

70 Agriculture/Park and Landscape Management

Definition

The courses offered are designed to prepare students for occupations in either the landscape or nursery business.

Staff

To access faculty and staff, dial (661) 722-6300, then the 4-digit extension.

Program Advisement:

Margaret Drake, Dean ext. 6327

Administrative Assistant:

Maureen Rethwisch ext. 6327

Faculty:

Neal Weisenberger ext. 6512

Lab Technician:

Marilyn Buchanan ext. 6254

Adjunct Faculty:

To access adjunct faculty voice mail, dial (661) 722-6300, then the 4-digit number.

V.M.

Sharon Weisenberger 2072

Program Description

The two-year certificate program is designed to prepare students for occupations in a field of horticulture such as landscape construction, landscape maintenance, and nursery operations. Completion of this program is one of the first steps toward obtaining a landscape contractor's license.

Students must receive a minimum grade of "C" or better in all required core courses and the specific courses listed as program electives in order to qualify for the degree or certificate.

Distinctive Features

Students enrolled in the Park and Landscape Management certificate program receive "hands-on" experience in all phases of landscape construction. The program also includes computer-aided instruction.

Career Options

Grounds Maintenance
Landscape Architect
Landscape Construction Worker
Landscape Contractor
Landscape Designer
Landscape Gardener
Nursery Worker

(Some of these careers may require education beyond the two-year college level.)

Certificate Programs

Environmental Horticulture

The following courses (31 units) are required for the certificate.

Required Courses:	units
AGRI 100, Fruit and Nut Production	3
AGRI 102, Plant Pest Control	3
AGRI 104, Nursery Practices	2
AGRI 110, Basic Landscape Design	2
AGRI 112, Plant and Landscape Maintenance	2
AGRI 130, Environmental Gardening	2
AGRI 132, Turf and Landscape Maintenance	2
AGRI 134, Plant Identification I	3
AGRI 212, Interior Plantscape	2
AGRI 230, Soils and Plant Nutrition	3
AGRI 234, Plant Identification II	3
BIOL 103, Introduction to Botany	4
Total	31

For a recommended plan of study for the certificate, please refer to the Associate Degree plan minus the general education requirements.

Landscape Construction

The following courses (51 units) are required for the certificate.

Required Courses:	units
AGRI 100, Fruit and Nut Production	3
AGRI 102, Plant Pest Control	3
AGRI 104, Nursery Practices	2
AGRI 110, Basic Landscape Design	2
AGRI 112, Plant and Landscape Maintenance	2
AGRI 130, Environmental Gardening	2
AGRI 132, Turf and Landscape Maintenance	2
AGRI 134, Plant Identification I	3
AGRI 153, Landscape Construction - Concrete & Masonry	3
AGRI 155, Landscape Construction - Wood & Lighting	3
AGRI 210, Advanced Landscape Design	3
AGRI 212, Interior Plantscape	2
AGRI 220, Landscape Irrigation	3
AGRI 230, Soil and Plant Nutrition	3
AGRI 234, Plant Identification II	3

AGRI 250, Landscape Management	2
BIOL 103, Introduction to Botany	4
BUS 111, Business English	3
MGT 201, Small Business Mgt.	3
Total	51

For a recommended plan of study for the certificate, please refer to the Associate Degree plan minus the general education requirements.

Locally Approved Certificate

Grounds Maintenance

The following courses (8 units) are required for the certificate.

Required Courses:	units
AGRI 104, Nursery Practices	2
AGRI 112, Plant and Landscape Maintenance	2
AGRI 130, Environmental Gardening	2
AGRI 132, Turf and Landscape Maintenance	2

Associate Degree

Environmental Horticulture

The requirements for an associate degree in Environmental Horticulture may be satisfied by completing 31 units of required courses, 21 units of general education requirements, and sufficient elective credits to total 60 units. (See Graduation/Associate Degree Requirements.)

