

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

AGRI 600

COURSE TITLE

LANDSCAPE CONSTRUCTION-BASIC

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This is an open-entry/open-exit modular course in the entry level skills required for employment in the Landscape industry. The course includes instruction in safety procedures and proper use of hand and power tools; practice in fencing, carpentry, masonry, concrete, irrigation, plant ID, turf culture, elementary soil testing, plan reading, estimating and job readiness. Associate Degree Credit is available upon petition. (FT)

LECTURE HOURS

100

LABORATORY HOURS

350

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

Eighth grade reading level, ability to communicate effectively in the English language and knowledge of general math.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

To provide instruction in the correct procedures for safely operating hand tools; identifying commonly-used landscape plants; identifying common turf grasses; building wooden and chain link fencing to specifications and code. Provide instruction in carpentry techniques, masonry and concrete finishing, irrigation planning and installation, irrigation trouble shooting and programming electronic irrigation controllers. Provide instruction in the correct methods of collecting and preparing soil samples for elementary tests. Enhance the students reading, writing, math, and communication skills. Prepare students in the common business practices, ethics and integrity associated with the industry.

COURSE OBJECTIVES

Students will demonstrate through practical applications, written and oral communication skills, their ability to:

1. Apply general safety practices in addition to the specific procedures related to the landscape industry.
2. Elect and properly use the correct hand and power tools that are used in day to day landscaping and landscape maintenance.
3. Competently build various fences and structures using carpentry techniques.
4. Correctly build walls and various structures using masonry and concrete techniques.
5. Correctly identify common landscape plants and prescribe the proper care for each.
6. Competently install various types of irrigation systems according to plan specifications and local codes and program electronics irrigation controllers.
7. Correctly collect, prepare, and test soil samples for basic nutrients.
8. Demonstrate professional ethics, personal integrity, good business practices and customer relation skills, meeting the standards of the California Association of Landscape Contractors.

SECTION II

COURSE CONTENT AND SCOPE

Course modules of the program contain the following:

1. Unit Descriptions
2. Theory of Operations
3. Component Functions
4. Test Procedures
5. Practice
6. Related Terminology

Math review for this module will cover the following areas: Addition and Subtraction of Whole Numbers; Liquid and Dry Measurements

MODULE I SAFETY

25 HRS.

1. Hand and Power Tools
2. Facilities Orientation
 - 2.1. Safety equipment
 - 2.2. Types and locations
3. Common Types Of Injuries
4. Tool Safety
 - 4.1. Hand tools
 - 4.2. Power tools
5. Fire Safety
6. Chemical Safety
 - 6.1. Pesticides
 - 6.2. Fertilizers
 - 6.3. Test reagents
7. Material Safety Data Sheets (MSDS)

Math review for this Module will cover: Addition, Subtraction, Multiplication, and Division of Whole Numbers, Fractions and Decimals; Linear and Cubic Measures.

MODULE II CARPENTRY

50 HRS.

1. Wood
2. Fasteners
 - 2.1. Manual
 - 2.2. Compressed air and powder-activated
3. Fencing
4. Forms and Other Structures

MODULE III

100 HRS.

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CONCRETE AND MASONRY

1. Materials and Mixes
 - 1.1. Flat work
 - 1.2. Masonry
2. Pouring, Finishing and Repairs
3. Reinforcing Materials
4. Rock

MODULE IV

125 HRS.

IRRIGATION

COURSE CONTENT AND SCOPE (CONTINUED)

1. Pipes and Fittings
 - 1.1. Metals
 - 1.2. Plastics
2. Heads and Emitters
3. Measuring
 - 3.1. Plan views
 - 3.2. Water pressures and supply
4. System Design
 - 4.1. Charts
 - 4.2. Local codes
5. Installation

MODULE V

50 HRS.

MANAGEMENT TESTING

1. Soil Profiles
 - 1.1. Taking and preparing samples
 - 1.2. Basic testing and reporting
2. Fertilizers and Soil Amendments

MODULE VI

50 HRS.

PLANT IDENTIFICATION

1. Trees, Shrubs and Vines
2. Grasses and Ground Covers
3. House Plants

MODULE VII

25 HRS.

BIDDING AND ESTIMATING

MODULE VIII

25 HRS.

JOB READINESS

Note: Students may take and complete modules in different orders than listed.

APPROPRIATE READINGS

California Landscape Standards, Roger Fiske
Landscape Data Manual, T. Gabriel

WRITING ASSIGNMENTS

Typical writing assignments may include, but are not limited to:

1. Book reports.
2. Landscape estimates.

OUTSIDE ASSIGNMENTS

Students are expected to spend a minimum of one hour outside of class in practice and preparation for each hour of theory. Appropriate assignments, which may include, but are not limited to:

1. Reading appropriate magazines and articles.
2. Worksheets and Handouts.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Students will perform analysis and evaluation of reading and/or classroom materials and utilize this analysis in classroom discussions, writing assignments and in performing laboratory activities. Students must select and use appropriate methods and materials needed to complete laboratory assignments.

EVALUATION

A student's grade will be based upon multiple measures of performance. The assessment will measure development of independent critical thinking skills and will include evaluation of the student's ability to:

1. Complete construction projects.
2. Complete irrigation projects.
3. Complete bids and estimates.
4. Completed soil tests.

Satisfactory completion of the course requires completion of a culminating activity, which may include, but is not limited to, one of the following:

1. Written report.
2. Classroom presentation.
3. Research project.
4. Industry involvement.

The culminating activities require the students to use the new skills that he/she has acquired during the course.

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The student will receive an evaluation at the end of each module or when requested by the student. A grade point average of 2.0 or a letter grade of C or better must be achieved for satisfactory completion of the course.

Upon satisfactory completion of all units and modules, a course Certificate of Completion will be awarded.

NOTE: If a student's goal is to complete one or more of the individual modules, upon satisfactory completion of that module, a Certificate of Achievement will be issued.

METHOD OF INSTRUCTION

Classroom lectures, demonstrations, laboratory, audio-visual presentation and peer instruction. Group and individual instruction. Field trips, job shadowing and internships may be utilized.

TEXTS AND SUPPLIES

Texts:

Western Home Landscaping, Ken Smith, HP Books, Tucson, AZ
Sunset New Western Garden Book, Sunset Books, Menlo Park, CA

Instructor prepared handouts

PREPARED BY: Claude E. Richards DATE: October 10, 1995

REVISED BY: Instructional Services, SLOs added DATE: March 1, 2017

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog