

MIDDLE LEVEL EXPLORING AGRICULTURE SCIENCE AND BUSINESS ED

Exploring Agriculture is a course that is suggested to be a semester long course, but can be refined to fit the needs of each school. The nature of this course is to provide students with an overview of various aspects of the agriculture industry. Topics to be covered in this course can include: leadership, supervised agriculture experience, plant and soil science, natural resources, animal science, agribusiness, food science, and power, structure and technical systems.

Exploring Agriculture introduces students to many careers in agriculture. These careers range from Agritourism Manager to Veterinarian and Implement Salesman to Agriculture Lawyer.

Course Specifications

- DOE Code: 0496
- Recommended Grade Level: Grade 5-8
- Recommended Prerequisites: None
- This course can be tailored to fit the needs of the school's agriculture program. It is suggested that standards from the FFA domain are covered in each program as well as careers associated with each domain. From there, programs can choose domains that best fit the school's time constraints, resources and capabilities.

Career and Technical Student Organization (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education courses. They enhance the knowledge and skills students learn in a course by allowing a student to participate a unique program of career and leadership development. Students in this course should be encouraged to participate in FFA.

Content Standards

Domain- Leadership

Core Standard 1 Students are able to see the importance of developing leadership skills and how The National FFA Organization (FFA) can be a critical component of a well-rounded agricultural education.

Standards

- EA-1.1 Recognize and explain the role of FFA in the development of leadership, employability, communications and human relations skills
- EA-1.2 Develop an understanding of the history of The National FFA Organization
- EA-1.3 Identify and understand personality types to be able to work with others effectively on a team

Domain- Supervised Agriculture Experience

Core Standard 2 Students see the importance of a Supervised Agricultural Experience (SAE) program and how it is a critical component of a well-rounded agricultural education.

Standards

- EA-2.1 Explain the nature of and become familiar with those terms related to an SAE program
- EA-2.2 Explore the numerous possibilities for an SAE program which a student might develop
- EA-2.3 Understand and apply basic record keeping skills

Domain- Plant, Soil, and Horticulture Science

Core Standard 3 Students have an understanding of plant and soil science and how it relates to the agricultural industry.

Standards

- EA-3.1 Understand basic needs of plant growth from germination to soil fertility
- EA-3.2 Explore and recognize the importance of plant and soil science as it relates to the agricultural industry
- EA-3.3 Identify and describe basic plant structures and their roles within the plant
- EA-3.4 Identify basic soil properties
- EA-3.5 Explore the importance of biotechnology as it relates to feeding a growing world population.

Domain- Natural Resources

Core Standard 4 Students gain an understanding of preserving and replenishing our natural resources through natural resource management.

Standards

- EA-4.1 Identify renewable and nonrenewable resources and how they relate to everyday life
- EA-4.2 Explore the interaction between local natural resources and the economy
- EA-4.3 Understand the relationship between wildlife habitats and human population

Domain- Animal Science

Core Standard 5 Students gain an understanding of the importance of the animal industry.

Standards

- EA-5.1 Share and explain the care and management of various animals in the livestock and companion animal industries
- EA-5.2 Understand the relationship between wildlife habitats and human population
- EA-5.3 Explain common uses of animals
- EA-5.4 Identify common species and/or breeds of livestock

Domain- Agribusiness

Core Standard 6 Students recognize basic economic principles and how they relate to agricultural business management.

Standards

- EA-6.1 Recognize the influence of social media as it relates to agricultural businesses
- EA-6.2 Define agritourism and how it affects the agricultural industry.
- EA-6.3 Apply principles of personal finances that are used in everyday life

Domain- Food Science

Core Standard 7 Students examine components of the food science industry and how they relate to agriculture.

Standards

- EA-7.1 Explore how various foods are grown and processed through the concept of farm to plate.
- EA-7.2 Apply concepts of MyPlate to a balanced diet for all ages
- EA-7.3 Recognize food safety principles and management techniques

Domain- Power, Structure, and Technical Systems

Core Standard 8 Students gain a basic understanding of agricultural power, structure, and technical systems.

Standards

- EA-8.1 Recognize and apply safety principles as they relate to agriculture and everyday life
- EA-8.2 Identify and understand the uses of various hand and power tools
- EA-8.3 Explore modern technology applications within the agriculture industry

Domain – Careers

Core Standard 9 Students examine the scope of career opportunities in and the importance of agriculture to the economy.

Standards

- EA-9.1 Evaluate the nature and scope of agriculture in society and the economy
- EA-9.2 Describe career opportunities and means to achieve those opportunities in agriculture
- EA-9.3 Explore those qualities, attributes, and skills necessary to succeed in a chosen agricultural career