

Conneaut School District—Agriculture Education Curriculum Map

Agriculture Education IV Grades 11-12 90 minutes/18 weeks

Time-Line	CONTENTS	STANDARDS	SKILLS	ASSESSMENTS
1 wks.	<p style="text-align: center;">Introduction</p> <ul style="list-style-type: none"> <li>• Introduction to Agriculture</li> <li>• Shop orientation and Procedures</li> </ul>	<p>4.4 10.3</p>	<ul style="list-style-type: none"> <li>• Local, national and global aspects of Agriculture</li> <li>• Economic importance</li> <li>• Shop procedures</li> <li>• Safety practices</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests and quizzes</li> <li>• Safety demonstration</li> <li>• Nocti</li> </ul>
1.5 wks	<p style="text-align: center;">F F A / S A E</p> <ul style="list-style-type: none"> <li>• Careers options</li> <li>• Supervised Agriculture Experience</li> <li>• Parliamentary Procedure</li> <li>• History/symbols</li> <li>• Opportunities/Awards</li> </ul>	<p>4.4 5.2 6.5 13.1 1.6</p>	<ul style="list-style-type: none"> <li>• Job opportunities in Ag</li> <li>• record keeping</li> <li>• business meeting management</li> <li>• historical data and personal goal setting</li> <li>• leadership development</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests and quizzes</li> <li>• SAE books</li> <li>• Career development events</li> <li>• Award applications</li> <li>• Nocti</li> </ul>
3 wks	<p style="text-align: center;">Plants</p> <ul style="list-style-type: none"> <li>• STRUCTURES/TAXONOMY</li> <li>• PLANT PHYSIOLOGY</li> <li>• PLANT REPRODUCTION</li> <li>• GARDENING</li> <li>• VEGETABLES</li> <li>• GRAIN/OIL/SPECIALTY CROPS</li> <li>• FORAGE AND PASTURES</li> <li>• ORNAMENTALS</li> <li>• BIOTECHNOLOGY IN PLANTS</li> <li>• INTEGRATED PEST MANAGEMENT</li> </ul>	<p>3.3 4.4 4.5 4.5 4.9</p>	<ul style="list-style-type: none"> <li>• Identify plant parts</li> <li>• Describe plant processes</li> <li>• Understand asexual and Grow and identify plants</li> <li>• Understand agronomic crops in the world</li> <li>• Landscaping processes and products</li> <li>• Identify plant biotechnology issues and advancements'</li> </ul>	<ul style="list-style-type: none"> <li>• written tests and quizzes</li> <li>• Hands-on work/greenhouse</li> <li>• Nocti</li> <li>•</li> </ul>

<p>2.5 wks</p>	<p><b>ANIMAL</b></p> <ul style="list-style-type: none"> <li>Animal Anatomy</li> <li>Animal Health</li> <li>Genetics/Breeding/Reproduction</li> <li>Small animal care</li> <li>Dairy and Livestock Horse</li> <li>biotechnology in animal science</li> </ul>	<p>2.3 3.3 4.4 4.9</p>	<ul style="list-style-type: none"> <li>Describe animal parts</li> <li>understand animal</li> <li>describe healthy animals</li> <li>list animal terms</li> <li>breeding techniques</li> <li>describe animal processes</li> <li>list and describe animal products</li> <li>identify purposes of biotechnology in animal science</li> </ul>	<ul style="list-style-type: none"> <li>written test and quizzes</li> <li>breeding charts</li> <li>Nocti</li> <li>Career development events</li> </ul>
<p>2 wks</p>	<p><b>NATURAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>Soils</li> <li>Forestry</li> <li>Wildlife/Aquatics</li> </ul>	<p>2.2 3.5 4.1 4.4 7.2 13.1</p>	<ul style="list-style-type: none"> <li>Understand soil properties</li> <li>List conservation methods</li> <li>Identify soil horizons</li> <li>Identify forestry products</li> <li>Use and measurement of forestry products</li> <li>Identify prey/predator relationships</li> <li>Understand wildlife/aquatic relationships</li> <li>Use of global position systems</li> </ul>	<ul style="list-style-type: none"> <li>Written tests and quizzes</li> <li>Worksheets</li> <li>Nocti</li> <li>Career Development events</li> </ul>

