

AVIATION AND TRAVEL CAREERS (ATC)

ATC 050 C Special Projects 2 Units

Advisory: Students must be concurrently enrolled in another ATC course. Term hours: 18 lecture and 54 laboratory TBA. This course provides students with opportunities to practice aviation and travel related principles and procedures in practical situations and simulations to develop industry related skills.

ATC 100 C Introduction to Aviation 3 Units

Term hours: 54 lecture. This course introduces students to the development of aviation and its importance in the economy. Special emphasis is placed on the history of aviation, the airlines, and general aviation. (CSU)

ATC 101 C Introduction to Travel Careers 3 Units

Term hours: 54 lecture. This course introduces students to career opportunities in the aviation and travel industries. Students will learn how to research and apply for jobs. The fundamentals of traveling will also be reviewed such as passport, visa, security, travel health and insurance. Students will prepare a personalized career project. (CSU)

ATC 102 C Career Communication and Portfolio 3 Units

Term hours: 54 lecture. In this course, students will develop their business communication skills in the development of a career portfolio, including a resume, cover letter, letters of recommendations, and work samples consistent with professional business conventions. Students will learn online application strategies, employment test-taking tips, and behavioral-based interviewing skills. (CSU)

ATC 103 C Aviation Travel Open Lab 0.5-3 Units

Corequisite(s): Students must be enrolled in another ATC course.

Term hours: 27 to 162 laboratory depending on units attempted. This open entry, open exit course with flexible hours and variable units provides students enrolled in an Aviation & Travel Careers course with the equipment and resources to allow self-paced instruction and/or practice in core competencies. Twenty-four (24) hours are required for each one-half unit. May be taken for credit 3 times. Open Entry/Open Exit. \$5.00 Material Fee-Payable at Registration. (CSU)

ATC 104 C Air Transportation 3 Units

Term hours: 54 lecture. This course presents the development and current status of the air transportation industry, including aircraft types, airport facilities, State and Federal regulations, security issues, economic challenges, career opportunities, and the organization and function of the FAA, NTSB, IATA and ICAO. (CSU)

ATC 112 C Homeland Security 3 Units

Term hours: 54 lecture. This course is an introductory study of domestic and international threats of terrorism. It examines the concepts, definitions, and contemporary issues of modern terrorism. The course includes law enforcement issues for first-responders relating to terrorism, particularly with regard to Homeland Protection and counter terrorists' measures. (CSU)

ATC 116 C Aviation and Transportation Security 3 Units

Term hours: 54 lecture. This course is an introductory study of domestic and international airport and transportation security issues. It includes the Patriot Act and changing laws relating to airport and transportation security. The course will present and analyze the current status of aviation law pertaining to terrorism, air rage, search and seizure protections and impending changes to the nation's transportation industry. (CSU)

ATC 118 C Disaster Preparedness Response 3 Units

Term hours: 54 lecture. This course provides students with an awareness of natural and man-made incidents which result in catastrophic loss. Disaster scenarios will be examined from the perspective of preparedness, response and clean-up. Federal, state and local response preparedness programs will be a focus, including FEMA. Students will take part in simulated incidents, including safety and security for large-scale events. State and national incident command systems, S.E.M.S. and N.I.M.S., will be taught so as to familiarize the student to police and fire responses. (CSU) (UC)

ATC 123 C Travel Sales and Tour Operations 3 Units

Term hours: 54 lecture. In this course, students will learn the essentials of travel sales and tour operations, including the latest trends, itinerary planning, and the technologies available to travel/tourism consultants in the leisure, recreational, and corporate travel markets. (CSU)

ATC 126 C Travel Management 3 Units

Term hours: 54 lecture. This course is a study of management practices in the airline and travel/tourism industries, including ARC requirements, location and staffing, sales reports and agency accounting. Travel markets, product lines, marketing techniques, advertising, and promotions are explored. Techniques for personal and telephone selling and guidelines for handling job stress, sales, and client crises are included. Students will learn supervisory and leadership strategies. (CSU)

ATC 132 C Private Pilot 4 Units

Term hours: 54 lecture and 54 laboratory. This course provides students with an introduction to basic principles of aviation, meteorology, navigation, radio communication and Federal Aviation Regulations to qualify the student for the FAA Knowledge Examination for the Private Pilot Certificate and meets the FAA requirements for ground training. Pass/No Pass/Letter Grade Option. (CSU)

ATC 136 C Air Navigation 3 Units

Advisory: Concurrent enrollment in, or completion of, ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 54 lecture. This course is a study of pilotage, dead reckoning, and radio navigation techniques; solution and application of navigation problems. This course meets partial fulfillment of the requirements of the FAA for ground training. (CSU)

