			
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

	Units
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.

Course			Units
Required Core:			
Introduction to Global Studies	GLST	A101	3
Introduction to Global Issues	GLST	A102	3
		Subtotal	**6**

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
IIntermediate Japanese 1	JAPN	A280	5
Intermediate Japanese 2	JAPN	A285	5
Intermediate Spanish 1	SPAN	A280	5
Intermediate Spanish 2	SPAN	A285	5

	Units
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
		Subtotal	**24**

Select six (6) units from the following:

Air Balance	HVAC	A104	3
Application/HVAC	HVAC	A106	3
Ice Machine Service & Repair	HVAC	A111	3
		Subtotal	**6**
		Total Units	**30**

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
Core Courses:			
History of the United States to 1876 / Honors	HIST	A170 / A170H	3
History of the United States Since 1876 / Honors	HIST	A175 / A175H	3
		Subtotal	**6**
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
		Subtotal	**6**
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
		Subtotal	**3**
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

Subtotal			**3**
Program Major Units			**18**
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 (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 plantscaping, 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.

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

1. Students will be able to demonstrate fundamental skills in landscape design elements, process and techniques.

2. 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

1. 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

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
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
Total Units			**13**

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
Total Units			**13.5**

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
Total Units			**7**

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
FALL			
Landscape Drafting Techniques	HORT	A111	1
California Friendly Landscapes	HORT	A190	2
Introduction to Landscape Design	HORT	A285	3
Subtotal			**6**
SPRING			
Cacti and Succulents	HORT	A191	1.5
Sprinkler Irrigation Systems Design	HORT	A288	2
Installation of Residential Irrigation Systems	HORT	A289	1
Subtotal			**4.5**
Total Units			**10.5**

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.

4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.

5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

Course			Units
FALL			
**Botany	BIOL	A183	3
Or			
Botany for Gardeners	HORT	A105	3
Knowing Your Soils	HORT	A109	3
Ornamental Trees	HORT	A181	3
Subtotal			**9**
SPRING			
Ornamental Shrubs	HORT	A182	3
Subtotal			**3**

Select twelve (12) units from the following:

FALL

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
*Portfolio Development	HORT	A284	1.5
*Introduction to Landscape Design	HORT	A285	3

SPRING

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
*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
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.

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.

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
FALL			
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
		Subtotal	**12**
SPRING			
Aviation Management	ARLN	A117	3
Destination the Americas	HTT	A125	3
Destination Africa/Pacific	HTT	A128	3
Homeland Security	HTT	A135	3
		Subtotal	**12**
FALL			
Passport to Success	HTT	A105	3
Destination Europe	HTT	A127	3
Enhancing Guest Service	HTT	A180	3
Leadership and Strategic Management	HTT	A284	3
		Subtotal	**12**

AIRLINE TRAVEL MANAGEMENT CERTIFICATE OF ACHIEVEMENT (CONTINUED)

SPRING

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			
California Employment Law	HTT	A290	3
	Subtotal		**13**
	Total Units		**49**

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 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
FALL			
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
	Subtotal		**12**
SPRING			
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
	Subtotal		**12**
FALL			
Passport to Success	HTT	A105	3
Destination Europe	HTT	A127	3
Enhancing Guest Service	HTT	A180	3
Leadership and Strategic Management	HTT	A284	3
	Subtotal		**12**

SPRING

Interviewing and Professional Development	HTT	A185	3
Airline Internship	HTT	A226	4
	Subtotal		**7**
	Total Units		**43**

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 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
FALL			
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
	Subtotal		**12**
SPRING			
Hospitality Accounting	HTT	A118	3
Computer Reservation Systems – SABRE	HTT	A131	3
Homeland Security	HTT	A135	3
Revenue Management	HTT	A140	3
	Subtotal		**12**
FALL			
Passport to Success	HTT	A105	3
Hospitality and Tourism Marketing	HTT	A240	3
Leadership and Strategic Management	HTT	A284	3

			Subtotal	9
SPRING				
Interviewing and Professional Development	HTT	A185		3
Hotel Internship	HTT	A227		4
Hospitality Operations	HTT	A285		3
			Subtotal	10
			Total Units	43

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

1. 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
FALL			
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
		Subtotal	12
SPRING			
Homeland Security	HTT	A135	3
Revenue Management	HTT	A140	3
Hospitality Operations	HTT	A285	3
Human Resource Management	HTT	A288	3
		Subtotal	12
FALL			
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
		Subtotal	12
SPRING			
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

			Subtotal	10
		Program Major Units		46
	AS General Education Option 1, 2, or 3			Varies
		Minimum Degree Units Total		64

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

1. The outcome for the certificate of achievement is to prepare students for employment within the hotel industry the area of human resources.

Course			Units
FALL			
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
		Subtotal	12
SPRING			
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
		Subtotal	12
FALL			
Hotel Internship	HTT	A227	4
Hospitality Operations	HTT	A285	3
Hospitality, Travel, and Tourism Law	HTT	A286	3
		Subtotal	10
		Total Units	34

Human Resource 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
Interpersonal Communication	CMST	A100	3
Elementary Spanish 1	SPAN	A180	5

ASSOCIATE IN SCIENCE DEGREE

Complete the Human Resource Manangement 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
FALL			
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
	Subtotal		**11.5**
SPRING			
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
	Subtotal		**13**
FALL			
Sharing the Travel Experience	HTT	A138	3
Meeting and Event Internship	HTT	A221	4
Establish and Operate an Event Business	HTT	A274	8
	Subtotal		**7**
	Total Units		**32.5**

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
FALL			
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
	Subtotal		**12**
SPRING			
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
	Subtotal		**12**
FALL			
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
	Subtotal		**13**
	Total Units		**37**

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
FALL			
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
		Subtotal	**12**
SPRING			
Passport to Success	HTT	A105	3
Spa Industry Finance	HTT	A170	1.5
Spa Marketing and Retailing	HTT	A175	1.5
Interviewing and Professional Development	HTT	A185	3
Hospitality Operations	HTT	A285	3
		Subtotal	**12**
FALL			
Sharing the Travel Experience	HTT	A138	3
Hospitality and Tourism Marketing	HTT	A240	3
Spa Internship	HTT	A279	4
		Subtotal	**10**
		Total Units	**34**

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 Mangement 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
FALL			
Destination Europe	HTT	A127	3
Cultural Tourism	HTT	A130	3
Travel and Tourism Career Development	HTT	A150	3
Cruising & Vacation Packages	HTT	A156	3
		Subtotal	**12**
SPRING			
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
		Subtotal	**12**
FALL			
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
		Subtotal	**15**
SPRING			
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
		Subtotal	**13**
		Total Units	**52**

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.**

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
FIRST SEMESTER			
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
		Subtotal	**12**
SECOND SEMESTER			
Color & Design: Two-Dimensional	ART	A110	3
Or			
Applied Color and Design Theory	ID	A175	
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
		Subtotal	**15**
		Total Units	**27**

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

1. 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

		Subtotal	**27**
Course			**Units**
THIRD SEMESTER			
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
		Subtotal	**12**
FOURTH SEMESTER			
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
		Subtotal	**13**
		Program Major Units	**52**
		AS General Education Option 1, 2, or 3	**Varies**
		Minimum Total Degree Units	**70**

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

1. 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

		Subtotal	**70**
Course			**Units**
FIFTH SEMESTER			
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
		Subtotal	**10-12**
		Total Units	**80-82**

Level 3 Professional Design Restricted Electives - Select one (1) course from the following:

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

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

1. 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
	Total Units		**10**

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.

JOURNALISM AA DEGREE

Course			Units
Core Courses:			
Media Literacy	CMST	A240	3
News Writing and Reporting	JOUR	A110	3
Newspaper Production Level 1	JOUR	A115	4
	Subtotal		**10**
Restricted Electives - Complete at least eight (8) units from the following:			
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
	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**

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, and regularly posts a variety of multimedia productions. Classes are open to students of all majors.

JOURNALISM AA-T DEGREE (CONTINUED)

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
	Subtotal		**10**

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
	Subtotal		**3**

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	MATH	A160	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 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

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**
Theory of Yoga	KIN	A284	3
Yoga Methodology	KIN	A285	3
	Total		**6**

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
Required Courses:			
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
	Subtotal		**12-16**

Course			Units
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	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
	Subtotal		**6-10**
	Total Units		**18-26**

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
FALL			
Fitness and Health	KIN	A270	3

Strength Conditioning/Theory	KIN	A280	3
Fitness Specialist Practicum	KIN	A297	2
	Subtotal		**8**
SPRING			
Introduction to Exercise Physiology	KIN	A282	3
Personal Trainer	KIN	A296	3
Fitness Specialist Internship	KIN	A298	2-3
	Subtotal		**8-9**

Course			Units
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
	Subtotal		**3-5**
	Total Units		**19-22**

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.

KINESIOLOGY AA-T DEGREE (CONTINUED)

Course			Units
Core Courses:			
Human Anatomy	BIOL	A220	5
Human Physiology	BIOL	A225	5
Introduction to Kinesiology	KIN	A202	3
Movement-Based Courses	(see list)		3
		Subtotal	**16**

List A – Select two (2) courses from the following:

Course			Units
Human Biology	BIOL	A125	3
Introduction to Chemistry	CHEM	A110	5
Or			
General Chemistry A	CHEM	A180	5
Intro to Statistics / Statistics for Behavioral Sciences	MATH/PSYC	A160	4
Algebra-Based Physics: Mechanics	PHYS	A120	
Or			
Calculus-Based Physics: Mechanics	PHYS	A185	4
		Subtotal	**7-9**
		Total Major Units	**23-25**
		CSU or IGETC for CSU	**37-39**
Transferable electives as needed to satisfy unit requirement			**Varies**
		Total Degree Units	**60**

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
*T'ai 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
*T'ai 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
		Total Units	**9**

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
All coursework must be 100 level or above.		
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	ECOL	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

1. Function effectively in a management position using the skills, principles, and tools they have acquired.

2. 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 Or	MGMT	A115	3
Organizational Leadership	LEAD	A200	3
Professional Communication	BUS/MGMT	A239	3

Total Units	**9**

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

1. Function effectively in a leadership or management role using the skills, principles, and tools they have acquired.

2. Apply the leadership and management principles they have learned in their personal and/or organizational lives.

3. Distinguish between the qualities of effective and ineffective leaders and managers.

4. Analyze the ethical dimensions of effective leaders and managers in everyday conduct and decision making.

5. Demonstrate effective written and/or oral skills.

Course			Units
FALL			
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
		Subtotal	**12**
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 Or	MKTG	A110	3
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

1. Function effectively as a manager in a retail environment using the skills, principles, and tools they have acquired.

2. Apply the retail principles they have learned in their professional lives.

3. Analyze the ethical dimensions of effective retail managers in everyday conduct and decision making.

4. Demonstrate effective written and/or oral skills.

Course			Units
Accounting-Small Business Or	ACCT	A100	3
Financial Accounting	ACCT	A101	4
Business Communication	BUS	A139	3
Introduction to Computer Applications	CIS	A100	3
Organizational Leadership	LEAD	A200	3
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
FALL			
CNC Machine Operation 1	MACH	A125	3
Introduction to CNC and Manual Programming	MACH	A130	3
Subtotal			**6**
SPRING			
CNC Machine Operation 2	MACH	A126	2
Subtotal			**2**
Total Units			**8**

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
	Total Units		**11.5**

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
FALL			
Introduction to Machine Shop	MACH	A100	3
Lathe	MACH	A105	5
Measurement and Blueprint Reading	MACH	A120	3
Computations for Machinists	MACH	A121	3
	Subtotal		**14**
SPRING			
Milling Machine	MACH	A110	5
Production Machining Techniques	MACH	A115	2
Introduction to CNC and Manual Programming	MACH	A130	3
	Subtotal		**10**
	Total Units		**24**

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
FALL			
CNC Machine Operation 1	MACH	A125	3
	Subtotal		**3**
SPRING			
CNC Machine Operation 2	MACH	A126	2
CNC Programming - Mastercam 1	MACH	A133	3
	Subtotal		**5**
	Total Units		**32**

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
FALL			
CNC Machine Operation 1	MACH	A125	3
	Subtotal		**3**
SPRING			
CNC Machine Operation 2	MACH	A126	2
Mastercam Solids	MACH	A142	2
	Subtotal		**4**

Continued on next page

CNC MACHINE PROGRAMMER CERTIFICATE OF ACHIEVEMENT (CONTINUED)

FALL

CNC Programming - Mastercam 2	MACH	A134	3
Mastercam Lathe	MACH	A141	1.5
	Subtotal		**4.5**
	Total Units		**35.5**

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
	Total Units		**40**

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
Core Courses:			
Oceanography / Honors	MRSC	A100 / A100H	3
Oceanography Lab / Honors	MRSC	A100L / A100M	1
Marine Biology	MRSC	A180	3
Marine Biology Lab	MRSC	A180L	1
Coastal Oceanography	MRSC	A185	3
	Subtotal		**11**

Marine Science Restricted Electives - Complete at least three (3) units from the following:

Course			Units
Marine Intertidal Ecology	ECOL/ESEC/MRSC A121		1
Ecology of the Gray Whale	ECOL/ESEC/MRSC A124		1
Marine Aquarium Science	MRSC	A120	1
Coastal Oceanography Lab	MRSC	A185L	1
Marine Mammals	MRSC	A187	3
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
	Subtotal		**3**

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

Subtotal	**4**
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**

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

1. Function effectively in entry-level advertising business positions using the skills, principles, and tools they have acquired.

