HORT 50.1 Course Outline as of Spring 2012

CATALOG INFORMATION

Dept and Nbr: HORT 50.1 Title: INTRO HORTICULTURAL SCI
Full Title: Introduction to Horticultural Science
Last Reviewed: 12/14/2015

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 78.75

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 90

Catalog Description:
Introduction to horticulture with an emphasis on the basics of plant growth and development, plant descriptions and classification, plant propagation, soils, fertilizers, and water management. This is the first half of a two-part series exploring (1) horticulture as an applied science and (2) horticultural careers.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Introduction to horticulture with an emphasis on the basics of plant growth and development, plant descriptions and classification, plant propagation, soils, fertilizers, and water management. This is the first half of a two-part series exploring (1) horticulture as an applied science and (2) horticultural careers. (Grade or P/NP)
Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:	Fall 2023
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon successful completion of this course the student will be able to:
1. Describe the natural classification system for the plant kingdom.
2. Identify the parts of a typical higher green plant and describe their functions.
3. Define the processes of photosynthesis, respiration, and transpiration.
4. Summarize the environmental factors that affect plant growth.
5. Differentiate between sexual and asexual reproduction in plants and describe the characteristics of each process.
6. Distinguish between mitosis and meiosis in plants and describe the processes of each.
7. Classify and describe plants using plant keys, taxonomic terms, and botanical nomenclature.
8. Demonstrate techniques of propagation using various media and by a variety of methods, such as cuttings and seeds.
9. Differentiate among types of soils and explain how and why they differ.
10. Describe the four components of soils, the major soil separates, and soil textural and structural characteristics.
11. List the available forms of the elements essential to plant growth and describe their functions and deficiency symptoms in plants.
12. Define soil acidity and alkalinity in terms of pH.

Topics and Scope:

1. Definition and History of Horticulture
2. Plant Growth and Development
   a. Parts of a plant
   b. Structure of plant parts
   c. Juvenility and maturity
   d. Major plant processes
   e. What plants need for growth

3. Plant Reproduction
   a. Defined
   b. Sexual and asexual reproduction
4. Plant Classification
   a. Plant taxonomy
   b. Horticultural descriptions
   c. How plants are identified
   d. Visual descriptions
5. Plant propagation methods
   a. Sexual
   b. Asexual
6. Soils
   a. Soil separates
   b. Texture
   c. Structure
   d. Water holding
   e. Porosity
   f. pH
7. Fertilizers and Fertilization Methods
   a. Essential nutrients
   b. Organic & synthetic characteristics
   c. Methods of application
   d. Analysis & fertilizer label

Assignment:

1. Chapter reviews
2. Worksheets for videos and lectures
3. Plant classification exercises
4. Plant propagation activities
5. Two to three quizzes
6. Final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Worksheets	Writing 10 - 30%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Plant classification exercises	Problem solving 10 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Plant propogation activities and plant classification	Skill Demonstrations 5 - 10%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and final include multiple choice, true/false, matching items	Exams 40 - 60%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Ornamental Horticulture, Science, Operations & Management. DelMar, 2009.
Horticulture: Principles & Practices. Prentice Hall, 2002 (classic)
Instructor prepared materials