

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

DSPS 645D

COURSE TITLE

GROUNDS MAINTENANCE-DISABLED

TYPE COURSE

NON-FEE

CATALOG COURSE DESCRIPTION

A vocational course for students with disabilities designed to provide training and instruction utilizing classroom and "hands-on" work experience. The course will prepare the student for employment in residential and commercial grounds maintenance occupations. (FT)

LECTURE/LABORATORY HOURS

15 hours per week
(for 18 weeks)

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

NONE

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 train adults with disabilities to gainful employment in positions in grounds maintenance occupations in the public and private sectors.

COURSE OBJECTIVES

Students will gain the necessary knowledge and skills in the following areas:

1. Ground safety.
2. Grounds maintenance cleanup.
3. Maintenance.
4. Watering.
5. Fertilizers.
6. Planting.
7. House and container plants.
8. Propagation.
9. Pest control.
10. Greenhouse maintenance.

SECTION II

COURSE CONTENT AND SCOPE

1. Orientation
 - 1.1. Student policy
 - 1.1.1. Behavior
 - 1.1.2. Attendance
 - 1.1.3. Attire – grooming
 - 1.2. Shop
 - 1.2.1. Location of offices – student areas
 - 1.2.2. Tool room
 - 1.2.2.1. Location
 - 1.2.2.2. Tool ID
 - 1.2.3. Machine storage areas
 - 1.2.3.1. Location

GROUNDS MAINTENANCE-DISABLED

PAGE 3

- 1.2.3.2. Machine ID
- 1.3. General safety
 - 1.3.1. Shop safety
 - 1.3.2. Hand tool safety
 - 1.3.3. Machine safety
 - 1.3.4. Gasoline safety
- 2. Grounds Maintenance Clean-Up
 - 2.1. Areas of service
 - 2.1.1. Lawn and ground covers
 - 2.1.1.1. Rakes
 - 2.1.1.2. Ground cloths
 - 2.1.1.3. Trash cans and liners
 - 2.1.2. Walks and patios
 - 2.1.2.1. Hose with sweeper nozzle
 - 2.1.2.2. Brooms
 - 2.1.2.3. Dust collectors
 - 2.1.2.4. Blower (back pack)
 - 2.1.2.4.1. Start-up
 - 2.1.2.4.2. Operation
 - 2.1.2.5. Safety of all equipment
 - 2.1.3. Planters and shrub beds (weed-control)
 - 2.1.3.1. Common hoes
 - 2.1.3.1.1. Uses
 - 2.1.3.1.2. Operation
 - 2.1.3.2. Scuffle hoes
 - 2.1.3.2.1. Uses
 - 2.1.3.2.2. Operation
 - 2.1.3.3. Cultivators
 - 2.1.3.3.1. Uses
 - 2.1.3.3.2. Operation
 - 2.1.3.4. Shovels
 - 2.1.3.4.1. Types
 - 2.1.3.4.2. Uses
 - 2.1.3.4.3. Operation
 - 2.1.4. Parking lots
 - 2.1.4.1. Vacuums
 - 2.1.4.1.1. Types
 - 2.1.4.1.2. Uses
 - 2.1.4.1.3. Operation
 - 2.1.4.2. Sweepers
 - 2.1.4.2.1. Types
 - 2.1.4.2.2. Uses
 - 2.1.4.2.3. Operation
 - 2.2. Safety
 - 2.2.1. Hand tools
 - 2.2.2. Power equipment

COURSE CONTENT AND SCOPE (CONTINUED)

GROUNDS MAINTENANCE-DISABLED

PAGE 4

- 2.3. Care and maintenance of equipment
 - 2.3.1. Hand tools
 - 2.3.2. Power equipment
- 3. Maintenance
 - 3.1. Areas of service
 - 3.1.1. Lawns and ground covers
 - 3.1.1.1. Equipment
 - 3.1.1.1.1. Mowers
 - 3.1.1.1.1.1. Types
 - 3.1.1.1.1.2. Operation
 - 3.1.1.1.2. Edgers

