

COURSE DESCRIPTIONS

INDUSTRIAL ARTS

Agricultural Mechanics

Recommended for Grades: 11-12

Full Year

1 Credit

This class is heavily weighted to hands-on lab/shop activities. Short, in-class work is necessary to introduce new units and present lecture notes. Also, safety procedures are introduced prior to entering the shop. After the required book work and safety instruction, students will spend large blocks of time working on projects in the shop. Students must be able to furnish 2 small engines for projects. The major units of study are: 1. Principles of combustion engines, 2. Disassembly, cleaning, reassemble (Not<2 engines), 3. Troubleshooting small engines (repair at least 1 engine), 4. Engine, evaluation and repairs, 5. Batteries-chargers and systems, 6. Hydraulics, 7. Oxyacetylene torch-cutting/ brazing, and 8. Welding, fabrication and repair.

Agricultural Welding

Recommended for Grades: 10-12

Full Year

1 Credit

This is an introductory course where students learn the basics of shielded metal arc welding (SMAW) and gas metal arc welding (GMAW) and their application in fabrication and agricultural work. Emphasis will be placed on safety, theory, and hands-on practice. Additional topics will include cutting, design, measurement, finishing, and repairs.