

# CAREER & TECHNOLOGY EDUCATION



## Agriculture, Food & Natural Resources

### Animal Science

**CA02N1 Principles of Agricultural Science (PRINAFNR)**  
**PEIMS #13000200 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

**CA40N5 Small Animal Management (SMANIMGT)**  
**PEIMS #13000400 Recommended Grade Placement: 10-11 .5 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.

**CA80N5 Professional Standards in Agribusiness (PROSAFNR)**  
**PEIMS #13000800 Recommended Grade Placement: 10-11 .5 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in agribusiness systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to leadership development and the workplace, and develop knowledge and skills regarding agricultural career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course primarily focuses on leadership, communication, employer-employee relations, and problem solving as they relate to agribusiness.

**CA30N1 Livestock Production (LIVEPROD)**  
**PEIMS #13000300 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry.



**CA20N1 Horticulture Science (HORTSCI)**  
**PEIMS #13002000 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

**CA28N1 Greenhouse Operation and Production (GREOP)**  
**PEIMS #13002050 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

**CA28N2 Greenhouse Operation and Production (GREOPLAB)**  
**PEIMS #13002055 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (El Dorado, Eastlake and Pebble Hills)**

To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

**CA21N1 Advanced Plant and Soil Science (Science Teacher) (ADVSSCI)**  
**PEIMS #13002100 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (El Dorado and Eastlake)**

1. Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science.
2. Investigations, laboratory practices, and field exercises will be used to develop an understanding of current plant and soil science.
3. This course is designed to prepare students for careers in the food and fiber industry. Students will learn, reinforce, apply, and transfer their knowledge in a scientific setting.



## Architecture & Construction

### Architecture

**CY06N1**                                      **Civil Engineering and Architecture**                                      **(CEA)**  
**PEIMS #N1303747**                                      **Recommended Grade Placement: 9-10**                                      **1 credit – state**  
**Schools Offering (All Campuses)**

The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or to students to model the experiences that civil engineers and architects face. Students work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. This course is designed for 10th, or 11th grade students.

**CB46A1**                                      **Architectural Design I**                                      **(ARCHDSN1)**  
**PEIMS #13004600**                                      **Recommended Grade Placement: 10-11**                                      **1 credit – state**  
**Schools Offering (All Campuses)**

In Architectural Design, students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in 19 architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**CB47N2**                                      **Architectural Design II**                                      **(ADVARCH)**  
**PEIMS #13004700**                                      **Recommended Grade Placement: 11-12**                                      **2 credit – state**  
**Schools Offering (All Campuses)**

In Advanced Architectural Design, students gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Advanced Architectural design includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**CB48N2**                                      **Practicum in Architecture**                                      **(PRACADS1)**  
**PEIMS #13004800**                                      **Recommended Grade Placement: 12**                                      **2 credit – state**  
**Schools Offering (All Campuses)**

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.

## **Aztec Architecture Academy**

**CB42N1 or D1 Principles of Architecture (Aztec Architecture Academy) (PRINARCH)**  
**PEIMS #13004200 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (El Dorado HS) (Implement 2018-2019)**

Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, education, and career information to set and achieve realistic career and educational goals. Job-specific training can be provided through training modules that identify career goals in trade and industry areas. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings.

**CB85N1 or D1 Architectural Design I (Aztec Architecture Academy) (ARCHDSN1)**  
**PEIMS #13004600 Recommended Grade Placement:10-11 1 credit – state**  
**Schools Offering (El Dorado HS) (Implement 2019-2020)**

Course is in Architectural Design, students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in 19 architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**CB86N2 or D2 Architectural Design II (ARCHDSN2)**  
**PEIMS #13004700 Recommended Grade Placement:11-12 2 credits – state**  
**Schools Offering (El Dorado HS) (Implement 2020 - 2021)**

In Advanced Architectural Design, students gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Advanced Architectural design includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**CB87N2 or D2 Practicum in Architectural Design (PRACADS1)**  
**PEIMS #13004800 Recommended Grade Placement:12 2 credits – state**  
**Schools Offering (El Dorado HS) (Implement 2021 - 2022)**

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.

**CB43N1 Interior Design I (INTERDS1)**  
**PEIMS #13004300 Recommended Grade Placement 11 1 credit – state**  
**Schools Offering (El Dorado HS) (Implement 2020 - 2021)**

Interior Design I is a technical course that addresses psychological, physiological, and sociological needs of individuals by enhancing the environments in which they live and work. Students will use knowledge and skills related to interior and exterior environments, construction, and furnishings to make wise consumer decisions, increase productivity, promote sustainability, and compete in industry.

**CB44N1 Interior Design II (INTERDS2)**  
**PEIMS #13004400 Recommended Placement 12 1 credit – state**  
**Schools Offering (El Dorado HS) (Implement 2021 - 2022)**

Interior Design II is a technical laboratory course that includes the application of the employability characteristics, principles, processes, technologies, communication, tools, equipment, and materials related to interior design to meet industry standards.

## **Construction – Construction Management (Mill and Cabinet)**

**CB73N1 Principles of Construction (PRINCON)**  
**PEIMS #13004220 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (Montwood)**

In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

**CB51N1 Construction Technology (CONSTECH)**  
**PEIMS #13005100 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (Montwood)**

In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

**CB53N2 Mill and Cabinetmaking Technology (MACTECH)**  
**PEIMS #13005300 Recommended Grade Placement: 11-12 2 credit – state**  
**Schools Offering (Montwood)**

In Mill and Cabinetmaking Technology, students gain knowledge and skills specific to those needed to enter the work force in the area of mill work and cabinet manufacturing and installation. The student may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in cabinet design, tool usage, jointing methods, finishes, and numerical and computer control production methods.