Course			Units
Beginning Drawing/Honors	ART	A120 / A120H	3
Or			
Graphic Design	DMAD	A182	3
Mass Communications	CMST	A180	3
Or			
Introduction to Radio, TV and Film	FILM	A150	3
Principles of Advertising	MKTG	A130	3
Total Units			**9**

ENTRY-LEVEL MARKETING

CERTIFICATE OF SPECIALIZATION

Program Outcomes

1. Function effectively in entry-level marketing positions using the skills, principles, and tools they have acquired.

2. 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
Total Units			**9**

GENERAL MARKETING

CERTIFICATE OF ACHIEVEMENT

Program Outcomes

1. Function effectively in a multitude of first-entry marketing positions using the skills, tools and principles they have acquired.

2. Communicate effectively and persuasively in personal, organizational, and selling environments.

3. 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
Subtotal			**18**

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
Subtotal			**9**
Total Units			**27**

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

1. Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.

2. Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

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
Total Units			**12**

INTERNATIONAL BUSINESS

CERTIFICATE OF ACHIEVEMENT

Program Outcomes

1. Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.

2. 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
Total Units			**21**

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

1. 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
Total Units			**9**

MATH

MATH

ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Students graduating with an Associate in Science in Math 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 Math 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 be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Course			Units
Core Courses:			
Calculus 1 / Honors	MATH	A180 / A180H	4
Calculus 2 / Honors	MATH	A185 / A185H	4
Calculus 3 / Honors	MATH	A280 / A280H	4-5
Subtotal			**12-13**

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
Subtotal			**3-5**

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	MATH	A160	4
Introduction to Discrete Mathematics	MATH	A230	5
Calculus-Based Physics: Mechanics	PHYS	A185	4

Subtotal			**3-5**
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

1. 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
FALL			
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
Subtotal			**13.5**

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

1. Demonstrate knowledge of basic requirements of vocalists, guitarists and pianists

2. Working Knowledge of basic studio techniques and equipment applications

3. Prepare and deliver an effective sales presentation for a product or service.

4. Organize, develop and prepare a written professional sales presentation for a product or service.

BUSINESS EMPLOYEE CERTIFICATE OF ACHIEVEMENT (CONTINUED)

Course			Units
FIRST SEMESTER			
History of Rock Music	MUS	A139	3
Piano 1	MUS	A141	1
Voice 1	MUS	A145	1
Music as a Business	MUS	A262	2
	Subtotal		**7**
SECOND SEMESTER			
Basic Guitar	MUS	A116	2
Theory 1	MUS	A180	3
Musicianship 1	MUS	A181	1
Recording Techniques 1	MUS	A261	3
	Subtotal		**9**
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:

Course			Units
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:

Course			Units
C++ Programming Language 1	CS	A150	4
Video Workshop	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.

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
Core Courses:			
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
FIRST SEMESTER			
Musicianship and Ear Training	MUS	A101	2
History of Rock Music	MUS	A139	3
Piano 1	MUS	A141	1
Theory 1	MUS	A180	3
Musicianship 1	MUS	A181	1
*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 CERTIFICATE OF ACHIEVEMENT (CONTINUED)

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

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
FIRST SEMESTER			
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
	Subtotal		**7.5**
SECOND SEMESTER			
Musicianship and Ear Training	MUS	A101	2
College Choir	MUS	A120	1
Advanced Pop Vocal Techniques	MUS	A247	1.5
Applied Music	MUS	A290	0.5
	Subtotal		**5**
THIRD SEMESTER			
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
	Subtotal		**9.5**
	Total Units		**22**

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
FIRST SEMESTER			
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
	Subtotal		**8.5**
SECOND SEMESTER			
Musicianship and Ear Training	MUS	A101	2
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
Applied Music	MUS	A290	0.5
	Subtotal		**10**
THIRD SEMESTER			
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
	Subtotal		**7.5**
	Total Units		**26**

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
All coursework must 100 level or higher:		
Astronomy	ASTR	
Biology	BIOL	
Chemistry	CHEM	
Ecology	ECOL	
Environmental Science & Ecology	ESEC	
Geology	GEOL	
Marine Science	MRSC	
Natural Science	NS	
Physics	PHYS	

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**

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

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 Outcome

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 Neurodiagnostic 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	2
Basic Electroencephalography	NDT	A110	4
Human Diseases	ALH	A120	2
	Subtotal		**10.5**
INTERSESSION			
Neurodiagnostic Lab Practice	NDT	A200	.5
	Subtotal		**.5**
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
	Subtotal		**13**
SUMMER			
Clinical Experience 2	NDT	A117	3
	Subtotal		**3**
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
	Subtotal		**12.5**

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	**55**

AS General Education Option 1, 2, or 3	**Varies**

Total Minimum AS Degree Units	**70**

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
FALL			
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 Or	NDT	A284	1
Introduction Nerve Conduction Velocity Or	NDT	A285	1
Statistics for Behavioral Sciences	PSYC	A160	3

Total Units	**6-8**

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.

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
	Subtotal		**4.5**

Course			Units
FALL SEMESTER			
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
	Subtotal		**15.5**
SPRING SEMESTER			
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
	Subtotal		**12.5**

Completion of the first year with a "C" grade in all courses is required before beginning second year.

FALL SEMESTER			
Life Cycle Nutrition	FN	A144	3
Applied Nutrition	FN	A171	2
Intermediate Nutrition Care	NC	A280	2
Supervised Practice 1	NC	A281	3.5
	Subtotal		**10.5**
SPRING SEMESTER			
Menu Planning and Purchasing	FSM	A250	3
Advanced Nutrition Care	NC	A285	2
Supervised Practice 2	NC	A286	3.5
	Subtotal		**8.5**
	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
Required Core:			
General Microbiology	BIOL	A210	5
General Chemistry A	CHEM	A180	5
Nutrition	FN	A170	3
Introduction to Psychology	PSYC	A100	3
	Subtotal		**16**

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
	Subtotal		**9-10**

List B - Complete the following:

Principles of Foods	FN	A180	3
Subtotal	**3**		
	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
FIRST SEMESTER			
Anatomy & Physiology	BIOL	A221	4
Careers in Dietetics/Food Science	FN/NC	A100	1
Sanitation and Safety	FSM	A160	3
Nutrition	FN	A170	3
	Subtotal		11
SECOND SEMESTER			
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
	Subtotal		8-10
THIRD SEMESTER			
Applied Nutrition	FN	A171	2
Cultural Foods	FN	A185	2
Intermediate Nutrition Care	NC	A280	2
Supervised Practice 1	NC	A281	3.5
	Subtotal		9.5
	Total Units		28.5-30.5

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 booming 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
FIRST SEMESTER			
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
	Subtotal		11
SECOND SEMESTER			
Cultural Foods	FN	A185	2
Fitness Programs 1	KIN	A107	1-3
Fitness and Health	KIN	A270	3
Introduction to Medical Nutrition Therapy	NC	A180	3
	Subtotal		9-11
THIRD SEMESTER			
Applied Nutrition	FN	A171	2
Life Cycle Nutrition	FN	A144	3
Intermediate Nutrition Care	NC	A280	2
Supervised Practice 1	NC	A281	3.5
Fitness and Exercise Testing	KIN	A281	3
	Subtotal		13.5
	Total Units		33.5-35.5

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
Core Courses:			
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
Subtotal			**6**

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
Subtotal			**3**

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
Subtotal			**6**

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
FIRST SEMESTER			
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
Subtotal			**9**

PHOTOGRAPHY — STILL CERTIFICATE OF ACHIEVEMENT (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

1. 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
	Total Units		**18**

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, postproduction 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

1. Students will be able to demonstrate competence as both a photographer and a videographer, and show a critical understanding of visual language.

Course			Units
FIRST SEMESTER			
Video Workshop	FILM	A110	3
Introduction to Digital Photography	PHOT	A123	3
Imaging with Photoshop 1	PHOT	A125	3
	Subtotal		**9**
SECOND SEMESTER			
Digital Film./Video Editing	FILM	A194	3
Introduction to Professional Photography	PHOT	A180	4
Cinematography	FILM	A262	3
	Subtotal		**10**

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
	Subtotal		**6**
	Total Units		**25**

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
Core Courses:			
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
Program Major Units			**24-25**
CSU or IGETC for CSU			**37-39**
Transferable electives as needed to satisfy unit requirement			**Varies**
Total Degree Units			**60**

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 be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Course			Units
Core Course:			
American Government / Honors	PSCI	A180 / A180H	3
Subtotal			**3**
List A - Complete three (3) courses from the following:			
Intro to Statistics / Statistics for Behavioral Sciences Or	MATH/PSYC	A160	4
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
Subtotal			**9-10**
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 lectures, 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 Registration in 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
Anatomy-Physiology	BIOL	A221	4
	Subtotal		**4.5**

Course			Units
FALL			
Medical Terminology	ALH	A111	3
Patient Care	ALH	A115	2.5
Applied Pharmacology	ALH	A130	2
Basic Electroencephalography	NDT	A110	4
Respiratory Anatomy and Physiology	RSPC	A185	3
	Subtotal		**14.5**
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	2
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	**51.5**
AS General Education Option 1, 2, or 3	**Varies**
Total Degree Units	**63.5**

*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
FIRST SEMESTER			
Coastal Navigation	MARA	A150	3
Maritime Industry	MARA	A151	2
Boat Handling and Seamanship	MARA	A152	3
	Subtotal		**8**
SECOND SEMESTER			
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
	Subtotal		**11-13**
	Total Units		**19-21**

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	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

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
FIRST SEMESTER			
Introduction to Sailing	MARA	A136	1
Or			
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