1wk	<p style="text-align: center;"><b>FOOD SCIENCE</b></p> <ul style="list-style-type: none"> <li>• Food industry</li> <li>• Food science</li> </ul>	<p style="text-align: center;">4.4 4.9 11.3 13.1 13.4</p>	<ul style="list-style-type: none"> <li>• Food safety</li> <li>• Food processing techniques</li> <li>• Food processing equipment</li> <li>• Food grades</li> <li>• Organic food products</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests and quizzes</li> <li>• Career development events</li> <li>• Nocti</li> </ul>
3 wks	<p style="text-align: center;"><b>COMMUNICATIONS</b></p> <ul style="list-style-type: none"> <li>• Marketing</li> <li>• Agribusiness planning</li> <li>• Entrepreneurship in AG</li> </ul>	<p style="text-align: center;">4.4 13.1 13.4 2.2 1.8</p>	<ul style="list-style-type: none"> <li>• National/global concepts</li> <li>• Business model identification</li> <li>• Business finances</li> <li>• Taxes</li> <li>• Laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Written test and quizzes</li> <li>• Business project</li> <li>• Career development events</li> <li>• Nocti</li> </ul>
3 wks	<p style="text-align: center;"><b>POWER MECHANICS/CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• Small gas engines</li> <li>• Electricity</li> <li>• Plumbing concrete and masonry</li> <li>• Agriculture structures</li> <li>• Farm machinery and equipment</li> </ul>	<p style="text-align: center;">3.6 3.7 2.2 2.3 4.4 4.8 10.3 13.1 13.4</p>	<ul style="list-style-type: none"> <li>• Engine processes</li> <li>• Fuels and lubricants</li> <li>• AC/DC power</li> <li>• Power generation</li> <li>• Building techniques</li> <li>• Calculating building materials</li> <li>• Use of materials</li> <li>• Drive tractor and equipment safely and correctly</li> </ul>	<ul style="list-style-type: none"> <li>• Written test and quizzes</li> <li>• Projects</li> <li>• Building project</li> </ul>

	WOOD/METAL WORKING				
	• Hand tools	3.6		• Tool id	• Written tests and quizzes
	• Power tools	3.7		• Proper use of tools	• Practicum tests
3 wks	• Project construction	2.2		• Weld with various techniques	• Projects
	• Welding-ARC	2.3		• Identify welding process	• Career Development events
	• Welding-MIG	4.4			• Nocti
	• Welding-GAS	4.8			
		10.3			
		13.1			
		13.4			

General Syllabus for:  
Agriculture Education---- GRADES 9-12

CONNEAUT SCHOOL DISTRICT

**Type of course:** Agriculture I-IV

**Prerequisites:** none Text

Information: The Science of Animal Agriculture, Agriscience Fundamentals and Applications,  
Agriculture Mechanics, Fundamentals and Applications,

**Objectives:**

- o To prepare for a career in Agriculture related fields
  - o Have a general overview of Agriculture in our world
  - o To develop leadership skills in today's youth

**Topics Covered:**

Introduction to Agriculture

- o Introduction
- o Shop orientation and procedures

FFA/SAE

- o Career options
- o Supervised Agriculture Experiences
- o Parliamentary Procedure
- o History/symbols
- o Opportunities and rewards

Plants

- o Structures
- o Reproduction
- o Gardening
- o Vegetables
- o Grains and oil crops
- o Forages and pastures
- o Ornamentals

Animals

- o Anatomy
- o Animal health
- o Genetics/reproduction
- o Small animal care
- o Dairy and livestock
- o Horses

Natural Resources

- o Soils
- o Forestry

- Wildlife and Aquatics

Wood and Metal working

- Hand tools
- Power tools
- Welding
- Small gas engines
- Project construction

Communications

- Marketing
- Agribusiness
- Planning Entrepreneurship in Ag

Assessment:

- NOCTI
- Tests
- Quizzes
- Worksheets
- Practicum skills
- Contests

Parent/Student Resources:

- On-line texts
- PA FFA Website [www.paffa.state.pa.us](http://www.paffa.state.pa.us)