### ***Beyond Endorsement (Can use Career Preparation)***

**CB62N2 Practicum in Construction Management (PRACCONS)**  
**PEIMS #13006200 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (El Dorado, Montwood and Socorro)**

In Mill and Cabinetmaking Technology, students gain knowledge and skills specific to those needed to enter the work force in the area of mill work and cabinet manufacturing and installation. The student may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in cabinet design, tool usage, jointing methods, finishes, and numerical and computer control production methods.



## **Construction – Heating, Ventilation and Air Conditioning (HVAC)**

**CB81N1 Principles of Construction (HVAC) (PRINCON)**  
**PEIMS #13004220 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (El Dorado)**

In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

**CB58D1/A1 Heating Ventilation and Refrigeration Technology I (HVACREF1)**  
**PEIMS #13005800 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (El Dorado)**

In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology, students gain knowledge and skills specific to those needed to enter the industry as technicians in the HVAC and refrigeration industry or building maintenance technician or supervisor or prepare for a postsecondary degree. Students acquire knowledge and skills in safety, principles of HVAC theory, tools, codes, and installation of HVAC and refrigeration equipment.

**CB59D2/A2 Heating Ventilation and Refrigeration Technology II (HVACREF2)**  
**PEIMS #13005900 Recommended Grade Placement: 11-12 2 credit – state**  
**Schools Offering (El Dorado)**

In Advanced Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology, students gain advanced knowledge and skills specific to those needed to enter the industry as HVAC and refrigeration technicians or building maintenance technicians or supervisors or prepare for a postsecondary degree. Students acquire knowledge and skills in safety, electrical theory, tools, codes, installation of commercial HVAC equipment, heat pumps, troubleshooting techniques, various duct systems, and maintenance practices.

### ***Beyond Endorsement (Can use Career Preparation)***

**CB83D2/A2 Practicum in Construction Management (HVAC) (PRACCONS)**  
**PEIMS #13006200 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (El Dorado)**

In Mill and Cabinetmaking Technology, students gain knowledge and skills specific to those needed to enter the work force in the area of mill work and cabinet manufacturing and installation. The student may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in cabinet design, tool usage, jointing methods, finishes, and numerical and computer control production methods.







**CC94C2**            **CTED Fashion Design II** (Textiles and Sewing)            **(FASHDSN2)**  
**PEIMS #13009400**            **Recommended Grade Placement: 11-12**            **2 credit – state**  
**Schools Offering (All Campuses – Housed at Eastlake)**

Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of fashion, with emphasis on design and production.

**CC95C2**            **CTED Practicum in Fashion Design** (First Time Taken)            **(PRACFAS1)**  
**PEIMS #13009500**            **Recommended Grade Placement: 12**            **2 credit – state**  
**Schools Offering (All Campuses – Housed at Eastlake)**

Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

**CC02C2**            **CTED Practicum in Fashion Design II** (Second Time Taken)            **(PRACFAS2)**  
**PEIMS #13009510**            **Recommended Grade Placement: 12+**            **2 credit – state**  
**Schools Offering (All Campuses – Housed at Eastlake)**

Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

**CC99N1**            **Professional Communications**            **(PROFCOMM)**  
**PEIMS #13009900**            **Required Grade Placement: 10<sup>th</sup> comprehensive and 9<sup>th</sup> ECHS .5 credit – state**  
**Schools Offering (All Campuses)**

**CC99D1 Dual Credit – EPCC – SPCH 1321 (Organizational & Professional Communication)**

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

**CC99C1**            **(CTED) Professional Communications**            **(PROFCOMM)**  
**PEIMS #13009900**            **Required Grade Placement: 10<sup>th</sup> comprehensive and 9<sup>th</sup> ECHS .5 credit – state**  
**Schools Offering (All Campuses)**

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

## Journalism and Yearbook (CTE Support Courses)

### 2017-2018 Implementation

**CC88J1      Graphic Design and Illustration I (Journalism)      (GRAPHDI1)**  
**PEIMS #13008800      1 credit – state**

#### **Schools Offering (EDHS & Mission ECHS)**

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

### 2018-2019 Implementation

**CC89J1      Graphic Design and Illustration II (Journalism)      (GRAPHDI2)**  
**PEIMS #13008900      1 credit – state**

#### **Schools Offering (EDHS & Mission ECHS)**

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

### 2019-2020 Implementation

**CC90J2      Practicum in Graphic Design and Illus. I (Journalism)      (PRACGRD1)**  
**PEIMS #13009000      2 credit – state**

#### **Schools Offering (EDHS & Mission ECHS)**

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

### 2020-2021 Implementation

**CC01J2      Practicum in Graphic Design and Illus. II (Journalism)      (PRACGRD2)**  
**PEIMS #13009010      2 credit – state**

#### **Schools Offering (EDHS & Mission ECHS)**

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and skills.

### 2017-2018 Implementation

**CC88Y1      Commercial Photography I (Yearbook)      (CPHOTO1)**  
**PEIMS #13009100      1 credit – state**

#### **Schools Offering (EDHS & Mission ECHS)**

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

The student applies academic knowledge and skills in commercial photography. The student is expected to apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as brochures; and apply mathematics

knowledge and skills by identifying whole numbers, decimals and fractions applied to measurement, percentages, depth of field, aperture, resolution, and scale; demonstrating knowledge of arithmetic operations; using conversion methods such as fractions to decimals and inches to points; and applying measurement to solve a problem.