	Subtotal		**13**
SECOND SEMESTER			
Marine Basic Safety Training	MARA	A153	4
Radar Observer	MARA	A157	2
*Professional Mariner Internship and Lecture	MARA	A200 & A201	3
	Subtotal		**9**
	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
Core Courses:			
Introduction to Psychology / Honors	PSYC	A100 / A100H	3
Statistics for Behavioral Sciences / Introduction to Stats	PSYC/MATH	A160	4
Introduction to Experimental Methods	PSYC	A280	4
	Subtotal		**11**
List A - Complete the following:			
Psychobiology	PSYC	A250	3
	Subtotal		**3**
List B - Complete one (1) course from the following:			
Life Span Developmental Psychology	PSYC	A130	3
Principles of Psychology	PSYC	A185	3
Social Psychology	PSYC	A260	3
	Subtotal		**3**
List C - Complete one (1) course from above not yet taken, or choose from the following:			
Cross-Cultural Psychology / Honors	PSYC	A190 / A190H	3
Psychology of Personality	PSYC	A220	3
Abnormal Psychology	PSYC	A255	3
Psychology of Learning	PSYC	A270	3
	Subtotal		**3**
	Program Major Units		**20**
	CSU or IGETC for CSU		**37-39**
Transferable electives as needed to satisfy unit requirement			**Varies**
	Total Degree Units		**60**

PUBLIC HEALTH

PUBLIC HEALTH

ASSOCIATE IN ARTS DEGREE

This program will introduce students to health, 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 to be able to make personal choices that reduce their risk of disease. Students will also understand health from a public health view and be able to analyze global health issue and the impact of the environment, socio-economics, politics, and culture on health and health systems. Though not a transfer degree, 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
Core Courses:			
Personal Health Education	PUBH	A100	3
Drugs, Health, and Society	PUBH	A200	3
Peer Health Educator - Level 1	PUBH	A160	2
	Subtotal		**8**
Complete one (1) course:			
Drugs, Health, and Society	PUBH	A202	3
Health and Social Justice	PUBH	A203	3
Peer Health Educator - Level 2	PUBH	A260	2
	Subtotal		**2-3**
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		**24-26**
	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
Required Core:			
Personal Health	PUBH/HLED	A100	3
Concepts in Public Health	HLED	A220	3
Intro to Statistics / Statistics for Behavioral Sciences	MATH/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
		Subtotal	**32**
List A - Complete one (1) of the following:			
Microeconomics / Honors	ECON	A170 / A170H	3
Macroeconomics / Honors	ECON	A175 / A175H	3
Nutrition	FN	A170	3
Drugs, Health, and Society	HLED	A122	3
Principles of Human Sexuality 1	PSYC	A165	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 — DIAGNOSTIC

RADIOLOGIC TECHNOLOGY — DIAGNOSTIC

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:

1. Allied Health A010 course - application and orientation.

2. 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.

RADIOLOGIC TECHNOLOGY — DIAGNOSTIC AS DEGREE (CONTINUED)

Program Outcomes

1. Students will be clinically competent and ready to begin a successful career in the Radiologic Sciences.

2. Students will be able to demonstrate professional and ethical behaviors.

3. Students will exhibit the communication skills necessary to effectively perform the duties of a Radiographer in a variety of health care environments.

4. 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

1. Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.

2. Communicate effectively in personal organizational and real estate environments.

3. Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.

4. 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
		Total Units	**24-25**

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.

			Total Units	15

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

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

1. Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.

2. 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
		Total Units	**9**

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

1. 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

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
Core Courses:			
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

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

		Subtotal	12.5

Course			Units
FALL			
Patient Care	ALH	A115	2.5
Basic Microbiology	BIOL	A114	2
Respiratory Anatomy and Physiology	RSPC	A185	3
Basic Respiratory Care Equipment	RSPC	A190	3
Respiratory Pharmacology	RSPC	A195	1
General Education (AS Degree) applicable course			6
		Subtotal	**17.5**
SPRING			
Human Diseases	ALH	A120	2
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
General Education (AS Degree) applicable courses			3
		Subtotal	**15.5**
SUMMER			
Clinical Lab 2	RSPC	A192	3
		Subtotal	**3**
FALL			
Pulmonary Pathology	RSPC	A265	3
Ventilators and Respiratory Management	RSPC	A270	2
Clinical Lab 3	RSPC	A276	4
Physician Series 1	RSPC	A279	.5
General Education (AS Degree) applicable courses			6
		Subtotal	**15.5**

AS Degree GE must be complete by the end of year two fall semester.

SPRING			
Home Care and Rehabilitation	RSPC	A255	1
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
		Subtotal	**13**
		Program Major Units	**62**
		AS General Education Option 1, 2, or 3	**Varies**
		Total Degree Units	**77**

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
FALL			
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
		Subtotal	11.5
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
Core Courses:			
Introduction to Sociology / Honors	SOC	A100 / A100H	3
		Subtotal	3
List A - Complete two (2) of the following:			
Statistics for Behavioral Sciences / Intro to Statistics	PSYC/MATH	A160	4
Analysis of Social Problems / Honors	SOC	A185 / A185H	3
Introduction to Research Methods	SOC	A200	3
		Subtotal	6-7

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

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

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 Outcome

1. Graduates of the program will be competent Speech-Language Pathology Assistants meeting the employment needs of the community and participating in professional growth activities.

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	**64**

*ANTH A190, BIOL A221, and HMDV A180 and in program double count towards General Education Breadth.

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
Core Courses:			
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
		Subtotal	**9**

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.

Course			Units
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
		Subtotal	**9-10**
		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
Core Courses:			
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
		Subtotal	**9**

List A - Complete three (3) courses, choosing from above core courses not yet completed and the following:

Course			Units
Acting 2	THEA	A107	3
Stage Scenery	THEA	A175	3
Stage Lighting	THEA	A176	3
Make-Up	THEA	A177	3
Stage Costuming	THEA	A178	3
		Subtotal	**9**
		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, petro-chemical 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
FALL			
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
	Subtotal		**10-11**
SPRING			
Advanced Welding	WELD	A200	3
Or			
Advanced Welding	WELD	A201	4
Welding Metallurgy	WELD	A230	3
	Subtotal		**6-7**
FALL			
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
	Subtotal		**5**
SPRING			
Welding Inspection and Testing	WELD	A210	4
	Subtotal		**4**
SUMMER			
Blueprint Reading for Manufacturing	MACH	A120	3
Or			
Blueprint Reading	WELD	A180	2
	Subtotal		**2-3**
	Total Units		**27-30**

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
	Total Units		**3.5-4.5**

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
	Total Units		**4.5-6.5**

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
	Total Units		**7.5-10.5**

ADVANCED 1 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
	Total Units		**7.5-10.5**

ADVANCED 2 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
	Total Units		**7.5-10.5**

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.

Course			Units
Arc and Oxy-acetylene Welding	WELD	A100	3
Or			
Arc and Oxy-acetylene Welding	WELD	A101	4
Weld Testing GMAW 1	WELD	A102	.5
Or			
Weld Testing GMAW 2	WELD	A103	.5
Advanced Welding	WELD	A200	3
Or			
Advanced Welding	WELD	A201	4
Gas Metal Arc Welding Training Level 1	WELD	A211	1
Total Units			**7.5-9.5**

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	WELD	A100	3
Or			
Arc and Oxy-acetylene Welding	WELD	A101	4
Weld Testing GTAW	WELD	A104	.5
Gas Tungsten Arc Welding Level 1	WELD	A130	3
Total Units			**6.5-7.5**

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
FALL SEMESTER			
Orbital Welding Level 1	WELD	A255	3
Subtotal			**3**
SECOND SEMESTER			
Orbital Welding Level 2	WELD	A256	3
Mathematics and Fabrication Layout for Welders	WELD	A120	4
Subtotal			**7**
SUMMER SEMESTER			
Blueprint Reading	WELD	A180	2
Subtotal			**2**
THIRD SEMESTER			
Welding Metallurgy	WELD	A230	3
Subtotal			**3**
Total Units			**15**

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 or 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	WELD	A100	3
Or			
Arc and Oxy-acetylene Welding	WELD	A101	4
Weld Testing Pipe	WELD	A111	.5
Advanced Welding	WELD	A200	3
Or			
Advanced Welding	WELD	A201	4
Pipe Welding Level 1	WELD	A250	3
Total Units			**9.5-11.5**

NONCREDIT CERTIFICATE PROGRAMS

ALLIED HEALH

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.

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			Units / Hours
Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Noncredit	ALH	A001N	0 / 36
Personal Care Aide II: Person Centered Care Noncredit	ALH	A002N	0 / 27
First Aid and CPR/AED for PCA Noncredit	ALH	A003N	0 / 9
	Total Units		0
	Total Hours		72

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 employement.

Course			Units / Hours
Introduction to the Retail Industry Noncredit	COS	A001N	0 / 12
Retail Opportunities Noncredit	COS	A002N	0 / 12
	Total Units		0
	Total Hours		24

ENGLISH LANGUAGE LEARNING

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			Units / Hours
Beginning Grammar Review Noncredit	ELL	A032N	0 / 36
Intermediate Grammar Review Noncredit	ELL	A033N	0 / 36
Advanced Grammar Review 1 Noncredit	ELL	A062N	0 / 36
Advanced Grammar Review 2 Noncredit	ELL	A063N	0 / 36
	Total Units		0
	Total Hours		144

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			Units / Hours
Listening and Speaking Transition to College Noncredit	ELL	A092N	0 / 36
Reading and Writing Transition to College Noncredit	ELL	A093N	0 / 36
	Total Units		0
	Total Hours		72

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			Units / Hours
Multi-skills English 1A Noncredit	ELL	A012N	0 / 54
Multi-skills English 1B Noncredit	ELL	A013N	0 / 54
Multi-skills English 2A Noncredit	ELL	A022N	0 / 54
Multi-skills English 2B Noncredit	ELL	A023N	0 / 54

Total Units	0

Total Hours	216

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

1. Students will demonstrate the listening and speaking skills required to interact with members of their communities.

Course			Units / Hours
Oral Communication 1 Noncredit	ELL	A001N	0 / 36
Oral Communication 2 Noncredit	ELL	A002N	0 / 36

Total Units	0

Total Hours	72

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

1. Students will demonstrate the English proficiency to enter or advance in the workplace.

Course			Units / Hours
ESL for the Workplace 1 Noncredit	ELL	A080N	0 / 36
ESL for the Workplace 2 Noncredit	ELL	A081N	0 / 36

Total Units	0

Total Hours	72

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**

1. Students will be able to assess emergency situations in a pool or the ocean and identify an action plan for immediate implementation.

2. Students will be able to perform water rescues and perform CPR as necessary.

Course			Units / Hours
Lifeguard Training, Professional Rescue Noncredit	KIN	A001N	0 / 22
Aquatic First Aid/CPR/AED for Lifeguard Rescue Noncredit	KIN	A002N	0 / 13
First Aid, CPR/AED First Responder Noncredit	KIN	A003N	0 / 26

Total Units	0

Total Hours	35 - 61

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

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 / Hours
Theory of Yoga	KIN	A084N	0 / 54
Yoga Methodology	KIN	A085N	0 /90

Total Units	**0**

Total Hours	**144**

MATH

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			Units / Hours
Preparation for Elementary Algebra Bootcamp Noncredit	MATH	A001N	0 / 27
Preparation for Intermediate Algebra Bootcamp NonCredit	MATH	A002N	0 / 27
Study Session for Pre-Algebra Noncredit	MATH	A009N	0 / 18
Study Session for Elementary Algebra NonCredit	MATH	A011N	0 / 18

Total Units	**0**

Total Units	**36-54**

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			Units / Hours
Tutoring Skills 1 Noncredit	TUTR	A090N	0 / 14
Tutoring Skills 2 Noncredit	TUTR	A091N	0 / 14

Total Units	**0**

Total Hours	**28**

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.

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.**

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 A001N — Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Noncredit — 0 units

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.

Allied Health A002N — Personal Care Aide II: Person Centered Care Noncredit — 0 units

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.

Allied Health A003N — First Aid and CPR/AED for PCA Noncredit — 0 units

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.

