

Agriscience & Agriculture

Agriscience and Agriculture emphasizes the importance of agriculture and natural resources in our personal, family, community, national, and international lives. The curriculum uses agriculture and natural environment as means to stimulate critical and creative thinking to enhance students' reading, writing, mathematical, and problem-solving skills. Agriscience and Natural Resources classes are viewed as elective science classes. Learning outcomes are cross-referenced with the State of Michigan science objectives and, unlike traditional science classes, the curriculum reinforces classroom learning with participation in FFA and supervised agriscience experience programs.

AG100A/B Natural Resources and Michigan Agriculture

Grades: 9 - 12

Credits: 1

Trimesters: 2

Repeat for Credit: No

Prerequisites: None

This class will provide opportunities for students to explore the environmental effects of production agriculture in Michigan. Students examine the importance of forests, wildlife, recreation, and parks as natural resources. They will analyze the impact and long-term quality effects on the environment caused by humans, and analyze soil, plant, and animal properties and how they affect our environment. Career opportunities in Natural Resources and Agriscience will be explored. **This course may count as one science elective credit.**

AG200A/B Plant Science / a Biological Approach

Grades: 9 - 12

Trimesters: 2

Prerequisites: None

Credits: 1

Repeat for Credit: No

Plants are important to humans in many ways. This class will examine these factors as well as explore plant structures, their parts, and functions, and their requirements and reproduction. Students will examine the functions of soil as related to plant growth, compare the basic types of soil, and analyze production methods as they relate to soil erosion and pollution. Career opportunities in the vast area of plants and soils will also be explored. **Plant Science and Animal Science together will meet the Michigan Biology objectives. This course may count as ½ biology credit and ½ science elective credit.**

AG300A/B Animal Science / a Biological Approach

Grades: 9 - 12

Trimesters: 2

Prerequisites: None

Credits: 1

Repeat for Credit: No

People are dependent upon livestock production for supplies of food, clothing, and recreation. This course will examine these factors and study the selection, breeding, feeding, care, and marketing of animals. Career opportunities in Animal Science will be explored in the production of livestock as well as the numerous jobs for students in related fields such as processing, grading, marketing, and service. **Plant Science and Animal Science together will meet the Michigan Biology objectives. This course may count as biology credit and science elective credit.**

AG660 Ag. Mechanical Maintenance and Systems

Grades: 9 - 12

Trimesters: 1

Prerequisites: None

Credits: .5

Repeat for Credit: No

All equipment needs to be maintained, and often, simple repairs can be done at home. Emphasis will be placed on safety, maintenance, and repair. Skills and knowledge will be covered in the areas of hydraulics and proper use of the torch and welder. Career and educational opportunities in the mechanical and equipment maintenance areas will be explored.

AG665 Ag. Building Construction and Systems

Grades: 9 - 12

Trimesters: 1

Prerequisites: None

Credits: .5

Repeat for Credit: No

This class is an introduction to agricultural buildings and the systems involved. Students will learn working through a small project from planning to completion. This course will include study in pneumatics, many areas of construction, concrete, plumbing, and electrical wiring. Career and educational opportunities in the construction-related fields will also be explored.

AG500 Ag. Business Management and Marketing

Grades: 10 - 12

Trimesters: 2

Prerequisites: Natural Resources & Animal Science are recommended

Credits: 1

Repeat for Credit: No

An important key to the survival of a business is good management and the ability to compete and win in the marketplace. This requires extensive knowledge of all aspects of business. This course provides study and skill development in goal setting, decision making, record keeping, financial analysis, marketing strategies, investment analysis, type of business, agriculture law, and computer applications. Career opportunities in the agri-business management industry will also be explored.