2020–21

# CTE COURSE DIRECTORY

El Dorado Union High School District

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**www.eduhsd.net**

530-622-5081, ext. 7233

**Select up to 7 courses per grade if attending El Dorado High School, Ponderosa High School or Oak Ridge High school. Select up to 8 courses per grade if attending Union Mine High School or EDUHSD Virtual Academy.**

| 9th Grade | | 10th Grade | |
|---|---|---|---|
| **Course Option** | **Course(s) Selected** | **Course Option** | **Course(s) Selected** |
| English | | English | |
| Mathematics | | Mathematics | |
| Science | | Science | |
| World Language | | World Language | |
| Life Fitness | | Life Fitness | |
| Health / Information Communication Technology | | World History (AP or non-AP) | |
| "a-g" Elective | | "a-g" Elective | |
| Optional General Elective | | Optional General Elective | |

| 11th Grade | | 12th Grade | |
|---|---|---|---|
| **Course Option** | **Course(s) Selected** | **Course Option** | **Course(s) Selected** |
| English (AP or non-AP) | | English (AP or non-AP) | |
| Mathematics | | Mathematics | |
| Science | | American Government / Economics (AP or non-AP) | |
| World Language | | "a-g" Elective | |
| U.S. History (AP or non-AP) | | "a-g" Elective | |
| "a-g" Elective | | "a-g" Elective | |
| "a-g" Elective | | Optional General Elective | |
| Optional General Elective | | Optional General Elective | |

**Course descriptions can be found on the following pages:**



**The Career Technical Education pathways are listed below. The course descriptions for each pathway can be found on the following pages.**

| CAREER TECHNICAL EDUCATION PATHWAYS | | | |
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**ADVANCED PLACEMENT SPANISH LITERATURE (Y) #0417AP**

| PREREQUISITE: Completion of AP Spanish Language and an interest in the Spanish language and culture. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "e" and "g"* | | |

The Advanced Placement program in Spanish Literature consists of a course designed to provide well-motivated students with an intellectual challenge through the advanced study of Hispanic literature. A College Board Examination that measures achievement in this course is administered in the spring by which a student may receive college credit. As with other electives, this course will only be offered if enough student requests for the course are received.

**ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE (Y) #0420AP**

| PREREQUISITE: Grade of *A* in French 3 and teacher recommendation; interest in French language and culture. | | |
|---|---|---|
| **SCHOOL**<br>ORHS<br>PHS<br>UMHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "e"* | | |

Equivalent to a 3rd-year college French course in grammar, reading, composition, and conversation. Stresses speaking and listening skills, composition, and grammar. This course provides extensive preparation for the spring administration of the AP exam. This course is conducted in French.

# CAREER TECHNICAL EDUCATION (CTE)

## AGRICULTURE AND NATURAL RESOURCES

**AGRICULTURE SCIENCE I (Y) #0704**

| PREREQUISITE: Interest in Agriculture. | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

This course is available to all students who have never taken a vocational agriculture class. It is the first year of a 2-year core program followed by Agriculture Biology. The course introduces students to the basic elements of plant science, animal science, agriculture business, California agriculture, leadership, and the FFA (Future Farmers of America). Students will have the opportunity to gain field experience through the development of a supervised occupational experience. As a vehicle for developing leadership skills students will be exposed to the FFA and its many opportunities.

**AGRICULTURE BIOLOGY (Y) #0706**

| PREREQUISITE: Successful completion of Earth and Space Science 9th grade course and/or completion of Algebra 1. | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "d"* | | |

Agricultural Biology is a 1-year, laboratory science course designed for the student with career interests in agriculture. Using agriculture as the learning vehicle, the course emphasizes the principles, central concepts, and inter-relationships among the following topics: molecular and cellular aspects of life, chemical and structural basis of life, energetics of life, growth and reproduction in animals, evolution of modern plants and livestock species, plant and animal genetics, taxonomy of modern agricultural plants and animals, animal behavior, ecological relationships among plants, animals, humans and the environment, nutrition in animals, health and diseases in animals, and similarities between animals and humans. The course is centered on an extensive laboratory component in order to connect the big ideas of life science with agricultural applications and other curricular areas, including written and oral reporting and leadership.

**AGRICULTURAL MECHANICS TECHNOLOGY (Y) #0702**

| PREREQUISITE: None | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This course will offer students, who have a career interest in the field of agriculture, the opportunity to advance their skills in the area of agricultural mechanics. Students will learn, understand and employ basic skills in the area of woodworking, electrical systems, plumbing, cold metal processes, concrete, welding technology, and small engines. Application of current safety standards and procedures will be a component of each study unit. Additional areas of study will include career planning and leadership development through participation in FFA. The maintenance of a Supervised Agricultural Experience (SAE) project to develop hands-on skills outside of class will be an integral part of the course.

