

## CLOVIS EAST HIGH SCHOOL

### Pathways

AGRICULTURAL MECHANICS		
Year in School	Pathway Course	Description
9-12	Ag Engineering I	Studies include the introduction of the Ag mechanics and engineering industry in the areas of welding, woodworking, electrical wiring, plumbing, and other related fields. <b>Prerequisite:</b> None.
10-12	Ag Engineering II (P) <b>Dual Enrollment Intro to Ag Welding (MAG 41)</b>	Studies include a continuation of Ag Mechanics I, computer-aided drafting, plasma arc cutting, fabrication techniques, and project design. <b>Prerequisite:</b> Ag Engineering I with a “C” grade or higher.
11-12	Ag Engineering III <b>Dual Enrollment Agricultural Welding Fabrication (MAG 44)</b>	Studies include advanced welding procedures, electrical wiring principles, budgets, and building projects. <b>Prerequisite:</b> Ag Engineering II or ROP Welding Processes and Fabrication with a “C” grade or higher.
11-12	* ROP Welding Processes and Fabrication <b>Dual Enrollment Credit by Exam</b>	Welding Processes and Fabrication is a skill-building course that emphasizes welding and fabrication skills, including non-ferrous metals, in the advanced phases of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW). The primary emphasis is on using equipment in all positions of welding with the application of welding skills learned through project fabrication, repair, and industry procedure. <b>Prerequisite:</b> Ag Engineering III is recommended, or Teacher Recommendation.
11-12	* ROP Welding Fabrication and Application <b>Dual Enrollment Credit by Exam</b>	Welding Fabrication and Application is a capstone course designed to train students for entry-level welding/metal fabrication positions. This course prepares students for post-secondary agricultural mechanics, welding technology, and industrial technology educational programs. This full-year course emphasizes welding and fabrication skills in the advanced phases of Oxyacetylene, SMAW (Arc Welding), GMAW (MIG Welding), and TIG welding. This course applies the practical knowledge and skills learned during the previous years of instruction. <b>Prerequisite:</b> Ag Engineering III or Welding Processes and Fabrication recommended, or Teacher Recommendation. Transportation is highly recommended.
AGRICULTURAL SCIENCE		
Year in School	Pathway Course	Description
9-10	Biology & Sustainable Ag (P)	Studies include plant and animal life, their relationship to one another, and to humans in their environment. Using agriculture as the model, this class takes biology to the applied level. <b>Prerequisite:</b> None.
10-11	Chemistry and Agriscience (P) <b>Dual Enrollment Soils Science (PLS 2)</b>	Studies include the exploration of the physical and chemical nature of soil as well as the relationships between soil, plants, animals, and agricultural practices. This course follows California Academic Standards NGSS for chemistry as well as Foundation Standards for Agriculture. <b>Prerequisite:</b> Math 2 or concurrently enrolled, and Ag Biology, Biology, or Honors Biology with a “C” grade or higher.
11-12	Food Science (P)	Studies include the application of fundamental scientific principles to the research, development, manufacturing, packaging, storage, and marketing of food products. <b>Prerequisite:</b> Math 1; Ag Biology, Biology, or Honors Biology with a “C” grade or higher; and a “C” grade or higher in any previous agricultural class at Clovis East.
11-12	Adv. Interdisciplinary Science for Sustainable Agriculture (HP)	Studies include design systems and experiments to solve agricultural management issues currently facing the industry. <b>Prerequisite:</b> Grade of “C” or higher in life science and physical science.
ANIMAL SCIENCE		
Year in School	Pathway Course	Description
9-10	Agricultural Science 1	This course is designed for students interested in the field of agriculture. Topics covered include animal science, plant science, ornamental horticulture, public speaking, record keeping, parliamentary procedures, agricultural organization, and judging competitions. This course fulfills the CUSD graduation requirement for life science. <b>Prerequisite:</b> None.
10-12	CDE Animal Science (P) <b>Dual Enrollment Intro to Animal Science (AS 1)</b>	Studies include the principles of animal science focusing on areas of livestock production, anatomy, physiology, reproduction, nutrition, respiration, and genetics. <b>Prerequisite:</b> Math 1, and Ag Biology, Biology, or Honors Biology with a “C” grade or higher.

