# Valley ROP Courses Snapshot
# Sanger High School

## Agriculture and Natural Resources

**Intro to Ag Mechanics/Welding:** This course will teach students specialized skills for the construction, maintenance, repair and service of agricultural equipment and facilities. This class will teach the student to fabricate and adapt various pieces of farm machinery and facilities by cutting, forming, and welding different types of metals. Students will learn the basic principles of plumbing, electrical, welding, concrete work, fencing and some animal husbandry skills. The course integrates math, and physical applications to applied principles within the everyday work world. **(DuE - MAG40)**

**Ag Welding:** Agricultural Welding provides an opportunity for students to advance their understanding of welding technology. This course integrates mathematics and scientific principles to applied processes in the specialized field of SMAW. The course operates within an extensive laboratory to provide practical applications and advanced instruction in the basic principles of welding as follows: 1) OFC, 2) SMAW, and 3) GMAW. **(DuE - MAG41)**

**Ag Construction:** This advanced course will teach students specialized skills for the construction, maintenance, repair and service of agricultural equipment. This class will teach the student to fabricate and adapt various pieces of machinery by cutting, forming, and welding different types of metals. Examples of equipment include: tractors, trailers, harvesters, tilling equipment, and others. This course integrates math and physical applications to applied principles within the everyday work world. **(DuE - MAG43)**

**Ag Engineering & Fabrication:** This advanced course will teach students specialized skills for the construction, maintenance, repair and service of agricultural equipment. This class will teach the student to fabricate and adapt various pieces of machinery by cutting, forming, and welding different types of metals. Examples of equipment include: tractors, trailers, processing equipment, tilling equipment, and others. This course integrates math and physical applications. **(DuE - MAG44)**

**Agriculture Shop Manager Internship:** This advanced one year course builds on students' shop skills and machine knowledge by providing them the opportunity to keep tool/part/consumable inventories, repair, adjust, and renew machinery and tools, and give students the chance to build jigs, small equipment, and install facility upgrades in a shop management internship. There will be 2 internships open per year. Leadership, FFA, and SAE are taught in this course.

**Biotechnology in Agriculture:** This course is designed for students to investigate biotechnology through the agriculture revolution. Students will learn through direct instruction, laboratory investigations and projects. Students will investigate topics related to agriculture biotechnology; genetic engineering, electrophoresis, DNA, tissue culture, bioethics, laboratories to marketplace, standard laboratory and operating procedures, cloning, biotechnology in ecology, and careers.

**Floral Design (1-2-3):** These courses are designed to allow students to apply an artistic approach to floral design. Students will explore elements and principles of design, two or three dimensional designs, history of floral art, arrangement styles and techniques, seasonal, holiday and occasional designs. Students will achieve this through creating, designing, identifying, explaining, and evaluating floral topics. Students will learn how to be profitable, create budgets, and shop for the best deals in materials. Students are expected to participate in FFA activities or events through this class. **(DuE - EH37)**

## Arts, Media, and Entertainment

**Commercial Art & Framing (Hallmark):** This course is designed to prepare students for employment in the commercial and fine art field and related fields. Students will learn how to apply and use various art techniques, framing skills, industrial equipment and materials. Students will achieve a working knowledge, use of materials, and skills required for employment in the art and framing field. Employment responsibility, job application and visiting various related places of employment are a part of the class. Students will be directed in sales, marketing, and sources for occupational needs.

**Digital Animation:** This course generates art through the use of advanced computer techniques and enhanced projects. Students will draw 1- and 2- point perspectives, create 2D animation including lip synch and body expression and script animations, and create texture maps using 3D Animation. Students will also create a portfolio of their work and job search documentation. **(DuE - GRC24)**

**Digital Video Production:** Students will learn the specialized vocabulary of the film and television industry and develop communication and design to express themselves clearly and concisely in their production of film, video, and television segments. Students develop ideas individually or within groups, research subject content, script, propose, and produce. **(DuE - GRC27)** **(AI)**

**Advanced Video Production:** This course is structured to provide students with entry level knowledge of multi-media production techniques, to prepare for real-world vocational opportunities. Topics of study will include: Sound Characteristics, Sound Console Layout, Audio Recording Machines, microphone design, speaker design, Basic Lighting, Camera operation & composition, Video Recording Machines & Techniques, Editing and Commercial Production for Advertising. **(AI)**

**Digital Photography:** This is a two semester course that teaches basic photography skills, focusing on the digital format as taught through hands-on and out of the book assignments, as well as various other forms of instruction. The use of digital cameras, PhotoShop image editing software, printers and computers are the core of this course. **(DuE - PHOTO5 & PHOTO12)** **(AI)**