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; pharmacokenetics: 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.**

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

Linguistic analysis and language structures from many areas of the world. Descriptive and historical linguistics. Relationships between language and culture. 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.**

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 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 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 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 enviromental ractices 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 — 2units

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. 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. 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. 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 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.**

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.**

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.**

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. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

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 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.**

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 majorsLecture, 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, UC.**

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 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 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.**

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 — 3 units

Prerequisite: Physics A130 or Physics A185 and Math A180.

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. T**ransfer 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.**

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 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 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.his course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A151 — Unmanned
Aircraft Systems Lab— 3 units**

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 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.**

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.

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 A182L — Zoology Lab — 1 unit

Prerequisite: Biology A182, or concurrent enrollment and Math A030 or Math 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, cardiovasuclar, 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. Transfer Credit: CSU, UC.Lecture. **Transfer Credit: CSU, UC. C-ID BUS 125.**

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 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 — Introduction to 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.**

Business A242 — Introduction to Entrepreneurship — 3 units

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**

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.

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, nstrumentation 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 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 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 Cerfication. 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 Integeration 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 —
Front-End Development 1 — 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 —
Front-End Development 2 — 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.**

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 beginning course in the Java programming language that will enable students to create Java applications and applets using the Java Development Kit (JDK). Emphasis will be placed on object-oriented programming techniques, including polymorphism, inheritance, and the use of the abstract window toolkit (AWT) components. 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 or 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 Information Systems A131 or Computer Science 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 A122 or 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.**

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

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.

The second course in Java programming language. Topics include object-oriented design, inheritance, interfaces, abstract and anonymous inner classes, I/O & exceptions, generics, regular expressions, databases, XML, GUI construction, graphics and multimedia, Java collections, data structures, lambda expressions, and multithreading. May be taken for grades or on a pass/no-pass basis. Lecture. **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 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 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 course covers interior and exterior building finishes and stairs, including layout fabrication and installation of stairs; an introduction to framing for door and window installation including hardware; interior and exterior millwork; molding; and interior drywall and exterior siding, stucco plastering. Building codes are included. 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 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 A001N — Introduction to the Retail Industry Noncredit — 0 units
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. Lecture.

Consumer Studies A002N — Retail Opportunities Noncredit — 0 units
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. Lecture.

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.**

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.**

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 boning 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, A200, A210, and A245.

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, 6.7-8.3 , 120-150 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 A149, A200, and Food Service Management A160.

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

Prerequisite: Culinary Arts A149.

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 — Dance Workout for the Maturing Body — 1-2 units

Designed to develop strength, flexibility, ease of motion for the maturing body through a basic dance workout. 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 coursed 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, UC.**

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. Maybe 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.. Maybe 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.**

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.**

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.**

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. Students may not enroll in this class without instructor approva. 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. 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 fpr 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

Prerequisite: Dance A213

Students may not enroll in this class without instructor approval. 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.**

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

Stuctured 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.**

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.**

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.**

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.**

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, UC.**

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.

AInstruction 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.

Co-requisite: Dental Assisting A115 and A165.

Emphasis on expanded functions for the registered dental assistant. Laboratory practice and preclinical evaluations, including pit and fissure sealant placements on patients. Students will practice mock written and practical examinations 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 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. Students are required to follow the dress code standards set up by the program, UCLA School of Dentistry and Cal-DOSH mandates. 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 and umbilical cord. 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: Allied Health A111.

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 A126.

Specific study of pathology and pathophysiological mechanisms related to diagnostic medical sonography. Lecture. **Transfer Credit: CSU.**

Diagnostic Medical Sonography A165 — Introduction to Scanning Practice — 3 units

Prerequisite: Diagnostic Medial Sonography A150

Co-requisite: Diagnostic Medical Sonography A126, A155.

Introduction to Sonographic scanning protocol as applied to clinical practice. Course includes environment of 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 clinical setting and exposure to departmental organization, patient flow, darkroom and processing procedures, observation of techniques employed, 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, darkroom and processing procedures, 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 includes physiological arterial testing of the lower and upper extremities with pathological correlation. Lecture, Lab. **Transfer Credit: CSU.**

Diagnostic Medical Sonography A271 — DMS Clinical Experience 3 — 7 units

Prerequisite: Diagnostic Medical Sonography A167

Co-requisite: Diagnostic Medical Sonography A255 and A274.

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

Prerequisite: Diagnostic Medical Sonography A271.

Intermediate clinical experience. Studies in the abdomen, small parts, and pelvis. 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 A271.

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.

Master the skills of front-end web design, and build working responsive websites optimized for mobile and desktop performance. Students will learn the fundamentals of how the web works and how user experiences effects web design. Primary software used: Adobe Muse. Concentration on both web design and creating an online design portfolio. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design
A202 — Internship — 2 units**

A supervised internship related to classroom-based learning at a work site related to the student's certificate program. This course is open to students who have completed four courses in one of the digital media arts and design certificate programs. 119 hours field; Lecture. **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 protoype 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**

Prerequisite: Digital Media Arts and Design A181.

Advisories: Digital Media Arts and Design A190 and A193.

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.**

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, .**

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, mattoral 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.**

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.**

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, diagnoisis, 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: Electro-magnetics, 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 (Buss, 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 A150 —
Emergency Medical Technician — 10 units**

Prerequisite: English A099 or ESL A099.

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 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 — 1 unit**

Prerequisite: English A099 or English as a Second Language A099, and American Heart Association Healthcare Provider CPR (this prerequisite will be validated in class during the first week of the course).

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 Technology A145 —
Emergency Medical Care for Children — 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 Technology 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 EMS's scope of practice within Orange County, the State and Federal guidelines, and review of the required EMS curriculum to the most up-to-date model. Provides 24 hours of Continuing Education as "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.**

**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.**

**Engineering A180 — Engineering
Graphics — 3 units**

Prerequisite: Mathematics A170, or concurrent enrollment.

Graphical representation in the analysis and computation of space problems, empirical data, and mathematical relationships. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Engineering A210 — Engineering
Materials — 3 units**

Prerequisite: Chemistry A180 and Physics A130, or equivalent.

This is an introductory course emphasizing the understanding of the structure and properties of the materials, and 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 macro structure, 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 and optical properties and also corrosion and degradation of materials. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 140.**

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.**

**Engineering A285 — Engineering
Circuits — 4 units**

Prerequisite: Mathematics A185 or A182H or A185H 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 applicable to AA or AS degree.

**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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

Composition and Related Studies

English A098 — Basic English Skills — 4 units
Prerequisite: Appropriate English placement score.

Study skills, reading, vocabulary, grammar, elemental principles of sentence structure, paragraph development, organization of ideas, punctuation and spelling. 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. Not applicable to AA or AS degree.

English A099 — Confidence in Writing — 3 units
Prerequisite: English A098 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 — Feature Writing — 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.**

Creative Writing

English A119 — Introduction to Creative Writing — 3 units
Prerequisite: English A099 or English as a Second Language A099 or qualifying placement score.

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
Prerequisite: English A099 or qualifying placement score.

Advisory: English A100 and A119.

A workshop 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 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, UC.**

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 — 3 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, UC.**

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, UC.**

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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 qualifying placement score.

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

Prerequisite: English A099 or English as a Second Language A099 or qualifying placement score.

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

Prerequisite: English A099 or English as a Second Language A099 or qualifying placement score.

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

Prerequisite: English A099 or English as a Second Language A099 or qualifying placement score.

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

Prerequisite: English A099 or English as a Second Language A099 or qualifying placement score.

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.**

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 qualifying placement score.

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 qualifying placement score.

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 qualifying English or ESL placement score.

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 qualifying placement score.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

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 applicable to AA or AS degree.

ENGLISH LANGUAGE LEARNING

English Language Learning A001N — Oral Communication 1 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A002N — Oral Communication 2 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A012N — Multi-skills English 1A Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A013N — Multi-skills English 1B Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A022N — Multi-skills English 2A Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A023N — Multi-skills English 2B Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A032N — Beginning Grammar Review Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A033N — Intermediate Grammar Review Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A062N — Advanced Grammar Review 1 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A063N — Advanced Grammar Review 2 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A080N — ESL for the Workplace 1 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A081N — ESL for the Workplace 2 Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A092N — Listening and Speaking Transition to College Noncredit — 0 units

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 applicable to AA or AS degree.

English Language Learning A093N — Reading and Writing Transition to College Noncredit — 0 units

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 applicable to AA or AS degree.

ENVIRONMENTAL SCIENCE AND ECOLOGY

Same as Ecology

Environmental Science and Ecoloy 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.**

Environmental Science and Ecoloy 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**

Environmental Science and Ecoloy A111 — 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**

Environmental Science and Ecoloy 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 Ecoloy 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 Ecoloy A140— Mediterranean Biome Ecology — 2 units

The Mediterranean Biome includes chaparral and coastal sage scrub in North America, mallee scrub in Australia, mattoral 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 Ecoloy 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 Ecoloy 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**

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

Family and Consumer Sciences A180 — Life Management — 3 units

This course develops skills in using resources for effective functioning now and in the future. Topics include steps in goal setting, problem solving, value clarifications, basic time and money management, nutrition and health. Lecture. **Transfer Credit: CSU.**

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 applicable to AA or AS degree.

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 in Everyday Life — 2 units

Design as it relates to everyday life. The study of the design process to include inspiration, design boards, tools and techniques, completed projects and evaluation. 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
Basic design theory and application. Utilization of tools, materials, and equipment to develop technical skills applicable to interior, architectural, and other related fields of design. Exploration of cultural heritage and psychological implication 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 A110, A115, A120, A121, A170, and A177.
Advisory: Fashion A118, A181, A150 & DVP A180.
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 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 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 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
Prerequisite: Fashion A180 or A183.
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 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 A110 and Film 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 A110 — Video Workshop — 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, postproduction, 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 A110 and Film 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 — Introduction to Radio, TV and Film — 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 — Film and Television Sound — 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 — Digital Film and Video Editing 1 — 3 units

Advisory: Film and 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 — Digital Film and Video Editing 2 — 3 units

Prerequisite Film and 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 and 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 and 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 and 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 — Virtual Reality Production (VR) — 3 units

Advisory: Film and 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 multimedia technology 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 A240 — Story Development & Production — 3 units

Prerequisite: Film and 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 and 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 Lab — 2 units

Prerequisite: Film and 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 and 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 — Digital Film
and Video Editing 2 — 3 units**

Prerequisite: Film and 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 and 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 — Digital
Cinema — 4 units**

Prerequisite: Film and 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 — DPortfolio
Development — 3 units**

Prerequisite: Film and 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 Culinology®/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 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.**

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, UC.**

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, UC.**

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

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.**

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.**

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 equivalen

*Same as Public Health A202*t

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.**

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; derterminants 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. Same as Kinesiology A134. 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 AmericaMay 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 Hortculture — 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, UC.**

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, UC.**

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, UC.**

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 follower's 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. Lecture. **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. Lecture. **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. Lecture. **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 l2 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 Cerfication. 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 A191or 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 Integeration 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. ThSame 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. TSame 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. 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. 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. 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. TSame 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. 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.**

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 applicable to AA or AS degree.

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

Advisory: Interior Design A100 and A110.

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

Basic design theory and application. Utilization of tools, materials, and equipment to develop technical skills applicable to interior, architectural, and other related fields of design. Exploration of cultural heritage and psychological implication 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. 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.**

Orange Coast College

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

Prerequisite: 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. 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 newswriting 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. **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.**

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 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 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; persistance 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 participantant'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 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 sparing (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 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, 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**

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.**

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.**

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 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**

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

Introduction to sports and fitness management programs-operation, procedures, facilities and equipment. Includes how to find a profession in the fitness field. 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. 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 to 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 applicable to AA or AS degree.

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 emphases 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.**

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

Prerequisite: Marine Science A100 or concurrent enrollment.

Advisory: English A098 or English as a Second Language A099.

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 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 applicable to AA or AS degree.

*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 applicable to AA or AS degree.

