

Washtenaw Community College Comprehensive Report

TRL 100 Green Technologies for Roofing Effective Term: Spring/Summer 2020

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: Trade Related Learning

Course Number: 100

Org Number: 28000

Full Course Title: Green Technologies for Roofing

Transcript Title: Green Technologies

Is Consultation with other department(s) required: No

Publish in the Following:

Reason for Submission: New Course

Change Information:

Rationale: New course for RWREJTF (Roofers and Waterproofers)

Proposed Start Semester: Spring/Summer 2020

Course Description: In this course, students will be introduced to green technologies in the roofing/waterproofing industry. Through classroom and hands-on training, students will be provided with an in-depth study of the concept, installation, and maintenance of green roofing systems including vegetable roofs, photovoltaics, water retention systems and building envelopes. Students will also be provided with online resources and materials to use as a reference to create a course for their local training center. Limited to approved union program participants.

Course Credit Hours

Variable hours: No

Credits: 1.5

The following Lecture Hour fields are not divisible by 15: Student Min ,Instructor Min

Lecture Hours: Instructor: 22.5 Student: 22.5

The following Lab fields are not divisible by 15: Student Min, Instructor Min

Lab: Instructor: 1.5 Student: 1.5

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 24 Student: 24

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Degree Attributes

Below College Level Pre-Reqs

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify the different green roofing systems as they apply to moisture, penetration, and airflow.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Spring/Summer 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: RWREJTF Instructors

2. Prepare and present a 5-10 minute lesson plan for a topic presentation.

Assessment 1

Assessment Tool: Skills demonstration

Assessment Date: Spring/Summer 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Checklist

Standard of success to be used for this assessment: 80% of the students will score 80% on the demonstration.

Who will score and analyze the data: RWREJTF Instructors

Course Objectives

1. Define and list characteristics of green roofing systems, and describe the benefits of their use.
2. Compare and contrast the different types of green systems used in the roofing industry today.
3. Identify the safety hazards and personal protection equipment needed when working with green technology.
4. Identify testing methodologies and equipment used to test efficiency and safety of green roofing systems.
5. Demonstrate proper use of testing equipment.
6. Access instructor training resources online, and successfully download training information.
7. Download instructor resources and use information to present lesson plan and lecture for class.
8. Prepare an assessment for outcomes of lesson plan.
9. Discuss and critique other students' teaching demonstrations.

New Resources for Course

Course Textbooks/Resources

Textbooks

Manuals

Periodicals

Software

Equipment/Facilities

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Feb 07, 2020</i>
Department Chair/Area Director: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Feb 07, 2020</i>
Dean: <i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Feb 11, 2020</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Mar 14, 2020</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Apr 23, 2020</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Apr 24, 2020</i>