**Digital Photography – Advanced:** This course is available to students who have already completed two semesters of Digital Photography. The course is designed to further the training and knowledge needed to enter the photographic field or to continue advanced photographic training at a community college or trade school through the use of digital cameras, PhotoShop image editing software. **(AI)**

**Journalism Production I&II:** This course covers the desktop publishing of the campus newspaper and yearbook. The CA State Standards for English Language Arts for grades 11 and 12 will be used to teach topics including the study and history of newspapers in the United States, the production of a newspaper and/or yearbook, and the art of effective writing in journalism. The class

involves training and hands-on experience in the following areas: writing and evaluating various types of articles, proofreading, editing, reporting, interviewing, use of technology such as Microsoft Office, InDesign, desktop publishing, etc

**Education**

**Careers with Children1 & 2:** This competency-based yearlong course will develop entry level skills necessary for employment in the area of early childhood education. Students will learn the domains of child development including and physical, social, emotional and cognitive. Students will study child growth and development, safety and emergency procedures, nutrition and health practices, positive interaction and guidance techniques, learning theories, developmentally appropriate practices. Students will apply this knowledge in an on-site preschool. Students completing the program successfully may apply for the Child Development Assistant Permit from the California Commission on Teaching Credentialing.

**Engineering**

**Mechanical Drafting/CAD I** Mechanical Drafting/CAD takes the students into computer-aided design (CAD) applications with special emphasis in manufacturing. Students will be exposed to computer-aided design and presentation graphics packages.
**(DuE -DRAFTING 12)**

**Architectural Drafting/CAD II:** This course provides the information students need to compete in a competitive job market. The approach is a hands-on, lab- and exercise-intensive look at all the important concepts needed to draw in true 3-D.
**(DuE -CAD 14)**

**Drafting Projects**: This course focuses on a holistic approach to project management. The content deals with planning, scheduling, organizing, and controlling projects. The course includes major topics of Strategy, Priorities, Organization, Project Tools, and Leadership.

**Business**

**Business Economics:** This course introduces students to business ownership with an emphasis on our economy. Students learn key economic concepts involved in owning one's own business. They acquire knowledge of decision making models and apply them to business ownership. They acquire knowledge about microeconomics and macroeconomics theories in terms of supply and demand, pricing, and marketing. They explore the Federal Reserve System and compare/contrast international economic models. Articulation with San Joaquin Valley College, 3 Units **(SJVC)**

**Health Science**

**Medical Terminology:** This course is taught as part of the Health Careers Pathway. It is a semester-long course and is taught in conjunction with First Aid and Safety. A component of the class will be to explore careers in health care through job shadowing, tours and guest speakers. The Medical Terminology course prepares students for entry-level positions into numerous occupations in health care and gives the student a fundamental understanding of the human body. Students study the body systems including anatomy and physiology, pathology, diagnostics, symptomatic and therapeutic terms, numerous medical procedures, abbreviations, pharmacology terms, and medical records. **(SJVC)**

**Pre-Certification Nursing Assistant (CNA): Class Limit = 17. Two-hour block; one-year course; 20 units per year.** This approved California Department of Public Health (CDPH) Pre-Certification Nursing Assistant (CNA) class includes classroom instruction and clinical hours in a long-term care facility. Transportation will be provided. The course instructs students on the care of geriatric residents. An RN or LVN teaches and supervises the class. After successfully completing the required number of hours of supervised study and hands-on practice and maintaining a 70% GPA or better, the student is eligible to take a **California State Certification Licensing exam for the Certified Nursing Assistant. Students are responsible to pay for the state certification exam ($90).** Students must be senior status, have an overall GPA of 2.5, and possess a valid Social Security card. Students who have successfully completed Medical Terminology class and also have the above requirements have priority for placement in the CNA classes. **(DuE - NAT101)**

**Marketing**

**Sports & Entertainment Marketing:** This course provides students with competencies necessary for entry-level employment and career opportunities within the sports and/or entertainment marketing industries. Students will learn the fundamental concepts of marketing and business principles in the scope of amateur, college, and professional sports. Students will also use the basic principles of marketing to learn the profit motives of financing entertainment projects, the different kinds of entertainment distribution, and promotional advertising and public relations strategies within the entertainment industry as well as licensing entertainment merchandise and copyright laws.

