Course Syllabus

Department: Environmental Conservation and Horticulture

Date: October 31, 2012

I. Course Prefix and Number: HRT 105

   Course Name: Basic Viticulture Techniques

   Credit Hours and Contact Hours: 3 credit hours and 3 contact hours

   Catalog Description including pre- and co-requisites: This course is designed to introduce students to current techniques used while managing a commercial vineyard. Students completing this class will understand how to maintain appropriate vigor and productivity of a vineyard once it is established. Topics covered include: site analysis; varietal selection; trellising methods; nutrient needs of vines; diseases and insect pests of grapevines; crop regulation; breeding; grafting; vineyard floor management; and harvest determinations. A significant portion of the class will be dedicated to pruning. Viticulture safety issues will be addressed. This course is dual-listed with VIT 105.

   Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

Basic Viticulture Techniques is required of students matriculated in the A.A.S. Viticulture and Wine Technology degree program. It is also an elective within the A.A.S. Horticulture degree program. It is a pre-requisite for VIT 110 and VIT 200.

II. Course Student Learning Outcomes:

At the completion of this course the student will be able to:

- Evaluate any vine in mid-winter and effectively prune the vine based on variety, training system, and desired yield
- Diagnose nutrient deficiencies, cold damage, and common pest problems
- Explain the physiology and symptoms of common pest problems
- Recognize common nutrient deficiencies and pest infestations
- Describe common trellising systems and when they would be used
- Identify differences between grapevine varieties as they relate to species, uses, and site needs
- Describe modern grapevine grafting techniques
- Explain grapevine breeding as it relates to diseases, cold hardiness and genetic diversity
- Identify phonological stages of a grapevine
- Describe harvest parameters as they relate to physiological ripeness
- Identify parts of a grapevine
- Explain seasonal grapevine training operations including pruning, suckering, leaf pulling, and trellis maintenance
- Prepare a detailed final report investigating a topic covered in this course and give an oral presentation to the class describing their major findings (critical thinking, reading, information resources, and oral communications)

**College Learning Outcomes Addressed by the Course:** (check each College Learning Outcome addressed by the Student Learning Outcomes)

- [ ] writing
- [x] oral communications
- [x] reading
- [ ] mathematics
- [ ] critical thinking
- [x] computer literacy
- [ ] ethics/values
- [ ] citizenship
- [ ] global concerns
- [x] information resources

**III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):** For each identified outcome checked, please provide the specific assessment measure.

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<thead>
<tr>
<th>List identified College Learning Outcomes(s)</th>
<th>Specific assessment measure(s)</th>
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<tr>
<td>Oral Communications</td>
<td>Students will report the major findings of their final report to the class during an oral presentation</td>
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<tr>
<td>Reading</td>
<td>Students will perform weekly reading assignments, ask pertinent questions about the assignments and answer other students questions. The questions are completed in an online discussion forum.</td>
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<td>Information Resources</td>
<td>Students locate and use scholarly articles when completing their final report</td>
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<td>Computer Literacy</td>
<td>Students will complete their final report using a word processing program.</td>
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**IV. Instructional Materials and Methods**

**Types of Course Materials:**

The students will purchase a viticulture textbook. Equipment items will be provided by the Conservation Department and extensive use of FLCC’s Teaching and Demonstration Vineyard will be incorporated for hands on activities.
Methods of Instruction (e.g. Lecture, Lab, Seminar …):
- Lecture
- Hands-on demonstrations
- Field experiences

V. General Outline of Topics Covered:
   A. Grapevine structure and phenology
   B. Cultivars of grapevine
   C. Training systems
   D. Pruning
   E. Nutrient needs and deficiencies of grapevines
   F. Grapevine diseases
   G. Insect pests of grapevines
   H. Grapevine breeding
   I. Propagation and grafting of grapevines
   J. Vineyard floor
   K. Vineyard trellis construction and maintenance
   L. Site preparation and planting
   M. Harvest determination vs. phonological ripeness