DATE SUBMITTED
DATE DICC APPROVED 4/27/10
DATE LAST REVIEWED Oct. 7, 2009

CATALOG DESCRIPTION

Environmental, safety and regulatory considerations of turf and ornamental pest control.

PREREQUISITES

None

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

Upon completion of this course, the student will be able to:

1. Identify regional insects, diseases and environmental stress factors that affect plant growth.

2. Demonstrate proper calibration of pesticide application equipment.

3. Demonstrate proper safety procedures in handling and applying pesticides.

4. Demonstrate the proper calibration and calculation of pesticides used, including wetable powders, soluble powder, emulsifiable concentrates, granules, and aerosols.

5. Identify weed species and know the appropriate pesticides and cultural practices used in their control.

6. Describe integrated pest management techniques, including, but not limited to, biological controls, cultural practices, varietal selection, planting times, and plant selection.
GENERAL EDUCATION OUTCOMES (ESO)

Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Student will demonstrate skills necessary to identify and recommend ornamental plant materials appropriate for use in regional landscaping, including some native to Missouri.

2. Students will develop and demonstrate the ability to communicate clearly and effectively with others.

3. Students will apply essential math skills and use formulas appropriate in landscape projects.

4. Students will increase familiarity with appropriate resources to advance knowledge and network within their field of employment or as entrepreneurs.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Identification quizzes (1, 5)
2. Field demonstrations (2-4)
3. Exams (5, 6)
COURSE OUTLINE FORM

DISCIPLINE: Agribusiness

COURSE TITLE: Pest Management/Turf and Ornamentals

Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Missouri Pesticide Use Act

II. General pesticide manual
   A. Study of safe handling of pesticides
   B. Ability to read and understand pesticide labels and labeling
   C. Environmental concerns and pesticide use, Laws and regulations
   D. Pesticide application equipment and calibration
   E. General study of insect, diseases and other pests and problems

III. Ornamental and turf
   A. Turf insects and diseases
   B. Ornamental insects and diseases
   C. Environmental impacts
   D. Invertebrate and vertebrate pests