**ADVANCED AGRICULTURAL MECHANICS TECHNOLOGY (Y) #0725**

| PREREQUISITE: Agricultural Mechanics Technology, Instructor Permission | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

Advanced Agricultural Mechanics Technology is an extension of and builds upon skills and knowledge learned in Agricultural Mechanics Technology. This course will offer Sophomores, Juniors and Seniors the opportunity to further advance their skill proficiencies in the areas of woodworking, metalworking, project planning, tool fitting, electricity and electronics, plumbing, cold metal processes, concrete, welding technology, hydraulic and pneumatic systems and basic construction techniques. Comprehensive understanding and application of current safety standards and procedures will be a component of each study unit. Career planning and leadership development through participation in FFA and the maintenance of a Supervised Agricultural Experience (SAE) project will be an integral part of the course.

**FLORAL AND LANDSCAPE DESIGN (Y) #0703**

| PREREQUISITE: Agriculture Science. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "f"* | | |

This course is designed to teach students the theories and principles of artistic design. The students will apply an artistic approach to floral design while exploring and acquiring practical skills. Students will perform 2- and 3-dimensional designs, understand the history of floral art, develop arrangement styles and techniques, and design seasonal and holiday designs. Students will achieve this through using balance, symmetry, harmony, unity, and texture throughout the course. The curriculum will include problem solving, creative thinking, and written and verbal communication skills. This college-prep course will meet the VAPA requirement for high school graduations.

**ADVANCED FLORAL AND LANDSCAPE DESIGN (Y)** **#0731**

| **PREREQUISITE:** Agriculture Science. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |

Advanced Floral Design allows students to learn professional florist skills and to increase their knowledge needed for employment in the floral industry. Curriculum focuses on a continued accumulation of knowledge and then the advancement of applicable hands-on skills. Students will explore the floriculture industry on a more technical and advanced level including: the proper care and handling of flowers, plants and foliage; the evaluation of floral materials and arrangements; the utilization of floral tools, supplies, and products to apply design principles to floral media; the construction of arrangements for all occasions; the marketing and pricing of floral designs; and the preservation of floral materials. The art elements and principles of design will serve as a foundation for each unit covered. Students will be exposed to careers available in agriculture business. All agriculture students are automatically members of the FFA, and participation in FFA leadership-development activities and Supervised Agricultural Experience Program projects (SAEs) will be graded components of this course. At the end of the course, students will be prepared to secure a job in the floral industry and can challenge themselves by taking the state standardized floral design certification assessment.

**AGRICULTURE LEADERSHIP (Y)** **#0708**

| **PREREQUISITE:** Completion of Agriculture Science with a grade *C* or better. | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This elective course is designed to improve the leadership skills of students interested in agricultural occupations. In addition to exploring different leadership styles, this course will improve students' skills in the areas of Goal-setting, Organization, Communication, Time and Resource Management, Public Speaking, Career Development, and Conflict Resolution. This course will combine the areas of classroom, FFA, and supervised occupational experience programs for the complete education of future leaders in agriculture.

**ANIMAL SCIENCE (Y)** **#0724**

| **PREREQUISITE:** Completion of Agriculture Science, or teacher approval. | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>UMHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course will expand on Animal Science knowledge that was learned in Agriculture Science. Students will learn scientific concepts related to animals and apply these in hands-on situations. The FFA leadership organization and Supervised Agricultural Experience Projects are an integral part of this class.

**ROP ANIMAL HEALTH (Y)** **#0965**

| **PREREQUISITE:** Biology. | |
|---|---|
| **SCHOOL**<br>PHS* | **CREDIT**<br>360 hours, 10 units per semester |
| 2 Hours Per Day | |

The intent of this yearlong course is to prepare high school students to work in the Animal Health industry. The course focuses on livestock and small animals. Upon completion of this course, students will have knowledge and hands-on experience in the areas of specific animal species, health and diseases, animal behavior, livestock and small animal procedures, and veterinary assistance. Second semester, students work in community classrooms related to the Animal Health industry. Example community classrooms may include veterinary clinics, pet groomers, retail animal health businesses, horse facilities, ranches, and zoos. Students will meet once per week in the classroom and then be in community classrooms for the remainder of their hours. Field trips and guest speakers will enhance instruction. The course also includes instruction in the FFA leadership organization, careers, and supervised occupational and agricultural experience projects, and job readiness.

Students wishing to earn the Certified Veterinary Assistant certification may continue for a third semester.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

**CALIFORNIA NATURAL RESOURCES I (Y)** **#0336**

| **PREREQUISITE:** Biology, Chemistry, and Geometry. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>11 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course is the first CTE course in the Natural Resources program at EDHS. During the year, students will investigate local ecosystems and the environmental issues associated with these areas. Students will complete field studies to help relate cause and effect patterns within the environment. Community service will be an ongoing part of this program.

