

COURSE OUTLINE
HORT-100
Introduction to Horticulture
4 Credits

HOWARD COMMUNITY COLLEGE

Description

Introduction to Horticulture is an introductory course which provides a broad spectrum of topics in the field of plant science. Specific topics covered are: plant structures, classification, soils, plant growth and development, propagation, pesticides, insects, diseases and plant protection. The course's objective is to make the students well-rounded in all aspects of plant science and prepare them for future classes in the curriculum of a more specific nature. This course is geared for commercial horticulture workers as well as for the homeowner. The subject matter is covered scientifically and practically so that the student can put into practice what is learned. (3 hours lecture, 3 hours lab)

Overall Course Objectives

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

1. Identify the functions of basic plant structures.
2. Identify basic plant functions and physiology.
3. Specify the relationship between plants and soil structure and nutrients.
4. Identify common plant problems and formulate a control practice.
5. Identify taxonomy of insects, their characteristics and relationship to plants.
6. Identify plant diseases arising from environmental or pathogenic factors.
7. Identify plant cultural practices that can lead to problems.
8. Apply basic knowledge of plant care.
9. Specify the effects of climate and microclimate on plant functions and growth.
10. Identify the characteristics of monocot and dicot plants.

Major Topics

- I. Botany
 - A. Plant Structures
 - B. Plant Cells
 - C. Growth
 - D. Reproduction
 - E. Plant Chemistry

- II. Soils
 - A. Structures
 - B. Soil Chemistry
 - C. Soil Management

- III. Plant Environments
 - A. Factors Affecting Plants
 - B. Microclimates
 - C. Plant Hardiness
 - D. Environmental Management
- IV. Introduction to Insects
- V. Introduction to Plant Diseases
- VI. Horticultural Practices
 - A. Planting and Transplanting
 - B. Fertilizing
 - C. Pruning
 - D. Propagation
- VII. Pesticides
 - Integrated Pest Management

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will be based on exams, lab practical tests and quizzes.

Other Course Information

This course is a core course in the Plant Science certificate program.