

# AGRICULTURE

## **PHIT103 Introduction to Agriculture**

**Level: 9-10**  
**Credit: 1 unit**

FFA will be an important part of this course; membership is highly recommended but is not required. Students will learn about the history of the FFA and will participate in numerous FFA activities. The course will feature units in Leadership Development, Animal Selection, Parliamentary Procedure, and Meats Judging. Students will also learn basic record-keeping practices and will be exposed to careers in Agriculture and to competitions leading to scholarships. This course will serve as a basis for all future Ag studies at Paola High School.

## **PHIT 201 Ag Science 2/Food Science**

**Prerequisite: Intro to Ag or instructor's approval**

**Level: 10-11**  
**Credit: 1 unit**

This is a yearlong course that is designed for sophomores that have completed Introduction to Agriculture. FFA will be an important part of this course; membership is highly recommended but is not required. This course will feature units in Soil Science and Land Capability Classification. The Poultry Industry and Evaluation will be studied along with units in Small Animal Care and Food Science. Students will continue building on skills learned in Introduction to Agriculture course. Members will have a chance to join teams that will compete at the state level.

## **PHIT301 Ag Science 3/Plant & Animal Science**

**Prerequisite: Ag Science 2**

**Level: 11-12**  
**Credit: 1 unit**

This course will build on the principles learned in Introduction to Agriculture and Agricultural Science 2. FFA will be an integral part of this course; membership is highly recommended but is not required. During this course students will be exposed to units in Crop Science/Agronomy, Plant Fertilization and Growth Requirements, Ag Sales Techniques and Public Speaking. Time may also be spent in Entomology, Poultry Production, Turf Grass Management and Swine Science.

## **PHIT401 Ag Science 4/Agribusiness**

**Prerequisite: Ag Science 2**

**Level: 11-12**  
**Credit: 1 unit**

This course will focus on several topics including Agri-business and Agri-business Management. Students will study Business Organization, Futures/Options Markets, Cash Flow and Net Worth Statements and Commodity Marketing. Students will also be exposed to a variety of topics in Animal Science, Horticulture, and Leadership Styles. Students will complete the National FFA Scholarship Application in this course.

**PHIT315 Horticulture****Level: 9-12**  
**Credit: ½ unit**

This is a semester-long course that is open to all students. FFA will be an integral part of this course; membership is highly recommended but is not required. Students will develop skills in greenhouse production, plant propagation, plant parts, and processes, basic landscaping principles, bedding plant production, plant identification, land capability classification, and integrated pest management. Students will have the opportunity to work in the school greenhouse and participate in numerous FFA competitions.

**PHIT304 Animal Science****Level: 10-12**  
**Credit: 1 unit****Prerequisite: Intro to Ag or instructor's approval**

FFA will be an integral part of this course; membership is highly recommended but is not required. During this course, students will study feeds, nutrition, reproduction, digestion, and animal selection. Time will also be spent in the care of cattle, swine, and horses. Students will have the opportunity to compete in livestock judging, dairy cattle judging, and horse judging. Students will receive instruction in science based curriculum and will also be exposed to practical knowledge that they can use outside of the classroom.

**PHIT106 Introduction to Ag Welding****Level: 9**  
**Credit: ½ unit**

Students will be introduced to general tool ID/use/safety, basic electricity, and hot/cold metal working. Arc welding, oxyacetylene welding and cutting, and MIG welding will be introduced at a basic level. Students will also be introduced to FFA, leadership and recordkeeping.

**PHIT206 Ag Welding 1****Level: 10-12**  
**Credit: 1 unit**

This course is a study of theory and application in the safe use of arc, oxyacetylene, and MIG welding operations with an introduction to sheet metal soldering and applications. Strong emphasis will be placed on skill development, with approximately 3 - 5 weeks for project construction. FFA activities are integrated throughout the course.

**PHIT306 Ag Welding 2**  
**Prerequisite: Ag Welding 1****Level: 11-12**  
**Credit: 1 unit**

This course allows for repeat/improvement of some of the skills from Welding 1; a study of more advanced metal fabrications techniques; an introduction to weld testing, welding symbols, and blueprint reading with the goal of developing skill for entry level welding jobs. Approximately 9 - 12 weeks are allowed for project construction or welding skill refinement. FFA activities are integrated throughout the course.

**PHIT308 Ag Welding 3**  
**Prerequisite: Ag Welding 2**

**Level: 12**  
**Credit: 1 unit**

Students will repeat/improve the skills from Welding 1 & 2; further study of weld testing and certification, welding symbols, and blueprint reading; study metallurgical properties and how to weld different metals; develop skills to employable standards.

Approximately 1 semester is allocated for project construction or welding skills refinement. Students are expected to complete an individual or small group project during this time. FFA activities are integrated throughout the course.

**PHIT307 Ag Projects**  
**Prerequisite: A or B in both semesters of Ag Welding 1, enrolled in Ag Welding 2 or 3 and with instructor approval**

**Level: 11-12**  
**Credit: 1 unit**

This course is designed to allow more time for project construction, or a more thorough study/development of a specific welding skill. Students will construct projects for the school's needs and help with welding shop maintenance/ improvement as well as complete needs in the Ag Education Department.