ATC 140 C Meteorology 3 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 54 lecture. This is a course of study of weather recognition, icing, fog, fronts, clouds, weather maps and symbols, forecasting pressure patterns, wind systems, temperature-humidity-dew point relationships, precipitation, with emphasis on the practical application of this knowledge to safe flying practices. The services and assistance available from the U.S. Weather Bureau will be highlighted. The course meets the Meteorology requirements of the FAA for ground training. (CSU)

ATC 144 C Aircraft and Engines 3 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 54 lecture. This course is a study of the theory of flight, aircraft design, construction, operation limitations, repair and maintenance, maintenance records and aircraft accessories. Engine study includes principles of internal combustion engines, engine design and construction, fuel, lubrication and cooling systems, propellers, trouble shooting and preventive maintenance. This course meets partial fulfillment of the requirements of the FAA for ground training. (CSU)

ATC 160 C UAS Drone Basic**3 Units**

Term hours: 54 lecture. In this course, students prepare to meet the Federal Aviation Administration requirements for certification to operate Unmanned Aircraft Vehicles (UAVs) under 55 pounds in commercial operations. Emphasizes the safety, legal, and ethical requirements of operation in the public, civil, commercial and military settings. Includes core technologies including optics, sensors, power plants, control systems and communication technologies. (CSU)

ATC 161 C UAS Drone Basic Simulator**2 Units**

Advisory: Concurrent enrollment or completion of ATC 160 C.

Term hours: 27 lecture and 27 laboratory. This course covers hands-on flight simulation activities to develop, practice, and optimize essential Unmanned Aircraft Systems pilot flight skills. Flight time in the approved ground trainers may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 162 C UAS Drone Basic Flight**2 Units**

Advisory: Completion of or concurrent enrollment in ATC 160 C and ATC 161 C.

Term hours: 27 lecture and 27 laboratory. Flight time in the approved UAS Drone aircraft may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 174 C Destin Americas and Europe**3 Units**

Term hours: 54 lecture. This course introduces students to world geography from a travel and tourism perspective. Students will learn about domestic and international travel considerations including itineraries, currencies, travel documents, customs, language, health requirements, and time considerations for locations throughout the Americas and Europe. (CSU)

ATC 175 C Destinations - Africa and Pacific**3 Units**

Term hours: 54 lecture. This course continues the study of world geography from a travel and tourism perspective. Students will examine international travel considerations including itineraries, currencies, travel documents, customs, language, health requirements, and time considerations for the following locations: Africa, the Middle East, Asia, and the Pacific Islands. (CSU)

ATC 180 C Tourism and Conference Management**3 Units**

Term hours: 54 lecture. This course is an introductory study of meeting, convention, and event planning. Students will learn industry terminology, types of events and venues, needs assessments, program and budget development, and project coordination. (CSU)

ATC 182 C Cultural Tourism**3 Units**

Advisory: Eligibility for College Writing or the equivalent writing skills.

Term hours: 54 lecture. This course examines the implications of cultural tourism in the United States. 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, resources, and sites. The course promotes multicultural awareness, hospitality, and sensitivity as a means of recognizing others and minimizing the exploitation of their culture. The course establishes a learning environment encouraging critical thinking, cultural humility, and respect for people of diverse backgrounds and experiences. The course explores the complexities and challenges of U.S. policy making and preservation in cultural tourism development. (CSU,AA GE, SOC JUST).

ATC 183 C Cust Care - Airline Travel**3 Units**

Term hours: 54 lecture. This course examines the priority of customer service and satisfaction in the competitive airline industry. Topics include the safety regulations and service standards of the Federal Aviation Administration, the Department of Transportation, and airlines themselves. Students will study these standards in relation to current performance, public opinion, and service ideology. Students will also investigate how airlines differentiate their service to be competitive in a particular market niche. (CSU)

ATC 189 C Flight Training Device - Introduction**0.5 Units**

Term Hours: 27 laboratory. Students will receive a hands-on introduction to a PC-based Flight Training Device and become familiar with the fundamentals of flight, flight terminology, flight controls, and instrument interpretations. Pass/No Pass/Letter Grade Option. (CSU)

ATC 190 C Flight Traing - Private Pilot**2 Units**

Prerequisite(s): Students must already possess and provide substantiation of an FAA Private Pilot Certificate or concurrent enrollment in an approved flight training program working toward an FAA Private Pilot Certificate, and completion of or concurrent enrollment in at least 3 units of ATC (132 or above) with a "grade of C or better.