The student applies professional communications strategies. The student is expected to adapt language for audience, purpose, situation, and intent such as structure and style; organize oral and written information; interpret and communicate information, data, and observations; give formal and informal presentations; apply active listening skills; listen to and speak with diverse individuals; and exhibit public relations skills. The student understands and examines problem-solving methods. The student is expected to employ critical-thinking and interpersonal skills independently and in teams to solve problems. The student applies information technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

### **2018-2019 Implementation**

**CC92Y1 Commercial Photography II (Yearbook) (CPHOTO2)**  
**PEIMS #13009200 1 credit – state**  
**Schools Offering (EDHS & Mission ECHS)**

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

### **2019-2020 Implementation**

**CC90J2 Practicum in Commercial Photography I (Yearbook) (PRACCPH1)**  
**PEIMS #13009250 2 credit – state**  
**Schools Offering (EDHS & Mission ECHS)**

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

### **2020-2021 Implementation**

**CC01J2 Practicum in Commercial Photography II (Yearbook) (PRACCPH2)**  
**PEIMS #13009260 2 credit – state**  
**Schools Offering (EDHS & Mission ECHS)**

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.



**Business, Management, & Administration**

- CD12N1 Principles of Business, Marketing, and Finance (PRINMBF)**  
**PEIMS #13011400 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (Pebble Hills SPARTA Academy)**  
 Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
- CD14N1 Business Information Management I (BUSIM1)**  
**PEIMS #13011400 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (All Campuses)**  
 Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
- CD14C1 CTED Business Information Management I (BUSIM1)**  
**PEIMS #13011400 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (All Campuses)**  
 Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
- CD15N1 Business Information Management II (BUSIM2)**  
**PEIMS #13011500 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**  
 Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.
- CD15C1 CTED Business Information Management II (BUSIM2)**  
**PEIMS #13011500 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**  
 Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

**CD17N1 Business Law (BUSLAW)**  
**PEIMS #13011700 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (Pebble Hills SPARTA Academy)**

Students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property. Students apply technical skills to address business applications of contemporary legal issues. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

**CD22N3 Practicum in Business Management/Extended (First Time Taken) (PRACBM)**  
**PEIMS #13012200 Recommended Grade Placement: 12 3 credit – state**  
**Schools Offering (Americas, Montwood, and Socorro)**

The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies.

**CJ43N5 Financial Literacy (Dollars and Sense) (DOLLARSE)**  
**PEIMS #13024300 Required 10<sup>th</sup> Comprehensive HS and 9<sup>th</sup> for ECHS ½ credit - state**

Dollars and Sense focuses on consumer practices and responsibilities, the money management process, decision-making skills, impact of technology, and preparation for different careers. Students are encouraged to participate in career and technical student organizations and other leadership organizations. Students will investigate global economics with emphasis on the free enterprise system and its impact on consumers and businesses. Students apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to set long-term financial goals based on those options. Students will determine methods of achieving long-term financial goals through educational planning and preparation, investment, tax planning, asset allocation, risk management, retirement planning, and estate planning. Students will learn about personal debt and will be introduced to dual credit and learn taking advantage of low/no cost educational options can make a profound affect their post-secondary goals and future quality of life. Students will complete Apply Texas, prepare for and take the Texas Success Initiative (TSI) college readiness test and will have an opportunity to apply for dual credit courses their junior and senior year.



## Education & Training

**CE44N2 Instructional Practices in Education and Training (INPREDTR)**  
**PEIMS #13014400 Recommended Grade Placement: 11-12 2 credit – state**  
**Schools Offering (All Campuses)**

Instructional Practices in Education and Training is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

**CE45N2 Practicum in Education and Training (PRACEDT1)**  
**PEIMS #13014500 Recommended Grade Placement: 11-12 2 credit – state**  
**Schools Offering (All Campuses)**

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

**CE45N3 Practicum in Education and Training/Extended (EXPREDT1)**  
**PEIMS #13014505 Recommended Grade Placement: 11-12 3 credit – state**  
**Schools Offering (All Campuses)**

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

**CE46N2 Practicum in Education and Training II (PRACEDT2)**  
**PEIMS #13014510 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (All Campuses)**

Practicum in Education and Training II is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.









**CG82N1 Principles of Government and Public Administration (PRINGPA)**  
**PEIMS #13018200 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
Government and Public Administration introduces students to foundations of governmental functions and career opportunities within the United States. Students will examine governmental documents such as the United States Constitution and the Bill of Rights.

**CG83N1 Political Science I (POLISCI2)**  
**PEIMS #13018300 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
This course will familiarize the student with political theory through the study of governments; public policies; and political processes, systems, and behavior.

**CG84N1 Political Science II (REVTAXRE)**  
**PEIMS #13018400 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
This course uses a variety of methodological approaches to examine the process, systems, and political dynamics of the United States and other nations. The dynamic component of this course includes current United States and world events.

**CG85N1 Revenue, Taxation, and Regulation (POLISCI1)**  
**PEIMS #13018500 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
Revenue, Taxation, and Regulation is an overview of law and investigative principles and follows agency procedures to examine evidence and ensure revenue compliance. In addition, students learn to facilitate clear and positive communication with taxpayers and become familiar with data analysis systems and revenue-related financial problems. The student prepares to enforce legal compliance and regulatory standards.

