



**Sustainable Agriculture Credential:
Certificate in Agricultural Sustainability
C1541010**

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 classroom study and practical application of skills and concepts in the field. An understanding of the fundamental principles and practices of sustainable agriculture are emphasized. This certificate is appropriate for individuals interested in adding knowledge and skills in sustainability for employment in areas such as agriculture education, farmer advocacy work, non-profit organizations with agricultural missions in developing countries.

Program Length: 2 semesters
Career Pathway Options: Associate in Applied Science in Sustainable Agriculture.
Program Site: Pittsboro Campus - Day Program

Course Requirements for Agriculture Sustainability Certificate

AGR 121	Biological Pest Management	3-0-3
AGR 139	Introduction to Sustainable Agriculture	3-0-3
AGR 170	Soil Science	2-2-3
AGR 265/6	Organic Crop Production (Spring or Fall)	2-2-3
AGR 293	Selected Topics in Sustainable Agriculture	3-0-3
AGR 265/6	Organic Crop Production (Spring or Fall)	2-2-3
	OR	
ANS 111	Sustainable Livestock Management	2-2-3

Total Semester Hours Credit Required for Graduation: 15/18

Semester Curriculum for Agricultural Sustainability Certificate

1st Semester (Fall)		C-L-SHC
AGR 139	Introduction to Sustainable Agriculture	3-0-3
AGR 170	Soil Science	2-2-3
AGR 265/6	Organic Crop Production (Spring or Fall)	<u>2-2-3</u>
		7-4-9
2nd Semester (Spring)		
AGR 293	Selected Topics in Sustainable Agriculture	3-0-3
AGR 121	Biological Pest Management	3-0-3
AGR 265/6	Organic Crop Production (Spring or Fall)	2-2-3
	OR	
ANS 111	Sustainable Livestock Management	<u>2-2-3</u>
		8-2-9

Total Semester Hours Credit: 15/18

COURSE DESCRIPTIONS

AGR 121 Biological Pest Management 3-0-3
This course will emphasize the building and maintaining of healthy soil, plant and insect biological cycles as the key to pest and disease management. Course content includes study of major pests and diseases, including structure, life cycle, and favored hosts; and biological and least toxic methods of chemical control. Upon completion, students should be able to identify and recommend methods of prevention and control of selected insects and diseases.

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 265 Organic Crop Production: Spring 2-2-3
This course includes a study of spring organic crop production practices, including vegetables, cut flowers, and culinary and medicinal herbs. Topics include variety selection, production methods, and record keeping procedures for certification. Upon completion, students should be able to demonstrate a knowledge of organic crop production appropriate for the spring season.

AGR 266 Organic Crop Production: Fall 2-2-3
The course includes a study of spring organic crop production practices, including vegetables, cut flowers, and culinary and medicinal herbs. Topics include variety selection, production methods, and record keeping procedures for certification. Upon completion, students should be able to demonstrate a knowledge of organic crop production appropriate for the fall season.

AGR 293 Selected Topics in Sustainable Agriculture 3-0-3
This course provides an opportunity to explore areas of current interest in Sustainable Agriculture. This course provides an opportunity to explore areas of current interest in Sustainable Agriculture. Emphasis is placed on subject matter appropriate to this discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

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.