



# Program Planning Guide

## Sustainable Livestock Systems Certificate (C1541020)

**Program Length:** 2 semesters

**Program Sites:** Chatham Main Campus

**Career Pathway Options:** Associate in Applied Science Degree in Sustainable Agriculture;  
Certificate in Sustainable Livestock Systems

Suggested Course Schedule		Class	Lab	Work	Credits	Notes:
<b>1st Semester (fall)</b>						
AGR 170	Soil Science	3	0	0	3	
AGR 214	Agriculture Marketing	3	0	0	3	
ANS 110	Animal Science	3	0	0	3	
	<b>Total Semester Hours</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	
<b>2nd Semester (spring)</b>						
AGR 139	Introduction to Sustainable Ag	3	0	0	3	
ANS 111	Sustainable Livestock Management	2	2	0	3	
	<b>Total Semester Hours</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>6</b>	
<b>Total Semester Hours Credit Required for Graduation: 15</b>						



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## Course Descriptions

### **AGR 139 Intro to Sustainable Agriculture**

This course will provide students with a clear perspective on the principles, history, and practices of sustainable agriculture in our local and global communities. Students will be introduced to the economic, environmental, and social impacts of agriculture. Upon completion, students should be able to identify the principles of sustainable agriculture as they relate to basic production practices.

### **AGR 170 Soil Science**

This course covers the basic principles of soil management and fertilization. Topics include liming, fertilization, soil management, biological properties of soil (including beneficial microorganisms), sustainable land care practices and the impact on soils, and plant nutrients. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media according to sustainable practices.

### **AGR 214 Agricultural Marketing**

This course covers basic marketing principles for agricultural products. Topics include buying, selling, processing, standardizing, grading, storing, and marketing of agricultural commodities. Upon completion, students should be able to construct a marketing plan for an agricultural product.

### **ANS 110 Animal Science**

This course introduces the livestock industry. Topics include nutrition, reproduction, production practices, diseases, meat processing, sustainable livestock production, and marketing. Upon completion, students should be able to demonstrate a basic understanding of livestock production practices and the economic impact of livestock locally, regionally, state-wide, and internationally.

### **ANS 111 Sustainable Livestock Management**

This course covers the integration of livestock as part of a sustainable farming system with emphasis on small-scale production for niche markets and pasture. The course will cover appropriate breed selection, nutrition and living requirements for livestock such as goats, hogs, sheep, poultry, and bees. Upon completion, students should recognize appropriate breeds for their farm needs and demonstrate knowledge of small-scale livestock production.