Rev for Fall, 2023

CFISD Agricultural Mechanics and Metal Technologies

Scope and Sequence

Course Description:

This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metalworking techniques. Construction of a project or demonstration of skills will fulfill the requirements of the Supervised Agricultural Experience Program.

- ♦ 1 credit, Grades 10-12
- ♦ Required prerequisite (or concurrent) for 10th graders: Principles of Agriculture, Food, and Natural Resources
- ♦ AWS certification satisfies the requirement to earn a performance acknowledgement.
- ♦ Lab supplies or fees may be required.

TEKS

Program of Study: Applied Ag Engineering

Cluster: Agriculture, Food, and Natural Resources

Endorsement: Business & Industry

- Meets advanced course requirement (Y/N): N
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): N

Industry Certification/Credentials: OSHA 10-Hour Card & American Welding Society D9.1

Instructional Units	Pacing
1st Semester Basic Shop Safety (OSHA 10 Certification) Hand Tool ID & Terminology Marking & Measuring Devices Technology, Programming and Automation	1st Grading Period
Welding Shop Safety Oxy-Fuel Set-Up & Safety Oxy-Fuel Cutting Intro to Plasma Cutting/Other Cutting Techniques Oxy-Fuel Welding & Brazing Shielded Metal Arc Welding Program of study review	2nd Grading Period
2nd Semester Gas Metal Arc Welding Flux Cored Arc Welding AWS certification	3rd Grading Period
Plumbing Electrical AC/DC Theory Electrical Application Building Construction Welding Certification Prep Small Engine	4th Grading Period

Primary Instructional Materials: Agricultural Mechanics and Technology Systems by Goodheart-Willcox Company