

**MURRAY STATE UNIVERSITY**

Revised 9/15

**SCHOOL OF AGRICULTURE**

**COURSE PREFIX: AGR**

**COURSE NUMBER: 160**

**CREDIT HOURS: 3**

**I. TITLE:**

Horticulture Science

**II. CATALOG DESCRIPTION:**

A study of the basic principles and practices used in horticulture.

**III. COURSE OBJECTIVES:**

- A. To develop a basic understanding of the different plant functional systems and the environmental influences that effect plant growth, both in the greenhouse and outdoors.
- B. To develop a basic understanding of practices such as propagation, pruning, watering, fertilizing, and other important cultural aspects in horticulture.
- C. To develop an appreciation for the practical aspects of ornamental horticulture including the establishment and maintenance of turfgrass, landscape design and maintenance, and fruit and vegetable production.

**IV. CONTENT OUTLINE:**

- A. Introduction
  - 1. Exploring the industry
  - 2. Careers in horticulture
  - 3. Environmental friendly practices
- B. Plant Anatomy and Propagation
  - 1. Vegetative structures
  - 2. Reproductive structures
  - 3. Plant functions
  - 4. Plant propagation
- C. Growing Media and Nutrients
  - 1. Soil and growing media
  - 2. Plant nutrients
  - 3. Fertilizers
- D. Pest Management
  - 1. Insects
  - 2. Diseases
  - 3. Integrated Pest Management (IPM)
- E. Greenhouse Growing
  - 1. Greenhouse structures
  - 2. Greenhouse growing environments

- F. Floral Design
  - 1. Design elements and principles
  - 2. Design construction
- G. Landscaping
  - 1. Interiorscaping
  - 2. Landscape design
  - 3. Landscape installation
  - 4. Landscape maintenance
- H. Turfgrass
  - 1. Turfgrass characteristics
  - 2. Turfgrass establishment and care
- I. Horticultural Food Crops
  - 1. Vegetable production
  - 2. Fruit and nut production

**V. INSTRUCTIONAL ACTIVITIES:**

- A. Lectures
- B. Demonstrations – used to illustrate certain points in lecture
- C. Slides
- D. Videos
- E. Field trips – on campus or to the greenhouse will be used to acquaint students with specific horticultural plants and practices

**VI. FIELD AND CLINICAL EXPERIENCES:**

Students will learn to grow plants and analyze watering and pruning needs, problems of propagation, as well as other problems associated with the various aspects of horticulture.

**VII. TEXTS AND RESOURCES:**

Required text: *Introduction to Horticulture*, 4th edition, by C.B. Schroeder, E.D. Seagle, L.M. Felton, J.M. Ruter, W.T. Kelley, and G. Krewer.

- A. Greenhouse
- B. Laboratory facilities plus plant materials; outdoors and indoors, on campus and at the University farms

**VIII. GRADING PROCEDURES:**

Six announced lecture examinations will be given during the semester. This will account for 56% of your grade. The remaining 44% of your grade will be determined by your performance on an unannounced quizzes (7%), propagation project (5%), greenhouse bench design (4%), horticulture application paper (5%), quiz bowl (4%), greenhouse field experience (14%), and class attendance (5%).

#### Grading Scale

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

Below 60 = E

Make-up policy: Make-up exams will NOT be given routinely. If UNUSUAL circumstances or illness precludes attendance on the day of an exam, it is the student's responsibility to discuss the situation with the instructor in order to schedule a new exam. Written reports must be received on time in order for the student to receive full credit. Late work will be lowered by 10% each week it is delinquent. Work will NOT be accepted after three weeks past due date. Unannounced quizzes cannot be made up. **Each student must complete a minimum of 80% of their field experience hours (11 of 14). If completion falls below the 80% level, the student will receive an Incomplete for the class. Missed experience hours must be made up within two weeks or they result in a zero for that week.**

#### IX. ATTENDANCE POLICY:

Students are expected to adhere to the MSU Attendance Policy outlined in the current *MSU Bulletin*.

