

Revised: Fall 2016

# HRT 226

## Greenhouse Management

### COURSE OUTLINE

#### Prerequisites:

None

#### Course Description:

Discusses the theoretical and applied practices of managing a greenhouse facility. Emphasizes greenhouse construction and design, environmental control, energy conservation, and related topics. Discusses fertilization and soils as it relates to greenhouse crop production.

**Semester Credits: 3 Lecture Hours: 2 Lab/Recitation Hours: 2**

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# Greenhouse Management – HRT 226

## Course Outcomes

**At the completion of this course, the student should be able to:**

1. Have a basic knowledge and understanding of the types of plant growing structures and how they function.
2. Have a basic knowledge and understanding of the environmental factors affecting plant production in the greenhouse environment.
3. Have a basic knowledge and understanding of the use of the function of soils, fertilizers and water in the greenhouse environment.
4. Have a basic knowledge and understanding of the types of crops or plants that may be produced in a greenhouse and how to grow them.
5. Have a basic knowledge and understanding of postharvest handling and marketing of greenhouse crops.

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# Class Name and Number

## Required Materials:

Textbook

Textbook:

Boodley, James and Newman, Steven: The Commercial Greenhouse, Cengage Learning Inc., Independence, KY, 3rd Edition, 2009. ISBN: 1-41803-079-1

The following supplementary materials are available:

- 1.
- 2.
- 3.

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## Class Name and Number

Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

1. The industry scope and development Week 1
  - a. Chapter 1, 2, and 3
2. Types of Plant Growing Structures
  - a. Chapter 4 & 5 Week 2
  - b. Chapter 6 Week 3
3. Effects of environmental factors on plant growth
  - a. Chapter 7 Week 3
  - b. Chapter 8 & 9 Week 4
  - c. Chapter 10 Week 5
4. Growing Media
  - a. Chapter 11 Week 5
  - b. Chapter 12 & 13 Week 6
5. Nutrition and Watering
  - a. Chapter 14 & 15 Week 7
  - b. Chapter 16 Week 8
6. Plant Propagation
  - a. Chapter 17 Week 8
  - b. Chapter 18 Week 9
7. Plant Pests in the Greenhouse
  - a. Chapter 19 Week 9
  - b. Chapter 20 Week 10
8. Plant Growth Regulators
  - a. Chapter 21 Week 10
9. Container Grown Crops
  - a. Chapter 22& 23 Week 11
  - b. Chapter 24 & 25 Week 12
  - c. Chapter 26 & 27 Week 13
  - d. Week 14 No Classes
  - e. Chapter 28 Week 15
10. Postharvest handling and marketing
  - a. Chapter 32 Week 15
  - b. Chapter 33 & 34 Week 16
11. Final Exam Week 17



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### Notes to Instructors

(List information about optional topics, departmental exams, etc)

1.

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