Students who complete the associate degree have enhanced employability in the field of Environmental Horticulture, including nursery sales, landscape design, landscape technician, city and county park's worker and other similar career fields. They have enhanced promotional opportunities into supervisory and management positions as they gain experience with various agencies. The associate degree will also provide students with a broad range of knowledge with which to evaluate and appreciate the physical environment, the culture, and the society in which they live and with the ability to think and communicate clearly and effectively.

Except in cases of a prerequisite requirement, it is not required to take courses in exactly this sequence; they are recommended in this order to facilitate success.

Recommended Plan of Study

*First Semester (Fall)	units
AGRI 100, Fruit and Nut Production	3
AGRI 102, Plant Pest Control	3
AGRI 104, Nursery Practices	2
AGRI 110, Basic Landscape Design	2
AGRI 112, Plant and Landscape Maintenance	2
Course from GE requirement Area D1	<u>3</u>
Total	15

*Second Semester (Spring)	units
AGRI 130, Environmental Gardening	2
AGRI 132, Turf and Landscape Maintenance	2
AGRI 134, Plant Identification I	3
BIOL 103, Introduction to Botany	4
Course from GE requirement Area D2	<u>3</u>
Total	14

*Third Semester (Fall)	units
AGRI 212, Interior Plantscape	2
Course from GE requirement Area B	3
Course from GE requirement Area E	3
Course from GE requirement Area F	3
Elective	<u>3</u>
Total	14

*Fourth Semester (Spring)	units
AGRI 230, Soils and Plant Nutrition	3
AGRI 234, Plant Identification II	3
Course from GE requirement Area C	3
Electives	<u>8</u>
Total	17

Degree Total 60

* Students may begin the program at any point in the degree plan.

Landscape Construction

The requirements for an associate degree in Landscape Construction may be satisfied by completing 51 units of required courses, 21 units of general education requirements, and sufficient elective credits to total 69 units. (See Graduation/Associate Degree Requirements.)

Students who complete the associate

degree have enhanced employability in the field of Landscape Construction with emphasis in obtaining a Contractor’s License, other occupational careers including nursery sales, landscape design, landscape technicians, city and county park’s worker and other similar career fields. They have enhanced promotional opportunities into supervisory and management positions as they gain experience with various agencies. The associate degree will also provide students with a broad range of knowledge with which to evaluate and appreciate the physical environment, the culture, and the society in which they live and with the ability to think and communicate clearly and effectively.

Except in cases of a prerequisite requirement, it is not required to take courses in exactly this sequence; they are recommended in this order to facilitate success.

Recommended Plan of Study

*First Semester (Fall)	units
AGRI 100, Fruit and Nut Production	3
AGRI 102, Plant Pest Control	3
AGRI 104, Nursery Practices	2
AGRI 110, Basic Landscape Design	2
AGRI 112, Plant and Landscape Maintenance	2
AGRI 130, Environmental Gardening	2
Course from GE requirement Area D1	<u>3</u>
Total	17

*Second Semester (Spring)	units
AGRI 132, Turf and Landscape Maintenance	2
AGRI 134, Plant Identification I	3
AGRI 153, Landscape Construction - Concrete & Masonry	3
BIOL 103, Introduction to Botany	4
Course from GE requirement Area D2	<u>3</u>
Total	15

*Summer Semester	units
Course from GE requirement Area B	3
Course from GE requirement Area E	<u>3</u>
Total	6

*Third Semester (Fall)	units
AGRI 155, Landscape Construction - Wood & Lighting	3
AGRI 210, Advanced Landscape Design	3

AGRI 212, Interior Plantscape	2
AGRI 220, Landscape Irrigation	3
BUS 111, Business English	3
Course from GE requirement Area F	<u>3</u>
Total	17

*Fourth Semester (Spring)	units
AGRI 230, Soil and Plant Nutrition	3
AGRI 234, Plant Identification II	3
AGRI 250, Landscape Management	2
MGT 201, Small Business Mgt.	3
Course from GE requirement Area C	<u>3</u>
Total	14

Degree Total 69

* Students may begin the program at any point in the certificate/degree plan.