Term hours: 108 laboratory TBA Hours as required by the FAA. Students who have earned, or are enrolled in an approved flight school and will earn, the FAA Private Pilot Certificate may be granted college credit consistent with the Credit by Examination requirements published in the catalog. Pass/No Pass/Letter Grade Option (CSU)

ATC 192 C Airline Reservations - SABRE**3 Units**

Term hours: 36 lecture and 54 laboratory. This course is an introduction to SABRE, the computer reservations system used by major airlines and some travel consultants. Students will learn how to build PNR's (passenger name records), quote fares, and calculate prices through hands-on applications on computers. \$4.00 Material Fee-Payable at Registration. (CSU)

ATC 193 C Flight Trng-Flight Instructor**1-5 Units**

Prerequisite(s): Students must provide substantiation of an FAA Flight Instructor Rating, or concurrent enrollment in an approved flight training program working toward an FAA Flight Instructor Rating, and completion of or concurrent enrollment in at least 3 units of ATC (132 or above) with a grade of C or better.

Term hours: 54-270 Laboratory TBA Hours as required by FAA. Students who have earned, or are enrolled in an approved flight school and will earn, an FAA Instructor Rating, may be granted college credit as follows: One unit of credit may be granted for each of the following Flight Instructor Certificates or Ratings: Airplane Single Engine, Airplane Multi-engine, Rotorcraft, Glider and Instrument. Credit may be granted by meeting the above prerequisites and the Credit by Examination procedures as published in this catalog. Pass/No Pass/Letter Grade Option. (CSU)

ATC 194 C Flight Training Instrument Rating (formerly AVIA 194 C)**2 Units**

Prerequisite(s): Completion of or concurrent enrollment: students must provide substantiation of an FAA Instrument Rating, or concurrent enrollment in an approved flight training program working toward an FAA Instrument Rating, and completion of or concurrent enrollment in at least 3 units of ATC (132 or above) with a grade of C or better

Term hours: 108 laboratory TBA Hours as required by FAA. Students who have earned, or are enrolled in an approved flight school and will earn, an FAA Instrument Rating on their Pilot Certificate may be granted college credit by meeting the above prerequisites and the Credit by Examination requirements as published in the current Cypress Catalog. Pass/No Pass/Letter Grade Option. (CSU)

ATC 195 C Flight Training Commercial Pilot (formerly AVIA 195 C) 2 Units

Prerequisite(s): FAA Students must provide substantiation of an FAA Commercial Pilot Certificate, or concurrent enrollment in an approved flight training program working toward an FAA Commercial Pilot Certificate, and completion of or concurrent enrollment in at least 3 units of ATC (132 or above) with a grade of C or better.

Term hours: 108 laboratory TBA hours as required by FAA. Students who have earned, or are enrolled in an approved flight school and will earn, an FAA Commercial Pilot Certificate may be granted college credit by meeting the above prerequisites and the Credit by Examination requirements as published in the current Cypress Catalog. Pass/No Pass/Letter Grade Option. (CSU)

ATC 196 C Flight Simulator Private Pilot 2 Units

Advisory: Concurrent enrollment in, or completion of, ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term Hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential private pilot flight skills. Flight time in the approved ground trainers may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 197 C Flight Simulator Instrument 2 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term Hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential instrument related flight skills. Flight time in the approved Flight Training Devices may be applied toward requirements for both attaining and maintaining flight ratings. Pass/No Pass or Letter Grade Option. (CSU)

ATC 198 C Flight Simulator Commercial 2 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C or completion of FAA Private Pilot Certificate and ATC 196 C and ATC 197 C, or the equivalent.

Term hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential commercial flight skills. Flight time in the approved Flight Training Devices (FTDs) may be applied toward requirements for both attaining and maintaining flight ratings. Pass/No Pass or Letter Grade Option. (CSU)

ATC 199 C Flight Simulator Instructor 2 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C or completion of FAA Private Pilot Certificate and ATC 196 C, ATC 197 C, and ATC 198 C.

Term hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential instructor flight skills. Flight time in the approved Flight Training Devices (FTDs) may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 210 C Cabin Safety Simulation 0.5 Units

Advisory: ATC 270 C or ATC 274 C.