**CG86N1 Public Management and Administration (PUBMANAD)**  
**PEIMS #13018600 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
Public Management and Administration considers that governments and nonprofit administration resemble private-sector management. Students are introduced to management tools that maximize the effectiveness of administrators and affect the quality of life of citizens in the community.

**CG87N1 Planning and Governance (PLANGOV)**  
**PEIMS #13018700 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (Americas Libertas Academy)**  
Planning and Governance provides the opportunity for students to formulate plans and policies to meet social, economic, and physical needs of communities.

**CG90N2 Practicum in Local, State, and Federal Government (First Time) (PRACLSF1)**  
**PEIMS #13019000 Recommended Grade Placement: 11-12 2 credits – state**  
**Schools Offering (Americas Libertas Academy)**  
Students concurrently learn advanced concepts of political science in the classroom setting. In addition, students will apply technical skills pertaining to government and public administration in a direct mentorship by individuals in professional settings such as government, public management and administration, national security, municipal planning, foreign service, revenue, taxation, and regulation.

**CG90N3            Practicum in Local, State, and Federal Government (First Time)    (EXPRLSF1)**  
**PEIMS #13019005            Recommended Grade Placement: 11-12            3 credits – state**  
**Schools Offering (Americas Libertas Academy)**

Students concurrently learn advanced concepts of political science in the classroom setting. In addition, students will apply technical skills pertaining to government and public administration in a direct mentorship by individuals in professional settings such as government, public management and administration, national security, municipal planning, foreign service, revenue, taxation, and regulation



## Health Science

**CH02N1 Principles of Health Science (PRINHLSC)**  
**PEIMS #13020200 Recommended Grade Placement: 9 1 credits – state**  
**Schools Offering (Socorro HS HPA)**

- (1) The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.
- (2) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.
- (4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities and limitations and understand the implications of their actions.

**CH03N1 Medical Terminology (MEDTERM)**  
**PEIMS #13020300 Recommended Grade Placement: 10-12 1 credits – state**  
**Schools Offering (Socorro HPA)**

- (1) This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.
- (2) To pursue a career in health science, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should understand that quality health care depends on the ability to work well with others.
- (3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.
- (4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities and limitations and understand the implications of their actions.

**CH04N2 Health Science Theory/Health Science Clinical (HLSCLIN)**  
**PEIMS #13020410 Recommended Grade Placement: 10-12 2 credits – state**  
**Schools Offering (Socorro HPA)**

- (1) The Health Science course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. The course may be taught by different methodologies such as clinical rotation and career preparation learning.
- (2) To pursue a career in the health science industry, students should recognize, learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to

provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.

(4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.

**CH07N1 Medical Microbiology (MICRO)**  
**PEIMS #13020700 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

(1) Medical Microbiology. Students in Medical Microbiology explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

(3) Scientific inquiry. Scientific inquiry is the planned and deliberate investigation of the natural world. Scientific methods of investigation are experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(5) Science, systems, and models. A system is a collection of cycles, structures, and processes that interact. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

**CH13N2 Practicum in Health Science II (EMT) (PRACHLS2)**  
**PEIMS #13020510 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (Socorro HPA)**

CH10D2 Dual Credit – EPCC - EMSP1501 (Emergency Medical Technician Basic) and EMSP1160 (Emergency Medical Technician Clinicals)

(1) The Practicum is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

(2) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

(3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.

(4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities and limitations and understand the implications of their actions.

**CH11A3                    Practicum in Health Science II (Pre-Dentistry)                    (EXPRHLS2)**  
**PEIMS #13020510                    Recommended Grade Placement: 12                    3 credit – state**  
**Schools Offering (Socorro HPA)**

- (1) The Practicum is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.
- (2) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.
- (4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities and limitations and understand the implications of their actions.

**CH12N3                    Practicum in Health Science II (Pharmacy Tech.)                    (EXPRHLS2)**  
**PEIMS #13020510                    Recommended Grade Placement: 12                    3 credit – state**  
**Schools Offering (Socorro HPA)**

- (1) The Practicum is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.
- (2) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (3) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science career through further education and employment.
- (4) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities and limitations and understand the implications of their actions.

**CH06N1                    Anatomy and Physiology                    (ANATPHYS)**  
**PEIMS #13020600                    Recommended Grade Placement: 10-12                    1 credit – state**  
**Schools Offering (All Campuses)**

- (1) Anatomy and Physiology. In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.
- (3) Scientific inquiry. Scientific inquiry is the planned and deliberate investigation of the natural world. Scientific methods of investigation are experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (5) Science, systems, and models. A system is a collection of cycles, structures, and processes that interact. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to

make predictions that can be scientifically tested. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

**CH08N1 Pathophysiology**

**(PATHO)**

**PEIMS #13020600**

**Recommended Grade Placement: 10-12**

**1 credit – state**

**Schools Offering (Socorro HS HPA)**

- (1) Pathophysiology. In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.
- (3) Scientific inquiry. Scientific inquiry is the planned and deliberate investigation of the natural world. Scientific methods of investigation are experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (5) Science, systems, and models. A system is a collection of cycles, structures, and processes that interact. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.



## PROJECT LEAD THE WAY – BIOMEDICAL SCIENCE (All Campuses)

**CHI2N1 Principles of Biomedical Sciences (PRBIOSCI)**  
**PEIMS # N1302092 Recommended Grade Placement: 9 1 Credit – state**  
**School Offering: (All Campuses)**

Student work involves the study of human medicine, research processes, an introduction to bioinformatics, and the use of computer science, mathematics, and information theory to model and analyze biological systems. Students investigate the human body systems and various health conditions including: heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts including homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, and the relationship of structure to function are incorporated in the curriculum. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.