*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 applicable to AA or AS degree.

*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 applicable to AA or AS degree.

*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 applicable to AA or AS degree.

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, linear product spaces, first and second order differential equations, systems of differential equations, and Laplace transforms. Additional honors topics include Jacobian matrices, properties of R3 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

Prerequisite: Allied Health A010 and A111.

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

Prerequisite: Allied Health A111 and Biology A221 or A220 and A225

Co-requisite: Medical Assisting A150.

Theory and techniques in basic microbiology; performing blood and urine collection; CLIA waivered 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 — Administrating 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: Allied Health A115 and Medical Assisting A180.

Co-requisite: Medical Assisting A205.

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: Allied Health A111 and Medical Assisting A180.

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 A101 — Musicianship and Ear Training — 2 units

Prerequisite: Minimum musical experience and ability to read simple music is suggested.

A study of scales, rhythm, sight singing and musical interval recognition. Students will learn to identify, perform, and notate melodic and rhythmic musical phrases. This course includes computer assisted aural learning. Lecture. **Transfer Credit: CSU, UC.**

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 schedule 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, l950s 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 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.**

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.**

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.**

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.**

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 5 — 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 6 — 2 units

Prerequisite: Minimum two years prior piano study, to be verified during first week of class.

Advanced Studio Masterclass for music majors. Review of functional skills. Preparation for transfer and sophomore recitals. 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 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 grades 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 120.**

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**

IIntroduction 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 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.**

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, gravitation, energy, momentum, angular momentum, the kinematics of rigid body rotation, fluids, oscillations and 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 or A280 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 — Polysomnographic 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-rerequisite: 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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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. Lecture. **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 Lecture. **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. Lecture. **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.**

Public Health A160— Peer Health Education - Level 1 — 2 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, Lab. **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.**

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.**

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.**

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

Prerequisite: Biology A221 and Math A030.

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. 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: Allied Health A111.

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: Allied Health A111.

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

Corequisite: Radiologic Technology A165 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: Radiologic Technology A171.

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

Prerequisite or concurrent enrollment: Radiologic Technology A171 and A172.

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: Radiologic Technology A176.

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

Corequisite: Radiologic Technology A110.

An introductory course to the factors influencing radiographic image formation, principles of film processing, digital imagining, 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**

Prerequisite: Radiographic Technology A170.

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**

Prerequisite: Allied Health A115.

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 A265 —
Principles of Digital Imaging and
Computer Applications — 2 units**

Prerequisite: Radiologic Technology A165.

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.

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 — 10.5 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.

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**

Prerequisite: Radiologic Technology A271.

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 — 6 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**

Prerequisite: Radiologic Technology A110.

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**

Prerequisite: Radiologic Technology A110.

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

Prerequisite: Biology A221 or A220 and A225.

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

Prequisite: 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 — 2 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 redit: 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.**

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 A185H, 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

Prerequisite: Allied Health A010.

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

Prerequisite: Speech-Language Pathology Assistant A100.

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

Prerequisite: Speech-Language Pathology Assistant A140.

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

Co-requisite: Speech-Language Pathology Assistant A180.

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

Prerequisite: Speech-Language Pathology Assistant A180.

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

Prerequisite: Speech-Language Pathology Assistant A180 and A190.

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.**

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 romantic 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, playwriting, publicity, technical production, tage 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 1— 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, UC.**

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 A050N — Supervised Tutoring — 0 units

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 applicable to AA or AS degree.

Tutoring A090N — Tutoring Skills 1 Noncredit — 0 units

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 applicable to AA or AS degree.

Tutoring A091N — Tutoring Skills 2 Noncredit — 0 units

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 applicable to AA or AS degree.

Tutoring A060 — Supervised Learning — 0 units

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.

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.**

Faculty

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Professor, Interior Design
B.A.,California State University, Long Beach
M.S.D., Arizona State University

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Instructor, Counseling Services, CAFYES/EOPS
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KUO, DANIEL (2006)
Assistant Professor, Economics
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M.S., Chapman University
M.A., California State University, Dominguez Hills

LANNOM, MICHAEL (2014)
Instructor, Welding Technology
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LAUX, JOHN M. (2000)
Professor, Chemistry
B.S., Pacific Lutheran University, Washington
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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
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LIANG, TABITHA WEI MEI (2016)
Instructor, Neurodiagnostic and Polysomnographic Technology
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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
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LOHMAN, BENJAMIN (2001)
Associate Professor, Speech
B.S., Bradley University, Illinois
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LOREN, DAVI (2001)
Professor, English
B.A., M.A., California State University, Northridge
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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
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MAEKAWA, NAOKO (2008)
Professor, Mathematics
B.S., University of California, Irvine
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MAHER, DEBORAH (1999)
Professor, Psychology
B.A., M.A., University of California, Riverside
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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

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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)
Instructor, Sculpture
B.A., California State University, Sonoma
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Instructor, Counseling
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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)
Instructor, 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
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Professor, Accounting
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Associate Professor, Business Education
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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

NAUTA, DALE (1990)
Professor, Mathematics
B.A., California State University, Long Beach
M.A., California State University, Fullerton

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
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B.A., University of California, Los Angeles

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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'CONNOR, ROBIN (2003)
Professor, Kinesiology and Athletics
B.S., York University, (Canada)
M.A., California State University, Long Beach

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
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OTWELL, CHARLES (2014)
Professor, Philosophy
B.A., M.A., Ph.D., University of California, Irvine

PAGHUNSAN, RACHEL (2016)
Instructor, Food Service Management
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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)
Instructor, 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)
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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
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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)
Assistant Professor, Speech
B.A., Carroll College, Montana
M.A., California State University, Northridge

PRIOLEAU, KAREN (2012)
Instructor, 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)
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B.A., M.A., California State University, Long Beach

RAILEANU, LIA (1999)
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M.A., University of Iassy, Romania

RANGNO, ERIK (2007)
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B.A., University of California, Berkeley
M.A., Ph.D., University of California, Irvine

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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
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Instructor, Counseling
A.A., Orange Coast College
B.A., California State University, Fullerton
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Professor, Art
Doctorate, Florence University, Italy

RIDNOR, RACHEL (2016)
Instructor, Sociology
B.A., M.A., University of California, Irvine

RIGGIO, ALISON (2012)
Instructor, Respiratory Care
A.A., College of St. Catherine, Minnesota
B.S., St. Cloud State University, Minnesota

RODGERS, KATHRYN (2016)
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M.S., University of California, Irvine
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Assistant Professor, Math
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B.A., University of Southern California
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SAVAGE, JENNIFER (2008)
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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

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B.S., Arizona State University
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Instructor, Kinesiology and Athletics
B.S., California State University, Fullerton
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SHERMAN FALCIONI, JOCELYN (2009)
Associate Professor, World Languages
B.A., Azusa Pacific University
M.A., University California, Los Angeles

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Professor, Culinary Arts
B.S., University of Missouri

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Professor, Counseling Services
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Assistant Professor, Kinesiology and Athletics
Assistant Coach, Football
B.S., Bowling Green State University
M.S., California State University, Fullerton

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Assistant Professor, Kinesiology and Athletics
Head Coach, Soccer
B.A., University of California, Irvine
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Instructor, Librarian
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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
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Professor, Music
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Associate Professor, Heating, Ventilation, Air
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TOPPING, HOLLY (2008)
Associate Professor, Art
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B.A., University of California, San Diego

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Assistant Professor, Chemistry
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Instructor, Digital Media Arts and Design
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M.A., National University

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Ph.D., University of California, Berkeley

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Ph.D., University of California, Irvine

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Professor, Computer Information Systems
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Ph.D., University of California, Irvine

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Assistant Professor, Communications
B.A., University of Arizona

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Professor, Music
B.A., California State University, Humboldt
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WHITRIDGE, ROGER (1999)
Professor, Art
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M.F.A., Claremont Graduate School

WICKREMESINGHE, MANOJ (2005)
Professor, Counseling Services: Articulation Officer
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M.A., California State University, Dominguez Hills
Ed.D., University of Southern California

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M.S., Counseling, National University

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Cardiovascular Technology

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Diagnostic Medical Sonography

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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 Diorders 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

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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

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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 Universiity Hospital, Los Angeles

Veterans Administration Medical Center, Long Beach

West Anaheim Medical Center, Anaheim

Western Medical Center, Santa Ana

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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

CONNER, 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

EARICK, DIANNE
Associate Professor, English as a Second Language
1992-2014

EASTMAN, JUDITH B.
Professor, English
1974-2000

ELDON, FREDA 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

GALVERY, 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

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
Professor, 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
1970-2004

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

MCCHESNEY, 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

NUDELMAN, JACK
Assistant Professor, Electronics Technology/Avionics
1980-2010

O'KEEFFE, 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

PRIDDY, 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

SCRIPSMA, 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

SKEIE, LEON
Professor, Kinesiology and Athletics
1973-2016

Orange Coast College

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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Orange Coast College

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Business (Business and Computing Division)				
Business Administration Certificate of Achievement	34-35	OCC Cert - Business Admin	1_CT_BSAD	79-80
Business Administration AS Degree	60	OCC AS - Business Admin	1_AS_BSAD	79-80
Business Administration AS for Transfer Degree	60	OCC AST - Business Admin	1_AST_BSAD	80
Entrepreneurship Certificate of Specialization	9	OCC Cert - Entrepreneurship	1_CE_BAEN	80
Finance Certificate of Specialization	10	OCC Cert - Finance	1_CE_BAFN	80-81
Not for Profit Management Certificate of Specialization	9	OCC Cert - Not for Profit Mgmt	1_CE_NFPM	81
Cardiovascular Technology (Consumer and Health Sciences Division)				
Electrocardiography Technician Certificate of Achievement	30	OCC Cert - Electrocardiography	1_CT_CTEV	81-82
Echocardiography and Vascular Ultrasound AS Degree	70	OCC AS - Echo & Vascular Ultra	1_AS_CTEV	82
Chemistry (Math and Sciences Division)				
Chemistry AS Degree	60	OCC AS - Chemistry	1_AS_CHEM	82
Communications Studies (Literature and Languages Division)				
Communication Studies AA Degree for Transfer	60	OCC AAT - Communications	1_AAT_CMST	82-83
Mass Communications/Media Studies AA Degree	60	OCC AA - Communications	1_AA_MCOM	83
Computer Information Systems (Business and Computing Division)				
Business Application Development Certificate of Achievement	33	OCC Cert - Bus App Develop	1_CT_CISB	83-84
Business Application Development AS	60	OCC AS - Bus App Develop	1_AS_CISB	83-84
Business Information Worker Certificate of Specialization	16.5	OCC Cert - Bus Info Worker	1_CE_CSOA	84
Computer Information Systems Certificate of Achievement	32	OCC Cert - Computer Informatio	1_CT_CIST	84-85
Computer Information Systems AS Degree	60	OCC AS - Computer Information	1_AS_CIST	84-85
Computer Programming Certificate of Achievement	34-35	OCC Cert - Computer Programmin	1_CT_CSCP	85
Computer Programming AS	60	OCC AS - Computer Programming	1_AS_CSCP	85
C++ Programming Certificate of Specialization	12	OCC Cert - C++ Programmin	1_CE_CSCP	85
Java Programming Certificate of Specialization	12	OCC Cert - Java Programming	1_CE_JAVA	85
Python Programming Certificate of Specialization	8	OCC Cert - Python Programming	1_CE_CSPY	86
Web Design Certificate of Specialization	10-11	OCC Cert - Web Design	1_CE_CSWD	86
Enterprise Routing Certificate of Specialization	7-8	OCC Cert - Enterprise Router	1_CE_CSER	86
Network Administration and Operations Certificate of Specialization	15-16	OCC Cert - Network Admin&Op	1_CE_CSNO	86
Network Administration - Linux Certificate of Specialization	6	OCC Cert - Network Linux	1_CE_CSLX	86
Network Administration - Windows Certificate of Specialization	17	OCC Cert - Network Windows	1_CE_CSAW	87
Network Infrastructure Certificate of Specialization	12	OCC Cert - Network Infrast	1_CE_CSNI	87
Network Professional Certificate of Specialization	17	OCC Cert - Network Prof	1_CE_CSNP	87
Network Security Certificate of Specialization	6	OCC Cert - Network Security	1_CE_CSNS	87
Network Services and Applications Certificate of Specialization	9	OCC Cert - Network Service&Ap	1_CE_CSNA	87
Network Technician Certificate of Specialization	8	OCC Cert - Network Tech	1_CE_CSNT	87
Virtualization and Cloud Computing Certificate of Specialization	12	OCC Cert - Virtualization & CC	1_CE_CSVC	88
Computer Science (Business and Computing Division)				
Computer Science AS for Transfer Degree	60	OCC AST - Computer Science	1_AST_CS	88
Construction Technology (Technology Division)				
Carpentry	10	OCC Cert - Carpentry	1_CE_CARP	88
Concrete and Masonry Certificate of Specialization	13	OCC Cert - Concrete & Masonry	1_CE_CNCM	88-89
Fine Woodworking Certificate of Specialization	17	OCC Cert - Fine Woodworking	1_CE_CTFW	89
Plumbing Certificate of Specialization	12	OCC Cert - Plumbing	1_CE_CNPL	89
Residential Electrical Certificate of Specialization	14-16	OCC Cert - Res Electrical	1_CE_CTRE	89
Construction Technology Certificate of Achievement	25	OCC Cert - Construction Tech	1_CL_CTBP	89
Construction Technology AS Degree	60	OCC AS - Construction Tech	1_AS_CTBP	89