Term hours: 9 lecture. In this course, students will participate in an aircraft emergency evacuation in a cabin simulator at the Long Beach Airport. A required 6-hour preparatory class will be held on campus and the remaining 3 hours will be delivered at the airport. Students will be provided a certificate upon successful completion.(CSU)

ATC 212 C Airline and Aviation Management 3 Units

Term Hours: 54 lecture. In this course, students will study the application of management principles to the airlines and general aviation. Major areas of study include planning, organization, regulations, manpower management, facilities, marketing, budget, safety, security, and supervision strategies. (CSU)

ATC 220 C Advanced Air Navigation 2 Units

Prerequisite(s): Completion of or concurrent enrollment in ATC 136 C.

Term Hours: 36 lecture. This is a course stressing advanced navigation procedures and principles including radio and electronic navigation aids, glass cockpit, flight management systems, international flight procedures, (ICAO, worldwide operations), Oceanic (Class II Navigation) and State (country) specific differences from United States FAA standards. Recency and other measures of readiness (CSU)

ATC 223 C Cruise Line Sales and Operations 3 Units

Term hours: 54 lecture. This course provides students with a practical, working knowledge of the cruise industry, including its operation, terminology, associations, and resources. Students will learn how to differentiate, price, market, and sell cruises. (CSU)

ATC 232 C Instrument Rating 3 Units

Advisory: Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 54 lecture. This course is designed to prepare or requalify the student in instrument flight procedures and techniques, including air traffic control, publications and regulations. This course reviews aeronautical ground training required to pass the FAA Instrument Pilot, Instrument Flight Instructor and Instrument Ground Instructor Knowledge Examinations. Flight time in a Flight Training Device is available by concurrent enrollment in ATC 132 C. Credit by Examination procedures as published in this catalog. (CSU)

ATC 236 C Aerodynamics 3 Units

Advisory: Concurrent enrollment in, or completion of, ATC 132 C or completion of FAA Private Pilot Certificate.

Term Hours: 54 lecture. In this course, students will learn the basic principles of aerodynamics, including airfoil shapes and characteristics, viscous effects, propellers, and aircraft performance viewed in terms of the basic laws of physics, aircraft limitations and Federal Aviation Regulations. Emphasis will be on physical aspects of flight time. (CSU)

ATC 240 C Commercial Pilot (formerly Commercial Pilot Seminar) 3 Units

Advisory: Concurrent enrollment in, or completion of, ATC 132 C or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 54 lecture. This course prepares a pilot for the FAA Commercial Pilot license. The course covers current Federal Aviation Regulations, Government Publications, transport aircraft systems & performance, multi-engine procedures, loading, weight and balance & commercial operations. This course will prepare the pilot with the aeronautical knowledge required to pass the FAA Commercial Pilot knowledge examination. This course meets the FAA requirements for ground training. Flight Training Device flight time is available by concurrent enrollment in ATC 196 C or ATC 198 C. Pass/No Pass/Letter Grade Option. (CSU)

ATC 244 C Aviation Instructor**3 Units****Prerequisite(s):** ATC 240 C.

Term Hours: 18 lecture and 108 laboratory. This course is a study of principles of learning and teaching, elements of practical educational psychology, and a review of current trends and techniques in aviation instruction. Class participation in lesson preparation is included. This course meets fulfillment of the requirements of the FAA for ground instruction in preparation for the FAA Fundamentals of Instruction, Ground Instructor and Flight Instructor knowledge exams. Recency and other measures of readiness. (CSU)

ATC 250 C Turbine Simulator Observation**0.5 Units****Advisory:** Must be enrolled in any other ATC course.

Term hours: 9 Lecture. Students will be introduced to a full-motion turbine aircraft flight deck, including familiarization with the fundamentals of flight, flight deck controls, instrument interpretation, and aircraft systems. A required 3-hour preparatory class will be held on campus, and the remaining 6 hours will be delivered at FlightSafety International with a tour of the professional aviation pilot training facility. Students will need to supply a picture ID and an approved background check before entrance to Flight Safety International. Fee may be required, subject to change by facility. (CSU).

ATC 255 C Turbine Simulator Orientation**0.5 Units****Advisory:** Completion of, or concurrent enrollment in, ATC 250 C.

Term Hours: 9 lecture. In this course, students will practice the fundamentals of flight, utilizing the flight deck's controls, instruments, and basic systems in a full-motion turbine flight simulator. A required 3-hour preparatory class will be held on campus, and the remaining 6 hours will be delivered at FlightSafety International with a tour of the professional aviation pilot training facility. Students will need to supply a picture ID and an approved background check before entrance to FlightSafety International. Fee may be required, subject to change by facility. (CSU)

ATC 256 C Crew Resource Management**3 Units**

Term hours: 54 lecture. This course will examine the concepts of Crew Resource Management (CRM) and Human Factors and Aeronautical Decision Making currently practiced in commercial and corporate aviation. The role of crew supervision and training, leadership styles and management oversight will be studied. Single and multi-crew aircraft situations will be studied. Human factors research and aircraft accident investigations will be examined. (CSU)

ATC 260 C UAS Drone Advanced (formerly UAV-UAS Advanced)**3 Units****Advisory:** Recommend completion of or concurrent enrollment in ATC 160 C, ATC 161 C and ATC 162 C or the equivalent.