9-12	Equine Anatomy & Physiology Science (P)	This course is designed to give the student an in-depth introduction to the field of animal health care of equine science. The student will complete a curriculum that covers breeds, anatomy, nutrition and feeding, conformation faults, diseases, reproduction, behavior, facilities and stable practices, careers, business management, FFA leadership, and a supervised agricultural experience program. <b>Prerequisite:</b> Ag Biology, Biology, or Honors Biology with a "C" grade or higher or concurrent enrollment.
11-12	* ROP Equine Science <b>Dual Enrollment Equine Science (AS 21)</b>	This course is designed to give the student an in-depth introduction to the field of animal health care and equine science. The student will complete a curriculum that covers breeds, anatomy, nutrition and feeding, conformation faults, diseases, preproduction, behavior, buildings, and stable practices. <b>Prerequisite:</b> Ag Biology, Biology, or Honors Biology with a "C" grade or higher. Transportation is required.
11-12	* ROP Veterinary Science (P)	This course provides a survey of veterinary and animal-related careers and teaches the foundation for an entry-level job in veterinary assisting or supports further veterinary medical training. Major topics include Animal breeds, veterinary equipment, parasites, anatomy and physiology, medical terminology, and management of both companion and livestock species. Hands-on training in animal restraints and clinical procedures is included. <b>Prerequisite:</b> Ag Biology, Biology, or Honors Biology with a "C" grade or higher. Transportation is required.

## PLANT and SOIL SCIENCE

Year in School	Pathway Course	Description
9-12	Art and History of Floral Design (P) <b>Dual Enrollment Beginning Floral Design (EH 37)</b>	Studies include the application and artistic approach to floral design. This class involves the fundamentals of floral design theory, techniques, and skills currently practiced in the floral design industry. <b>Prerequisite:</b> None.
10-12	Ornamental Horticulture	This project-based course offers hands-on experience in many areas of plant science. Students learn basic horticultural plant structures and functions, propagation methods, growing media and fertilizers, landscaping, and pruning. Students gain an understanding of plant classification, anatomy, production and utilization, the study of plant diseases, their causes, nature, and control. Units in this course will also cover turf grass management, landscape design, and irrigation systems. <b>Prerequisite:</b> Ag Biology, Biology, or Honors Biology with a "C" grade or higher.
10-12	Plant Production Management (P)	This course encompasses learning the farming practices of row crops, orchard production, vineyard production, safe transport methods, quality control, and fresh fruit grading/evaluations. At the conclusion of the year, students will have an opportunity to market and sell the produce/ projects at the McFarlane-Coffman Agriculture Center. <b>Prerequisite:</b> Grade of "C" or higher in life science and physical science.
11-12	Farm to Table (P)	This course will teach students to integrate sustainable agricultural practices of farmers who grow our food and the people who prepare and consume it. <b>Prerequisite:</b> Math 2 or concurrently enrolled; Ag Biology, Biology, or Honors Biology with a "C" grade or higher; and a "C" grade or higher in any previous agricultural class at Clovis East.
11-12	Advanced Floral Design (P)	This course will build upon the prerequisite course, The Art and History of Floral Design. Advanced Floral Design will increase the focus on the art design, handling of cut flowers, the mechanics of floral design, and the effects of retail in the floral industry. Students will learn about building and designing displays, advertising, marketing, pricing, and sales. Students will also develop floral design skills for use in industries such as weddings, sympathy, and event floral work. <b>Prerequisite:</b> Grade of "C" or higher in Art and History of Floral Design.

## CHILD DEVELOPMENT

Year in School	Pathway Course	Description
10	Exploration of Child and Adolescent Literature (HP)	Exploration of Child and Adolescent Literature is a grade 10 English Language Arts college preparatory course integrated with the Education Pathway standards. This course allows students to utilize Language Arts skills to investigate and evaluate the value and purpose of world literature for children and adolescents. Students synthesize knowledge of the developmental stages of physical, intellectual, social, and emotional development with an understanding of appropriate teaching materials and readings for each of the stages. <b>Prerequisite:</b> A 2.50 grade point average or higher.
11-12	* ROP Careers in Child Development <b>Dual Enrollment Early Child Ed 1</b>	Studies include the preparation to work in fields dealing with young children and the developmental stages of children before birth to age 12. Students gain firsthand experience through classroom and worksite learning, job shadowing, and tours that enable them to determine the benefits of an education-related career. <b>Prerequisite:</b> 2.5+ GPA, excellent attendance and citizenship, and a desire to work with children.