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Master Construction Specialist Certificate of Achievement	59	OCC Cert - Mstr Construction	1_CT_CTMS	90
Master Construction Specialist AS Degree	77	OCC AS - Mstr Construction	1_AS_CTMS	90
Residential Construction Development First Award Certificate of Achievement	18	OCC Cert - Res Construction 1	1_CL_RCDS	90
Residential Construction Development First Award AS	60	OCC AS - Res Construction 1	1_AS_CTRS	90
Residential Construction Development Second Award Certificate of Achievement	36	OCC Cert - Res Construction 2	1_CT_CTRS	90-91
Residential Construction Development Third Award Certificate of Achievement	54	OCC Cert - Res Construction 3	1_CT_RSTA	91
Culinary Arts (Consumer and Health Sciences Division)				
Baking and Pastry - Basic Certificate of Specialization	13-14	OCC Cert - Basic Baking&Pastry	1_CE_CABP	91
Advanced Baking and Pastry Certificate of Achievement	39-40	OCC Cert - Adv Baking&Pastry	1_CT_ABP	92
Advanced Baking and Pastry AS Degree	60	OCC AS - Adv Baking&Pastry	1_AS_ABP	92
Culinary Arts - Basic Certificate of Achievement	27-30	OCC Cert - Basic Culinary	1_CT_CAAP	92
Advanced Culinary Arts Certificate of Achievement	51-55	OCC Cert - Advanced Culinary	1_CT_CAAV	92-93
Advanced Culinary Arts AS Degree	69-72	OCC AS - Advanced Culinary	1_AS_CAAV	92-93
Culinology® & Food Science (Consumer and Health Sciences Division)				
Culinary Food Science Assistant – Level 1 Certificate of Achievement	30	OCC Cert - Culinology	1_CT_CULN	93
Culinology® – Level 2 – Professional Level AS Degree	69	OCC AS - Culinology	1_AS_CULN	93-94
Dance (Visual and Performing Arts Division)				
Pilates Instructor Certificate of Achievement	18.5	OCC Cert - Pilates/Dance Condi	1_CL_PILA	94
Dance Instructor Certificate of Achievement	34	OCC Cert - Dance Instructor	1_CT_DNDI	94-95
Dance Instructor AS Degree	60	OCC - AS Dance Instructor	1_AS_DNDI	94-95
World Dance Certificate of Achievement	25-28	OCC Cert - World Dance	1_CL_DNWD	95-96
World Dance AA Degree	60	OCC AA - World Dance	1_AA_DNWD	95-96
Dance AA Degree	60	OCC AA - Dance	1_AA_DANC	96
Dental Assisting, Registered (Consumer and Health Sciences Division)				
Dental Assisting, Registered Certificate of Achievement	33	OCC Cert - Dental Assisting	1_CT_DENA	97
Dental Assisting, Registered AS Degree	60	OCC AS - Dental Assisting	1_AS_DENA	97
Diagnostic Medical Sonography (Consumer and Health Sciences Division)				
Diagnostic Medical Sonography AS Degree	84	OCC AS - Diagnostic Med Sonogr	1_AS_DMS	97-98
Digital Media Arts and Design (Visual and Performing Arts Division)				
Graphics Design Certificate of Achievement	38.5	OCC Cert - Graphics Design	1_CT_DMAG	98-99
Graphics Design AS Degree	60	OCC AS - Graphics Design	1_AS_DMAG	98-99
UX Design Certificate of Achievement	38.5	OCC Cert - UX Design	1_CT_UXDS	99
UX Design AS Degree	60	OCC AS - UX Design	1_AS_UXDS	99
Economics (Behavioral and Social Sciences Division)				
Economics AA Degree for Transfer	60	OCC AAT- Economics	1_AAT_ECON	100
Education (Consumer and Health Sciences Division)				
Early Childhood Education AS Degree for Transfer	60	OCC AST - Early Childhood Educ	1_AST_ECE	100-101
Infant & Toddler Teacher Certificate of Achievement	32.5-34	OCC Cert - EC: Infant & Toddle	1_CT_ECIT	101
Infant & Toddler Teacher AS Degree	60	OCC AS - EC: Infant & Toddler	1_AS_ECIT	101
Preschool Teacher Certificate of Achievement	35.5-37	OCC Cert - EC: Preschool Teach	1_CT_ECPT	102
Preschool Teacher AS Degree	60	OCC AS - EC: Preschool Teacher	1_AS_ECPT	102
Early Childhood Administration Certificate of Achievement	48-52.5	OCC Cert - Early Childhood Adm	1_CT_ECAD	102
Early Childhood Administration AS Degree	63-67.5	OCC AS - Early Childhood Admin	1_AS_ECAD	102
Elementary Teacher Education AA Degree for Transfer	60	OCC AAT - Elementary Teacher E	1_AAT_ETE	102-103
Electronics Technology (Technology Division)				
Electro-Mechanical Technician Certificate of Specialization	11-12	OCC Cert - Electro-Mechanical	1_CE_ELEM	103
Electronic Reliability Technician Certificate of Achievement	22-23	OCC Cert - Electr Relia Tech	1_CL_ELCH	104
Electronics Engineering Technician Certificate of Achievement	34-35	OCC Cert - Electr Engin Tech	1_CT_ELET	104
Electronics Engineering Technician AS Degree	60	OCC AS: Electr Engin Tech	1_AS_ELET	104
Industrial Automation Technician Certificate of Achievement	45-46	OCC Cert - Industrial Automati	1_CT_ELAM	104
Industrial Automation Technician AS Degree	63-64	OCC AS - Industrial Automation	1_AS_ELAM	104
Emergency Medical Services (Consumer and Health Sciences Division)				
Emergency Medical Services Certificate of Specialization	15	OCC Cert - Emergency Medical S	1_CE_EMS	105
Engineering (Math and Sciences Division)				

Program Title	Units	Degree Works "What If" Title	BANNER Program Code	Page #
Engineering AS Degree	60	OCC AS - Engineering	1_AS_ENGR	105-106
English (Literature and Languages Division)				
English AA Degree	60	OCC AA - English	1_AA_ENGL	106
English AA Degree for Transfer	60	OCC AAT - English	1_AAT_ENGL	106-107
Fashion (Consumer and Health Sciences Division)				
Industrial Sewing Certificate of Specialization	11.5-13	OCC Cert - Industrial Sewing	1_CE_FAIS	107
Apparel Construction Certificate of Achievement	44	OCC Cert - Fashion - Apparel C	1_CT_FSAC	107-108
Apparel Construction AS Degree	62	OCC AS - Fashion - Apparel Con	1_AS_FSAC	107-108
Design Certificate of Achievement	44.5	OCC Cert - Fashion: Design	1_CT_FSDE	108
Design AS Degree	60-62.5	OCC AS - Fashion: Design	1_AS_FSDE	108
Display and Visual Presentation Certificate of Achievement	28	OCC Cert - Display & Visual Pr	1_CL_MKDV	108-109
Display and Visual Presentation AS Degree	60	OCC AS - Display & Visual Pres	1_AS_MKDV	108-109
Fashion Merchandising Certificate of Achievement	43	OCC Cert - Fashion Merchandisi	1_CT_FSMC	109
Fashion Merchandising AS Degree	60-61	OCC AS - Fashion Merchandising	1_AS_FSMC	109
Production/Product Development Certificate of Achievement	43.5	OCC Cert - Fashion Production	1_CT_FSPD	109
Production/Product Development AS Degree	61.5	OCC AS - Fashion Production/Pr	1_AS_FSPD	109
Film & Television (Visual and Performing Arts Division)				
Film & Television Certificate of Achievement	29	OCC Cert - Film & TV	1_CL_FTV	110
Film & Television AA Degree	60	OCC AA - Film & TV	1_AA_FTV	110
Film, Television, and Electronic Media AS Degree for Transfer	60	OCC AST - Film & TV	1_AST_FILM	110-111
Media Arts and Creative Entertainment	17	OCC Cert - Media Arts & Creat Ent	1_CB_MACE	111
Food Service Management Commercial (Consumer and Health Sciences Division)				
Catering Certificate of Achievement	17-19	OCC Cert - FSM: Catering	1_CB_FSCC	111-112
Quick Service Certificate of Specialization	15	OCC Cert - FSM: Quick Service	1_CE_FSQS	112
Restaurant Supervision Certificate of Achievement	28-29	OCC Cert - FSM Restaurant Sup	1_CL_FMRS	112
Restaurant AS Degree	63-64	OCC AS - FSM: Restaurant	1_AS_FMCR	112-113
Food Service Management Institutional (Consumer and Health Sciences Division)				
Dietetic Service Supervisor Certificate of Achievement	21.5	OCC Cert - Dietetic Srvc Supr	1_CL_FSDS	113
Dietetic Service Manager Certificate of Achievement	40	OCC Cert - Dietetic Srvc Mgr	1_CT_FMDM	113
Foreign Languages (Literature and Languages Division)				
Foreign Language AA Degree	60	OCC AA - Foreign Languages	1_AA_FLNG	113-114
Spanish AA Degree for Transfer	60	OCC AAT - Spanish	1_AAT_SPAN	114-115
General Education Transfer Certificates — Refer to the Graduation Requirements section of this catalog				
Certificate of Achievement — CSU General Education	39	OCC Cert - CSU General Ed	1_CT_CSU	46-47
Certificate of Achievement — IGETC	37-39	OCC Cert - IGETC General Ed	1_CT_IGETC	48-49
Geography (Social and Behavioral Sciences Division)				
Geography AA Degree	60	OCC AA - Geography	1_AA_GEOG	115
Geography AA Degree for Transfer	60	OCC AAT- Geography	1_AAT_GEOG	115
Geology (Math and Sciences Division)				
Earth Science AS Degree	60	OCC AS - Earth Science	1_AS_ERTH	116
Geology AS Degree for Transfer	60	OCC AS - Geology	1_AST_GEOL	116-117
Global Studies (Social and Behavioral Sciences Division)				
Global Studies AA Degree for Transfer	60	OCC AAT - Global Studies	1_AAT_GLST	117
Heating, Ventilation, Air Conditioning & Refrigeration (Technology Division)				
HVACR Technology Certificate of Achievement	30	OCC Cert - HVACR Technology	1_CT_HVAC	118
HVACR Technology AS Degree	60	OCC AS - HVACR Technology	1_AS_HVAC	118
History (Social and Behavioral Sciences Division)				
History AA Degree for Transfer	60	OCC AAT - History	1_AAT_HIST	118-119
Horticulture (Math and Science Division)				
Landscape Site Design Elements Certificate of Specialization	9.5	OCC Cert - Lanscape Site Design	1_CE_LSCP	119
Basic Landscape Design Certificate of Specialization	9	OCC Cert - Basic Landscape	1_CE_BLSC	119
Intermediate Landscape Design Certificate of Specialization	13	OCC Cert - Intm Landscape	1_CE_ILSC	119
Advanced Landscape Design Certificate of Specialization	13.5	OCC Cert - Adv Landscape	1_CE_ALSC	119-120
The Professional Practice of a Landscape Design & Construction Business Certificate of Specialization	9	OCC Cert - Landscape & Construction	1_CE_LDSN	120
Retrofitting California Urban Gardens Certificate of Specialization	10.5	OCC Cert - Retrofitting CA Urb	1_CE_RCUG	120
Horticulture Certificate of Achievement	24	OCC Cert - Horticulture	1_CL_OH	120-121

