Washtenaw Community College Comprehensive Report

TRL 102 Single-Ply 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: 102
Org Number: 28000
Full Course Title: Single-Ply Roofing
Transcript Title: Single-Ply Roofing
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 the methods for installation, maintenance, and repair of single-ply roof systems. Through classroom and hands-on activities, students will learn installation and waterproofing techniques currently available in the industry, such as layup and detailing methods for Thermoplastic Polyolefin (TPO)/Polyvinyl Chloride (PVC) and Ethylene Propylene Diene Terpolymer (EPDM) roofing. Students will use online material and resources to develop a lesson plan that can be presented to 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. Demonstrate installation of single-ply roofing system utilizing hot air welding, seam tape exposure, field layup, and detailing.
   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: Departmental rubric
   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. Locate, download, and utilize online resources for single-ply roofing including Roofers and Waterproofers Training Resource Center and manufacturers' specifications applications.
   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% or higher.
   Who will score and analyze the data: RWREJTF Instructors

3. Prepare and present a lesson plan for single-ply roofing.
   Assessment 1
   Assessment Tool: Teaching 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% or higher.
   Who will score and analyze the data: RWREJTF Instructors

Course Objectives

1. Locate, navigate, and download online resources and materials from the RWREJTF Training Resource Center and manufacturer applications associated with single-ply membranes.
2. Review safety issues and personal protective equipment (PPE) associated with installation and maintenance of single-ply roofing systems.
3. Compare and contrast different types of membranes involved in TPO, PVC, and EPDM roofing products in various locations and environments.
4. Demonstrate hands-on skills associated with hot air welding.
5. Demonstrate hands-on skills associated with installation and maintenance of EPDM roofing systems.

6. Create a lesson plan for single-ply roofing for instruction at a local training facility.
7. Present a teaching demonstration of one aspect of single-ply roofing.
8. Identify policies and procedures for proper installation of single-ply roofing system (TPO/ PVC and EPDM).
9. Recognize conditions, locations, and environments that can result in premature failure of roofing systems.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

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