SCHOOL OF AGRICULTURE
COURSE NUMBER: AGR 160  CREDIT HOURS: 3

I. TITLE:
Horticulture Science

II. CATALOG DESCRIPTION:
A study of the basic principles and practices used in horticulture.

III. PURPOSE:
To make the student aware of the many different aspects in the field of horticulture and to show how knowledge of horticulture and horticulture practices can be utilized in everyday life.

IV. 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.

V. 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

VI. **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

VII. **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.

VIII. **RESOURCES:**

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

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
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<tr>
<td>80 – 89</td>
<td>B</td>
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<tr>
<td>70 – 79</td>
<td>C</td>
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<tr>
<td>60 – 69</td>
<td>D</td>
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<tr>
<td>Below 60</td>
<td>E</td>
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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.

X. **ATTENDANCE POLICY:**

Please refer to the most current copy of the *Murray State University’s Undergraduate Bulletin and Graduate Bulletin.*

XI. **ACADEMIC HONESTY POLICY:**

(Adopted by the MSU Board of Regents)

Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, term papers, or the presentation on unacknowledged material as if it were the student’s own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

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.

XII. TEXT AND REFERENCES:


XIII. PREREQUISITES:

None

XIV. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

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 regarding nondiscrimination policies contact the Office of Equal Opportunities, 270-809-3155.

XV. 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.