

Course Outline for HORT 50
INTRODUCTION TO HORTICULTURE
Effective: Fall 2020

I. CATALOG DESCRIPTION:

HORT 50 — INTRODUCTION TO HORTICULTURE — 3.00 units

Botanical nomenclature, anatomy and physiology, plant growth and development are presented. Soils, media, fertilizers, and watering methods are discussed. Preliminary Landscape design, installation and maintenance is included. Current practices of plant propagation, plant disorders and pest management, and 21st Century horticulture trends will be explored. (8 hours of lab to be scheduled on Saturdays which may include one or more field trips)

2.50 Units Lecture 0.50 Units Lab

Grading Methods:

Letter or P/NP

Discipline:

- Ornamental Horticulture

	MIN
Lecture Hours:	45.00
Expected Outside of Class Hours:	90.00
Lab Hours:	27.00
Total Hours:	162.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

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

- A. Select the correct horticultural practice to use, based on principles of plant growth and development
- B. Identify local micro-climates and relate them to plant growth
- C. Identify plants both by botanical nomenclature and common names
- D. Determine the correct fertilizer based on the information on the fertilizer label
- E. Sketch a basic landscape plan
- F. Draft an Integrated Pest Management Plan, a propagation protocol, or similar project or report, using the internet or other available resource material
- G. Identify the basic concepts of floral design, including selection and arrangement of flowers, foliage, form, color, and other aesthetic principles of design.

V. CONTENT:

- A. Botanical Nomenclature, anatomy and physiology
- B. Plant growth and development
- C. Micro-climates of Northern California
- D. Landscape planning
- E. Media, fertilizer, and watering
- F. Current research of plant propagation protocols and integrated pest management programs
- G. Basic design principles related to landscape and floral design.

VI. LAB CONTENT:

- A. Field identification of plants studied
- B. Propagation of plants studied.
- C. Practice relevant maintenance activities involved with managing plants studied.

VII. METHODS OF INSTRUCTION:

- A. **Lab** -
- B. **Lecture** -
- C. **Demonstration** -
- D. **Projects** -
- E. **Discussion** -

F. Field Trips -

VIII. TYPICAL ASSIGNMENTS:

- A. Weekly reading and associated homework assignments in textbook related to lecture topics
- B. Field trips to local gardens, such as the UC Berkeley Botanical Garden or the H.A.R.D. Japanese Garden
- C. Laboratory exercises, such as soil testing, plant identification, landscape design, and pruning
- D. Propagation by seed and cuttings

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - 1 Midterm, 1 Final Exam
- B. Quizzes
 - 5 Quizzes
- C. Papers
 - Minimum 1 Paper/Project
- D. Oral Presentation
 - Minimum 1 verbal and/or visual presentation
- E. Class Participation
 - Lab and Lecture participation
- F. Home Work
 - Typically per textbook chapter
- G. Lab Activities
 - Singly or Group Lab work

X. TYPICAL TEXTS:

- 1. Adams, Charles. *Principles of Horticulture: Level 2*. 7th ed., Routledge, Taylor, and Francis, 2014.
- 2. Rice, Laura. *Practical Horticulture*. 7th ed., Prentice Hall, 2011.
- 3. Riedel, Jodi, and Elizabeth Driscoll. *Horticulture Today*. 1st ed., Goodheart-Willcox Co., Inc., 2017.
- 4. Shry, Carroll, and H. Edward Reiley. *Introductory Horticulture*. 9th ed., Cengage, 2017.

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Appropriate sturdy footwear, and personal protective equipment, such as ear plugs, gloves, and safety glasses must be worn during certain lab activities, such as motorized equipment operation.
- B. Access to internet is required, in order to use online resource material and information posted onto College online programs.