Department of Agriculture
Title of Course: Viticulture

I. Catalog Description and Credit Hours:

Fundamentals of grape production with a special emphasis on growth and development, plant nutrition, pest management, cultural methods, harvesting and post-harvest processing. Two lectures and a two hour laboratory (3).

II. Prerequisites: none

III. Purpose or Objectives of the Course:

At the completion of the course, the student(s) should be able to:

A. Express the concepts of grape production and define all aspects of grape quality.
B. Identify, evaluate, and solve vineyard problems involving soil fertility, plant pathogens, insect pests, and ground-cover management.
C. Develop management plans focusing on the integration of cultural methods, variety selection, and environmental constraints within the context of a market driven enterprise.
D. Relate methods of post-harvest management to end-product utilization.

IV. Expectations of Students:

A. Become familiar with all aspects of commercial grape production.
B. Prepare management guides for soil fertility evaluation and improvement, plant pathogens, insect and mite infestations, weed management, and non-infectious (environmental) disease agents.
C. Develop a variety selection program.
D. Prepare a development plan for the establishment of a commercial vineyard, with an emphasis on establishing a specific market.

V. Course Content or Outline:

A. World and USA production and its economic importance (1/2 week)
B. Vineyard location - climate and individual sites (1/2 week)
C. Growth and development of the grape plant (1 week)
D. Plant Physiology (2 week)
E. Cultivars and berry evaluation (1 week)
F. Propagation (1 week)
G. Pruning and trellis Design (1 week)
H. Soil management (2 week)
I. Insects and their management (1 week)
J. Plant pathogens and their control (2 week)
K. Frost control and irrigation (1 weeks)
L. Harvesting and post-harvest management (2 weeks)

VI. Laboratories:
1. Vineyard selection criteria
2. Vineyard establishment
3. Trellis designs and construction
4. Pruning the grape vine
5. Grafting techniques
6. Soil fertility and fertilizers
7. Grape plant morphology
8. Assessing berry and juice quality
9. Insect management
10. Insect management
11. Disease management
12. Irrigation scheduling
13. Harvesting and post-harvest management
14. Marketing
15. Wines

VII. Textbooks and Other Required Materials:
B. A current list of web sites will be provided to the student.

VIII. Basis for Student Evaluation:
A. Three essay examinations 30%
B. Final 10%
B. Laboratory 40%
C. Assignments 20%

Grade Scale: A is 100-90%; B is 90-80%; C is 80-70%; D is 70-60%; F is <60%

IX Policy on Academic Honesty:
This course will adhere to the statement of academic policy as written in the 2004-2005 Southeast Missouri State University Undergraduate Bulletin (page 17-19). This statement includes student expectations concerning cheating and plagiarism. Graduate students are asked to review the same policy in the 2004-2005 Southeast Missouri State University Graduate Bulletin.

X. Disabilities Statement:
If you have special needs addressed by the Americans with Disabilities Act and need course materials in an alternative format, notify your course instructor. Reasonable efforts will be made to accommodate your needs. All of those requiring special assistance must contact the Learning Enrichment Center.