COURSE CONTENT AND SCOPE (CONTINUED)

- 3.1.1.1.2.1. Types
 - 3.1.1.1.2.2. Operation
 - 3.1.1.1.3. Line trimmers
 - 3.1.1.1.3.1. Types
 - 3.1.1.1.3.2. Uses
 - 3.1.1.1.3.3. Operation
 - 3.1.1.1.4. Renovators
 - 3.1.1.1.4.1. Uses
 - 3.1.1.1.4.2. Operation
 - 3.1.1.1.5. Aerators
 - 3.1.1.1.5.1. Uses
 - 3.1.1.1.5.2. Operation
 - 3.1.1.2. Safety
 - 3.1.1.3. Care and maintenance of equipment
 - 3.1.2. Trees and shrubs
 - 3.1.2.1. Pruning
 - 3.1.2.1.1. Purpose
 - 3.1.2.1.2. Methods
 - 3.1.2.1.3. Equipment
 - 3.1.2.1.3.1. Hand
 - 3.1.2.1.3.1.1. Shears
 - 3.1.2.1.3.1.2. Saws
 - 3.1.2.1.3.1.3. Loppers
 - 3.1.2.1.3.1.4. Pole pruners
 - 3.1.2.1.3.2. Power
 - 3.1.2.1.3.2.1. Hedge shears
 - 3.1.2.1.3.2.2. Chain saw
 - 3.1.2.1.3.3. Safety
 - 3.1.2.1.3.3.1. Procedures
 - 3.1.2.1.3.3.2. Equipment safety
 - 3.1.2.1.3.4. Care and maintenance of equipment
 - 3.1.2.1.3.4.1. Hand tools
 - 3.1.2.1.3.4.2. Power equipment
4. Watering
 - 4.1. Purpose

GROUNDS MAINTENANCE-DISABLED

PAGE 5

- 4.2. Methods of application
 - 4.2.1. Hose nozzles
 - 4.2.1.1. Hand held
 - 4.2.1.2. Stationary
 - 4.2.1.3. Root watering
 - 4.2.2. Sprinkler systems
 - 4.2.2.1. PVC
 - 4.2.2.2. Older installation
 - 4.2.2.2.1. Copper
 - 4.2.2.2.2. Galvanized
 - 4.2.2.3. Drip

COURSE CONTENT AND SCOPE (CONTINUED)

- 4.2.2.4. Automated sprinkler systems
 - 4.2.3. Trench
- 4.3. Simple repairs of PVC and hoses
- 4.4. Care of watering equipment
- 5. Fertilizers
 - 5.1. Purpose
 - 5.2. Nutrients
 - 5.2.1. Major
 - 5.2.2. Minor
 - 5.3. Types
 - 5.3.1. Granular
 - 5.3.2. Liquid
 - 5.3.3. Tablets
 - 5.4. Methods of application
 - 5.4.1. Spreaders
 - 5.4.1.1. Gravity
 - 5.4.1.2. Centrifugal
 - 5.4.1.3. Hand broadcasting
 - 5.4.2. Sprayers
 - 5.4.2.1. Pump
 - 5.4.2.2. Hose end
 - 5.5. Care and maintenance of equipment
- 6. Planting
 - 6.1. Lawns
 - 6.1.1. Preparation of area
 - 6.1.1.1. Tools
 - 6.1.1.2. Machines
 - 6.1.2. Selection of plant material
 - 6.1.2.1. Types of lawn
 - 6.1.2.2. How to choose
 - 6.1.3. Selection of plant stock
 - 6.1.3.1. Types of stock
 - 6.1.3.1.1. Seed
 - 6.1.3.1.2. Stolons
 - 6.1.3.1.3. Sod

6.1.3.1.4. Plugs

6.1.4. Ammendments

6.1.4.1. Types

6.1.4.2. How to choose

6.1.5. Planting techniques

6.1.5.1. Seed

6.1.5.2. Stolons

6.1.5.3. Sod

6.1.5.4. Plugs

6.1.6. Early maintenance

6.2. Trees and shrubs

COURSE CONTENT AND SCOPE (CONTINUED)

