

Academic Program Outcomes



ALLIED HEALTH ASSOCIATE DEGREE

Program Description

Students successfully completing the Allied Health Associate in Science Degree have a solid foundation for pursuing further education in a variety of health care fields.

Measurable Outcomes

Successful students will likely:

- Demonstrate foundational knowledge in science necessary to enroll in a variety of health care programs

AUTOMOTIVE SERVICE TECHNICIAN ASSOCIATE DEGREE

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This degree major includes training in engine repair, braking systems, air conditioning, engine performance, electrics, suspension and steering, manual power trains and axles, automatic transmissions and transaxles or Smog Check Technician training, and general skills needed to be successful in the industry. The degree recipient will be more competitive for management positions.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:

- Braking systems theory, service, and repair
- Engine theories, service, and repair
- Air conditioning theory, service and repair
- Engine performance theories, service, and repair
- Electrics theories, service, and repair
- Suspension and steering theories, service, and repair
- Manual and automatic drive trains theories, service, and repairs
- Smog Check Technician training, prescribed by the Bureau of Automotive Repair

AUTOMOTIVE MAINTENANCE TECHNICIAN ASSOCIATE DEGREE

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This degree major includes training in engine repair, braking systems, air conditioning,

and general skills needed to be successful in the industry. The degree recipient will be more competitive for management positions.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:

- Braking systems theory, service, and repair
- Engine theories, service, and repair
- Air conditioning theory, service and repair

AUTOMOTIVE SERVICE TECHNICIAN CERTIFICATE OF ACHIEVEMENT

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This certificate includes training in engine repair, braking systems, air conditioning, engine performance, electrics, suspension and steering, manual power trains and axles, automatic transmissions and transaxles or Smog Check Technician training, and general skills needed to be successful in the industry.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:

- Braking systems theory, service, and repair
- Engine theories, service, and repair
- Air conditioning theory, service and repair
- Engine performance theories, service, and repair
- Electrics theories, service, and repair
- Suspension and steering theories, service, and repair
- Manual and automatic drive trains theories, service, and repairs
- Smog Check Technician training, prescribed by the Bureau of Automotive Repair

AUTOMOTIVE MAINTENANCE TECHNICIAN CERTIFICATE OF ACHIEVEMENT

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This certificate includes training in engine repair, braking systems, air conditioning, and general skills needed to be successful in the industry.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:



- Braking systems theory, service, and repair
- Engine theories, service, and repair
- Air conditioning theory, service and repair

ENGINE PERFORMANCE CERTIFICATE OF ACHIEVEMENT

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This certificate includes training in engine performance and air conditioning.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:

- Engine performance theories, service, and repair
- Air conditioning theory, service and repair

UNDER VEHICLE SERVICE CERTIFICATE OF ACHIEVEMENT

Program Description

The successful student will gain entry-level skills for the automotive technology industry based on Automotive Service Excellence (ASE) standards. This certificate includes training in braking systems, suspension and steering, and manual drive trains.

Measurable Outcomes

Successful students will complete National Automotive Technician Education Foundation (NATEF) skills to industry standards:

- Braking systems theory, service, and repair
- Suspension and steering theories, service, and repair
- Manual and automatic drive trains theories, service, and repairs

BEHAVIORAL AND SOCIAL SCIENCES

Purpose

Behavioral and Social Sciences courses at Columbia College include Anthropology, Geography, History, Humanities, Philosophy, Political Science, Psychology, Sociology, and Speech. Students pursuing coursework in these subjects will benefit from a rich and in-depth experience that can lead to successful transfer to a four-year institution as well as meeting general education requirements for an AA/AS degree.

Measurable Outcomes

Students successfully completing courses in these areas will likely be able to:

- Demonstrate basic knowledge of the most significant theories, methods, structures, processes, and institutions associated with Behavioral and Social Sciences
- Critically analyze, evaluate, and articulate established ways of knowing in the Behavioral and Social Sciences
- Demonstrate critical thinking competencies in analyzing competing hypotheses
- Demonstrate competencies associated with 21st century citizenship and adulthood—these competencies include basic awareness of diverse perspectives and their implications—culturally, socially, psychologically, philosophically, historically, and geographically
- Demonstrate ability to engage in and maintain effective approaches to problem solving

BIOLOGICAL AND PHYSICAL SCIENCES

Purpose

Biological and Physical Sciences courses at Columbia College include Biological Sciences, Chemistry, Earth Sciences and Physics. Students pursuing coursework in these subjects will benefit from a rich and in-depth science experience that can lead to successful transfer to a four-year institution as well as meeting general education requirements for an AS degree.

Measurable Outcomes

Students will likely:

- Learn how to plan a program of data gathering and analysis that employs modern scientific procedures and the use of modern technology
- Use acquired knowledge of biology and physical science to make informed decisions about problems in society and public policy
- Develop social and professional skills needed to be successful in the modern work place (e.g. communications, working in groups, working with technology)

BUSINESS ADMINISTRATION

Program Description

Business Administration students will gain experience in Management, Marketing, Human Resource Development, Production, Economics, and Finance, Accounting, and

Computer Science applications relevant to each area.

