

Section I: Course Description

[Print Outline](#)

Department: Landscape Horticulture (LHO)

Curriculum: Landscape and Environmental Horticulture

Course Title: Horticulture Science II

Course Number: LHO151

Type Of Course: Vocational Preparatory

Course Length: 1 Quarter

Credit Hours: 2

Lecture Hours: 22

Lab Hours: 0

Class Size: 25

Prerequisites: LHO 150

Division: Hospitality and Service Occupations

Revision: S. Skamser

Effective Date: June 2000

Status: Active

Course Description

Exploration and discussion of plant-soil-water relations, metabolism, control of growth and development, plant adaptations, ecology and environmental considerations. Emphasis is placed on group research project involving an environmental topic related to horticulture industry.

Section II: Student Learning Outcomes

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Student Learning Outcomes

1. Communication - Read and listen actively to learn and communicate. Speak and write effectively for presentation of the group project.
2. Human Relations - Use social interactive skills to work in groups effectively toward the project goals.
3. Critical Thinking and Problem-Solving - Think critically about plant process to evaluate plant growth and solve plant problems.
4. Personal Responsibility - Be motivated and able to continue learning and adapt to changes in the industry and work. Value and capitalize on one's own skills, abilities, ideas and art. Take pride in one's work. Manage personal health and safety. Be aware of civic and environmental issues in the field of horticulture and their importance

Section III: Course Objectives

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General Course Objectives

At the end of the course the student will:

1. Understand the ecology of plants and the impact on growth and development.
2. Understand the plant systems, how they interact with their environment, and how the horticulturist can manipulate them.
3. Raise awareness of environmental issues and their relation to the industry through a term project.
4. Experience working in a group on a research project and presentation of the results to the class.

Section IV: Course Outline

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Topical Course Outline

Topical Outline:	Approx. Hours
I. Ecology	4
II. Plant adaptations	3
III. Plant-soil-water relations	5
IV. Plant metabolism	2
V. Control of growth and development	3
VI. Environment and plant growth	3
VII. Horticulture industry and the environment	2
Total	22

Section I: Course Description

[Print Outline](#)

Department: Landscape Horticulture (LHO)

Division: Hospitality and Service Occupations

Curriculum: Landscape and Environmental Horticulture

Revision: S. Skamser

Course Title: Horticulture Science I

Effective Date: June 2002

Course Number: LHO150

Status: Active

Type Of Course: Vocational Preparatory

Course Length: 1 Quarter

Credit Hours: 2

Lecture Hours: 22

Lab Hours: 0

Class Size: 25

Prerequisites: None

Course Description

Discover the basic principles of plant anatomy, physiology, adaptations, control of growth and development, plant-soil-water relations and ecological considerations in two quarters.

Section II: Student Learning Outcomes

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Student Learning Outcomes

1. Personal Responsibility - Use personal work ethic to manage greenhouse and complete work in greenhouse lab. Take pride in one's own skills and abilities.
2. Human Relations - Use social interactive skills to work in groups effectively.
3. Critical Thinking and Problem Solving - Think critically evaluating information, solving problems and making decisions.

Section III: Course Objectives

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General Course Objectives

At the end of the course the student will:

1. Understand the various areas of horticulture.
2. Understand the basics of binomial nomenclature.
3. Be able to distinguish between common plant classifications applicable to horticulture.
4. Understand the basis of plant life.
5. Be able to describe and identify basic plant anatomical structures with an understanding of modifications for adaptability.
6. Be able to use the information to identify plant structures for plant identification, pruning and propagation.
7. Acquire knowledge of science as it applies to practical horticulture.

Section IV: Course Outline
Topical Course Outline

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Topical Outline: Hours	Approx.
I. Introduction to various areas of horticulture	1
II. Plant binomial nomenclature	2
III. Plant classifications for horticulture	2
IV. Gross morphology and functions of roots	
V. Gross morphology and functions of stems	
VI. Gross morphology and functions of flowers, fruits & seeds	3
VII. Basis of plant life	1
VIII. Basics of cells and tissues	2
IX. Tissue patterns in roots, stems and leaves	5
X. Internal pathways of water, mineral nutrients and manufactured foods	1
	Total 22