Term hours: 54 lecture. This course examines the core technologies of unmanned aircraft systems (UAS), including the design concepts, power plants, control systems, and communication technologies. Explores cross-country navigation, flight planning, payload, sensors, and autonomous operations. Emphasizes the ethical, legal, and safety related requirements of operation in the public, civil, commercial and military settings. (CSU)

ATC 261 C UAS Drone Advanced Simulator**2 Units****Advisory:** Concurrent enrollment in or completion of ATC 260 C.

Term hours: 27 lecture and 27 laboratory. This advanced UAS simulator course provides hands-on flight simulation activities to improve, practice, and optimize essential Unmanned Aircraft Systems pilot flight skills. Flight time in the approved ground trainers may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 262 C UAS Drone Advanced Flight**2 Units****Advisory:** Concurrent enrollment or completion of ATC 260 C and ATC 261 C.

Term hours: 27 lecture and 27 laboratory. This course offers advanced UAS drone flight activities to practice and optimize essential Unmanned Aircraft Systems skills. Flight time in the approved UAS drone aircraft may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 270 C Airline Operations**3 Units**

Term hours: 54 lecture. This course is designed for students interested in working in the airline industry. Students will learn airline terminology, city codes, the 24-hour clock, airline operations, and industry hiring standards. (CSU)

ATC 271 C Airport Operations**3 Units**

Term hours: 54 lecture. This course provides students with a background in general aviation and commercial airports. Students will learn about airport operations, including terminology, ground and baggage handling, terminal and airfield operations, hazardous material, aircraft emergencies, ground access, and FAR Part 139. (CSU)

ATC 274 C Passenger Services and Safety**3 Units**

Term hours: 54 lecture. In this course, students will learn about passenger related service and safety procedures for the airline industry, including first aid, CPR, fire-fighting, and conflict resolution. (CSU)

ATC 278 C Public Relations**3 Units**

Term hours: 54 lecture. This course introduces students to the public relations concepts and practices in the airline and travel industries. Students will examine promotional campaigns and develop their own public relations proposal with emphasis on practical applications. (CSU)

ATC 295 C Aviation Travel Internship**3 Units****Prerequisite(s):** Completion of the Basic Airline Customer Services Certificate; or Basic Flight Attendant Certificate; or Basic Travel/Tourism Certificate

Term hours: 18 lecture and 108 work experience education. This course offers practical work experience in an approved aviation and travel related industry for the student(s) in the Aviation and Travel Careers program. This course is designed to provide vocational learning opportunities throughout employment. (CSU)

ATC 296 C Flight Simulator Private Pilot - Advanced**2 Units****Advisory:** Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential private pilot flight skills. Flight time in the approved ground trainers may be applied toward requirements for both attaining and maintaining flight ratings. (CSU)

ATC 297 C Flight Simulator Instrument Pilot - Advanced**2 Units****Advisory:** Completion of or concurrent enrollment in ATC 132 C, or completion of FAA Private Pilot Certificate, or taking flight lessons at a local flight school.

Term hours: 27 lecture and 27 laboratory. In this course, students will participate in hands-on flight simulation activities to develop, practice, and optimize essential instrument related flight skills. Flight time in the approved Flight Training Devices may be applied toward requirements for both attaining and maintaining flight ratings. Pass/No Pass or Letter Grade option. (CSU)

ATC 298 C Aviation and Travel Seminar**0.5-12 Units*****Prerequisite(s):*** May be required.***Corequisite(s):*** May be required.***Advisory:*** May be required.

Term hours: 9-216 lecture and/or 9-1620 laboratory depending on units attempted. This course is for students who wish to increase their knowledge of the aviation and travel industry. Various topics will be offered. Unit credit may range from 1/2 to 12 units in any given semester. Consult the class schedule to verify credit for a particular semester. Pass/No Pass or Letter Grade option. Fees may be required-Payable at Registration. (CSU)

ATC 299 C Independent Study**0.5-2 Units*****Prerequisite(s):*** Approved Independent Study Learning Contract

Term hours: 8-36 lecture. This course is designed for those students who wish to increase their knowledge of the airline and/or travel industry through professionally directed independent study or research. (CSU)