The value to students who successfully complete the program(s) will be found in the variety of courses and the all-important connective theme of the subjects. A broadly based working knowledge of the principles required in operating a business should enhance the opportunity and careers of those who acquire a balanced understanding of the process.

The Associate in Science degree with the “Professional” designation is comprised of transfer courses articulated with upper-division colleges and accommodates those students who wish to advance and earn a Bachelor’s degree.

Measurable Outcomes

As students successfully complete the courses they will:

- Acquire the knowledge of the lower-division course content
- Be qualified for acceptance as juniors entering a four-year college upper-division schedule

CHILD DEVELOPMENT

Program Description

Students who choose the Child Development Associate Degree Program will have the ability to work successfully with young children and provide education and care based on sound, nationally recognized child development principles, State requirements for the field, a well-rounded general education that meets basic skills in writing, speaking, mathematics, and workplace skills. This program provides a solid foundation for students transferring to complete a higher degree.

Measurable Outcomes

Successful students will complete a portfolio showcasing expertise in the areas of:

- Child growth and development theories and practice
- Observation and assessment techniques that lead to planning developmentally appropriate, inclusive curriculum
- Reflective practice that understands and appreciates the diversity of families and children and the ethical responsibilities of working with children and families



COMPUTER SCIENCE, COMPUTER INFORMATION SYSTEMS, AND GEOGRAPHIC INFORMATION SYSTEMS

Program Description

Students who enroll in a Computer Science/Computer Information Systems/Geographic Information Systems program will have the opportunity to choose from numerous specialty areas including programming, networking, computer repair and maintenance, website development, computer graphic arts, multimedia, and GIS. Programs include certificates, degrees and transfer courses, many of which prepare students for industry certifications. Small class sizes, faculty with industry experience, and community partnerships for practical work experience provide a solid foundation for many careers.

Measurable Outcomes

Successful students who complete a specialty degree or certificate will:

- Demonstrate understanding of theories and practice within their specialty
- Demonstrate skills in using industry standard hardware and software applicable to their specialty
- Demonstrate ability to codify customers' needs, construct options within given parameters (customers' needs, software, hardware, financial, etc.) and present, explain and recommend options

EMERGENCY MEDICAL SERVICES

Program Description

Students enrolling in an Emergency Medical Services program will have the opportunity to earn a certificate, degree, and/or prerequisites for advanced courses in a broad area of emergency medical healthcare. Many of these courses prepare students for industry certifications. Faculty with industry experience, and community partnerships for practical work experience, provide a solid foundation in numerous careers.



Measurable Outcomes

Students who successfully complete an Emergency Medical Services degree or certificate will:

- Demonstrate understanding of theories and practice within their scope of training
- Demonstrate skills according to the current national standard
- Be qualified to take the exam for Emergency Medical Technicians and receive a national certification

FINE ARTS

Purpose

If science or mathematics is a desired outcome, start by studying and practicing art and music. A foundation in the arts will nourish your inner scientist, sharpen your observation skills and help develop critical thinking. Music helps develop mathematical reasoning. Creating art, studying music, and performing drama have a positive impact on one's cognitive life. Cultural literacy is an essential skill in the global economy.

Measurable Outcomes

- Visual art students will demonstrate a foundation of art skills and a high level of craftsmanship by utilizing a variety of tools and technologies
- Visual art students will demonstrate an understanding of the art materials, methods and techniques, historical and contemporary, and the contexts in which they are employed
- Students taking classes in music will have the practical skills to perform in their specific communities
- Music students will demonstrate the ability to read music at a rudimentary and intermediate level
- Students taking classes in music will be able to attend concerts and listen to recorded performances appreciating the skills of the performers, the style of the music compared to other styles of music, and be able to identify the various elements of music including melody, harmony, and rhythm
- Drama students will demonstrate the ability to act, portraying a wide range of emotion. Drama students will demonstrate a wide variety of interpretive methods

Conclusion/Additional Information:

- Coursework in the visual arts will enhance every chosen course of study. Elements of art design touch every single aspect of our lives from cell phones to cars to community planning
- Coursework in music will provide an understanding of the one universal communication: Music
- Coursework in drama provides the opportunity for humanitarian expression—and the ability to reach out and affect the lives of others
- The Fine Arts are a critical tool for communication and introspection in the Information Age

FIRE TECHNOLOGY, WILDFIRE/URBAN INTERFACE FIRE MANAGEMENT

Program Description

Students choosing a Fire Technology and/or Wildfire/Urban Interface Fire Management program will have an opportunity to earn a certificate and/or degree from a variety of specializations in the field of Fire Science, as well as gaining a solid foundation of the necessary skills and competencies for work in the field. Classroom and field experience prepare students for careers in many areas of Fire Science. Students successfully pursuing a degree will graduate with a well-rounded general education in addition to desirable workplace skills in the field of Fire Science.

