COURSE DIRECTORY

CTE/ROP Courses

www.eduhsd.net

530-622-5081, ext. 7239
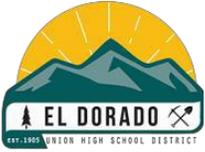
A letter from the Superintendent

Dear Parents and Guardians:

The Course Directory is published annually to provide you with the most accurate and up-to-date information that you and your student will need throughout his/her high school career.

This directory includes brief course descriptions as well as information on the 240-unit graduation requirement, college entrance information, and a 4-year planning guide to assist you in determining the best course of action that suits your student's academic interest.

If you have additional questions after perusing this directory, please contact your student's counselor for the best source of information.

We take a great deal of pride in the success of our students within our District and getting them, along with their parents, as much academic information as possible along the way is a fundamental goal of ours. There are many great programs and pathways in place for our students to experience on their journey towards graduation. It is our goal that all students attending our schools receive the necessary support and instruction to help them be college and/or career ready when they walk across the stage at graduation.

The education of our high school students is a partnership among parents, our schools, and communities. We look forward to working with you in this partnership.

Sincerely,

Stephen Wehr
Superintendent

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CAREER TECHNICAL EDUCATION and
CENTRAL SIERRA REGIONAL OCCUPATIONAL PROGRAM

CAREER TECHNICAL EDUCATION (CTE)

AGRICULTURE AND NATURAL RESOURCES

AGRICULTURE SCIENCE I (Y)　#0704

PREREQUISITE:	Interest in Agriculture.	
SCHOOL PHS	**GRADES** 9–12	**CREDIT** 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 Physical and Earth Science 9th grade course and/or completion of Algebra 1.	
SCHOOL PHS	**GRADES** 10–12	**CREDIT** 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 PHS	**GRADES** 10–12	**CREDIT** 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		
SCHOOL PHS	**GRADES** 10–12	**CREDIT** 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 prophecies 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 DESIGN (Y)　#0703

PREREQUISITE:	Agriculture Science.	
SCHOOL PHS	**GRADES** 11–12	**CREDIT** 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.

Note: *Students who successfully complete the yearlong course of study will receive Visual/Performing Arts credit.*

AGRICULTURE LEADERSHIP (Y) #0708

PREREQUISITE: Completion of Agriculture Science with a grade *C* or better.		
SCHOOL PHS	GRADES 10–12	CREDIT 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.

AGRICULTURE BUSINESS AND ECONOMICS (Y) #0701

PREREQUISITE: Completion of Agriculture Biology or teacher approval.		
SCHOOL PHS	GRADES 11–12	CREDIT 5 units per semester
Meets UC Requirement: "g"		

This course is designed for students interested in pursuing advanced studies in the field of agriculture. Students will understand and employ basic economic principles as they relate to agriculture business management, production agriculture, and individual consumers. The course will include study of basic economic concepts, vocabulary, the development and operation of the U.S. market economy from both the macroeconomic and microeconomic context, as well as comparative economic systems and the global market economy. Students will be required to develop a "business" to include product management, packaging, price determination, and marketing. Students will keep accounting-based records of expenses,

receipts, and profit/losses. At the conclusion of the course, profits will be split equally amongst the partners. The course will also include development of the skills necessary for the preparation of resumes, job applications, interview skills, and college and scholarship applications.

ANIMAL SCIENCE (Y) #0724

PREREQUISITE: Completion of Agriculture Science, or teacher approval.		
SCHOOL PHS	GRADES 11–12	CREDIT 5 units per semester

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 PHS*	CREDIT 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 1 (Y) #0336

PREREQUISITE: Biology, Chemistry, and Geometry.		
SCHOOL EDHS	GRADES 11	CREDIT 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 2 (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 EDHS	GRADES	CREDIT 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 EDHS	**GRADES**	**CREDIT** 5 units per
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

INTRO TO TELEVISION PRODUCTION (Y)   #0487

PREREQUISITE: Grade *C* or better in ICT Foundations and Grade *B* or better in English or recommendation from the most recent English teacher.		
SCHOOL ORHS UMHS	**GRADES** 9–12	**CREDIT** 5 units per semester
Meets UC Requirement: "g"		

This course provides an introduction to the field of television production. Students will be introduced to analog and digital video cameras

and digital still cameras, techniques for editing video on linear and nonlinear tape editors and on the computer, and how to create a daily news broadcast for the school. Students will learn how to create basic graphics and animation for video using various computer concepts and applications. Further, students will explore career options in the field of broadcast news. Students will be required to create a portfolio of their work for prospective employers.

VIDEO PRODUCTION (Y)   #0489

PREREQUISITE: Grade *C* or better in ICT Foundations, a grade *B* or better in English, and successful completion of Introduction to Television Production.		
SCHOOL UMHS	**GRADES** 10–12	**CREDIT** 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.

