

Common Course Outline
HORT 117
Integrated Pest Management
3 credits

Community College of Baltimore County

Description

HORT 117 – 3 credits- Integrated Pest Management explores the common insects, diseases and weeds that might infect interior ornamentals; nursery and landscape ornamentals, turf and greenhouse plant materials; prepares the horticulture student for the pesticide applicator licensure examination given by the Maryland State Department of Agriculture. One Saturday field trip or practical lab is required.

3 credits; 2 lecture hours and 2 laboratory hours per week.

Prerequisites: ACLT 052 or ACLT 053 and MATH 081

Overall Course Objectives

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

1. discuss the history of Integrated Pest Management;
2. list and discuss the federal and state laws governing pesticide application;
3. explain Integrated Pest Management techniques;
4. classify pesticides by formulation and mode of action;
5. evaluate pesticide compatibility and pesticide resistance;
6. discuss the toxicity of pesticides;
7. summarize the potential health effects of prolonged pesticide exposure;
8. list the steps used in the development of a pesticide label;
9. comprehend the information listed on a pesticide label;
10. demonstrate the proper handling of pesticides;
11. describe the proper storage and disposal of pesticides;
12. explain the proper steps to be taken with pesticide emergencies including spills and fires;
13. recognize the liabilities associated with pesticide application;
14. contrast the various cultural conditions that predispose plants and turf to pest attacks;
15. identify the economically important insects and diseases found in turf, greenhouses and ornamental landscape plantings;
16. identify the economically important weeds found in turf and landscapes;
17. recommend control treatments for the economically important weeds, insects and diseases found in turf, greenhouses and ornamental landscape plantings;
18. calibrate and operate pesticide applicator equipment;
19. make a permanent collection of weeds, insects and plant diseases;
20. make a presentation of a pest sample, discuss the damage it causes and recommend a control measure;
21. identify noninfectious diseases of turf, greenhouses and ornamentals; and

22. recommend control measures for noninfectious diseases of turf, greenhouses and ornamentals.

Major Topics

- I. Entomology
- II. Insects and mites of woody ornamental plants
- III. Plant disease of woody ornamental plants
- IV. Weeds of woody ornamental plants
- V. Insects and disease of herbaceous plants

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

1. 4 Written Exams
2. 10-15 Weekly Lab Reports/Homework
3. Specimen Collection
4. One (1) Saturday Class Practical or Field Trip
5. Participation

Other Course Information

This course is a Horticulture Program core course required for the Horticulture A.A.S. Degree.

It is also a required course for the following Horticulture Certificates:

- Greenhouse Production
- Turf and Landscape Management
- Landscape Design and Installation

It is also a required course for licensing testing for a Maryland State Pesticide Applicator's license in Category III – A and B.