**Virtual Enterprise:** Virtual Enterprise is a simulated business that is set up and run by students to prepare them for working in a real business environment. Students learn about Economics--micro and macro—and its relationship to and impact on business operation in the private enterprise system. The students study supply and demand, the Federal Reserve System, taxation by local, state, and federal governments, business organizations, the stock market, and international transactions. The students determine the nature of their business, its products and services, its management and structure, and learn the daily operations of a business under the guidance of a consultant with the support of a real business partner. **(SJVC)**

**DuE= Class Is Dual Enrolled with FCC or RC** **SJVC = San Joaquin Valley College Articulations** AI=Art Institute Articulations

## Information Tech

**Web Design:** This course is designed to teach students how to create exciting web pages. The course will introduce students to the World Wide Web. Students will learn the mechanics of creating a web site and the basic structure to web pages in HyperText Markup Language (HTML). The web page design principals of simplicity, clarity, contrast, consistency and unity will be emphasized. Students will also do some graphics work in designing appropriate web graphics. Some photo enhancement techniques and optimizing photographs for web pages will also be learned. Graphical web page design programs will be introduced after the fundamentals have been learned. **(DuE - GRC15)**

**Video Game Design**: This course will introduce students to the Video Game Design Industry and the basic components and processes required to produce an interactive video game. The students will study the history of video games and analyze successful design aspects. Career opportunities and industry standards will be researched. Students will learn game theory, character creation, writing, storyboarding, and leveling. Students will work in teams to create a 2D game for tablets and smartphones and learn all of the steps required before the game is ready to be sold to the masses. Students will also get the opportunity to prototype a 3D video game using Blender.

## Public Services

**Criminal Justice:** This course is designed to develop an awareness of the various law enforcement occupations. The emphasis is placed on the development of attitudes, skills and competencies related to the criminal justice system in the U.S. The course introduces the student to the study of crime and the administration of justice in the U.S. The focus will be on the realities of enforcement and apprehension at the federal, state, and local levels, prosecution, courts, and the disposition of the people charged with the commission of crimes. Throughout this course writing skills and students' abilities to deal with people will be stressed. **(DuE - CRIM1) (SJVC)**

**Crime Scene Investigation (CSI):** This course develops an awareness of the various components of criminal investigation. Emphasis is placed on the development of attitudes, skills, and competencies related to crime investigation. It introduces the student to the study of criminal investigative techniques and analysis. The focus throughout is collection, protection, and preservation of evidence as it relates to the investigative process. The course emphasizes writing. **(SJVC)**

**Urban/Rural Fire Fighting: Two-hour block; one-year course; 30 units per year.** This course is designed to prepare individuals for fighting fires and related tasks. The course is the California State Fire Marshal Fire Fighter I course which prepares students for State certification. Students will learn about fire protection organizations, use and handling of firefighting equipment and apparatuses, fire protection and safety, fire behavior and extinguishment methods, rescue and ventilation operations, fire control, and salvage and overhaul of structures. Practical experience will be gained through live fire and simulated exercises relating to the theory taught in the classroom. CPR and first aid will be taught in the course to provide the students with the knowledge and skills necessary to adequately assess and provide care for victims at the scene of injury. **(DuE-FIRET 1)**

**Wildland Firefighting: (Regional Program at Reedley College)** 2-hour block (1:21 – 3:06 p.m.) with 5 Saturday field days. This course provides an introduction to fire protection. This course also introduces students to the USDA Forest Service (USFS) and prepares them with basic firefighting and conservation entry-level skills. Classroom instruction, demonstration, and hands-on field application will be given in basic firefighting, standards for survival, engine and pump operations, backfiring methods and equipment use, chainsaw operations, map and compass use, air operations, basic hand tool sharpening and use, fire line construction, and forest conservation. Students who are 18 upon completion of the class (end of April) and have achieved the appropriate certifications may apply for the USFS Summer Intern program and work as firefighters from May through October**.** **(DuE-NR 5, NR 8, NR 42, NR 110)**

## Transportation and Automotive

**Small Gas Engine Repair:** This course trains students for entry-level jobs in the fast growing industry of small engine repair. Students will demonstrate ability to repair small engines such as lawn, garden, and small engines used in agriculture. Emphasis is placed on overhaul, repair, adjustment, troubleshooting, and small shop operation.

**Small Gas Engine Internship:** This course is designed to expand the student's knowledge from the basic principles they have learned in the beginning small engines class. Students will demonstrate ability to repair small engines such as lawn, garden, and small engines used in agriculture. Emphasis is placed on overhaul, repair, adjustment, troubleshooting, and small shop operation. This class is also designed to be completely hands-on.

**Aviation Technology and Flight School: (Regional Program at Reedley College)** 2-hour block (1:21 – 3:06 p.m.) The Aviation Maintenance Technology Class designed to teach the theory of operation of aircraft airframes, power plants, and avionics systems and associated maintenance and repair practices. This course will also provide a basic introduction to flight school where students will explore the basics of flight training ground school using flight simulators. Students learn to use and read and navigate with airplane instruments, Meteorology systems, and Flight environment.