**CHI3N1 Human Body Systems (HUMBODSY)**  
**School Offering: (All Campuses)**

**PEIMS # N1302093 Recommended Grade Placement: 10 1 Credit – state**  
Students engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems are studied as “parts of a whole,” working together to keep the amazing human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real-world cases and play the role of biomedical professionals to solve medical mysteries.

**CHI4N1 Medical Interventions (MEDINT)**  
**PEIMS # N1302094 Recommended Grade Placement: 11 1 Credit – state**  
**School Offering: (All Campuses)**

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail. These scenarios expose students to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across generations of a family and provide a look at the past, present and future of biomedical sciences. Lifestyle choices and preventive measures are emphasized throughout the course as are the important roles scientific thinking and engineering design play in the development of interventions of the future.

**CHI5N1 Biomedical Innovations (BIOINN)**  
**PEIMS # N1302095 Recommended Grade Placement: 12 1 Credit – state**  
**School Offering: (All Campuses)**

Students apply their knowledge and skills to answer questions and solve problems related to the biomedical sciences. In this capstone course, they may consult with a mentor or advisor from a university, hospital, physician's office, or industry. Students are expected to present the results of their work to an adult audience, which may include representatives from the local healthcare or business community or the school's Partnership Team.

Students should take **Anatomy and Physiology** for their fourth Science and **Medical Microbiology** for their fifth Science. Wherever possible, students should be offered **Medical Terminology**.



## Hospitality

**CI22N1 Principles of Hospitality and Tourism (PRINHOSP)**  
**PEIMS #13022200 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (All Campuses)**

The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; and restaurants and food beverage service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**CI33A1 Introduction to Culinary Arts (CULARTS)**  
**PEIMS #13022550 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (All Campuses)**

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification, a Texas culinary specialist certification, or any other appropriate industry certification. This course may be offered as a laboratory-based or internship course. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**CI26A2 Culinary Arts (CULARTS)**  
**PEIMS #13022600 Recommended Grade Placement: 11-12 2 credits – state**  
**Schools Offering (All Campuses)**

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.

**CI34A2 Advanced Culinary Arts (ADCULART)**  
**PEIMS #13022650 Recommended Grade Placement: 12 2 credits – state**  
**Schools Offering (All Campuses)**

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.





student researches careers in the personal care services industry. To prepare for success, students must have skills relative to this industry, as well as academic knowledge and skills. Students may begin to earn clock hours toward state licensing requirements.

**CJ55N1 Introduction to Cosmetology (INTCOSMO)**  
**PEIMS #13025100 Recommended Grade Placement: 11 1 credit – state**  
**Schools Offering (All Campuses)**

Students explore areas such as bacteriology, sterilization and sanitation, hair styling, manicuring, shampooing and the principles of hair cutting, hair styling, hair coloring, skin care, and facial makeup. The student researches careers in the personal care services industry. To prepare for success, students must have skills relative to this industry, as well as academic knowledge and skills. Students may begin to earn clock hours toward state licensing requirements.

**CJ52N2 Cosmetology I (COSMET1)**  
**PEIMS #13025200 Recommended Grade Placement: 11 2 credit – state**  
**Schools Offering (All Campuses)**

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

**CJ53N3 Cosmetology II (COSMET2)**  
**PEIMS #13025300 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (All Campuses)**

Students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems.

**CJ54N2 Practicum in Human Services (Cosmetology) (PRACHUS2)**  
**PEIMS #13025315 Recommended Grade Placement: 12 2 credit – state**  
**Schools Offering (All Campuses)**

Practicum in Human Services provides occupationally specific training and focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community services careers. Content for Practicum in Human Services is designed to meet the occupational preparation needs and interests of students and should be based upon the knowledge and skills selected from two or more courses in a coherent sequence in the human services cluster as well as the essential knowledge and skills described in subsection (c) of this section for communication, critical thinking, problem solving, information technology, ethical and legal responsibilities, leadership, teamwork, and entrepreneurship.

**CJ56N2 Cosmetology I (Nail Technology) (COSMET1)**  
**PEIMS #13025200 Recommended Grade Placement: 11 2 credits – state**  
**Schools Offering (Eastlake)**

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

**CJ57N2            Cosmetology II (Nail Technology)**

**(COSMET2)**

**PEIMS #13025300**

**Recommended Grade Placement: 12**

**2 credits – state**

**Schools Offering (Eastlake)**

Students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, haircare, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems.