**CALIFORNIA NATURAL RESOURCES II (Y)** **#0337**

| **PREREQUISITE:** Passing grade of *C* or better in NR Biology, AP or Non AP Environmental Science (or concurrent enrollment), geometry, and California Natural Resources 1. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course is the second and final science-based CTE course in the Natural Resources program at EDHS. During the year, students will focus on independent projects, develop project management skills, and manage an independent or small group project to develop leadership skills, inquiry skills, goal setting, time management, and communication skills. Students will continue to complete field studies to help relate cause and effect patterns within the environment. Community service and a senior project are a required part of this program.

**ENVIRONMENTAL BOTANY (Y)** **#0332**

| **PREREQUISITE:** Biology, with a passing grade of C- or better | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "d"* | | |

This upper division science course is offered to students with a desire to learn about ecologic and economic functions of plant cultivation with respect to common horticultural and native plants. They will study and know how to identify, grow, harvest and care for commonly grown species of plants. Students will learn about the biological role of plants and the human impacts on, and care of plants, within an ecosystem. Moreover, they will gain knowledge of nursery and greenhouse management that will ultimately prepare the student to gain employment, study plant conservation, or tend to and care for their own garden.

## ARTS, MEDIA, AND ENTERTAINMENT

**ADVANCED VIDEO PRODUCTION (Y)** **#0489**

| **PREREQUISITE:** Grade *C* or better in ICT Foundations, a grade *B* or better in English. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This course will use various computer technology concepts and applications to apply the skills of pre-production through post-production, including development of treatments, storyboarding, script writing, filming, and editing to the production of projects, programs, and broadcasts in the DB-TV Studio. Students will learn to work in production teams as directors, on-air talent, audio engineers, switchers, graphics technicians, etc., as they produce longer quality feature programs for the school

network, and, potentially, for community cable broadcasts. The class will also offer opportunities to visit area television studios and to participate in summer training at UCLA.

**DIGITAL IMAGING (Y)** **#0635**

| **PREREQUISITE:** Art 1 | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "f"* | | |

Digital Imaging is a "school to career" course that teaches students a broad set of skills in the Adobe Creative Suite using Photoshop, Illustrator and InDesign while maintaining a fine arts approach and focus. The course will introduce how to work with basic vector and raster-based images while emphasizing individual creativity. Photography is also a component where composition and lighting will be used to add to the creativity in the Creative Suite. All projects will focus on developing perception and application of the principles of design and elements of art through the coursework along with creative problem solving, experimentation, and critique and revision. Digital Imaging is a course where students will use state-of-the-art digital imaging software and concepts to create projects which integrate art, graphic design, photo manipulation and illustration, while exposing students to career options involving graphic design in a technological world.

**ICT DIGITAL MEDIA (Y)** **#0453**

| **PREREQUISITE:** ICT Foundations with a grade *C* or better. | | |
|---|---|---|
| **SCHOOL**<br>PHS<br>IHS<br>Virtual Academy | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

Information and Communication Technology (ICT) Digital Media is designed for college-bound students who have already mastered the skills taught in the Foundations course and are interested in a career that requires a working knowledge of effective technology, or are ready to join the workforce. Students are provided with the skills necessary to read, write, and compute as they carry out instruction. Listening and oral communication skills are emphasized as students interact with other members of a team. A cornerstone of this class includes accepting job responsibilities and applying the ability to know how to learn and be willing to learn to keep competitive in our ever-changing digital world, along with the teamwork necessary to complete a task and enhance presentations with technical, graphic, and design skills. The focus of this course is the graphic design skills, along with technical and business principles, that students will gain as they select a product for their business to effectively promote.

## BUILDING AND CONSTRUCTION TRADES

**WOOD I (Y)** **#0520**

| **PREREQUISITE:** None | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

Basic techniques in basic construction, cabinet making, furniture construction, upholstery, woodworking, wood finishing, and wood turning. Students develop accuracy, judgment, and craftsmanship, and participate in creative project activities. The correct and safe uses of tools, machines, materials, and processes are emphasized. Second semester offers techniques in finished carpentry, wood finishing related to these areas and wood turning. The student will use tools, machines, and techniques related to the light construction industry. Accuracy, neatness, sound work habits, and safe work practices are stressed.

**FINISH CARPENTRY (Y)** **#0528**

| **PREREQUISITE:** Woodworking and Carpentry or Engineering Design I. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This course will enhance the student's ability to use the tools of the construction trades while gaining the confidence to work safely. The student will learn advanced techniques and applications of the use of tools and equipment in the construction of those elements that make up the job of a finished cabinetmaker and carpenter. Second semester offers techniques in finish carpentry, wood finishing related to these areas, and wood turning. The student will use tools, machines and techniques related to the light construction industry. Accuracy, neatness, sound work habits, and safe work practices are stressed.

