

Discipline: Agriculture	Sub-discipline: Environmental Horticulture
General Course Title: Floriculture Crop Production	Min. Units: 3 Semester
Proposed Suffix: L	
<p>Course Description:</p> <p>This course involves an analysis, description, and operation of greenhouses and other structures and facilities as they relate to floriculture. Included are; (A) Relationships of light, temperature, moisture, aeration, humidity, and fertility of floricultural crops; (B) Identification and investigation of major greenhouse grown crops including foliage plants, flowering potted plants, bedding plants, cut flowers, color and specialty crops; (C) Planning and implementing several cropping plans for floriculture plants and products.</p>	
Required Prerequisites or Co-Requisites ¹	
Advisories/Recommended Preparation ²	
<p>Course Objectives: <i>At the conclusion of this course, the student should be able to:</i></p> <ul style="list-style-type: none"> • List skills needed in the growing and marketing of floriculture products • Describe how the floriculture industry in California functions • Outline environmental factors affecting plant growth • Explain how to manipulate the growth environment for efficient use of resources and facilities • Identify selected plants from the various categories of floriculture crops • Identify markets for floriculture products and market crops grown by the class • Propagate, grow and market floriculture products for specific occasions 	
<p>Course Content:</p> <ol style="list-style-type: none"> 1. Basic introduction to the floriculture industry. 2. Environmental factors affecting plant growth <ol style="list-style-type: none"> a. light b. Temperature c. Humidity d. Moisture e. Air quality f. Photoperiod 3. Manipulation of environment <ol style="list-style-type: none"> a. Coldframes, hotbeds, greenhouses, shade houses, etc. b. Glazing materials for the above c. Heating, Cooling and ventilating growing facilities d. Manipulating humidity, fertility, air quality and soil moisture e. Hardening off product 4. Propagation, and production of various floriculture crops <ol style="list-style-type: none"> a. Cut flower production b. Potted plants -- foliage c. Potted plants -- flower d. Bedding plant production e. Specialty floriculture crop production <p>Floriculture Crop Production (Content Continued)</p>	

¹ Prerequisite or co-requisite course need to be validated at the CCC level in accordance with Title 5 regulations; co-requisites for CCCs are the linked courses that must be taken at the same time as the primary or target course.

² Advisories or recommended preparation will not require validation but are recommendations to be considered by the student prior to enrolling.

5. Media and containers for rooting, growing and marketing floriculture crops
 - a. Media for vegetative and seed propagation.
 - b. Growing media for floriculture crops.
 - c. Containers used for floriculture crops
6. Soil fertility
 - a. Essential plant food elements
 - b. Fertilizers
 - c. Ways to deliver fertilizer to your plants
 - d. Salinity and pH: how they affect the growing media
7. Insect and disease management
 - a. Integrated pest management
 - b. Conventional methods of pest and disease management
 - c. Organic alternatives to pest and disease management
 - d. Identification of major pests and diseases in floriculture crop management.
8. Marketing and pricing of floriculture crops
 - a. Market research
 - b. Marketing specialty products or holiday crops
 - d. Wholesalers, brokers, and retailers
9. Identification of major floriculture crops
 - a. Cut Flowers
 - b. Potted plants -- foliage
 - c. Potted plants -- flowering
 - d. Bedding plants
 - e. Perennials in containers
10. Customer relations
 - a. Communication styles
 - b. How to deal with a difficult customer
 - c. Telephone skills
 - d. Relating information
11. Elements of supervision
 - a. Do's and don'ts of supervising people
 - b. Basic leadership skills
 - c. Basic organizational skills

Laboratory Activities: Individual Laboratory Activities are designed to support course objectives.

Student Learning Outcomes

Identification:

The student will be able to identify the following with 80% accuracy:

1. Cut flowers and materials (10)
2. Tools and equipment (as appropriate)
3. Flowering potted plants (10)
4. Foliage plants (10)
5. Bedding plants (10)

The student will demonstrate knowledge in the following areas:

1. Factors affecting plant growth
2. Facilities and equipment used in growing floriculture crop.
3. Propagation principles involved in the production of floriculture crops
4. Growing media
5. Fertility and fertilizer application
6. Pests and diseases of floriculture crops
7. Marketing and sales of products

The student will demonstrate manual skill in the following areas:

1. Planting seed
2. Spotting off and transplanting
3. Pest and disease control
4. Watering crops properly
5. Development of specialty products. e.g. Moss Baskets, hanging plants
6. Supervising small groups of students in a lab setting.
7. Perform tests important to crop production. e.g. pH, salinity
8. Handling and applying fertilizers
9. Salesmanship

Methods of Evaluation: Lecture
Comprehensive Quizzes and Exams
Written Critical Thinking Scenarios
Problem Analysis and Solution
Research and Term Papers

Methods of Evaluation: Laboratory
Laboratory Skill Validation by Observation
Laboratory Projects and Reports
Laboratory Research Projects and Reports
Laboratory Skill Practicum Exams

Typical Textbooks, Manuals, or Other Support Materials

Boodley, James W. and Newman, Steven (2008). The Commercial Greenhouse 3E. Del Mar Cengage Learning, NY (ISBN-13: 978-1418030797).
Nelson, Paul V. (2012). Greenhouse Operation and Management. Prentice-Hall, NJ (ISBN: 13: 9780132439367)

Reference:

Ball, Vic (2003). Ball Red Book Volumes 1 & 2. Ball, IL (ISBN: Vol. 1, 13: 978-1883052348; Vol. 2, 13: 978-1883052355).
Dole, John M. and Harold Wilkins (2005) Floriculture: Principles and Species, 2/E (IBN: 13: 978-0130462503).
Laurie, Alex; Kiplinger, D.C.; Nelson, Kennard S. (1976). Commercial Flower Forcing. McGraw-Hill, NY (ISBN: 0-07-036633-0).
Larson, Roy A. (1992). Introduction to Floriculture. Academic Press, NY (ISBN: 13:978-0124376519).

Statewide Articulation: Transfers as lower division elective

FDRG Lead Signature:

Date:

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Internal Tracking Number