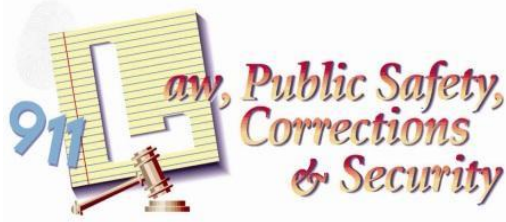
## Information

## Technology

- CK73N1 Computer Maintenance (COMPMTN)**  
**PEIMS #13027300 Recommended Grade Placement: 9-11 1 credit – state**  
**Schools Offering (All Campuses)**  
Students acquire principles of computer maintenance, including electrical and electronic theory, computer hardware principles, and broad level components related to the installation, diagnosis, service, and repair of computer systems. To prepare for success, students must have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.
- CK74N2 Networking (TELECOMN)**  
**PEIMS #13027400 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (All Campuses)**  
Students develop knowledge of the concepts and skills related to telecommunications and data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.
- CK75N2 Computer Technician Practicum (COMPT1)**  
**PEIMS #13027500 Recommended Grade Placement: 11-12 2 credits – state**  
**Schools Offering (All Campuses)**  
Students gain knowledge and skills in the area of computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Proper use of analytical skills and application of information technology concepts and standards are essential to prepare students for success in a technology-driven society. The critical thinking, information technology experience, and product development may be conducted either in a classroom setting with an instructor, with an industry mentor, or both.
- CK75N3 Computer Technician Practicum/Extended (EXCOMPT1)**  
**PEIMS #13027505 Recommended Grade Placement: 11-12 3 credits – state**  
**Schools Offering (All Campuses)**  
Students gain knowledge and skills in the area of computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Proper use of analytical skills and application of information technology concepts and standards are essential to prepare students for success in a technology-driven society. The critical thinking, information technology experience, and product development may be conducted either in a classroom setting with an instructor, with an industry mentor, or both.
- CK76N1 Computer Programming 1 (COMPPRO1)**  
**PEIMS #13027600 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (All Campuses)**  
Students acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as it relates to computer programming. Students apply technical skills to address business applications of emerging technologies.







**Law, Public Safety, Corrections, & Security**

**CL92N1 Principles of Law, Public Safety, Corrections, and Security (PRINLPCS)**  
**PEIMS #13029200 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (All Campuses)**

Principles of Law, Public Safety, Corrections, and Security course introduces students to professions in law enforcement, security, corrections, and fire and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

**CL93N1/D1 Law Enforcement I (LAWENF1)**  
**PEIMS #13029300 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (All Campuses)**

Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

**CL94N1/D1 Law Enforcement II (LAWENF2)**  
**PEIMS #13029400 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. This course includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony.

**CL95N1 Forensic Science (FORENSCI)**  
**PEIMS #13029500 Recommended Grade Placement: 12 1 credit – state**  
**Schools Offering (All Campuses)**

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

**CL02N1/D1 Criminal Investigation (CRINVEST)**  
**PEIMS #13029550 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

Criminal Investigation provides the knowledge and skills necessary to prepare for a standard investigation within the law enforcement divisions. This course includes the ethical and legal responsibilities, operation, and procedures of police while conducting an investigation.

**CL96N1 Court Systems and Practices (COURTSP)**  
**PEIMS #13029600 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation.





## Manufacturing

**CM23N1 Principles of Manufacturing (PRINMAN)**  
**PEIMS #13032200 Recommended Grade Placement: 9-10 1 credit – state**  
**Schools Offering (Americas and El Dorado)**

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

**CM23N1 Introduction to Welding (INTRWELD)**  
**PEIMS #13032250 Recommended Grade Placement: 10-11 1 credit – state**  
**Schools Offering (Americas and El Dorado)**

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

**CM23N1 Welding I (WELD1)**  
**PEIMS #13032300 Recommended Grade Placement: 10-12 1 credit – state**  
**Schools Offering (Americas and El Dorado)**

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

**CM24N2 Welding II (WELD2)**  
**PEIMS #13032400 Recommended Grade Placement: 11-12 2 credit – state**  
**Schools Offering (Americas and El Dorado)**

Advanced Welding builds on knowledge and skills developed in Welding. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.





## Marketing, Sales, & Service

**CN42N5 Advertising (ADVERTIS)**  
**PEIMS #13034200 Recommended Grade Placement: 9-10 .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.

**CN43N5 Fashion Marketing (FASHMKTG)**  
**PEIMS #13034300 Recommended Grade Placement: 9-10 .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.

**CN46N5 Sports and Entertainment Marketing (SPORTSEM)**  
**PEIMS #13034600 Recommended Grade Placement: 10-11 .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

This course will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and sporting events and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.

**CN46N5 Social Media Marketing (SMEDMKTG)**  
**PEIMS #13034650 Recommended Grade Placement: 10-11 .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

This course will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and sporting events and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.

**CN48N2 Practicum in Marketing Dynamics I (PRACMKT1)**  
**PEIMS #13034800 Recommended Grade Placement: 11-12 credit – state**  
**Schools Offering (Americas, El Dorado and Socorro HS)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

**CN48N3                    Practicum in Marketing Dynamics I/Extended                    (EXPRMKT1)**  
**PEIMS #13034805                    Recommended Grade Placement: 11-12                    3 credit – state**  
**Schools Offering (Americas, El Dorado and Socorro HS)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

**CN49N3                    Practicum in Marketing Dynamics II                    (PRACMKT2)**  
**PEIMS #13034810                    Recommended Grade Placement: 12+                    3 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

**CN49N3                    Practicum in Marketing Dynamics II/Extended                    (EXPRMKT2)**  
**PEIMS #13034815                    Recommended Grade Placement: 12+                    3 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

**CN42C5                    CTED Advertising                    (ADVERTIS)**  
**PEIMS #13034200                    Recommended Grade Placement: 9-10                    .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.

**CN43C5                    CTED Fashion Marketing                    (FASHMKTG)**  
**PEIMS #13034300                    Recommended Grade Placement: 9-10                    .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.

**CN46C5                    CTED Sports and Entertainment Marketing                    (SPORTSEM)**  
**PEIMS #13034600                    Recommended Grade Placement: 10-11                    .5 credit – state**  
**Schools Offering (Americas, El Dorado, and Socorro) Spring**

This course will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and sporting events and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.