6.2.1. Preparation of area

6.2.2. Selection of plant materials

6.2.2.1. Types

6.2.2.2. How to choose

6.2.3. Ammendments

6.2.3.1. Types

6.2.3.2. How to choose

6.2.4. Planting techniques

6.2.4.1. Tools

6.2.4.2. Size of hole

6.2.4.3. Refilling hole

6.2.5. Early maintenance

6.3. Ground covers and bedding plants

6.3.1. Preparation of area

6.3.1.1. Tools

6.3.1.2. Machines

6.3.2. Selection of plant materials

6.3.2.1. Types of plants – general

6.3.2.2. How to choose

6.3.3. Ammendments

6.3.3.1. Types

6.3.3.2. How to choose

6.3.4. Planting techniques

6.3.4.1. Rooted stock

6.3.4.2. Plugs

6.3.4.3. Seed

6.3.5. Early maintenance

7. Houseplants and Container Plants

7.1. Selection of plants materials

7.2. Selection of container

7.3. Planting medium

7.4. Planting techniques

7.5. Water requirements

7.6. Light requirements

7.7. Fertilizer requirements

GROUNDS MAINTENANCE-DISABLED

PAGE 7

- 8. Propagation
 - 8.1. Purpose
 - 8.2. Types
 - 8.2.1. Cuttings
 - 8.2.1.1. Hardwood
 - 8.2.1.1.1. Tools
 - 8.2.1.1.2. Techniques
 - 8.2.1.2. Softwood
 - 8.2.1.2.1. Tools
 - 8.2.1.2.2. Techniques

8.2.2. Grafting

COURSE CONTENT AND SCOPE (CONTINUED)

- 8.2.2.1. Tools
 - 8.2.2.2. Techniques
 - 8.2.3. Divisions
 - 8.2.3.1. Tools
 - 8.2.3.2. Techniques
 - 8.2.4. Seed
 - 8.2.4.1. Tools
 - 8.2.4.2. Techniques
 - 8.2.5. Air layering
 - 8.2.5.1. Tools
 - 8.2.5.2. Techniques
- 9. Pest Control
 - 9.1. Types of pests
 - 9.1.1. Insect
 - 9.1.2. Rodent
 - 9.1.3. Weed
 - 9.1.4. Bacterial disease
 - 9.1.5. Fungal disease
 - 9.2. Types of control
 - 9.2.1. Natural
 - 9.2.2. Chemical
 - 9.2.2.1. Types of chemicals
 - 9.2.2.2. Methods of application
 - 9.3. Safety
 - 9.3.1. Safety in handling
 - 9.3.2. Choice of proper pesticide
- 10. Greenhouse Maintenance
 - 10.1. Special safety measures
 - 10.2. Cleanliness
 - 10.3. Temperature control
 - 10.4. Humidity control
 - 10.5. Fertilizer application
 - 10.6. Repair of glazing material

All students will begin with Lesson 1. They will then progress with the class through the

GROUPS MAINTENANCE-DISABLED

PAGE 8

remaining lessons at the rate of two per week. There will be a combination of three hours lecture and three hours lab for each lesson and one day for review of both lessons.

APPROPRIATE READINGS

NONE

WRITING ASSIGNMENTS

NONE

OUTSIDE ASSIGNMENTS

NONE

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

NONE

EVALUATION

1. Oral/written examination.
2. Observation.
3. Time studies.
4. Pre-post testing.
5. Behavior and performance charting.

METHOD OF INSTRUCTION

1. Demonstration.
2. Lectures – task analysis.
3. Industrialized educational programs.
4. Small group instruction.
5. Audio-visual aides.
6. Class discussion.

TEXTS AND SUPPLIES

NONE

GROUPS MAINTENANCE-DISABLED

PAGE 9

PREPARED BY Judy Brae DATE 1/20/84

REVISED BY Marie Doerner DATE May 27, 2008

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