



Sustainable Agriculture Credential: Certificate in Sustainable Livestock Systems C1541020

The Sustainable Agriculture curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. Course work includes fundamental sustainable agriculture concepts, study of the soil systems as they relate to pasture fertility and livestock health and marketing practices typical of small-scale, local food systems. Appropriate breed selection, pasture management and direct marketing are emphasized. This certificate is appropriate for individuals interested in integrating sustainable livestock production into their current agricultural system, agriculture educators, and individuals interested in working in the food and fiber industry.

Program Length: 2 semesters

Career Pathway Options: Associate in Applied Science in Sustainable Agriculture

Program Site: Pittsboro Campus – Day Program

Course Requirements for Sustainable Livestock Systems Certificate

AGR 139	Introduction to Sustainable Agriculture	3-0-3
AGR 170	Soil Science	2-2-3
AGR 214	Agricultural Marketing	3-0-3
ANS 110	Animal Science	3-0-3
ANS 111	Sustainable Livestock Management	2-2-3

Total Semester Hours Credit required for graduation: 15

Semester Curriculum for Sustainable Livestock Systems Certificate

1st Semester (Fall)		C-L-SHC
AGR 170	Soil Science	2-2-3
ANS 110	Animal Science	3-0-3
AGR 214	Agricultural Marketing	<u>3-0-3</u>
		8-2-9
2nd Semester		
ANS 111	Sustainable Livestock Management	2-2-3
AGR 139	Introduction to Sustainable Agriculture	<u>3-0-3</u>
		5-2-6

Total Semester Hours Credit required: 15

COURSE DESCRIPTIONS

AGR 139 Introduction to Sustainable Ag 3-0-3
 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 2-2-3
 This course covers the basic principles of soil fertilizing. Topics include liming, fertilization, management, and plant nutrients. Upon completion, students should be able to give nutrient and liming recommendations for soils.

AGR 214 Agricultural Marketing 3-0-3
 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 3-0-3
 This course introduces the livestock industry. Topics include nutrition, reproduction, production practices, diseases, meat processing, and marketing. Upon completion, students should be able to demonstrate a basic understanding of livestock production practices and the economic impact of livestock in North Carolina.

ANS 111 Sustainable Livestock Management 2-2-3
 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. Topics included are appropriate breed selection, nutrition and living requirements for livestock such as goats, hogs, sheep, poultry, and bees. Upon completion, student should recognize appropriate breeds for their farm needs and demonstrate knowledge of small-scale livestock production.