**CN46C5 CTED Social Media Marketing  
(SMEDMKTG)**

**PEIMS #13034650 Recommended Grade Placement: 10-11 .5 credit – state  
Schools Offering (Americas, El Dorado, and Socorro) Spring**

This course will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and sporting events and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.

**CN47C3 CTED Marketing Dynamics  
(MKTGDYN)**

**PEIMS #13034700 Recommended Grade Placement: 11-12 3 credit – state  
Schools Offering (Americas, El Dorado, and Socorro)**

Marketing is a series of dynamic activities that focus on the customer to generate a profitable exchange. Students gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions. This course may include paid or unpaid career preparation experience.

**CN48C3 CTED Practicum in Marketing Dynamics I/Extended  
(EXPRMKT1)**

**PEIMS #13034805 Recommended Grade Placement: 12+ 3 credit – state  
Schools Offering (Americas, El Dorado and Socorro HS)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.

**CN49C3 CTED Practicum in Marketing Dynamics II/Extended  
(EXPRMK2)**

**PEIMS #13034810 Recommended Grade Placement: 12+ 3 credit – state  
Schools Offering (Americas, El Dorado, and Socorro)**

Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. This course covers technology, communication, and customer-service skills. The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical education courses in marketing education.





## STEM – Science and Math

**CO71N1 Principles of Technology (Physics Credit) (PRINTECH)**  
**PEIMS #13037100 Recommended Grade Placement: 11 1 credit – state**  
In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.

**CO71C1 CTED Principles of Technology (Physics Credit) (PRINTECH)**  
**PEIMS #13037100 Recommended Grade Placement: 11 1 credit – state**  
In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.

**CO72N1 Scientific Research and Design I (SCIRD)**  
**PEIMS #13037200 Recommended Grade Placement: 11-12 1 credit – state**  
Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO72D1 Scientific Research and Design I (DC GEO 1301/1302) (SCIRD)**  
**PEIMS #13037200 Recommended Grade Placement: 11-12 1 credit – state**  
Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO72P1 Scientific Research and Design I (PLTW CSA AP Credit) (SCIRD)**  
**PEIMS #13037200 Recommended Grade Placement: 10-12 1 credit – state**  
Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO77N1 Scientific Research and Design II (SCIRD2)**  
**PEIMS #13037210 Recommended Grade Placement: 12 1 credit – state**  
Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO77D1                      Scientific Research and Design II (Dual Credit Geology)                      (SCIRD2)**

**PEIMS #13037210                      Recommended Grade Placement: 12                      1 credit – state**

Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO77P1                      Scientific Research and Design II (AP Computer Science Principles) (SCIRD2)**

**PEIMS #13037210                      Recommended Grade Placement:10-12                      1 credit – state**

Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO78N1                      Scientific Research and Design III                      (SCIRD3)**

**PEIMS #13037220                      Recommended Grade Placement: 12                      1 credit – state**

Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO78D1                      Scientific Research and Design III (Dual Credit Geology)  
(SCIRD3)**

**PEIMS #13037220                      Recommended Grade Placement: 12                      1 credit – state**

Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO78D1AL/CO78D1BL Scientific Research and Design III (Dual Credit Geology LAB)(SCIRD3)**

**PEIMS #84800XXX                      Recommended Grade Placement: 12                      1 credit – state**

Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.

**CO67N1                      Engineering Mathematics                      ENGMATH**

**PEIMS #13036700                      Recommended Grade Placement 12                      1 credit - state**

Engineering Mathematics is a course where students solve and model robotic design problems. Students use a variety of mathematical methods and models to represent and analyze problems involving data acquisition, spatial applications, electrical measurement, manufacturing processes, materials engineering, mechanical drives, pneumatics, process control systems, quality control, and robotics with computer programming.









## Transportation, Distribution & Logistics

**CP93D1                      Energy Power and Transportation                      (EPTSYS)**  
**PEIMS #13039300                      Recommended Grade Placement: 10-11                      1 credit – state**  
**Schools Offering (All Campuses)**

The businesses and industries of the Transportation, Distribution, and Logistics cluster are rapidly expanding to provide new career opportunities. Students will need to understand the interaction between various vehicle systems, the logistics used to move goods and services to consumers, and the components of transportation infrastructure. Performance requirements will include academic and technical skills. Students prepared to meet the expectations of employers in this industry must be able to interact and relate to others and understand the technologies used in order to provide products and services in a timely manner. The increasing demand for employees will provide growth potential.

**CP07D1                      Automotive Basics                      AUTOBASC**  
**PEIMS #13039550                      Recommended Grade Placement: 10                      1 credit – state**

Automotive services include knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

**CP96N2                      Automotive Technology (Brakes and Steering & Suspension)                      (AUTOTECH)**  
**PEIMS #13039600                      Recommended Grade Placement: 11-12                      2 credit – state**  
**Schools Offering (All Campuses)**

Automotive services include knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

**CP97N2                      Advanced Auto Technology (Auto Electric/Engine Performance)                      (ADVAUTOT)**  
**PEIMS #13039700                      Recommended Grade Placement: 11-12                      2 credit – state**  
**Schools Offering (All Campuses)**

The principles of diagnosing and servicing these systems. In Advanced Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

**CP04N2                      Practicum in Transportation, Distribution, and Logistics                      (PRACTDL)**  
**PEIMS #13040400                      Recommended Grade Placement: 11-12                      2 credit – state**  
**Schools Offering (All Campuses)**

The Practicum is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience such as internships, mentorships, independent study, or laboratories.