Measurable Outcomes

Successful students will likely demonstrate mastery of outcomes validated through written and manipulative exams that are aligned with California State Fire Marshal and/or National Wildfire Coordinating Group requirements:

- Understand requirements and successfully apply them to a variety of jobs in the field
- Demonstrate the correct use of technical equipment used in the field, including ropes, ladders, chain saws, safety equipment, etc.
- Identify procedures used during various incidents, such as a Hazardous Materials incident

FORESTRY AND NATURAL RESOURCES

Columbia College Forestry and Natural Resources programs include a variety of degrees and certificates that prepare students for careers and further education in this growing field. Columbia College works closely with partners in industry and uses current technologies so that students will have the opportunity to develop the latest skills, knowledge and experience necessary to succeed in the field.

Measurable Outcomes

A successful student will likely demonstrate necessary skills, knowledge and experience by:

- Completion of course requirements specific to each degree or certificate

Students graduating with a degree or certificate in Forestry or Natural Resources will be able to apply acquired knowledge and skills to making informed decisions about their personal lives, career choices, and the communities in which they live.

HEALTH AND HUMAN PERFORMANCE

Purpose

Students pursuing coursework in Health and Human Performance will benefit from a rich and in-depth experience that can lead to successful transfer to a four-year institution as well as meeting general education requirements for an Associate's degree.



Measurable Outcomes

Students will likely:

- Demonstrate appropriate social behavior with at least an 80% work ethic (active participation)
- Improve and/or maintain fitness or skill levels from the beginning to the end of the semester
- Perform skills and strategies at a safe and proficient level of technique
- Apply knowledge to health and physical well-being

HOSPITALITY MANAGEMENT

Program Description

Students who choose Hospitality Management will have the ability to work successfully in a variety of fields including Culinary Arts, Hotel Management, Restaurant Management and Tourism. Columbia College Hospitality Management graduates are trained for entry-level positions through concentrated, highly structured programs of study that reflect the needs of a changing job market.

Measurable Outcomes

Successful students will likely:

- Demonstrate applicable technical skills through hands-on demonstration in areas such as cooking, budgets or planning
- Demonstrate applicable safety procedures
- Demonstrate applicable competencies to provide high-quality customer service

LITERATURE AND LANGUAGE

Purpose

In addition to Associate in Arts Degrees in English, coursework is available in American Sign Language, Spanish, and English as a Second Language. Students pursuing coursework in these areas are able to apply their work to associate degrees as well as transfer to a four-year institution. Students will have the opportunity to perfect academic and vocational writing, reading and communication skills, and to develop their critical thinking skills through exploration of a wide variety of literature and texts.

Measurable Outcomes

Students will likely:

- Demonstrate effective communication skills orally, in writing, and expressively, as relevant to the discipline
- Be able to analyze and synthesize key concepts from texts within the disciplines
- Be able to apply strategies from the discipline that reflect an understanding of reading, writing, and other communication processes that demonstrates critical thinking and an awareness of different cultural perspectives

MATHEMATICS**Purpose**

Columbia College offers mathematics courses at the basic skills, associate degree and transfer level. Students pursuing coursework in mathematics will develop appropriate procedural skills, problem-solving skills and attitudes, critical reasoning skills and quantitative literacy.

Measurable Outcomes

Students will likely:

- Be effective problem solvers at a level appropriate to the classes taken
- Develop increased mathematical sophistication and technical skills
- Have the confidence and willingness to engage in unfamiliar problems and solve them in their daily or professional lives
- Be able to organize information, reason mathematically and communicate their reasoning to others
- Become more independent learners in mathematics

**OFFICE TECHNOLOGY****Program Description**

The Office Technology Department's goal is to prepare students for employment with essential office skills. In addition to technological training, emphasis is placed on oral and written communication skills, and supervisory strategies for time management, problem solving, decision making, values and ethics, and conflict resolution. Graduates of Office Technology programs may be employed in a variety of office settings, including educational and medical institutions, federal, State, and local government offices, and small and large businesses. Alternately, graduates may become entrepreneurs by setting up virtual businesses.

Measurable Outcomes

Successful students will likely:

- Develop entry-level job skill sets as an administrative office professional or an office assistant
- Demonstrate effective written business communication skills
- Demonstrate competence using business office technology (copy machine, fax machine, 10-key calculator)
- Demonstrate proficiency in keyboarding and document formatting
- Demonstrate ability to file and manage records

WELDING TECHNOLOGY**Program Description**

Students enrolled in the Welding Technology certificate of achievement program will experience a comprehensive range of welding processes including M.I.G., T.I.G., arc, and oxygen-acetylene welding, as well as metallurgy. Additionally, students will learn how to interpret blueprints in preparation for welding. Students will prepare for and can choose to take the examination for certification by the American Welding Society (AWS).

Measurable Outcomes

Successful students will complete skills to industry standards:

- Metal Inert Gas welding
- Tungsten Inert Gas welding
- OxyAce welding