## EDUCATION, CHILD DEVELOPMENT, AND FAMILY SERVICES

**CHILD DEVELOPMENT (Y)** **#0581**

| **PREREQUISITE:** Student interest. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course will prepare individuals to understand the physical, mental, emotional, and social growth and development of children, as well as their care and guidance as it pertains to careers and future parenting.

## ENGINEERING AND ARCHITECTURE

**INTRODUCTION TO ENGINEERING DESIGN (IED) PLTW (Y)** **#0535**

| **PREREQUISITE:** None. | | |
|---|---|---|
| **SCHOOL**<br>UMHS | **GRADES**<br>9–10 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g" and CTE* | | |

The major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

**ENGINEERING DESIGN AND ARCHITECTURE I (Y)** **#0517**

| **PREREQUISITE:** None. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>IHS<br>Virtual Academy | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

This is a 1-year course for students with little or no drafting background. This course is recommended as a prerequisite for all engineering, construction, and manufacturing classes. Basic skills of sketching, board drawing, and computer operations are emphasized.

**ENGINEERING DESIGN AND ARCHITECTURE II (Y)** **#0518**

| **PREREQUISITE:** Engineering Design and Architecture I | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>IHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This is a 1-year course for students who wish to continue learning about engineering design. Students will use the principles learned in Engineering I, understand how basic machines work, and to apply these mechanical devices to design features to solve engineering problems. Problem solving techniques will also be applied to architectural problems. All work will be assembled into the student's portfolio.

**INTRODUCTION TO MANUFACTURING AND ENGINEERING #0531**

| PREREQUISITE: None. | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>9–10 | **CREDIT**<br>5 units per semester |

Introduction to solid modeling software which is the foundation for all modern mechanical engineering and manufacturing systems. The course also covers the basics of modern machining, welding and other technologies such as 3D printing and electro-mechanical systems is a 1-year course for students who wish to continue learning about engineering design. Students will use the principles learned in Engineering I, understand how basic machines work, and to apply these mechanical devices to design features to solve engineering problems. Problem solving techniques will also be applied to architectural problems. All work will be assembled into the student's portfolio.

**MANUFACTURING AND ENGINEERING TECHNOLOGY (Y) #0516**

| PREREQUISITE: None. | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *This course may be repeated for credit.* | | |

This course represents a contextualized, laboratory-based, integrated curriculum opportunity for students to learn about drafting and design, machining and forming, welding and materials joining, and product innovation and design. Students will develop critical thinking skills through a variety of multimodal, problem-solving techniques. Students will gain hands-on skills in basic machine shop practices, measurement systems, shop safety practices, drilling machines, grinding machines, and milling machines. The integrated content focuses on competence in an age of rapidly advancing technology; and providing students with the basis for making a wise academic and career choice.

## HONORS ENGINEERING AND MANUFACTURING

**HONORS PRINCIPLES OF ENGINEERING (POE) PLTW (Y) #0536**

| PREREQUISITE: None. | | |
|---|---|---|
| **SCHOOL**<br>UMHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement "g" and CTE* | | |

The major focus of Honors POE is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

**HONORS COMPUTER INTEGRATED MANUFACTURING (CIM) PLTW (Y) #0537**

| PREREQUISITE: Intro to Engineering (#0535) and Honors Principles of Engineering (#0536). Recommended Geometry completed with a grade B or better. | | |
|---|---|---|
| **SCHOOL**<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

Honors CIM is one of the specialization courses in the Project Lead the Way high school engineering program. The course applies and concurrently develops secondary-level knowledge and skills in mathematics, science, and technology.

**HONORS ENGINEERING DESIGN AND DEVELOPMENT (EDD) PLTW (Y) #0538**

| PREREQUISITE: Intro to Engineering (#0535) and Honors Principles of Engineering (#0536). Recommended Geometry completed with a grade B or better and Honors PLTW Computer Integrated Mfg. (#0537) | | |
|---|---|---|
| **SCHOOL**<br>UMHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

Utilizing the activity-project-problem-based (APPB) teaching and learning pedagogy, students will perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams of students will design, build, and test their solution. Finally, student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with a community mentor and experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process.

## FASHION AND INTERIOR DESIGN

**FASHION APPAREL AND TEXTILES (Y) #0561**

| PREREQUISITE: Student interest. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *This course may be repeated for elective credit. Meets UC Requirement: "f"* | | |

This course emphasizes factors affecting clothing choices and decisions, and teaches students to be better consumers of ready-to-wear apparel. Construction techniques are practiced in a laboratory environment. Career options in this field will also be studied.

**ADVANCED FASHION APPAREL AND TEXTILES (Y) #0562**

| PREREQUISITE: Fashion, Apparel and Textiles. | | |
|---|---|---|
| **SCHOOL**<br>PHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *This course may be repeated for elective credit. Meets UC Requirement "g"* | | |

This course is designed to provide further study and practice to effectively prepare students with the knowledge, skills, attitudes, and behaviors needed to successfully enter the job market, or to transition to postsecondary education.