**Skill for Career Development Orientation**  
**High School**

**CS99N0 Work Study (Career Prep Practicum)**  
**(CAREERP1)**

**PEIMS #Local Recommended Grade Placement: 11-12 0 credit – state**

**Schools Offering (El Dorado, Montwood, Americas, and Eastlake)**

Student Enrolled in a Practicum with employment or a Career Prep course shall be placed in this course during the period/s that are working during the school day.

**CS13N2 Career Preparation I (CAREERP1)**

**PEIMS #12701300 Recommended Grade Placement: 11-12 2 credit – state**

**Schools Offering (El Dorado, Montwood, Americas, and Eastlake)**

Career Preparation I provides opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

**CS14N2 Career Preparation II (CAREERP2)**

**PEIMS #12701400 Recommended Grade Placement: 12+ 2 credit – state**

**Schools Offering (All Campuses)**

Career Preparation II develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved business and industry training area. Students will develop skills for lifelong learning, employability, leadership, management, work ethics, safety, and communication as a group; however, each student will have an individual training plan that will address job-specific knowledge and skills. Approved training sponsors will provide paid occupational training for a student. The training sponsor will assist the teacher in providing the necessary knowledge and skills for the student's specific career preparation.

**CS13N3 Career Preparation I/Extended (EXCAREE1)**

**PEIMS #12701305 Recommended Grade Placement: 11-12 3 credit – state**

**Schools Offering (El Dorado, Montwood, Americas, and Eastlake)**

Career Preparation I provides opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

**CS14N3 Career Preparation II (EXCAREE2)**

**PEIMS #12701405 Recommended Grade Placement: 12+ 3 credit – state**

**Schools Offering (All Campuses)**

Career Preparation II develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved business and industry training area. Students will develop skills for lifelong learning, employability, leadership, management, work ethics, safety, and communication as a group; however, each student will have an individual training plan that will address job-specific knowledge and skills. Approved training sponsors will provide paid occupational training for a student. The training sponsor will assist the teacher in providing the necessary knowledge and skills for the student's specific career preparation.





**CS16N1 Project Based Research (PROBS2)**  
**PEIMS #12701510 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (Any Campus)**

Problem Based Research is a project-based research course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.

**CS17N1 Project Based Research (PROBS3)**  
**PEIMS #12701520 Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (Any Campus)**

Problem Based Research is a project-based research course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.

**CS15N1 Problems and Solutions I (PROBS1)**  
**PEIMS # Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

Problems and Solutions is a project-based research course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.

**CS16N1 Problems and Solutions II (PROBS2)**  
**PEIMS # Recommended Grade Placement: 11-12 1 credit – state**  
**Schools Offering (All Campuses)**

Problems and Solutions is a project-based research course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.

## Middle School

VA30N1      **College and Career Readiness**      (NONE)

**PEIMS #12700300**      **Required Grade Placement:8**

The career development process is unique to every person and evolves throughout one's life. Students will use decision-making and problem-solving skills for college and career planning. Students will explore valid, reliable educational and career information to learn more about themselves and their interests and abilities. Students integrate skills from academic subjects, information technology, and interpersonal communication to make informed decisions. This course is designed to guide students through the process of investigation and in the development of a college and career achievement plan. Students will use interest inventory software or other tools to explore areas of personal interest. Students will use this information to explore educational requirements for a variety of chosen career paths. Districts have the flexibility of offering career exploration knowledge and skills in a variety of instructional arrangements.

**VB73N1**      **Principles of Construction (Drugan Only)**

**(PRINCON)**

**PEIMS #13004220**      **Recommended Grade Placement: 6-8**

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. For safety and liability considerations, limiting course enrollment to 15 students is recommended. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

**Gateway to Technology (Teachers who teach these courses must have taken the summer PLTW Professional Development. Since each series of courses yield one half high school credit, teachers are to hold a secondary certification) Questions can be addressed to the CTE office.**

**VT73L5& VT73N5**      **Gateway to Technology 4 (Green Architecture / Medical Detectives)**      (GTT1)

**PEIMS # N1303756**      **Recommended Grade Placement: 6**

Green Architecture - Today's students have grown up in an age of "green" choices. In this unit, students learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's® 3D architectural design software. Medical Detectives - Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a "crime scene." They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

**VT70L5& VT70N5**      **Gateway to Technology 1 (Design and Modeling / Robotics and Automation)**      (GTT1)

**PEIMS # N1303756**      **Recommended Grade Placement: 7-8**

Gateway To Technology (GTT) is an activities-, project-, and problem-based (APPB) learning program designed to challenge and engage the natural curiosity of middle school students. The instructional units excite and motivate students to use their imaginations and teach them to be creative and innovative, while gaining the skills they need to develop, produce, and use products and services.

**VT71L5& VT71N5**      **Gateway to Technology 2 (Applied Science and Technology)**      (GTT2)

**PEIMS # N1303757**      **Recommended Grade Placement: 8**

Gateway To Technology (GTT) is an activities-, project-, and problem-based (APPB) learning program designed to challenge and engage the natural curiosity of middle school students. The instructional units excite and motivate students to use their imaginations and teach them to be creative and innovative, while gaining the skills they need to develop, produce, and use products and services.

**VK76N1**      **Gateway to Technology (Introduction to Computer Science) (COMPPRO1)**

Students will be receiving one HS state credit under (Computer Programming I)

**PEIMS # 13024600**      **Recommended Grade Placement: 8**

Students acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as it relates to computer programming. Students apply technical skills to address business applications of emerging technologies