Career and Technical Education(CTE) classes available to incoming 9th graders at Arcadia High School.

This document is online at
https://sites.google.com/ausd.net/cte

Each spring, 8th graders get a Course Selection Worksheet.

CTE classes can fit in the row labeled Class #6.

Class #1 (English)	
Class #2 (Social Science)	
Class #3 (Mathematics)	
Class #4 (Physical Education)	
Class #5 (Science or Language)	
Class #6 (Elective, Science, or Language)	**Students can enter a one-year elective or two one-semester electives.**

Click on the links below to learn more about each class.
Teachers' email addresses are included for additional information.

Physical Education and Athletics (Required)	Year-Long Electives	One Semester Electives
● Beginning Dance*/Health PE *Allowed to do 1 year of dance, but health will need to be completed in 10th grade* ● Intermediate Dance (Try Out Required)	● Animation (VPA) ● Beginning TV Production (VPA) ● Culinary Arts ● Graphic Design (VPA) ● Intro to Engineering Design ● Medical Careers ● Photography (VPA) ● Principles of Engineering (See Prerequisite) ● Stagecraft (VPA)	● Business Management ● Computer Programming C++ ● Computer Programming JAVA ● Computer Science ● Food Science ● Sports Medicine

Dance Classes Open to Freshmen

BEGINNING DANCE, Teachers: Breanne Orlowsky, borlowsky@ausd.net Liza Tedford, ltedford@ausd.net
(Semester) Freshman, Sophomore, Junior, Senior
This class consists of warm-ups, across the floor movements and choreography. Students are taught basic dance technique and terminology. Students are expected to learn and perform dance routines. There is a mandatory public performance each semester outside of the school day. Other dance related topics are introduced including health and nutrition, dance analysis, historical, and cultural dance forms. This course may be used in partial fulfillment of the PE requirement. This course may be repeated for credit.

INTERMEDIATE DANCE, Teachers: Breanne Orlowsky, borlowsky@ausd.net Liza Tedford, ltedford@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Student audition and/or permission of instructor.
This class is geared toward the intermediate dancer who understands basic dance technique and is ready for more challenging material and an introduction to choreography. Jazz, Performance, Ballet, Modern and Choreography units are covered. Other dance related topics include careers in the dance industry, dance in higher education, health and nutrition for the dancer, historical and cultural dance forms, and dance analysis. There is a mandatory public performance each semester outside of the school day. This course can be taken more than once. Students in Intermediate Dance may receive fine arts or physical education credit toward high school graduation.

Computer Graphics Classes Open to Freshmen

ANIMATION, Teacher: Ing Mu, imu@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Animation is a project-based course that focuses on creativity and storytelling. The course is computer-based. Students will use Adobe Creative Cloud products to produce their animation projects. The students will have the opportunities to develop original screenplays that will be made into animations. The students will be responsible for pre-production such as developing storyboards and pitching their ideas to the production stage, which is making the animation, and post-production, which is editing the animation that includes audios. Students will have the opportunity to view peers' work. *NOTE:* Animation may be repeated for additional credit to provide students opportunities to continue building their portfolios.

GRAPHIC DESIGN, Teacher: Ing Mu, imu@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Graphic Design is a foundation course that introduces students to the field of design and the visual arts. Students will learn elements and principles of design, and apply them to various projects such as posters and logo designs. The course is computer-based and students will use professional industry standard software called Adobe Photoshop and Adobe Illustrator. This course offers students the skills to pursue careers leading to graphic design, web design, publishing and editorial, marketing, public relations, business, and other careers in the diverse field of entertainment and commercial arts. Students will explore historical styles to contemporary trends in the global field of design. Through challenging projects, students will have opportunities to create, innovate, problem solve, and expand their communication skills. The course will provide students with opportunities to collaborate with different disciplines on campus. The course emphasizes knowledge of the professional environment and the diverse career paths relating to graphic design.

Engineering Classes Open to Freshmen

INTRODUCTION TO ENGINEERING DESIGN, Teacher: David Trent, dtrent@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Introduction to Engineering Design (IED) is a course that is appropriate for students who are interested in design and engineering. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will employ engineering and scientific concepts in the solution of engineering design problems. In addition, students use a state-of-the-art 3D solid modeling design software package to help them design solutions to solve proposed problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course.

PRINCIPLES OF ENGINEERING, Teacher: David Trent, dtrent@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Completion of Algebra 1 with a grade of "C" or higher.
Principles of Engineering is a hands-on course using robotics to explore some of the major concepts in engineering. Topics include mechanisms, energy sources and application, statics, material properties and testing, structures, control systems, hydraulics, pneumatics, statistics, and kinematics. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges

Health Careers Classes Open to Freshmen

SPORTS MEDICINE, Teachers: Matt Nielsen, mnielsen@ausd.net, Jack Sessions, jsessions@ausd.net
(Semester) Freshman, Sophomore, Junior, Senior
This course is designed to provide related instruction and field training for students preparing for careers in sports medicine, including physical therapy and careers in the health and fitness industry. Classroom instruction will include basic human anatomy, nutrition, injury prevention and training. *NOTE*: An after-school component requires all students to participate in lab experiences involving athletic training and observation of ten hours.

MEDICAL CAREERS, Matt Nielsen, mnielsen@ausd.net, Jack Sessions, jsessions@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Medical Careers trains students for entry-level occupations in the medical/health field and to standards required of workers in the field. Students learn the ethical and legal responsibilities of the health care worker, safety, HIPAA, transmission based precautions, body mechanics, transporting duties, human anatomy and physiology, normal function of body systems, advanced terminology and vital signs. Also included are health care delivery systems, regulatory agencies, research, current technology, and socio-economic issues affecting health care. Internship opportunities are available during the year.