NOTE: Semester order for classes and time to complete may vary for night students.

Transfer

A bachelor’s degree in Landscape Architecture is available at Cal State Polytechnic Univ., Pomona and Cal Polytechnic State Univ., San Luis Obispo. Check the schools’ catalogs and consult with a counselor regarding transfer requirements.

A bachelor’s degree in Ornamental Horticulture is available from Cal State Polytechnic Univ., Pomona and Cal State Polytechnic Univ., San Luis Obispo, and Cal State Univ., Fresno.

Prerequisite Completion

If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order to enroll in the next course. According to Title 5, Section 55200(d), a satisfactory grade is a grade of “A,” “B,” “C” or “P”. Classes in which the Pass/No Pass option is available are indicated with an asterisk (*) before the course title. See “Pass/No Pass Option” in the catalog for full explanation.

Agriculture/Park and Landscape Management Courses

AGRI 100 *FRUIT AND NUT PRODUCTION

3 units

5 hours weekly

(2 hours lecture, 3 hours lab)

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

This course covers the botany, taxonomy, and development of major fruit, vine, and nut crops in California. Variety selection, production practices including site selection establishment, fertilization, pollination, irrigation, harvest, storage, processing, marketing, pest management and pruning are explored in this course. (CSU, UC, AVC)

AGRI 102 *PLANT PEST CONTROL

3 units

5 hours weekly

(2 hours lecture, 3 hours lab)

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

Focuses on the exploration, identification, and control of major horticultural pests, including insects, weeds, and diseases. The impact of pests on commercial nursery crops and the landscape is also discussed. Integrated pest management including cultural, biological, mechanical/physical and chemical control methods is emphasized. Course is designed to assist students in preparing for California licensing examinations in pest management. (CSU, AVC)

AGRI 104 *NURSERY PRACTICES

2 units

3 hours weekly

Advisory: Eligibility for READ 099.

Course involves plant propagation and production practices with emphasis on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, plant pest and disease control, structures and site layout. Preparation and use of

propagating and planting mediums. Use and maintenance of common tools and equipment. Regulations pertaining to plant production will be included. (CSU, AVC)

AGRI 110 *BASIC LANDSCAPE DESIGN

2 units

3 hours weekly

Advisory: Eligibility for READ 099 and MATH 070.

This course involves the study and implementation of the art and science of landscape design, including principles of design and the design process. Project emphasis is placed upon residential and small commercial sites. A home landscape design project is required. (CSU, UC, AVC)

AGRI 112 *PLANT AND LANDSCAPE MAINTENANCE

2 units

4 hours weekly

Advisory: Eligibility for READ 099 and MATH 070.

Skills used in a typical landscape maintenance program with emphasis on the plants in the landscape, including, but not limited to, planting, pruning and care of shrubs and trees. Care of turf areas will also be covered. (CSU, AVC)

AGRI 130 *ENVIRONMENTAL GARDENING

2 units

3 hours weekly

Advisory: Eligibility for READ 099.

A general course in environmental horticulture with emphasis on nursery operations, landscaping and turf management. Topics include basic botany, propagation, soils, fertilization, pest management, planting, container gardening, vegetable and fruit gardening, houseplants, turf grass installation and care. (CSU, AVC)

AGRI 132 *TURF AND LANDSCAPE MAINTENANCE

2 units

4 hours weekly

Advisory: Eligibility for READ 099 and MATH 070.

Skills used in a typical landscape maintenance program with emphasis on turf and ground covers in the landscape, including, but not limited to, planting and care of turf. Care and pruning of shrubs and trees will also be covered. (CSU, AVC)

AGRI 134 *PLANT IDENTIFICATION I

3 units

3 hours weekly

Advisory: Eligibility for READ 099.

