

Course Title

Agricultural Mechanics

Description of Target Group

This class is designed for beginning agricultural students. It is primarily recommended for 9th and 10th grade level students with an interest to make a career in agriculture.

Purpose

Basic Agricultural Mechanics is a one-semester class designed to give the beginning student a feeling of worth and a positive attitude toward accomplishing basic tasks. It makes the student aware of the great need for an advanced educational background necessary to pursue a career in agriculture repair or general farming. The class is designed to teach basic shop skills. Taking class enables the student to participate in FFA activities.

Standards of Expected Student Achievement

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Complete the District safety test with a passing score.
2. Be aware of the hazards of working in a farm shop.
3. Wear the necessary safety clothing and eye protection for the appropriate areas of the shop.
4. Understand how a simple working drawing or sketch can help a student or farmer build a more successful projects.
5. Become familiar with the types of lumber used in the construction of most home farm projects.
6. Be familiar with the types of tools used in the shop.
7. Understand the uses and hazards of the oxyacetylene welding equipment in the shop.
8. Be aware of the uses and hazards of the electric arc welding equipment in the shop.
9. Be familiar with the types of rope commonly used on the home farm.
10. Be familiar with the types of metals used in the construction of projects on a home farm.
11. Work on pipe, including threading and sealing joints.

Instructional Materials

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District.

Activities

Students will actively initiate the knowledge gained from demonstration lectures. Each student will work with hands and mind, developing those skills which are basic to a good foundation in agricultural mechanics. The overall activity will be on an individual basis except where a group effort is needed, such as the building of concrete forms, mixing, pouring, and finishing. The student will be exposed to films, charts, and filmstrips to build their background and thinking about skills presented.