

Prepared by Department of Natural Sciences & Life Fitness

Date of Departmental Approval: December 3, 2007

Date approved by Curriculum and Programs: December 5, 2007

Effective: Fall 2008

1. Course Number: HOR103
Course Title: Woody Plant Identification and Culture

2. Description: The identification and culture of native and ornamental plants and shrubs are discussed. Plant requirements, characteristics and placement as well as susceptibility to diseases and pests are reviewed. Methods of pruning, fertilizing and special needs are discussed.

3. Student Learning Outcomes: (instructional objectives, intellectual skills):

Upon successful completion of this course, students are able to do the following:

- Identify deciduous shrubs (lilacs, viburnums, etc.).
- Identify broadleaf evergreen shrubs (rhododendron, hollies, euonymus etc.)
- Identify needled evergreen shrubs (junipers, yews etc.)
- Identify needled trees (pines, firs, spruces, hemlocks etc.)
- Identify deciduous trees (oaks, ashes, maples, birches etc.)
- Place trees and shrubs based on need (sun, shade, size, exposure etc.)
- Plant, transplant and prune trees and shrubs properly.
- Select and apply fertilizer based on needs.
- Identify numerous trees and shrubs using both summer and winter characteristics.

4. Credits: 3 credits

5. Satisfies General Education Requirement: No

6. Prerequisite: None

7. Semester(s) Offered: Fall

8. Suggested General Guidelines for Evaluation: Weekly quizzes, Exam, Comprehensive Final Exam, Herbarium Project

9. General Topical Outline (Optional): See attached.

HOR103. Woody Plant Identification and Culture Course Outline

I. Woody Plant Identification

- a. Plant Nomenclature
- b. Plant Identification Characteristics
 - i. Leaf Anatomy
 - ii. Twig and Branch Anatomy
 - iii. Flowers and Fruit
 - iv. Needles and Cones
- c. Plant Identification Keys
- d. The Coniferous Evergreens
 - i. Identification and culture of Pines, Spruces, Firs, Hemlocks, Yews, Douglas Firs, Junipers and Arborvitae.
 - ii. Common Insects and Diseases of the Coniferous Evergreens.
- e. The Broadleaf Evergreens
 - i. Identification and Cultural Requirements of the Hollies, Rhododendrons, Azaleas, Andromedas, Boxwoods, Euonymus, Skimmia and other common species.
 - ii. Insect and Disease Problems of the Broadleaf Evergreens.
- f. The Deciduous Trees and Shrubs
 - i. Identification and Cultural Requirements of Common Native and Ornamental Species.
 - ii. Common Insects and Diseases of Deciduous Trees and Shrubs.

II. Woody Plant Culture

- a. Fertilizers and Fertilizing.
- b. Planting and Transplanting.
- c. Pruning of Trees and Shrubs.

III. Diagnosing Plant Problems

IV. Trees and Shrubs for Special Conditions

- a. Shade and Street Trees
- b. Trees and Shrubs with Persistent Fruit
- c. Trees and Shrubs for Shady Conditions
- d. Trees and Shrubs for Coastal Conditions