**ROP COSMETOLOGY (Y) #0927**

| M–F<br>High School Students: 3.5 Hours per day | |
|---|---|
| **SCHOOL**<br>Virtual Academy* | **CREDIT**<br>1,600 hours,<br>15 units per semester |

Enter the exciting career of cosmetology and become a hairstylist, platform artist, salon owner, or one of many numerous opportunities available as a licensed cosmetologist. In 1,600 hours, students learn all of the things necessary to take the California State Board Examination course of study: cutting, setting, coloring, permanent waving, and chemical relaxing of hair; artificial nails, manicuring, and pedicuring; and facials and makeup. Available to men and women at least 16 years of age who have completed 10th grade.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

## HEALTH SCIENCE AND MEDICAL TECHNOLOGY

**MEDICAL ARTS AND SCIENCE I (Y) #0281**

| PREREQUISITE: 9th grade Health and enrollment in Health Academy. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This one-year course will contain content-specific information and skill-building standards which focus on health-related careers. Specific studies will include the history of the health care industry, knowledge concerning the function of human body systems, knowledge of medical care service systems, and introduction to the standards for learning basic health care skills. Semester 2 will focus on local health career opportunities, health care systems in America, personal application to health careers, and community service participation.

**MEDICAL ARTS AND SCIENCE II (Y)** **#0284**

| **PREREQUISITE:** Medical Arts and Science I, concurrent enrollment in Algebra 2 or higher, and Chemistry. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "d"* | | |

This one-year advanced health course will be taught in two integrated semesters. Each semester contains information with specific content and skills building. Semester I will focus on basic health history, knowledge and facts of the human body, systems of medical care, and introductions to health careers. Semester II will focus on health career opportunities, health care systems in America, personal application to health careers, and community service participation.

**MEDICAL ARTS AND SCIENCE III (Y)** **#0285**

| **PREREQUISITE:** Medical Arts and Science I, concurrent enrollment in Algebra 2 or higher, and Chemistry. | | |
|---|---|---|
| **SCHOOL**<br>EDHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |

This 1-year advanced health course will be taught in two integrated semesters. Each semester contains information with specific content and skills building. Semester I will focus on basic health history, knowledge and facts of the human body, systems of medical care, and introductions to health careers. Semester II will focus on health career opportunities, health care systems in America, personal application to health careers, and community service participation.

**ROP HEALTH CAREERS (Y)** **#0944**

| 2 Hours per Day / M–F | |
|---|---|
| **SCHOOL**<br>EDHS* | **CREDIT**<br>360 hours, 10 units per semester |

This two-semester course provides students with the basic knowledge and skills necessary to obtain entry-level employment or decide on a specific focus for postsecondary education.

After spending the first 18 weeks in the classroom learning how to work in a patient care setting and studying medical terminology, vital signs, CPR, and basic anatomy/physiology, the student is then placed in one of the many health care training sites. After placement, students will follow a training plan for their assigned health facility 8 hours per week and will report for classroom instruction 1 day per week. Students have the opportunity of firsthand experience in as many as three different settings, allowing them to pursue a specific area in higher education and/or gain employment upon completion of the course.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes*

**ROP DENTAL CAREERS (Y)** **#0928**

| 3 Hours per Day / M–F | |
|---|---|
| **SCHOOL**<br>Virtual Academy * | **CREDIT**<br>540 hours, 15 units per semester |
| *Meets UC Requirement: "g"* | |

This two-semester course provides students with basic knowledge of the duties of a dental assistant. After classroom instruction, students receive in-service training in a local dental office where they observe and perform dental procedures. This community class training consists of approximately 220 hours. After placement, students will follow a training plan for their assigned dental facility 12 hours per week and will report for classroom instruction 1 day per week.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes*

## HOSPITALITY, TOURISM AND RECREATION

**CULINARY I (Y)** **#0553**

| **PREREQUISITE:** Student interest. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course covers the relationship of nutrition to health and well-being; the selection, preparation and care of food, meal management and optimal use of food dollars. In addition, the course demonstrates competencies needed for planning, preparing and serving food attractively and nutritiously within a given time schedule. At ORHS, cooking lab is limited to once per week.

**CULINARY II (Y)** **#0556**

| **PREREQUISITE:** Culinary I with a grade *C* or better and teacher approval. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This course builds on those units and skills learned in the Culinary I class. It covers selection, preparation, and care of food in meal management, as well as budgeting. Students prepare and serve meals to staff and/or students during the second semester. In addition, students study and prepare foods from geographic regions in the United States and/or foods of other cultures. Career options and speakers are emphasized in this course.

