

## Milwaukee Area Technical College

# **HORT-114 Survey of Woody Ornamental Plants**

# **Course Outcome Summary**

**Course Information** 

**Description** Plant classification and the techniques of plant identification are explained. The

student utilizes these techniques in identifying commonly used deciduous and

evergreen trees and shrubs.

Total Credits 3
Total Hours 64

Types of Instruction

Instruction Type Credits/Hours

Lecture 2 crs / 32 hrs

On Campus Lab 1 crs / 32 hrs

#### Career Essentials

1. Effective Communication in Writing

### **Program Outcomes**

### 1. Diagnose plant health

Status WIP

### Criteria

- 1.1. learner gathers diagnostic information
- 1.2. learner describes methods of plant sample collection and preparation for lab analysis
- 1.3. learner recommends appropriate remedial options
- 1.4. learner recognizes common biotic and abiotic disease agents and common plant injuries
- 1.5. learner differentiates between signs and symptoms

### 2. Communicate as a horticulture professional

Status WIP

#### Criteria

- 2.1. learner refers to plants by common and approved nomenclature
- 2.2. learner articulates phases of project management
- 2.3. learner displays professional character
- 2.4. learner interacts with professional organizations, colleagues, and community
- 2.5. learner applies current technology to the profession

#### 3. Provide horticulture maintenance

Status WIP

#### Criteria

- 3.1. learner protects existing vegetation, structures, and property
- 3.2. learner implements cultural practices to maintain plants and or communities
- 3.3. learner operates maintenance equipment
- 3.4. learner schedules maintenance operations

3.5. learner adheres to safety standards

### 4. Apply the principles of plant science

Status WIP

#### Criteria

- 4.1. learner identifies parts of a plant
- 4.2. learner identifies plants by their characteristics
- 4.3. learner summarizes the plant's physiological process
- 4.4. learner selects the right plant for the right place
- 4.5. learner determines the correct plant cultural requirements

### **Course Competencies**

### 1. Explain the binomial system of nomenclature.

### **Linked Program Outcomes**

Communicate as a horticulture professional

### **Assessment Strategies**

1.1. Competency will be demonstrated by a written quiz.

#### Criteria

Your performance will be successful when:

- 1.1. Learner explains relationships among the taxa with 80% accuracy.
- 1.2. Learner relates the importance of the family with 80% accuracy.
- 1.3. Learner evaluates the importance of genus with 80% accuracy.
- 1.4. Learner reviews the importance of species with 80% accuracy.

### **Learning Objectives**

- 1.a. analyze taxonomy
- 1.b. classify plant families
- 1.c. categorize plant genera
- 1.d. classify plant species
- 1.e. utilize a dichotomous key

### 2. Distinguish phyllotaxis.

#### **Linked Program Outcomes**

Diagnose plant health

Apply the principles of plant science

#### **Assessment Strategies**

2.1. Competency will be demonstrated by written quiz.

#### Criteria

- 2.1. Identify opposite leaf arrangement with 100% accuracy.
- 2.2. Identify alternate leaf arrangement with 100% accuracy.

### **Learning Objectives**

- 2.a. identify opposite branching plants
- 2.b. identify alternate branching plants
- 2.c. identify simple leaves
- 2.d. identify compound leaves

### 3. Differentiate plants by genus Latin name.

#### **Linked Career Essentials**

Effective Communication in Writing

#### **Linked Program Outcomes**

Communicate as a horticulture professional

### **Assessment Strategies**

- 3.1. Competency will be demonstrated by weekly quizzes in the field or the classroom.
- 3.2. Competency will be demonstrated by four major exams in the field or the classroom.

#### Criteria

#### Your performance will be successful when:

3.1. Learner identifies plants to the genus level in field or plant samples in classroom with 80% accuracy.

3.2. Learner classifies plants by genus Latin name with 80% accuracy.

### **Learning Objectives**

- 3.a. identify genus
- 3.b. label genera by Latin names

### 4. Differentiate plants by genus common name.

#### **Linked Program Outcomes**

Communicate as a horticulture professional

Provide horticulture maintenance

#### **Assessment Strategies**

- 4.1. Competency will be demonstrated by weekly quizzes in the field or the classroom.
- 4.2. Competency will be demonstrated by four major exams in the field or the classroom.

#### Criteria

- 4.1. Learner identifies plants to the genus level in field or plant samples in classroom with 80% accuracy.
- 4.2. Learner classifies plants by genus common name with 80% accuracy.

### **Learning Objectives**

- 4.a. identify genus
- 4.b. label genera by common names

### 5. Differentiate species within each genus by Latin name.

#### **Linked Career Essentials**

Effective Communication in Writing

#### **Assessment Strategies**

- 5.1. Competency will be demonstrated by weekly quizzes in the field or the classroom.
- 5.2. Competency will be demonstrated by four major exams in the field or the classroom.

#### Criteria

#### Your performance will be successful when:

- 5.1. Learner identifies plants to the species level in field or plant samples in classroom with 80% accuracy.
- 5.2. Learner classifies plants by species Latin name with 80% accuracy.

#### **Learning Objectives**

- 5.a. identify species
- 5.b. label species by Latin names

#### 6. Differentiate species within each genus by common name.

### **Assessment Strategies**

- 6.1. Competency will be demonstrated by weekly guizzes in the field or the classroom.
- 6.2. Competency will be demonstrated by four major exams in the field or the classroom.

#### Criteria

- 6.1. Learner identifies plants to the species level in field or plant samples in classroom with 80% accuracy.
- 6.2. Learner classifies plants by species common name with 80% accuracy.

#### **Learning Objectives**

- 6.a. identify species
- 6.b. label species by common names

### Revised By:

Cassie Brayton

#### **Revision Date:**

3/4/20