AG 120 Plant Science
3 credits

INSTRUCTOR: Ringuette
OFFICE: Uluwehi
OFFICE HOURS: 
TELEPHONE: 236-9265
EFFECTIVE DATE: Fall 2009

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOG DESCRIPTION

The study of plant science, morphology, anatomy, physiology classification, growth, growth regulators, and propagation. Students are required to write a 10 to 15 page research report. (2 hrs. lect.; 2 hrs. lect./lab.)
WCC: DB
The student learning outcomes are:
• Describe and explain general plant structure and function in relation to plant growth and development.
• Demonstrate knowledge of horticultural principles in the cultivation of plants.
• Examine commercial agricultural enterprises for to become familiar with employment opportunities and the impact of horticulture on our lives.
• Research and report on a horticultural plant.

Activities Required at Scheduled Times Other Than Class Times

None

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:
1. Describe and explain general plant structure and function in relation to plant growth and development.
2. Demonstrate knowledge of horticultural principles in the cultivation of plants.
3. Examine commercial agricultural enterprises for to become familiar with employment opportunities and the impact of horticulture on our lives.
## COURSE CONTENT

<table>
<thead>
<tr>
<th>Course content</th>
<th>related SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impact of Plants on the Environment, Man &amp; Society</td>
<td>(3)</td>
</tr>
<tr>
<td>2. Origins of Agriculture</td>
<td>(3)</td>
</tr>
<tr>
<td>3. The Cell</td>
<td>(1)</td>
</tr>
<tr>
<td>4. Plant Tissues</td>
<td>(1)</td>
</tr>
<tr>
<td>5. Plant Organs and Functions</td>
<td>(1)</td>
</tr>
<tr>
<td>6. Cell Reproduction</td>
<td>(1)</td>
</tr>
<tr>
<td>7. Photosynthesis</td>
<td>(1 &amp; 2)</td>
</tr>
<tr>
<td>8. Respiration</td>
<td>(1 &amp; 2)</td>
</tr>
<tr>
<td>9. Sexual Propagation</td>
<td>(2)</td>
</tr>
<tr>
<td>10. Asexual Propagation</td>
<td>(2)</td>
</tr>
<tr>
<td>11. Plant Nutrition</td>
<td>(2)</td>
</tr>
<tr>
<td>12. Commercial Plant Production</td>
<td>(3)</td>
</tr>
</tbody>
</table>

### Concepts or Topics

1. Impact of Plants on the Environment, Man & Society (3)
2. Origins of Agriculture
3. The Cell
4. Plant Tissues
5. Plant Organs and Functions
6. Cell Reproduction
7. Photosynthesis
8. Respiration
9. Sexual Propagation
10. Asexual Propagation
11. Plant Nutrition
12. Commercial Plant Production

### Skills or Competencies

1. Locate information.
2. Distinguish relevant and reliable information.
3. Identify plant structures.
4. Describe a production system for a crop or agricultural enterprise.
5. Determine what appropriate propagation methods would be used for a given crop.
6. Recognize best management practices for a given crop.
COURSE TASKS
1. Use objective tests, essay questions or research/term papers to evaluate student’s ability to explain or identify plant structures or functions.

2. Use objective tests, essay questions, research/term papers or applied projects to evaluate student’s knowledge of horticulture principles.

3. Use objective tests, essay questions, research/term papers, case studies, class presentations or applied projects to evaluate student’s comprehension of commercial agricultural enterprises and their impact on the state’s economy.

ASSESSMENT TASKS AND GRADING
METHODS OF EVALUATION:

Examinations:  60%
Projects:  30%
Participation  10%

LEARNING RESOURCES
Handouts and notes

Additional Information
STUDENT RESPONSIBILITY

1. Students unable to be resent on the day of the exam are required to notify the instructor at least one day prior to the exam day. It is the responsibility of the student to make up any exams and or classes missed.

2. Students absent from class will be held responsible for the material covered in class and any announcements made in class.

DISABILITIES ACCOMMODATION STATEMENT

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.

Revised May 10, 2007