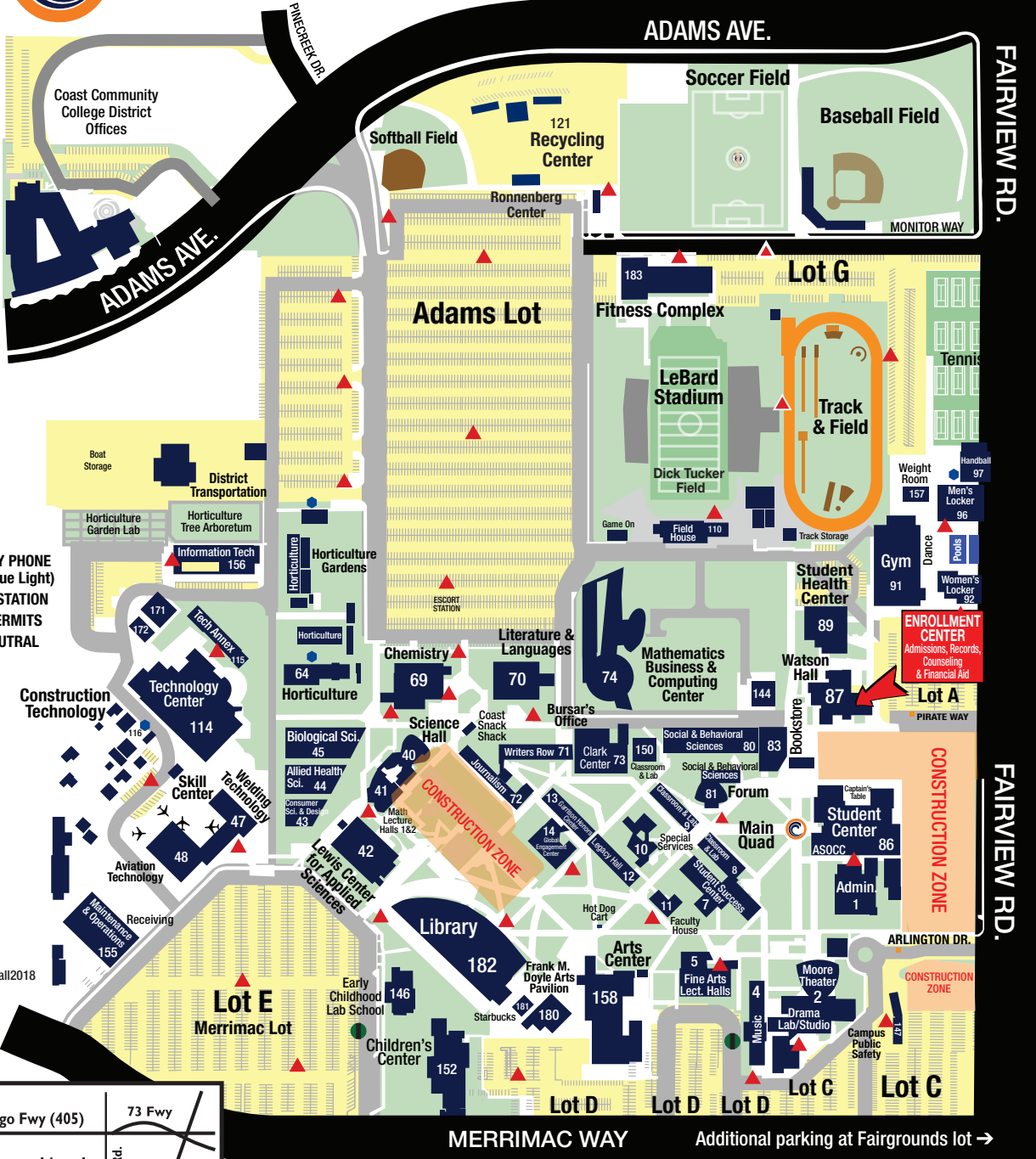| Program Title	Units	Degree Works "What If" Title	BANNER Program Code	Page #
Horticulture AS Degree	60	OCC AS - Horticulture	1_AS_OH	120-121
Hospitality, Travel, and Tourism (Consumer Health and Sciences Division)				
Airline Travel Management Certificate of Achievement	49	OCC Cert - Airline & Travel	1_CT_ATM	121-122
Flight Attendant & Airline Travel Careers Certificate of Achievement	43	OCC Cert - Flight Attendant	1_CT_FAAT	122
Flight Attendant & Airline Travel Careers AS Degree	61	OCC AS - Flight Attendant	1_AS_FAAT	122
Front Office Specialist Certificate of Achievement	43	OCC Cert - Hotel Front Office	1_CT_HMFO	122-123
Hotel Management AS Degree	64	OCC AS - Hotel Room Operations	1_AS_HMRO	123
Human Resource Management Certificate of Achievement	34	OCC Cert - Human Resource Mgmt	1_CT_HMHR	123
Human Resource Management AS Degree	60	OCC AS - Human Resource Mgmt	1_AS_HMHR	123
Meeting and Event Management Certificate of Achievement	32.5	OCC Cert - Meeting Event Mgmt	1_CT_HTTM	124
Meeting and Event Management AS Degree	60	OCC AS- Meeting Event Mgmt	1_AS_HTTM	124
Sales and Marketing Specialist Certificate of Achievement	37	OCC Cert - Hotel Sales Marketing	1_CT_HMME	124
Sales and Marketing AS Degree	60	OCC AS - Sales Marketing	1_AS_HMME	124
Spa Management Certificate of Achievement	34	OCC Cert - Spa Management	1_CT_HMSM	124-125
Spa Management AS Degree	60	OCC AS - Spa Management	1_AS_HMSM	124-125
Travel Specialist Certificate of Achievement	52	OCC Cert - Travel Agent	1_CT_TRAV	125
Travel Specialist AS Degree	70	OCC AS - Travel & Tourism	1_AS_TRAV	125
Interior Design (Consumer and Health Sciences Division)				
Interior Merchandising — Level 1 Certificate of Achievement	27	OCC Cert - Interior Merch	1_CL_IDIM	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	77-79	OCC Cert - Interior Design: Pro	1_CF_IDP	126-127
Kitchen & Bath — Advanced Certificate of Specialization	10	OCC Cert - Kitchen & Bath	1_CE_IDKB	127
Journalism (Literature and Languages Division)				
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
Kinesiology (Kinesiology and Athletics Division)				
Yoga Instructor Training Certificate of Specialization	6	OCC Cert - Yoga Instructor	1_CE_YOGA	128
Athletic Training Level 1 Certificate of Achievement	18-26	OCC Cert - Athletic Training	1_CL_KINAT	128-129
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
Leadership Studies (Business and Computing Division)				
Leadership Studies Certificate of Specialization	9	OCC Cert - Leadership Studies	1_CE_LDST	130
Liberal Arts				
Liberal Arts AA Degree	60	OCC AA - Liberal Arts	1_AA_LIB	130-131
Management (Business and Computing Division)				
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	131-132
Management and Leadership Studies AS Degree	60	OCC AS - Management & Leader	1_AS_MGMT	131-132
Retail Certificate of Achievement	24-25	OCC Cert - Retail	1_CL_MGRT	132
Retail AS Degree	60	OCC AS - Retail	1_AS_MGRT	132
Manufacturing Technology (Technology Division)				
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	132-133
Machinist Certificate of Achievement	24	OCC Cert - Machinist	1_CL_MTMC	133
Machinist AS Degree	60	OCC AS - Machinist	1_AS_MTMC	133
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	133-134
CNC Machine Programmer AS Degree	60	OCC AS - Machine Programmer	1_AS_MTMP	133-134
Tooling Certificate of Achievement	40	OCC Cert - Tooling	1_CT_MTTL	134
Tooling AS Degree	60	OCC AS - Tooling	1_AS_MTTL	134

Program Title	Units	Degree Works "What If" Title	BANNER Program Code	Page #
Marine Science (Math and Sciences Division)				
Marine Science AS Degree	60	OCC AS - Marine Science	1_AS_MRSC	134-135
Marketing (Business and Computing Division)				
Advertising	9	OCC Cert - Advertising	1_CE_MKAD	135
Entry Level Marketing	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	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	9	OCC Cert - Sales	1_CE_MKSL	136
Math (Math and Sciences Division)				
Math AS Degree for Transfer	60	OCC AST - Math	1_AST_MATH	136-137
Medical Assisting (Consumer and Health Sciences Division)				
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
Music (Visual and Performing Arts Division)				
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	29	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	140-141
Studio Guitar Performer AA Degree	60	OCC AA - Music: Studio Guitar	1_AA_MSGP	140-141
Natural Science (Math and Sciences Division)				
Natural Science AS Degree	60	OCC AS - Natural Science	1_AS_NS	141
Neurodiagnostic Technology (Consumer and Health Sciences Division)				
Neurodiagnostic Technology Upgrade Certificate of Specialization	6-8	OCC Cert - Neurodiagnostic Upg	1_CE_NDTU	141-142
Neurodiagnostic Technology AS Degree	70	OCC AS - Neurodiagnostic Techn	1_AS_NDT	141-142
Nutrition and Dietetics (Consumer and Health Sciences Division)				
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	33.5-35.5	OCC Cert - Nutrition & Fitness	1_CT_NCFE	144
Philosophy (Social and Behavioral Sciences Division)				
Philosophy AA Degree for Transfer	60	OCC AAT - Philosophy	1_AAT_PHIL	145
Photography (Visual and Performing Arts Division)				
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
Physics (Math and Sciences Division)				
Physics AS Degree for Transfer	60	OCC AST - Physics	1_AST_PHYS	146-147
Political Science (Social and Behavioral Sciences Division)				
Political Science AA Degree for Transfer	60	OCC AAT - Political Science	1_AAT_PSCI	147
Polysomnographic Technology (Consumer and Health Sciences Division)				
Polysomnographic Technology AS Degree	63.5	OCC AS - Polysomnography	1_AS_PSG	147-148
Professional Mariner (Consumer and Health Sciences Division)				
Professional Mariner Certificate of Achievement	19-21	OCC Cert - ProfessionalMariner	1_CL_MRPM	148-149
Professional Mariner AS Degree	60	OCC AS - Professional Mariner	1_AS_MRPM	149

