



Western Technical College

## 10001117 Landscape Maintenance 1

### Course Outcome Summary

#### Course Information

<b>Description</b>	This course will provide "hands-on" learning opportunities for the students in landscape maintenance. Students will experience the operation of landscape tools and equipment, as well as learn and practice maintenance skills such as tree and shrub planting, incorporating soil amendments to planting beds, fertilizing, mulching, as well as the operation of skid steer endloaders, landscape tractors, and trucks with trailers. Students will also learn proper safety practices for equipment, tools, supplies and personal protection equipment.
<b>Career Cluster</b>	Agriculture, Food and Natural Resources
<b>Instructional Level</b>	Associate Degree Courses
<b>Total Credits</b>	2
<b>Total Hours</b>	54

#### Textbooks

No textbook required.

#### Learner Supplies

Sturdy closed-toed shoes/boots.**Vendor:**To be discussed in class. Required.

Online Landscape Safety Training 1-yr Subscription.**Vendor:** Landscape Safety Inc. Required.

#### Experiential Learning

1. Community Based Learning Project: a key learning outcome of this course is to connect academic

learning and civic development while simultaneously addressing a community partner's needs, interests, or problems.

## **Course Competencies**

### **1. Apply horticultural safety techniques.**

#### **Criteria**

*You will know you are successful when*

- 1.1. you dress so you are comfortable and safe through duration of the job.
- 1.2. you protect yourself using the appropriate personal protective equipment.
- 1.3. you demonstrate proper ergonomics and team lifts during manual labor.

#### **Learning Objectives**

- 1.a. Identify appropriate dress for the job and weather.
- 1.b. Identify appropriate personal protective equipment.
- 1.c. Identify proper ergonomics practices for the industry.
- 1.d. Practice safe lifting procedures.

### **2. Transplant herbaceous and woody plant specimens.**

#### **Criteria**

*You will know you are successful when*

- 2.1. you outline the advantages/disadvantages of using each type of planting stock.
- 2.2. you explain the transplanting technique for each planting stock.
- 2.3. you transplant herbaceous plant specimens.
- 2.4. you transplant woody plant specimens.

#### **Learning Objectives**

- 2.a. Investigate the advantages/disadvantages of each planting stock.
- 2.b. Explore various transplanting techniques for each planting stock.
- 2.c. Practice transplanting herbaceous plant specimens.
- 2.d. Practice transplanting woody plant specimens.

### **3. Demonstrate safe operation of hand tools.**

#### **Assessment Strategies**

- 3.1. Skill Demonstration

#### **Criteria**

*You will know you are successful when:*

- 3.1. you select the right tool for the associated task.
- 3.2. you inspect the hand tool for any defects or damage before using the tool.
- 3.3. you operate tools according to the manufacturers' instructions.
- 3.4. you demonstrate deliberate and controlled use of hand tool.

#### **Learning Objectives**

- 3.a. Identify proper tool for assigned task.
- 3.b. Identify and report damaged tools that need repair or tools that need to be replaced.
- 3.c. Practice deliberate and controlled use of hand tool.

### **4. Demonstrate safe operation of hand held power tools.**

#### **Assessment Strategies**

- 4.1. Skill Demonstration

#### **Criteria**

*You will know you are successful when:*

- 4.1. you perform pre-operation inspection of equipment.
- 4.2. you select the correct powered hand tool for the job.
- 4.3. you recognize safety risks, safety precautions, and safety equipment prior to operation.

- 4.4. you demonstrate deliberate and controlled use of powered hand tools.
- 4.5. you operate tools according to the manufacturers' instructions.

#### **Learning Objectives**

- 4.a. Examine proper operational procedures for equipment.
- 4.b. Practice deliberate and controlled use of powered hand tools (mower, edger, blower, trimmer, aerator, spreader, etc.)
- 4.c. Determine the correct powered hand tool for the job.

### **5. Perform maintenance on hand tools.**

#### **Criteria**

*You will know you are successful when*

- 5.1. you clean all foreign debris off hand tool and sanitize all surfaces.
- 5.2. you sharpen all cutting edges.
- 5.3. you remove and/or fix any burrs and bent parts.
- 5.4. you identify loose and/or damaged parts on hand tools.
- 5.5. you fix any loose and/or damaged parts on hand tools.

#### **Learning Objectives**

- 5.a. Practice cleaning and sanitizing hand tools.
- 5.b. Practice sharpening all cutting edges.
- 5.c. Identify damaged parts or defects on hand tools.
- 5.d. Explore ways to fix any loose and damaged parts.
- 5.e. Determine when hand tools may need to be replaced instead of repaired.

### **6. Perform maintenance on hand-held power tools.**

#### **Criteria**

*You will know you are successful when*

- 6.1. you clean all foreign debris off hand-held power tools and sanitize surfaces as needed.
- 6.2. you identify worn parts and potential defects.
- 6.3. you remove parts following manufacturers' instructions.
- 6.4. you determine when parts should be repaired and when parts should be replaced.
- 6.5. you sharpen all cutting edges and remove/fix any burrs/bent parts.
- 6.6. you perform daily/scheduled maintenance on engine/moving parts.

#### **Learning Objectives**

- 6.a. Identify proper fluid levels and/or battery charge for equipment.
- 6.b. Identify defects or worn parts.
- 6.c. Examine ways to remove parts that need repairing or replacing.
- 6.d. Practice cleaning and sanitizing hand-held powered tools.
- 6.e. Practice sharpening all cutting edges.
- 6.f. Perform daily/scheduled maintenance on hand-held powered tools.

### **7. Investigate summer and fall landscape maintenance practices.**

#### **Assessment Strategies**

- 7.1. Skill Demonstration

#### **Criteria**

*You will know you are successful when:*

- 7.1. you describe the functions of different landscape beds.
- 7.2. you explain the positive and negative characteristics associated with each landscape bed design.
- 7.3. you develop a summer/fall maintenance plan for common landscape bed designs.
- 7.4. you develop a summer/fall maintenance plan for Western's green roof.

#### **Learning Objectives**

- 7.a. Research different landscape bed designs.
- 7.b. Explore advantages and disadvantages of landscape bed designs.
- 7.c. Develop maintenance plans for common landscape bed designs.
- 7.d. Develop a maintenance plan for a green roof.

## **8. Demonstrate summer and fall landscape maintenance practices.**

### **Assessment Strategies**

8.1. Skill Demonstration

### **Criteria**

*You will know you are successful when:*

- 8.1. you safely perform summer/fall maintenance on Western's landscape beds.
- 8.2. you safely perform summer/fall maintenance on Western's turf areas.
- 8.3. you safely perform summer/fall maintenance on Western's green roof.

### **Learning Objectives**

- 8.a. Practice pruning techniques.
- 8.b. Practice summer/fall maintenance on landscape beds.
- 8.c. Practice summer/fall maintenance on turf areas.
- 8.d. Practice summer/fall maintenance on green roof.