This course involves identification, growth habits, culture and ornamental use of landscape plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurserymen & Garden Centers (CANGC) and Associated Landscape Contractors of America (ALCA) Certification Tests Plant Lists. Approximately 280 plants will be covered. A leaf collection will be required. The plants covered in this class differ from AGRI 234. (CSU, UC, AVC)

AGRI 153 *LANDSCAPE CONSTRUCTION - CONCRETE AND MASONRY

3 units

5 hours weekly

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

Construction and repair of concrete and masonry projects using materials and methods used in landscape construction. Discussion, as well as demonstrated manual skills needed to construct various concrete and masonry projects in a landscape, including ponds and waterfalls. (CSU, AVC)

AGRI 155 *LANDSCAPE CONSTRUCTION - WOOD AND LIGHTING

3 units

5 hours weekly

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

Construction and repair of wood, lighting and drainage projects using materials and methods used in landscape construction. Discussion, as well as demonstrated manual skills needed to construct various wood, lighting, and drainage projects in a landscape. (CSU, AVC)

AGRI 199 *OCCUPATIONAL WORK EXPERIENCE

1-8 units

hours vary

Prerequisite: To participate in work experience, students must have a job or internship which is either paid or voluntary and have the approval of the supervisor and instructor supervising work experience in the specific subject area. PRIOR TO ENROLLING, students must attend a scheduled orientation or meet individually with the supervising instructor for an individual orientation.

Occupational Work Experience Education is supervised employment designed to provide students a realistic learning experience through work. The ultimate goal is to teach students those skills and attitudes that will equip them to function and adapt as an employee in a variety of situations and jobs. Occupational Work Experience Education is supervised employment extending classroom-based occupational learning at an on-the-job learning station related to the students' educational major or occupational goal. Credit may be accrued at the rate of one to eight units per semester. For the satisfactory completion of all types of Cooperative Work Experience Education (WE 197 and WE 199), students may earn up to a total of sixteen semester credit hours. (CSU, AVC) (R3)

AGRI 210 *ADVANCED LANDSCAPE DESIGN

3 units

7 hours weekly

Advisory: Completion of AGRI 110, and Eligibility for READ 099 and MATH 070.

This advanced course involves the implementation of landscape design, including principles of design, the design process, drafting, graphics and presentation methods. Project emphasis is placed upon residential and small commercial sites. Course includes the use of computer landscape design programs. (CSU, AVC)

AGRI 212 *INTERIOR PLANTSCAPE

2 units

3 hours weekly

Advisory: Eligibility for READ 099.

Study of common plants used in interior plantscape. Will discuss how to use plants in the home or office, what plants are best suited, pests and diseases, and the environment needed to keep the plants alive. (CSU, AVC)

AGRI 220 *LANDSCAPE IRRIGATION

3 units

5 hours weekly

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

This course prepares students to design, install, and maintain a water-efficient landscape irrigation system. Topics include water supply, basic hydraulics, component identification and terminology, system layout, pipe sizing, types of heads, valves, controllers and practices related to appropriate horticulture for California. (CSU, AVC)

AGRI 230 *SOILS AND PLANT NUTRITION

3 units

5 hours weekly

(2 hours lecture, 3 hours lab)

Advisory: Eligibility for ENGL 099, READ 099 and MATH 070.

This course involves a study of soil derivation, classification and characteristics. Soil use and management including erosion, moisture retention, structure, cultivation, organic matter and microbiology. Laboratory topics include soil type, classification, soil reaction, soil fertility and physical properties of soil. (CSU, UC, AVC)

AGRI 234 *PLANT IDENTIFICATION II

3 units

3 hours weekly

Advisory: Eligibility for READ 099.

This course involves identification, growth habits, culture, and ornamental use of landscape plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurserymen & Garden Centers (CANGC) and Associated Landscape Contractors of America (ALCA) Certification Tests Plant Lists. Approximately 280 plants will be covered. A leaf collection will be required. The plants covered in this class differ from AGRI 134. (CSU, UC, AVC)

AGRI 250 *LANDSCAPE MANAGEMENT

2 units

4 hours weekly

Advisory: Eligibility for READ 099 and MATH 070.

This course is an introduction to professional landscape management practices, including bidding, estimating, contracts and various business management practices. (CSU, AVC)