

# Associate of Applied Science Agriculture Pathway

## Courses Offered at GCHS

<b><u>Written Communication</u></b>	3 credits
ENGL 111 English Composition	
<b><u>Speaking and Listening</u></b>	3 credits
COMM 101 Fundamentals of Public Speaking	
<b><u>Quantitative Reasoning</u></b>	3 credits
MATH 136 College Algebra	
<b><u>Scientific Ways of Knowing</u></b>	3 credits
BIOL 101 Biology I	
SCIN 100 Earth Science	
<b><u>Social and Behavioral Ways of Knowing</u></b>	3 credits
HIST 101 Survey of American History I	
HIST 102 Survey of American History II	
PSYC 101 Introduction to Psychology	
<b><u>Agriculture</u></b>	18 credits
AGRI 102 Agricultural Bus. & Farm Management	
AGRI 103 Animal Science	
AGRI 105 Plant and Soil Science	
AGRI 106 Agricultural Mechanization	
AGRI 115 Natural Resource Management	
AGRI 164 Landscape Design I	
<b>TOTAL: 33 credits</b>	

## Courses Offered at IVY TECH- (After High School)

IVYT 113 Student Success in Technology	1 credit
AGRI 100 Introduction to Agriculture	3 credits
AGRI 101 Agricultural Data Management	3 credits
AGRI 104 Food Science	3 credits
AGRI 116 Survey of Horticulture	3 credits
AGRI 117 Soil Science	3 credits
AGRI 204 Agriculture Salesmanship	3 credits
AGRI 210 Management Methods for Agricultural Business	3 credits
AGRI 280 Co-Op / Internship	3 credits
AGRI 290 Agriculture Seminar	3 credits
<b>TOTAL: 27-30 credits</b>	

**Associate of Applied Science of Agriculture**

**60-63 minimum credits**



# IVY TECH COURSE DESCRIPTIONS

## Associate of Applied Science-Agriculture Pathway

### Courses Offered at GCHS

#### Written Communication

##### **ENGL 111 English Composition**

**Transfer IN 3 credits**

English Composition is designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion, and argumentation. A research paper is required. Numerous in-class writing activities are required in addition to extended essays written outside of class.

#### Speaking and Listening

##### **COMM 101 Fundamentals of Public Speaking**

**Transfer IN 3 credits**

Introduces fundamental concepts and skills for effective public speaking, including audience analysis, outlining, research, delivery, critical listening and evaluation, presentational aids, and use of appropriate technology.

#### Quantitative Reasoning

##### **MATH 136 College Algebra**

**Transfer IN 3 credits**

Presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, rational fractions and exponential and logarithmic functions.

#### Scientific Ways of Knowing

##### **BIOL 101 Introductory Biology**

**Transfer IN 3 credits**

Introduces the basic concepts of life. Includes discussion of cellular and organismal biology, evolution, ecology, and interaction among all living organisms. Addresses applications of biology in a global community.

##### **SCIN 100 Earth Science**

**Transfer IN 4 credits**

Introduces physical concepts and theories pertaining to current applications and trends in earth science. Basic concepts in geology, meteorology, oceanography, and astronomy will be illustrated. Includes lab.

#### Social and Behavioral Ways of Knowing

##### **HIST 101 Survey of American History I**

**Transfer IN 3 credits**

Covers major themes and events in American history from domestic and global standpoints, including exploration of the New World; the colonial period; causes and results of the American Revolution; the development of the federal system of government; the growth of democracy; early popular American culture; territorial expansion; slavery and its effect; reform movements, sectionalism; causes and effects of the Civil War.

##### **HIST 102 Survey of American History II**

**Transfer IN 3 credits**

Covers major themes including the post Civil War period, western expansion, industrial growth of the nation and its effects, immigration and urban discontent and attempts at reform, World War I, the Roaring Twenties, social and governmental changes of the thirties, World War II and its consequences, the growth of the federal government, social upheaval in the sixties and seventies, and recent trends in conservatism, globalization, and cultural diversity.

##### **PSYC 101 Introduction to Psychology**

**Transfer IN 3 credits**

The course focuses on biological foundations, learning processes, research methodologies, personality, human development and abnormal and social psychology.

## Agriculture

### **AGRI 102 Agricultural Business & Farm Management**

**3 credits**

Deals with vast and complex business of agriculture; emphasizes modern business and farm production methods along with current management and administrative strategies needed for success in an agricultural business.

### **AGRI 103 Animal Science**

**3 credits**

An introduction to animal science in agriculture including livestock species, breeds, and production methods.

### **AGRI 105 Plant and Soil Science**

**3 credits**

An introduction to plant biology and soil science.

### **AGRI 106 Agricultural Mechanization**

**3 credits**

Agriculture Mechanization lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance, and management of agricultural equipment in concert with the utilization of technology. Topics covered include: safety, electricity, plumbing, concrete, carpentry, welding, engines, emerging technologies, and career opportunities in the area of agriculture mechanization.

### **AGRI 115 Natural Resource Management**

**3 credits**

Problems associated with the use/misuse of our natural resources and current management practices associated with the conservation of natural resources

### **AGRI 164 Landscape Design I**

**3 credits**

An introduction to designing residential and commercial landscapes. Emphasis is placed on the plants and features of landscapes that are best adapted to Midwestern environments.

## *Courses Offered at IVY TECH- (After High School)*

### **IVYT 113 Student Success in Technology**

**1 credit**

This course provides School of Technology students with an overview of skills and strategies necessary to reach their educational, career, and life objectives. Topics include time management, study skills, learning styles, campus and community resources, critical thinking, utilization of technology, career skills, and diversity in society.

### **AGRI 100 Introduction to Agriculture**

**3 credits**

Presents an overview of agriculture emphasizing the diversity of agricultural careers including crop production, forestry and horticulture, as well as large and small animal production for meat, milk, wool and companionship.

### **AGRI 101 Agricultural Data Management**

**3 credits**

Principles of collecting, managing, and retrieving financial, physical, and spatial data from farm operations to support the farm's decision-making and reporting. Emphasizes use of financial, statistical and logical spreadsheet functions, GIS systems, record-keeping for fertilizer and pesticide usage and regulation, and specialized software applications, including integration of information from various sources and packages. This course incorporates mandatory OSHA 10 certification program in which successful completion results in students earning their OSHA 10 General Industry certification.

### **AGRI 104 Food Science**

**3 credits**

Provides an overview of the principles of agricultural food science and its importance in securing a safe, nutritious food supply. Emphasis is placed on the principles of food chemistry, nutrition, preservation, packaging, regulations, and careers in the agricultural food science industry. Laboratory experimentation and problem solving are used to enhance student learning in this course.

### **AGRI 116 Survey of Horticulture**

**3 credits**

Presents an overview of horticulture emphasizing the basic concepts of ornamental plant ID, production, and use in the landscape.

### **AGRI 117 Soil Science**

**3 credits**

Classification and characterization of soils and differences between soils, including physical, chemical, and biological properties. Relation of soils to land use and tillage, erosion, drainage, moisture supply and aeration practices. Relationship of soil properties to plant nutrition and to fertilizer chemistry, use, and management.

### **AGRI 204 Agriculture Salesmanship**

**3 credits**

Role, dynamics, and principles of sales communications as related to food and agriculture; methods for analyzing, setting objectives, planning, conducting, and evaluating sales communications efforts; sales presentations.