#### X. ACADEMIC HONESTY POLICY:

Murray State University takes seriously its moral and educational obligation to maintain high standards of academic honesty and ethical behavior. Instructors are expected to evaluate students' academic achievements accurately, as well as ascertain that work submitted by students is authentic and the result of their own efforts, and consistent with established academic standards. Students are obligated to respect and abide by the basic standards of personal and professional integrity.

##### **Violations of Academic Honesty include:**

**Cheating** - Intentionally using or attempting to use unauthorized information such as books, notes, study aids, or other electronic, online, or digital devices in any academic exercise; as well as unauthorized communication of information by any means to or from others during any academic exercise.

**Fabrication and Falsification** - Intentional alteration or invention of any information or citation in an academic exercise. Falsification involves changing information whereas fabrication involves inventing or counterfeiting information.

**Multiple Submission** - The submission of substantial portions of the same academic work, including oral reports, for credit more than once without authorization from the instructor.

**Plagiarism** - Intentionally or knowingly representing the words, ideas, creative work, or data of someone else as one's own in any academic exercise, without due and proper acknowledgement.

Instructors should outline their expectations that may go beyond the scope of this policy at the beginning of each course and identify such expectations and restrictions in the course syllabus. When an instructor receives evidence, either directly or indirectly, of academic dishonesty, he or she should investigate the instance. The faculty member should then take appropriate disciplinary action.

Disciplinary action may include, but is not limited to the following:

- 1) Requiring the student(s) to repeat the exercise or do additional related exercise(s).
- 2) Lowering the grade or failing the student(s) on the particular exercise(s) involved.
- 3) Lowering the grade or failing the student(s) in the course.

**If the disciplinary action results in the awarding of a grade of E in the course, the student(s) may not drop the course.**

Faculty reserve the right to invalidate any exercise or other evaluative measures if substantial evidence exists that the integrity of the exercise has been compromised. Faculty also reserve the right to document in the course syllabi further academic honesty policy elements related to the individual disciplines.

A student may appeal the decision of the faculty member with the department chair in writing within five working days. Note: If, at any point in this process, the student alleges that actions have taken place that may be in violation of the Murray State University Non-Discrimination Statement, this process must be suspended and the matter be directed to the Office of Institutional Diversity, Equity and Access. Any appeal will be forwarded to the appropriate university committee as determined by the Provost.

NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current *Undergraduate Bulletin and Graduate Bulletin*. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student's responsibility to obtain and read a copy of this document. The School's Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty member or the Secretary.

## **XI. NON-DISCRIMINATION POLICY AND STUDENTS WITH DISABILITIES:**

### Policy Statement

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon

request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact the Executive Director of Institutional Diversity, Equity and Access, 103 Wells Hall, (270) 809-3155 (voice), (270) 809-3361 (TDD).

#### Students with Disabilities

Students requiring special assistance due to a disability should visit the Office of Student Disability Services immediately for assistance with accommodations. For more information, students should contact the Office of Student Disability Services, 423 Wells Hall, Murray, KY 42071. 270-809-2018 (voice) 270-809-5889(TDD).

## **XII. MSU SCHOOL OF AGRICULTURE CELL PHONE POLICY**

The School of Agriculture recognizes that in today's world cell phones are a familiar and often necessary form of communication for students.

It shall be the policy of the School that no cell phone usage shall be allowed in class and/or labs without the prior consent of the course instructor. This shall include verbal calling, incoming calls, email, text messaging, and use of cell phone calculators on tests and quizzes.

Cell phones must be kept off and out of sight (i.e. secured to a person's belt or kept in a bag or purse away from desks and lab counters).

Should a student's cell phone be visible, ring, or other form of unauthorized usage that is interruptive to the class or lab, the student may be asked to leave class and not return for that class/lab period.

Upon prior consent of the instructor, a student may obtain permission to have their phone on in case of an emergency or in critical family situations.

This policy also includes pagers and other electronic equipment such as Blackberries and/or computers/laptops.