## EDUCATION

11	Contemporary Issues in Education (HP)	Contemporary Issues in Education is a college preparatory grade 11 English course integrated with the Education Pathway standards of the Education, Child Development, and Family Services sector which allows students to see where the skills of English intersect with the elements of education. Students conduct research, closely read, and analyze complex texts, evaluate instructional methodology and philosophy, and create a portfolio of reflections, activities, and compositions that, when synthesized, serve as the foundation for three capstone projects. <b>Prerequisite:</b> A 2.50 grade point average or higher.
11-12	* ROP Careers in Education w/ English 11 or 12 (P) <b>Dual Enrollment Education 10</b>	Studies include the nature and scope of the school system, the duties and opportunities of the professional teacher, factors relative to success in teaching, and credentialing requirements. <b>Prerequisite:</b> Grade of "C" or better in English 10, and English 11. Excellent attendance and behavior record in previous grade levels are required.

## EMERGENCY RESPONSE

Year in School	Pathway Course	Description
11	* ROP Fire Fighting Technology I	Studies include preparing students for a career in the Fire Service. Students learn about firefighting organizations, the use and handling of equipment, fire protection systems, safety, fire behavior, and extinguishing methods. This class is intended to prepare students to attend an accredited Fire Academy after graduation. <b>Prerequisite:</b> None.
12	* ROP Fire Fighting Technology II <b>Dual Enrollment FIRET-1 at FCC Seniors Only</b>	Studies include the reinforcement of concepts from Fire Fighting Technology I and an increasing emphasis on leadership and advanced manipulative skills and methods. <b>Prerequisite:</b> Fire Fighting Technology I recommended, and transportation is required.

## PATIENT CARE

Year in School	Pathway Course	Description
11	* ROP Medical Careers (P)	Studies include learning transferable skills related to entry-level health occupations, exploration of career options in the health industry, and becoming knowledgeable of post-secondary educational requirements. <b>Prerequisite:</b> 2.5+ GPA required. Completion of Biology (P), Anatomy (P), and/or Chemistry (P) with a grade of "C" or better. Excellent attendance and behavior record in previous grade levels are required. Additional requirements include reliable transportation, fully vaccinated for all childhood vaccines, COVID-19 vaccine plus up-to-date boosters, current TB skin test, and ability to wear a mask for prolonged amount of time.
12	* ROP Health and Medical Wellness (P) <b>Dual Enrollment Medical Terminology CSUF Uni-Track Nutrition 53</b>	This course will explore the many facets of public and medical health. Content will relate to individuals, communities, careers, and institutions directly involved with health and wellness issues. Students will explore the domains of health including psychosocial, physical, and environmental elements, and the impact on a person's wellness. <b>Prerequisite:</b> 2.5+ GPA required. Completion of Biology (P), Anatomy (P), and/or Chemistry (P) with a grade of "C" or better. Excellent attendance and behavior record in previous grade levels are required. Additional requirements include reliable transportation, fully vaccinated for all childhood vaccines, COVID-19 vaccine plus up-to-date boosters, current TB skin test, and ability to wear a mask for prolonged amount of time.

## PUBLIC SAFETY

Year in School	Pathway Course	Description
11	* ROP Criminal Justice	Studies include the awareness of career options (attorney, police officer, probation officer) and information in the area of law enforcement and private security for interested students. <b>Prerequisite:</b> Grade of "C" or higher in English 10, and English 11.
12	* ROP Criminal Investigation <b>Dual Enrollment Criminology 8</b>	Studies include an awareness of the various components of criminal investigation, with emphasis placed on the development of attitudes, skills, and competencies related to a criminal investigation. <b>Prerequisite:</b> Grade of "C" or higher in English 10, and English 11.