

CATALOG INFORMATION

Dept and Nbr: HORT 69.2 Title: ADAPTIVE HORTICULT
Full Title: Adaptive Horticulture
Last Reviewed: 5/19/2003

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	16	Lecture Scheduled	32.00
Minimum	3.00	Lab Scheduled	3.00	16	Lab Scheduled	48.00
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	80.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 64.00

Total Student Learning Hours: 144.00

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly: AG 297.34F

Catalog Description:
This course focuses on the design and use of therapeutic gardening environments and activities to meet the needs of seniors and individuals with disabilities. Students gain experience designing and adapting horticultural tools, equipment, and facilities, including raised beds and garden containers. Adaptive garden and greenhouse design, accessibility under the Americans with Disabilities Act, and universal design principles will be covered.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Design and use of adaptive horticulture techniques, tools, structures, and activities for gardening with seniors and individuals with disabilities. Includes accessibility and universal design principles. (Grade Only)
Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

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:		Effective:	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

Upon completion of this course, the student will be able to:

1. Design, construct, and use therapeutic gardening environments and activities to meeting the needs of seniors and individuals with disabilities.
2. Apply principles of adaptive horticulture to the creation of a safe and accessible environment for horticultural therapy participants.
3. Analyze the adaptations and modifications in gardens, greenhouses, and workspaces utilized by special needs populations in horticultural therapy programming and apply to the creation and/or utilization of adaptive gardens, tools, and equipment.
4. Assess the Americans with Disabilities Act (ADA) requirements for an identified horticultural structure and implement the necessary adaptations in accordance with the ADA and universal design precautions.
5. Identify plant material that is successful for horticultural therapy programs.
6. Compile resources, including equipment and materials, supplies, and books/reference materials, for use in adaptive horticulture program implementation.

Topics and Scope:

I. Introduction

A. Definitions related to adaptive horticulture

1. Adaptive - to change a structure to fit a new or special use situation
2. Accessible - easily approached or entered

B. Settings for adaptive horticulture

1. Gardens
 - a. Traditional garden
 - b. Raised bed garden
 - c. Container garden
2. Greenhouses
- C. Resources
 1. The Americans with Disabilities Act
 2. Universal design principles
- II. Populations
 - A. Review of populations
 1. Developmentally disabled
 2. Older adults, geriatrics
 3. Physically challenged
 4. Children, at-risk youth
 5. Mentally ill, disadvantaged
 6. Individuals recovering from substance abuse
 - B. Specific adaptations
 1. Communication tools
 - a. Individuals with hearing and sight impairments
 - b. Individuals lacking literacy skills
 2. Location considerations
 - a. Site accessibility
 - b. Safety issues and concerns
- III. Adaptive Garden Structures
 - A. Raised Beds Types and Use
 1. Standard bed
 2. Tabletop planter
 3. Combination bed
 2. Design and construction of one type of bed
 - B. Garden Containers
 1. Types and Use
 - a. Vertical wall garden
 - b. Hanging basket garden
 2. Demonstration of one type of container
- IV. Accessible Garden Design Principles
 - A. Accessibility
 1. Definition of accessible
 2. Americans with Disabilities Act
 - B. Pathways
 1. Accessibility requirements
 - a. Width requirements
 - b. Grading and slope
 2. Surface materials for pathways
 - a. Various materials
 - b. Advantages, disadvantages of each
 - C. Elements of design
 1. Accessibility of site
 2. Incorporating containers and pathways
 3. Maneuverability
 4. Resources such as water and electricity
- V. Adaptive tools and equipment
 - A. Types of tools and equipment

1. Hand tools
2. Digging tools
3. Planting tools
4. Pruning tools
- B. Modifying existing tools and equipment
 1. Handle extensions
 2. Grip improvements to hand tools
- C. Making an adaptive tool
 1. Hand tool with recycled products
 2. Planting tool with PVC pipe
- D. Tools for specific populations
 1. Which tool for which disability
 2. What tool for what activity
3. Benefits obtained from each tool
 - E. Mobility Aids
 1. Knee benches
 2. Carts and wheelbarrows
 3. Sitting benches
- VI. Accessible Greenhouse Design
 - A. Structures
 1. Potting benches
 2. Storage containers
 3. Standard benches
 - B. Therapeutic design
 1. Greenhouse aisles
 - a. Accessibility requirements
 - b. Maneuverability
 2. Greenhouse entrance way
 - a. Accessibility requirements
 - b. Accessible ramps
 3. Interior design
 - a. Wheelchair accessible design
 - b. Classroom design
 - c. Production design
- VII. Adaptive techniques
 - A. Activities appropriate for
 1. Each population
 2. Goal of group
 3. Goal of program
 - B. Adaptations for specific populations
 1. Identifying specific adaptation(s)
 2. Identifying adaptive tools
 3. Adapting activity for different individuals
- VIII. Plant material
 - A. Recommended plants for bed and/or container
 - B. Recommended plants for therapeutic projects
- IX. Resources
 - A. Books
 - B. Organizations
 - C. Suppliers

Assignment:

1. Design and/or construct raised garden beds and various garden containers.
2. Plan and design an accessible greenhouse for individuals with disabilities.
3. Develop an adaptive horticulture activity to meet the needs of a horticulture therapy program participant.
4. Field trip and 2-page field trip report.
5. Reports based on 2-3 in-class speakers' presentations (1-2 pages).
6. One professional article review.
7. Term paper on a specific horticultural therapy topic.
8. Reading assignments (15-20 pages per week) and summaries.
9. 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.

Written homework, Reading reports, Term papers, Speaker reports. Field trip report.

Writing
20 - 40%

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

Plans & designs.

Problem solving
20 - 40%

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

None

Skill Demonstrations
0 - 0%

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

Multiple choice, True/false, Matching items, Completion, Short answer.

Exams
20 - 30%

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

Field trip attendance and class participation.

Other Category
10 - 20%

Representative Textbooks and Materials:

The Enabling Garden: Creating Barrier-Free Gardens. Gene Rother, HTR, 1994, Taylor Publishing Company.

Accessible Gardening: Tips and Techniques for Seniors and the Disabled. Joann Woy, Stackpole Books, 1997.