**ROP CULINARY ARTS (Y)** **#0961**

| 3 Hours, 20 minutes per Day / 3 Days per Week / M, T, Th or M, W, F | |
|---|---|
| **SCHOOL**<br>EDHS* | **CREDIT**<br>360 hours, 10 units per semester |

This competency-based course prepares students for entry-level positions in the restaurant/ food service industry and/or for postsecondary training. Included are core content standards, such as sanitation, food service operations, nutrition, food preparation, and presentation. Integrated throughout the course are career preparation standards, such as basic academic skills, communication, inter-personal skills, problem solving, safety, technology, and other employment skills. Meal preparations and catering are an integral part of this program.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes*

## INFORMATION AND COMMUNICATION TECHNOLOGIES

**EXPLORING COMPUTER SCIENCE (Y)** **#0455**

| **PREREQUISITE:** Completion of an Algebra 1 course. No previous computer science course is required to take this course. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g" and CTE*<br>*Course meets District technology requirement.* | | |

Exploring Computer Science is a hands-on introduction to computer architecture, programming, and using the computer as a creative tool. The class is taught in the computer lab and is project-based, rather than textbook-based. The class is divided into six basic units. Units consist of: a survey of computer architecture and human/computer interaction, algorithmic problem-solving, web site development, program design and development using Scratch, data analysis, and robotics. Each unit uses a series of projects of increasing complexity to introduce, refine, and integrate programming and development concepts, culminating with a "capstone" projects as a unit final.

**ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (Y) #0241AP**

| **PREREQUISITE:** Completion of Algebra 1. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

Designed to be equivalent to a first-semester introductory college computing course. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using simulations to explore questions that interest them. The course focuses on using technology and programming as a means to solve computational problems and create exciting and personally relevant artifacts. Students design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life.

**ADVANCED PLACEMENT COMPUTER SCIENCE A (Y) #0243AP**

| **PREREQUISITE:** Grade *B* or better in Algebra 2 or Advanced Algebra 2, or teacher recommendation. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This course includes all the topics of Advanced Placement Computer Science A emphasizing object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design, and abstraction. The course is designed for students with no prior computing experience and is meant to be the equivalent of a first-semester college-level course in Computer Science.

**ROP DATABASE DESIGN AND SQL PROGRAMMING (Y) #0454**

| **PREREQUISITE:** Grade *C* or better in Geometry | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>11–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"* | | |

This two-part course is designed to meet the needs of college-bound students who would like to experience college-level database design and Structured Query Language (SQL) programming. In Part 1, database design curriculum, students learn to analyze complex business scenarios and create a data model, a conceptual representation of an organization's information. In Part 2, database programming curriculum, students implement their database design by creating a physical database using the industry-standard SQL. Upon completion of this course, students have the opportunity to take an exam to earn industry certification: Oracle Database SQL Certified Expert.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

## MANUFACTURING AND PRODUCT DEVELOPMENT

**METALS (Y) #0530**

| **SCHOOL**<br>EDHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
|---|---|---|

This program is designed to provide the student with vocational experiences associated with the general metals area of sheet metal and bench metal, welding, foundry, forging, and machine tools. The student will explore the modern concepts and trends affecting the metalworking industry. It also looks into the social, economic, and ecological impact technology has had on our society. This program also provides the student an opportunity to develop competencies in metal fabrication and machine tool operation.

**ADVANCED MANUFACTURING AND ENGINEERING TECHNOLOGY (Y) #0515**

| **PREREQUISITE:** Manufacturing and Engineering Technology. | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "g"*<br>*This course may be repeated for credit.* | | |

Advanced Manufacturing and Engineering Technology builds upon the skills and knowledge learned in Manufacturing and Engineering Technology. This course will offer Sophomores, Juniors and Seniors the opportunity to further advance their skill proficiencies in the areas of graphic design, machine tooling and forming, engineering design, project planning, tool fitting, and product innovation and design. Comprehensive understanding and application of current safety standards and procedures will be a component of each study unit. Career planning, project innovation, and ship will be integral parts of the course.

**ROP METAL FABRICATION/ WELDING (Y) #0932**

| 3 days per week / M, T, TH | |
|---|---|
| **SCHOOL**<br>EDHS | **CREDIT**<br>180 hours, 5 units per semester |

This 2-semester Metal Fabrication/ Welding course is designed to provide the student with entry-level skills in the metal working trades with special emphasis on welding. Metal fabrication tools and practices are also taught which provide competencies common to the machine tool, plant maintenance, heavy construction, millwright, and industrial services trades. Students are generally expected to enter the class with some background, such as a high school general metal course, although students may enter without any formal background training with the instructor's permission. Some students may opt to continue with enrolling in a third of fourth semester.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