WEB PAGE AUTHORING AND CREATION (Y)   #0468

PREREQUISITE: Grade *B* or better in ICT Foundations, or teacher approval.		
SCHOOL EDHS ORHS UMHS	**GRADES** 9–12	**CREDIT** 5 units per semester
Meets UC Requirement: "g"		

This course provides a comprehensive introduction to the essentials of web design, from

planning page layouts to publishing a complete site to the web. Through real- world projects and engaging activities, participants learn fundamental design concepts and hands-on techniques for creating compelling, easy-to-use web pages. Using Dreamweaver, participants learn how to combine their graphic design skills with the technical knowledge needed to build and publish websites with ease.

DESKTOP PUBLISHING (Y); UMHS (S) #0469

PREREQUISITE: Grade *C* or better in ICT Foundations, or teacher		
SCHOOL UMHS	**GRADES** 9–12	**CREDIT** 5 units per semester
Meets UC Requirement: "f"		

This course takes students beyond the fundamentals of desktop publishing introduced in previous computer technology courses. Students will work with a variety of desktop publishing applications and learn how to create professional quality print and web ready publications for business and the consumer. Emphasis will also be placed on exploring desktop publishing certification, career opportunities, and creating the Yearbook.

DIGITAL IMAGING ORHS (Y); UMHS (S) #0635

PREREQUISITE: Art 1, ICT Foundations.		
SCHOOL ORHS UMHS	**GRADES** 10–12	**CREDIT** 5 units per semester
Meets UC Requirement: "f"		

This is an elective school-to-career course for the digital artist. Students will master computer graphics applications as Adobe Photoshop and Adobe Illustrator to manipulate artistic contents. Students will learn to operate peripheral devices, such as scanners, digital cameras, and graphic slates. Student products will have a foundation in the elements and

principals of design. Copyright law is a critical component of this course.

ICT DIGITAL MEDIA (Y)   #0453

PREREQUISITE: ICT Foundations with a grade *C* or better.		
SCHOOL PHS UMHS IHS Virtual Academy	**GRADES** 9–12	**CREDIT** 5 units per semester
Meets UC Requirement: "g"		

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 team work 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

WOODWORKING AND CARPENTRY (Y) #0520

PREREQUISITE: None		
SCHOOL EDHS UMHS	**GRADES** 9–12	**CREDIT** 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 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, and sound work habits and safe work practices are stressed.

FINISH CARPENTRY (Y) #0528

PREREQUISITE: Woodworking and Carpentry or Engineering Design I.		
SCHOOL UMHS	**GRADES** 10–12	**CREDIT** 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.

BUSINESS & FINANCE

ACCOUNTING (Y)   #0482

PREREQUISITE: None		
SCHOOL EDHS ORHS PHS UMHS IHS VHS Virtual Academy	**GRADES** 11–12	**CREDIT** 5 units per semester
Earns math credit for graduation		

This course is designed to familiarize students with the principles of business accounting. Topics include the accounting cycle, and concepts and principles used in recording assets, liabilities, equity, revenues, and expenses. Students will use critical thinking skills in accounting simulations to process, analyze, and prepare financial information. Students will practice math skills that are specific to the accounting process. This course will introduce students to computerized accounting using what is currently available.

EDUCATION, CHILD DEVELOPMENT, AND FAMILY SERVICES

CHILD DEVELOPMENT (Y)   #0581

PREREQUISITE: Student interest.		
SCHOOL ORHS PHS UMHS	**GRADES** 10–12	**CREDIT** 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.

TEACHING AND LEARNING (Y) #0585

PREREQUISITE: Students must complete an application process.		
SCHOOL PHS	**GRADES** 11–12	**CREDIT** 5 units per semester

The Future Teachers of America program is an innovative approach designed to attract young people to the teaching profession through a challenging introduction to teaching. The program seeks to (1) provide high school students insight into the nature of teaching, (2) a chance to work in the classroom as well as teach, and (3) gain insight into critical issues impacting the quality of education in America's schools.

ENGINEERING AND ARCHITECTURE

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

PREREQUISITE:	None.	
SCHOOL	**GRADES**	**CREDIT**
UMHS	9–10	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.

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

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

The major focus of 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.

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

PREREQUISITE:	Intro to Engineering (#0535) and Principles of Engineering (#0536). Recommended Geometry completed with a grade B or better.	
SCHOOL	**GRADES**	**CREDIT**
UMHS	10–12	5 units per semester

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.

ENGINEERING DESIGN AND ARCHITECTURE I (Y) #0517

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

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	**GRADES**	**CREDIT**
EDHS	10–12	5 units per semester
ORHS		
IHS		

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.

ARCHITECTURAL DESIGN AND GRAPHICS (Y)   #0512

PREREQUISITE: Engineering Design and Architecture 1or Art 1.		
SCHOOL	**GRADES**	**CREDIT**
EDHS	10–12	5 units per semester
ORHS		
Meets CSU and UC Requirement: "f"		

Architectural Design and Graphics is an advanced course in which the student will develop a portfolio showcasing projects completed in the areas of sketching, architectural history, structural graphics, architectural design, and presentation. Use and under-standing of the computer as a design tool shall also be stressed. At Oak Ridge, landscape design will be stressed.