Stagecraft Class Open to Freshmen

STAGECRAFT, Teacher: Keith DeLuca, kdeluca@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Stagecraft is a comprehensive course in which students develop skills in scene design, set construction, stage lighting, sound production, scenery painting, and property making. Students gain experience assisting in designing, constructing, and maintaining scenery for various productions at Arcadia High School. *NOTE:* Additional afternoon and evening hours will be required before and during theatrical productions to construct sets, prepare the theater, and assist backstage during shows. The time commitment is similar to what is required to perform in a play.

Photography Class Open to Freshmen

PHOTOGRAPHY, Teacher: Annette Fierro, afierro@ausd.net
Consumable Cost: $50/year
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Photography is a sequential course, covering introductory to intermediate skills of digital and analog (film) photography. Students will learn about camera functions, shooting skills, and how to process images with digital software. Creativity, composition, design principles, and lighting are emphasized as students gain hands-on experience with industry-relevant techniques, equipment, and editing programs. This course also introduces the basics of analog/darkroom photography including film processing, scanning, and printing. In instructions and projects, students will explore contemporary photography and its societal role, including social media, advertising, portraiture, photojournalism, and fine art. A key element of the course is exposure to the various careers and industry uses of photography, as well as the professional photographers who inspire today's trends. Students have access to cameras, a photography studio, and editing software during school hours, and will develop and curate their own digital portfolio/website.

Business Class Open to Freshmen

BUSINESS MANAGEMENT, Teacher: Rob Greep, rgreep@ausd.net
(Semester) Freshman, Sophomore, Junior, Senior
This course introduces students to the buying and selling of goods, services, and to ideas in the electronic commerce environment. Utilizing marketing foundations and functions, students will learn that marketing is a process that includes selling, advertising, market research, product decision-making and distribution. Technology will be used to teach students how to inform others about themselves, and their products/services, attract and retain customers, handle transactions, provide pricing and product information, and process and deliver products.

Food Science Classes Open to Freshmen

FOOD SCIENCE, Teacher: Emily Roswell, eroswell@ausd.net
Consumable Cost: $35/semester
(Semester) Freshman, Sophomore, Junior, Senior
UC Approved
This course is designed to provide students with an understanding of kitchen safety, food sanitation, nutrition, meal planning, and equipment use. Students will learn the basic skills of knife handling, food preparation, and menu planning. Integrated throughout the course are the academic and CTE standards, which include safety, communication, technology, and career planning and employability skills. Note: This course may be repeated for credit.

CULINARY ARTS, Teacher: Emily Roswell, eroswell@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
Consumable Cost: $35/semester
Culinary Arts is designed to provide students with extended instruction in understanding of kitchen safety, food sanitation, nutrition, meal planning, and equipment use. Students will learn basic to intermediate skills of knife handling, food preparation, and menu planning. Integrated throughout the course are the academic and CTE standards, which include safety, communication, technology, and career planning and employability skills.

Video Production Class Open to Freshmen

BEGINNING TELEVISION PRODUCTION, Teacher: Frank Sunez, fsunez@ausd.net
(Year) Freshman, Sophomore, Junior, Senior
UC Approved
"The TV Class!" This introductory course is meant to expose students to the basic concepts of video and media production. Students begin the course by becoming familiar with the historical and cultural events surrounding the emergence of radio, television and film throughout the 19th, 20th and 21st centuries. Instructional units become more technical and specialized as the class progresses, beginning with basic camera and studio operations, culminating into two large scale studio projects first semester: Studio-based productions, and the Infomercial. Second Semester, students will be introduced to the Adobe Creative Cloud suite of video editing products and will begin to develop graphical elements for their other larger scale projects. Students will end the semester by creating a radio podcast, a sketch comedy show, and a news magazine show. Through studio and single-camera exercises, professional speakers, lectures and examining media samples, students will gain the hands-on experience they need to continue on in the Television Production pathway at Arcadia High School. The completion of a portfolio/reel exhibiting advancement of concepts throughout the year is due at the completion of the course.

Computer Science Classes Open to Freshmen

COMPUTER SCIENCE, Teachers: Caven Shen, cshen@ausd.net, Rob Greep, rgreep@ausd.net
<mark>(Semester)</mark> Freshman, Sophomore, Junior, Senior
UC Approved
This class will emphasize a variety of areas. Students will begin with computer literacy and the Windows environment. Desktop applications including Word, Excel, and PowerPoint will be covered. Students will progress to web page production, cloud computing, computer hardware, and programming scripting.

COMPUTER PROGRAMMING (C++), Teacher: Ray Mynster, rmynster@ausd.net
<mark>(Semester)</mark> Freshman, Sophomore, Junior, Senior
UC Approved
This course requires grade level mathematical reasoning and reading comprehension. This course is a fast-paced and rigorous introduction to programming fundamentals. Students will learn to write computer programs in a high level language that supports object oriented programming. Topics include data types and strings, math operations, input/output, decision-making, and loops. The course will introduce students to programming in the C++ language both on PC and mobile platforms.

COMPUTER PROGRAMMING JAVA, Teacher: David Trent, dtrent@ausd.net, Brian Zurla, bzurla@ausd.net
<mark>(Semester)</mark> Freshman, Sophomore, Junior, Senior
UC Approved
This course requires grade level mathematical reasoning and reading comprehension. This course is a fast-paced and rigorous introduction to programming fundamentals. Students will learn to write computer programs in a high level language that supports object oriented programming. Topics include data types and strings, math operations, input/output and exception handling, decision-making, and loops. This course will introduce students to programming in Java language both on PC and mobile platforms ***Note:*** Computer Programming Java cannot be taken at the same time or after Computer Science A (AP).