



## Agriculture, Food & Natural Resources

### Principles of Agriculture, Food, and Natural Resources

**TSDS PEIMS Code: 13000200 (PRINAFNR)**

**Grade Placement: 9–12**

**Credit: 1**

**Prerequisite: None.**

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.

### Livestock Production

**TSDS PEIMS Code: 13000300 (LIVEPROD)**

**Grade Placement: 10–12**

**Credit: 1**

**Prerequisite: None.**

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry.

### Veterinary Medical Applications

**TSDS PEIMS Code: 13000600 (VETMEDAP)**

**Grade Placement: 11–12**

**Credit: 1**

**Prerequisites: Equine Science, Small Animal Management, or Livestock Production.**

Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species

## Advanced Animal Science

**TSDS PEIMS Code: 13000700 (ADVANSCI)**

**Grade Placement: 11–12**

**Credit: 1**

**Prerequisites: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production.**

**Recommended Prerequisite: Veterinary Medical Applications.**

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

**Note:** *This course satisfies a science credit requirement for students on the Foundation High School Program.*

## Floral Design

**TSDS PEIMS Code: 13001800 (FLORAL)**

**Grade Placement: 9–12 Credit: 1**

**Prerequisite: None.**

Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

**Note:** *This course satisfies a fine arts credit requirement for students on the Foundation High School Program*

## Advanced Plant and Soil Science

**TSDS PEIMS Code: 13002100 (ADVPPSCI)**

**Grade Placement: 11–12**

**Credit: 1 Prerequisite: None.**

**Recommended Prerequisites: Biology, Integrated Physics and Chemistry, Chemistry, or Physics and a minimum of one credit from the courses in the Agriculture, Food, and Natural Resources Career Cluster.**

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other

fields of science. To prepare for careers in plant and soil science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to plant and soil science and the workplace.

**Note:** *This course satisfies a science credit requirement for students on the Foundation High School Program.*

## **Agricultural Mechanics and Metal Technologies**

**TSDS PEIMS Code: 13002200 (AGMECHMT)**

**Grade Placement: 10–12**

**Credit: 1**

**Prerequisite: None.**

**Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources.**

Agricultural Mechanics and Metal Technologies 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 metal working techniques. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

## **Agricultural Structures Design and Fabrication**

**TSDS PEIMS Code: 13002300 (AGSDF)**

**Grade Placement: 11–12**

**Credit: 1**

**Prerequisite: None.**

**Recommended Prerequisites: Agricultural Mechanics and Metal Technologies.**

In Agricultural Structures Design and Fabrication, students will explore career opportunities, entry requirements, and industry expectations. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication.

## Practicum in Agriculture, Food, and Natural Resources

**TSDS PEIMS Code: 13002500 (First Time Taken) (PRACAFNR1)**

**13002510 (Second Time Taken) (PRACAFNR2)**

**Grade Placement: 11–12**

**Credit: 2**

**Prerequisite: None.**

**Recommended Prerequisite: A minimum of one credit from the courses in the Agriculture, Food, and Natural Resources Career Cluster.**

Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.