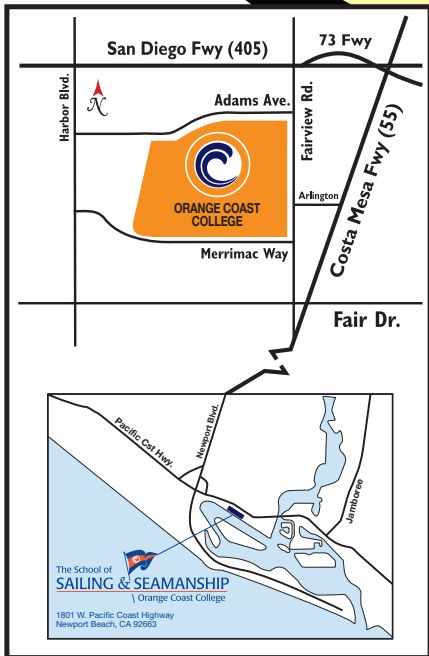| Program Title	Units	Degree Works "What If" Title	BANNER Program Code	Page #
Psychology (Social and Behavioral Sciences Division)				
Psychology AA Degree for Transfer	60	OCC AAT - Psychology	1_AAT_PSYC	149-150
Public Health (Kinesiology and Athletics Division)				
Public Health AA Degree	60	OCC AA - Public Health	1_AA_PUBH	150
Public Health Science AS Degree for Transfer	60	OCC AST - Public Health	1_AST_HLTH	150-151
Radiologic Technology — Diagnostic (Consumer and Health Sciences Division)				
Radiologic Technology — Diagnostic AS Degree	88.5	OCC AS - Radiological Tech: Diag	1_AS_RADT	151-152
Real Estate (Business and Computing Division)				
Real Estate Broker Certificate of Achievement	24-25	OCC Cert - Real Estate Broker	1_CL_RE	152
Real Estate Broker AS Degree	60	OCC AS - Real Estate Broker	1_AS_RE	152
Real Estate Salesperson Certificate of Specialization	9	OCC Cert - Real Estate Sales	1_CE_MKRS	153
Religious Studies (Social and Behavioral Sciences Division)				
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	153
Respiratory Care (Consumer and Health Sciences Division)				
Respiratory Care AS Degree	76	OCC AS - Respiratory Care	1_AS_RSPC	154
Sociology (Social and Behavioral Sciences Division)				
Sociology AA Degree for Transfer	60	OCC AAT - Sociology	1_AAT_SOC	155
Speech-Language Pathology Assistant (Consumer and Health Sciences Division)				
Speech Language Pathology Assistant AS Degree	64	OCC AS - Speech Lang Pathology	1_AS_SLPA	156
Theatre Arts (Visual and Performing Arts Division)				
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
Welding Technology (Technology Division)				
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_BSMAW	158-159
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 1 Welding (FCAW) Certificate of Specialization	7.5-10.5	OCC Cert - Welding: FCAW 1	1_CE_FCAWA	159
Advanced 2 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	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
Noncredit Certificates				
Allied Health (Consumer and Health Sciences Division)				
Personal Care Aide Certificate of Completion		OCC NC Cert - Personal Care Aide	1_NCH_PCA	161
Consumer Studies (Consumer and Health Sciences Division)				
Retail Employment Certificate of Completion		OCC NC Cert - Retail Employment	1_NCJ_RETL	161
English Language Learning (Literature and Languages Division)				
Grammar Review Certificate of Competency		OCC NC Cert - ELL: Grammar Review	1_NCJ_ELLG	161
Language Transition to College Certificate of Competency		OCC NC Cert - ELL: Language Transition	1_NCH_ELL	161
Multi-skills English Certificate of Competency		OCC NC Cert - ELL: Multi-skills English	1_NCK_ELLM	162
Oral Communication Certificate of Competency		OCC NC Cert - ELL: Oral Communication	1_NCH_ELLO	162
Workplace English Certificate of Competency		OCC NC Cert - ELL: Workplace English	1_NCH_ELLW	162
Kinesiology (Kinesiology and Athletics Division)				
Lifeguard Training, Professional Rescue Certificate of Completion		OCC NC Cert - Lifeguard Training	1_NCH_LFGD	162
Yoga Instructor Training Certificate of Completion		OCC NC Cert - Yoga Instructor Training	1_NCJ_YOGA	162-163
Math (Math and Sciences Division)				
Math Skills Development Certificate of Competency		OCC NC Cert -Math Skills Development	1_NCH_MATH	163
Tutoring (Library and Learning Division)				
Tutoring Skills and Strategies Certificate of Completion		OCC NC Cert - Tutoring Skills and Strategies	1_NCG_TUTR	163

ORANGE COAST COLLEGE CAMPUS MAP

2701 Fairview Rd. Costa Mesa CA 92626 • 714-432-0202

ADAMS AVE.

FAIRVIEW RD.

Coast Community College District Offices

Softball Field

121 Recycling Center

Soccer Field

Baseball Field

MONITOR WAY

Ronnenberg Center

Adams Lot

183 Fitness Complex

Lot G

Track & Field

Tennis

LeBard Stadium

Dick Tucker Field

Game On

Field House 110

Track Storage

Weight Room 157

Handball 97

Men's Locker 96

Gym 91

Dance

Pools

Women's Locker 92

Boat Storage

District Transportation

Horticulture Garden Lab

Horticulture Tree Arboretum

Information Tech 156

Horticulture

Horticulture Gardens

Horticulture

64

Horticulture

ESCORT STATION

Chemistry 69

Literature & Languages 70

Mathematics Business & Computing Center 74

Student Health Center 89

Watson Hall 87

Enrollment Center — Admissions, Records, Counseling & Financial Aid

Lot A

PIRATE WAY

Tech Annex 171 172

115

Technology Center 114

116

Construction Technology

Skill Center

Welding Technology

47

48

Aviation Technology

Receiving

Maintenance & Operations 155

Fall 2018

Lewis Center for Applied Sciences 42

Biological Sci. 45

Allied Health Sci. 44

Consumer Sci. & Design 43

Science Hall 40

41

Math Lecture Halls 1&2

Coast Snack Shack

Writers Row 71

Journalism 72

13

14 Global Engagement Center

Clark Center 73

150 Classroom & Lab

Classroom & Lab

Legacy Hall

Special Services 10

Classroom & Lab 8

Student Success Center 12

Bursar's Office

Social & Behavioral Sciences 80 83

Social & Behavioral Sciences 81

Forum

Main Quad

Captain's Table

Student Center 86

ASOCC

Admin. 1

Bookstore 144

CONSTRUCTION ZONE

Hot Dog Cart

Faculty House 11

Library 182

Early Childhood Lab School 146

Children's Center 152

Frank M. Doyle Arts Pavilion

Starbucks

180

181

Arts Center 158

Fine Arts Lect. Halls 5

4 Music

Moore Theater 2

Drama Lab/Studio

147

Campus Public Safety

ARLINGTON DR.

CONSTRUCTION ZONE

Lot E — Merrimac Lot

Lot D

Lot C

MERRIMAC WAY

Additional parking at Fairgrounds lot →

Legend
- ▲ EMERGENCY PHONE (Red Box Blue Light)
- ● CHARGING STATION
- ■ PARKING PERMITS
- ⬡ GENDER NEUTRAL RESTROOM

N

San Diego Fwy (405)

73 Fwy

Adams Ave.

Arlington

Merrimac Way

Harbor Blvd.

Fairview Rd.

Costa Mesa Fwy (55)

Fair Dr.

ORANGE COAST COLLEGE

The School of SAILING & SEAMANSHIP — Orange Coast College
1801 W. Pacific Coast Highway, Newport Beach, CA 92663

Pacific Coast Hwy

Newport Blvd.

Jamboree

Dennis Kelly Aquarium

Directory

Name	No.
Administration	(1)
Admissions, Counseling & Student Records (Watson Hall)	(87)
Adult Education	(150)
Allied Health Sciences	(44)
Arts Center	(158)
Assessment Center (Watson Hall)	(87)
Associated Students of OCC (ASOCC)	(86)
Athletics	(91)
Aviation Technology	(48)
Biological Sciences	(45)
Bookstore & Warehouse	(83 & 144)
Bursar's Office (Clark Center)	(73)
Business Education	(13)
Cafeteria (Student Center Café)	(86)
Campus Public Safety (Parking)	(147)
Captain's Table Restaurant	(86)
Career Education (Watson Hall)	(87)
Chemistry	(69)
Children's Center	(152)
Classrooms & Labs	(7, 8, 9 & 150)
Community Education (Clark Center)	(73)
Construction Technology	(116)
Consumer Sciences & Design	(43)
Consumer & Health Sciences Division	(43)
Counseling (Watson Hall)	(87)
Counseling Division (Watson Hall)	(87)
Dance	(91, 158)
Dennis Kelly Aquarium	
Dick Tucker Field	(LeBard Stadium)
Disabled Students Center	(10)
Drama Lab/Studio	(2)
Early Childhood Lab School	(146)
Eclectic Café	(86)
Enrollment Center (Watson Hall)	(87)
Exercise Science (Fitness Complex)	(183)
Faculty House	(11)
Field House	(110)
Financial Aid (Watson Hall)	(87)
Fine Arts Lecture Halls	(5)
Fitness Complex	(183)
Food Services (Cafeteria)	(86)
Forum Lecture Hall (Giles Brown)	(81)
Frank M. Doyle Arts Pavilion	(180)
Garrison Honors Center	(13)
Global Engagement Center	(14)
Gymnasium	(91)
Handball Courts	(97)
Health Center (Student)	(89)
Horticulture	(64)
Information Technology	(156)
International Admission & Student Services	(14)
Job Placement (Watson Hall)	(87)
Journalism	(72)
Kinesiology & Athletics Division	(91)
Language Institute	(12)
Learning Center (Special Services)	(10)
Legacy Hall	(12)
Lewis Center for Applied Sciences	(42)
Library	(182)
Literature & Languages	(70)
Literature & Languages Division	(70)
Mailroom (Clark Center)	(73)
Maintenance & Operations	(155)
Marketing & Public Relations	(73)
Math Lecture Halls 1 & 2	(41)
Mathematic, Business & Computing Center	(74)
Mathematics & Sciences Division	(42)
Media Center (Library)	(182)
Men's Locker Room	(96)
Multicultural Center	(14)
Music	(4)
Parking (Campus Public Safety)	(147)
Photo Lab (Arts Center)	(158)
Digital Photo Lab (Fine Arts)	(5)
Pirates Cove	(72)
Pools (Aquatics)	(Gym Area, 91)
Receiving	(155)
Recycling Center	(121)
Re-Entry (Watson Hall)	(87)
Reprographics (Clark Center)	(73)
Ronnenberg Center	(121)
Science Hall	(40)
Skill Center	(47 & 48)
Snack Bars	
Coast Snack Shack	(Lit & Lang Quad)
The Grove	(Main Quad)
Game On	(LeBard Stadium)
Hot Dog Cart	(Arts Center Quad)
Starbucks	(181)
Social & Behavioral Sciences	(80 & 81)
Social & Behavioral Sciences Division	(81)
Social Science Lab	(83)
Special Services	(10)
Sports Medicine	(183)
Student Center	(86)
Student Center Café	(86)
Student Health Center	(89)
Student Records (Watson Hall)	(87)
Student Services (Watson Hall)	(87)
Student Success Center	(7 & 8)
Study Abroad	(14)
Swap Meet Office	(110)
Technology Annex	(115)
Technology Division	(114)
Technology Center	(114–116, 171)
Theatre (Robert B. Moore)	(2)
Transfer Center (Watson Hall)	(87)
Veterans Resource Center (VRC)	(86)
Veterans Services	(87)
Visual & Performing Arts Division	(158)
Watson Hall	(87)
Web Services Training	(156)
Weight Room	(157)
Welcome/Info Center (Watson Hall)	(87)
Welding Technology	(47)
Women's Locker Room	(92)
Writers Row	(71)
Writing/Reading Center	(8)

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COAST
COLLEGE

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Costa Mesa, California 92626
www.orangecoastcollege.edu