Program Planning Guide  

Agricultural Sustainability, Certificate (C1541010)

Program Length: 2 semesters  
Career Pathway Options: Associate in Applied Science in Sustainable Agriculture.  
Program Site: Chatham Main Campus – Day Program

Suggested Course Schedule:

<table>
<thead>
<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
<th>Grade</th>
<th>Semester</th>
<th>Notes</th>
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<tbody>
<tr>
<td>1st Semester (Fall)</td>
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<tr>
<td>AGR 139 Intro to Sustainable Agriculture</td>
<td>3</td>
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<tr>
<td>AGR 170 Soil Science</td>
<td>2</td>
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<td>AGR 265/6 Organic Crop Production</td>
<td>2</td>
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<tr>
<td>AGR 267 Permaculture</td>
<td>2</td>
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<td>3</td>
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<td>9</td>
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<td>12</td>
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<td>2nd Semester (Spring)</td>
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<td>AGR 121 Biological Pest Management</td>
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<tr>
<td>AGR 265/6 Organic Crop Production</td>
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<td>2</td>
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<td>OR ANS 111 Sustainable Livestock Management</td>
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<td>Total Semester Hours Credit: 18</td>
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Course Descriptions:

**AGR 121 Biological Pest Mgmt**  
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 Intro 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 Prod: 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 Prod: 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 267 Permaculture**  
2-2-3  
This course introduces the design of sustainable human habitats as part of a sustainable system, with emphasis placed on living systems of the temperate region. Topics include fundamentals of permaculture system design for farms, including gardens, fields, water, animals, buildings, economics, and society. Upon completion, students should be able to design a functional holistic farm system.

**ANS 111 Sustainable Livestock Mgt**  
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 include 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.