

# Agriculture and Natural Resources: Agriculture Mechanics



CHICO HIGH SCHOOL

## Course Sequence



## Course Descriptions

**Ag Welding I (Introductory)** \* A-G “G” Elective  
 This course covers general **shop safety, oxygen propane cutting, AC/DC arc welding and oxygen-acetylene welding** in flat positions. Welding 1B covers more advanced and job oriented welding processes used in the welding and agriculture fabrication industries. These include: **Gas Metal Arc Welding (GMAW)** or wire welding, oxygen-acetylene welding, and cutting. The last quarter of the class students will design and fabricate individual projects: Time in class: 40%; time in lab: 60%. \*FFA projects and record books are used. Meets district CTE Requirements.

**Ag Welding II (Concentrator)** \* A-G “G” Elective  
**Prerequisite: Ag Welding I**  
 Instruction in both **theory and lab** application is designed to prepare students for careers related to **agriculture construction, repair, operation, and maintenance of equipment used in the agriculture industry. Agricultural mechanics skills, construction, and safety** are covered along with **electrical systems, cold metal work, and welding technology.** FFA projects and record books are used. Meets district CTE Requirements.

**Advanced Welding (Capstone)** \*Optional Butte College Credit  
**Prerequisite: Ag Welding II**  
 Students will learn skills in the areas of **welding, sheet metal, light construction, use of tools and equipment and safety.** Upon completion, students will be **qualified for entry-level jobs in welding, cutting and metal fabrication.** Course objectives aim to prepare students for **optional AWS Welding Certification training.** Students may be placed in **internships** for related hands-on training. Work-based learning and advanced lab techniques, large **FFA** projects, and application to industry and real-world settings are emphasized. FFA projects and record books are used.

*Note: These templates are designed to help guide students. The order of some classes may vary and individual variation can be applied.*



### POST-SECONDARY OPTIONS:

#### Butte College

- Welding Program Certificate of Achievement
- AS Degree: Welding Technology Program
- AA Degree: Adv. Manufacturing

#### CSU, Chico

- BS Degree Manufacturing Technology
- BS Degree: Agriculture
- Option in Ag. Education

#### WYO Tech

#### UTI

### HIGHLIGHTED CAREERS:

- \* Welder
- \* Welding Inspector
- \* Manufacturing
- \* Mechanical Engineer
- \* Maintenance/Service Technician

### Contact:

**Ronnie Cockrell**  
[rcockrel@chicousd.org](mailto:rcockrel@chicousd.org)

Career and Technical  
 Student Service