## PUBLIC SERVICES

**ROP LAW ENFORCEMENT (S) (Y) #0933**

| 2 Hours per Day / M–F | |
|---|---|
| **SCHOOL**<br>PHS * | **CREDIT**<br>360 hours, 10 units per semester |

This course is designed to acquaint the student with every facet of the criminal justice field and includes instruction in firearms, elementary law, unarmed defense, rights of citizens, and court procedure. The entire scope of careers in law enforcement is discussed, covering every level from federal to state to local. Students learn how to apply for and pass law enforcement entry examinations.
In addition, students are taught the proper way to complete job application forms and are exposed to a "mock oral," which simulates the stress of an actual job interview. The student has an opportunity to get to know professionals in the field through the many field trips made available.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

**ROP FIRE CONTROL TECHNICIAN (Y) #0948**

| 2 Hours per Day / M–F | |
|---|---|
| **SCHOOL**<br>UMHS* | **CREDIT**<br>360 hours, 10 units per semester |

This course is designed to prepare students for entry-level positions in the fire service. This would include city fire departments, county fire districts, California Department of Forestry, California Parks, U.S. Forest Service, Bureau of Land Management, and private companies involved in fire service and fuels management. Major areas of training and/or certification include State Firefighter I Training, Wild Land Fire Training, EMS First Responder Training, Hazardous Materials Training, and CPR Training. As part of their training, students will also be expected to spend part of the second semester in an on-the-job training experience with local fire agencies.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

## TRANSPORTATION

**AUTOMOTIVE TECHNOLOGY I (Y) #0540**

| **PREREQUISITE:** Teacher permission. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS | **GRADES**<br>10–12 | **CREDIT**<br>5 units per semester |

This is an introductory class designed to expose the student to the basic automotive systems and their functions. Information will be presented through lecture, demonstrations, and selected lab activities. Topics to be covered are engine performance, power train components, ignition, fuel, emissions, cooling, and suspension and brake systems. In the beginning class, students will remove and replace parts; in the advanced class, students will remove and repair parts.

**INTRODUCTION TO SERVICE AND REPAIR #0542**

| **PREREQUISITE:** None. | | |
|---|---|---|
| **SCHOOL**<br>ORHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

In this course students will learn the assembly and disassembly process of mechanisms along with diagnostic/ troubleshooting procedures and skills. Students will study all features of a 2 and 4 stroke small engines and use all tools applicable for small engine repair and maintenance. Work ethic, productivity, and safety are an integral part of the classroom and laboratory activities of these classes.

**ROP AUTOMOTIVE ENGINE (Y) #0921**

| 3 days per week / M, W, F | |
|---|---|
| **SCHOOL**<br>EDHS* | **CREDIT**<br>360 hours, 5 units per semester |

This program helps students prepare for a career in the mechanics trade. Students receive in-depth classroom theory and detailed lab instruction in operation and trouble-shooting of all major systems and components. Emphasis for the first semester is on tune-ups, complete checking of batteries, starting and charging systems, fuel injection systems, and valve work. Major emphasis is placed on automotive electricity. Second semester emphasis is on complete drum and disc brake theory and servicing. Wheel alignment and power trains are also included. A working knowledge of basic math, including fractions and decimals, is highly desirable.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

**ROP DIESEL ENGINE (Y) #0926**

| 2 Hours per Day/ M-F | |
|---|---|
| **SCHOOL**<br>PHS* | **CREDIT**<br>360 hours, 10 units per semester |

The Diesel Engine program is designed to mix classroom instruction with hands-on training, including the basics of diesel technology, repair techniques and equipment, and practical exercises. Principals and theories are studied by running, testing, diagnosing, disassembling and reassembling components, systems, and engines. Students also learn how to interpret technical manuals and electronic diagnostic reports. Graduates can continue their education at American River College to obtain a Diesel Technology degree.
College credit may be available through American River College.

** ROP classes are available to all district students. Students are responsible for their own transportation to classes.*

## NON-DEPARTMENTAL

**ICT FOUNDATIONS (S) #0451**

| **PREREQUISITE:** None. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS<br>IHS<br>Virtual Academy | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *Course meets District technology requirement.* | | |

Information and Communications Technology (ICT) Foundations has been designed to prepare students to employ critical thinking and problem solving skills in a variety of real world scenarios. The overarching objective of the course is to expose students to an array of programs, applications, and technology and provide the groundwork for success throughout a student's educational career. Students will engage in a host of hands-on activities designed to enhance technological efficiency and promote a positive future in the digital world. ICT Foundations will provide students with tools necessary to be a well-qualified participant in today's perpetually changing global economy. After completing this course students will have fulfilled the El Dorado Union High School District Technology Requirement needed for graduation and be able to select from a variety of courses within the ICT pathway.