MANUFACTURING AND ENGINEERING TECHNOLOGY (Y)   #0516

PREREQUISITE:	None.	
SCHOOL	**GRADES**	**CREDIT**
ORHS	9–12	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.

ADVANCED MANUFACTURING AND ENGINEERING TECHNOLOGY (Y) #0516

REREQUISITE: Manufacturing and Engineering Technology.		
SCHOOL	**GRADES**	**CREDIT**
ORHS	10–12	5 units per semester
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 entrepreneurship will be integral parts of the course.

ROP ARCHITECTURAL CAD (Y) #0960

1 Hour or 2 Hours per Day	
SCHOOL	**CREDIT**
ORHS*	180 credits, 5 units per semester
This course may be repeated for elective credit.	

This course is designed to build drafting skills and serve as a foundation for drafters and pre-engineering students. Advance Drafting includes descriptive geometry, sheet metal developments, working drawings, architectural (house) design, and construction drawings. An introduction to CAD will include basic Auto CAD commands, mechanical and architectural applications, and plotting.

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

FASHION AND INTERIOR DESIGN

FASHION APPAREL AND TEXTILES (Y) #0561

PREREQUISITE: Student interest.		
SCHOOL	**GRADES**	**CREDIT**
PHS UMHS	9–12	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.

ROP COSMETOLOGY (Y) #0927

M–F High School Students: 5 Hours per Day	
SCHOOL	**CREDIT**
Virtual Academy*	1,600 hours, 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 (approximately 58 weeks), 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	**GRADES**	**CREDIT**
EDHS	10–12	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 A.		
SCHOOL	**GRADES**	**CREDIT**
EDHS	11–12	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 A.		
SCHOOL	**GRADES**	**CREDIT**
EDHS	11–12	5 units per semester
Meets UC Requirement: "d"		

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	**CREDIT**
EDHS*	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 further vocational training in a variety of health settings.

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 12 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	**CREDIT**
Virtual Academy *	540 hours, 15 units per semester

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

FOODS AND NUTRITION (Y) #0553

PREREQUISITE: Student interest.		
SCHOOL	**GRADES**	**CREDIT**
EDHS ORHS PHS UMHS	9–12	5 units per semester

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: Foods and Nutrition with a grade *C* or better and teacher		
SCHOOL	**GRADES**	**CREDIT**
EDHS ORHS PHS UMHS	10–12	5 units per semester

This course builds on those units and skills learned in the Foods and Nutrition 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	**CREDIT**
EDHS*	360 hours, 10 units per semester

This competency-based course prepares students for entry-level positions in the restaurant/ food service industry. 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.

* 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		
SCHOOL EDHS ORHS PHS UMHS	**GRADES** 9–12	**CREDIT** 5 units per semester
Meets UC Requirement: "g" and CTE *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		
SCHOOL EDHS ORHS PHS UMHS	**GRADES** 10–12	**CREDIT** 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 ORHS	**GRADES** 11–12	**CREDIT** 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.

DATABASE DESIGN AND SQL PROGRAMMING (Y) #0454

PREREQUISITE: Grade *C* or better in Geometry		
SCHOOL ORHS	**GRADES** 11–12	**CREDIT** 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.

MANUFACTURING AND PRODUCT DEVELOPMENT

METALS (Y) #0530

SCHOOL EDHS	**GRADES** 9–12	**CREDIT** 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.

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

2 Hours per Day / M–F	
SCHOOL EDHS*	**CREDIT** 360 hours, 10 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 service 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 or fourth semester.

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

MARKETING, SALES AND SERVICE

ICT ENTREPRENEUR (Y)   #0452

PREREQUISITE:	ICT Foundations.	
SCHOOL	**GRADES**	**CREDIT**
ORHS	9–12	5 units per semester

Information and Communication Technology (ICT) Entrepreneur is designed to give students a broad base of knowledge that include the legal, managerial, financial, ethical, and industry-standard supported technology to make appropriate business decisions.

PUBLIC SERVICES

ROP LAW ENFORCEMENT (S) (Y) #0933

2 Hours per Day / M–F	
SCHOOL	**CREDIT**
PHS *	360 hours, 10 units per

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. College credit for this course may be available through El Dorado Center of Los Rios Community College.

* 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	**CREDIT**
UMHS*	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.

College credit for this course may be available through El Dorado Center of Los Rios Community College.

* 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	**GRADES**	**CREDIT**
EDHS ORHS PHS	10–12	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.

ADVANCED AUTOMOTIVE TECHNOLOGY (Y)   #0541

PREREQUISITE:	Automotive Technology I and/or Instructor approval.	
SCHOOL	**GRADES**	**CREDIT**
EDHS PHS	11–12	5 units per semester

Advanced auto is an extension of the skills and knowledge acquired in Automotive Technology I. This is a project-oriented/ hands-on course designed to give the student an opportunity to develop advanced diagnostic, repair, and managerial skills as applied to the automotive industry.

In the beginning class, students will remove and replace parts; in the advanced class, students will remove and repair parts.

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

2 Hours per Day / M–F	
SCHOOL EDHS*	**CREDIT** 360 hours, 10 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 PHS*	**CREDIT** 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.