**STUDENT LEADERSHIP (Y) #0877**

| **PREREQUISITE:**<br>EDHS: Elected by student body or representatives, 2.0 GPA.<br>ORHS: Elected by student body.<br>PHS: Elected by student body or appointed by the ASB Cabinet, 2.0 GPA, and no failing grades.<br>UMHS: Elected by student body or selected through an application process. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS<br>IHS<br>Virtual Academy | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |

This course combines classroom instruction with leadership practices in a laboratory of practical school situations. It provides student leaders with the opportunity to study the basic concepts of democratic government, the meaning and techniques of leadership, parliamentary procedure, group processes, and the principles of human behavior, the objectives of education, and many problems of school administration. It provides opportunities to develop speaking and writing skills; to improve in courtesy, poise, and appearance; to work with peers of diverse backgrounds and attitudes; and to share responsibilities with adults and consider common problems. After school participation is mandatory.

**STUDENT LEADERSHIP I (S) #0877F**

| **SCHOOL**<br>ORHS<br>UMHS<br>Virtual Academy | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
|---|---|---|

This course is designed for the student interested in learning the basic concepts of the democratic process, leadership skills, parliamentary procedures, group processes, and organization in a laboratory of practical school situations. It affords the student a classroom environment to practice speaking and writing responsibility with both peers and adults.

**YEARBOOK (Y) #0600**

| **PREREQUISITE:** An application/interview process is required of students to obtain instructor approval. PHS students are also required to obtain an administrator's approval. | | |
|---|---|---|
| **SCHOOL**<br>EDHS<br>ORHS<br>PHS<br>UMHS | **GRADES**<br>9–12 | **CREDIT**<br>5 units per semester |
| *Meets UC Requirement: "f"* | | |

This course offers instruction in and practice of the principles of yearbook production. Students will gain skills in design, layout, photography, salesmanship, PageMaker, and word processing computer skills. (PageMaker is not offered at EDHS.)

# EL DORADO UNION HIGH SCHOOL DISTRICT

## Career Technical Education (CTE) Pathway Courses

### Agriculture and Natural Resources

- Agriculture Leadership (PHS)
- Agriculture Biology (PHS) (UMHS)
- Agriculture Science (PHS) (UMHS)
- Agriculture Floral & Landscape Design (PHS)
- Advanced Floral & Landscape Design (PHS)
- Agriculture Mechanics Technology (PHS) (UMHS)
- Advanced Agriculture Mechanics Technology (PHS)(UMHS)
- CA Natural Resources I & II (EDHS)
- Environmental Botany (EDHS)
- Animal Science (PHS) (UMHS)
- ROP Animal Health (ALL)

### Arts, Media and Entertainment

- Digital Imaging (ORHS)
- ICT Digital Media (PHS)

### Building and Construction Trades

- Wood I (EDHS)
- Finished Carpentry (EDHS)

### Engineering and Architecture

- PLTW – Intro to Engineering Design (UMHS)
- PLTW – Honors Principles of Engineering (UMHS)
- PLTW – Honors Computer Integrated Manufacturing (UMHS)
- PLTW – Honors Engineering Design and Development (UMHS)
- Engineering Design & Architecture I (EDHS) (ORHS)
- Engineering Design & Architecture II (EDHS)

### Education, Child Development, and Family Services

- Child Development (PHS)

### Fashion and Interior Design

- Fashion Apparel & Textiles (PHS)
- Advanced Fashion Apparel & Textiles (PHS)
- ROP Cosmetology (ALL)

### Health Science and Medical Technology

- Medical Arts & Science I & II & III (EDHS)
- ROP Health Careers (ALL)
- ROP Dental Careers (ALL)

### Hospitality, Tourism, and Recreation

- Culinary I (ALL)
- Culinary II (EDHS) (PHS) (ORHS) (UMHS)
- ROP Culinary Arts (ALL)

### Information and Communication Technologies

- Exploring Computer Science (ALL)
- AP Computer Science Principles (EDHS) (ORHS) (PHS)
- AP Computer Science A (EDHS) (ORHS)
- ROP Database Design & SQL Programming (ALL)

### Manufacturing and Product Development

- Metals (EDHS)
- Intro to Manufacturing & Engineering (ORHS)
- Manufacturing & Engineering Technology (ORHS)
- Advanced Manufacturing & Engineering
- Technology (ORHS)
- ROP Metal Fabrication/ Welding (ALL)

### Public Services

- ROP Law Enforcement (ALL)
- ROP Fire Control Technician (ALL)

### Transportation

- Automotive Technology I (EDHS) (ORHS) (PHS)
- Introduction to Service and Repair (ORHS)
- ROP Automotive Engine (ALL)
- ROP Diesel Engine (ALL)

**Sign up with your Guidance Counselor or contact:**

**CENTRAL SIERRA REGIONAL OCCUPATIONAL PROGRAM**

**4675 Missouri Flat Road, Placerville, CA 95667**

**(530) 622-5081 ext. 7239 www.eduhsd.net**