

## Washtenaw Community College Comprehensive Report

### TRL 160 Hazard Communication and Radio Frequency (RF) Radiation Effective Term: Fall 2024

#### Course Cover

**College:** Advanced Technologies and Public Service Careers

**Division:** Advanced Technologies and Public Service Careers

**Department:** United Association Department

**Discipline:** Trade Related Learning

**Course Number:** 160

**Org Number:** 28000

**Full Course Title:** Hazard Communication and Radio Frequency (RF) Radiation

**Transcript Title:** Hazard Comm. and RF Radiation

**Is Consultation with other department(s) required:** No

**Publish in the Following:**

**Reason for Submission:** New Course

**Change Information:**

**Rationale:** New RWREJTF course (Roofers & Waterproofers Research and Education Joint Trust Fund)

**Proposed Start Semester:** Fall 2024

**Course Description:** In this course, students will identify and discuss the five key elements of the Occupational Safety and Health Administration's (OSHA) regulations related to Hazard Communication Standards and Radio Frequency (RF) Radiation hazards. Students will identify, review, and calculate the risk of these safety hazards and the personal protection equipment (PPE) required by utilizing Safety Data Sheets (SDS) provided on job sites in the construction industry. Upon class completion, students will be prepared to develop a related course curriculum that can be used at their local Training Centers. 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 five key elements of OSHA's Hazard Communication Standard (Hazcom).

### **Assessment 1**

Assessment Tool: Outcome-related written exam questions

Assessment Date: Fall 2024

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: Roofers & Waterproofers Research and Education Joint Trust Fund (RWREJTF) Instructors

2. Identify the hazards utilizing the Safety Data Sheets (SDS).

### **Assessment 1**

Assessment Tool: Outcome-related written exam questions

Assessment Date: Fall 2024

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 students will score 80% or higher.

Who will score and analyze the data: RWREJTF Instructors

3. Demonstrate proper inspection and donning of PPE used on the job site as outlined in the SDS.

### **Assessment 1**

Assessment Tool: Outcome-related skills demonstration

Assessment Date: Fall 2024

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

4. Recognize the safety practices and personal protective equipment (PPE) required while working near and around RF Radiation equipment.

### **Assessment 1**

Assessment Tool: Outcome-related written exam questions

Assessment Date: Fall 2024

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

5. Create a lesson plan using the resources outlined in this course for use at your local Training Center.

#### **Assessment 1**

Assessment Tool: Outcome-related lesson plan

Assessment Date: Fall 2024

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. Discuss personal protective equipment (PPE) used in Hazardous Communication.
2. Review the most commonly ignored OSHA hazards associated with roofing and discuss ways to reinforce compliance.
3. Discuss the five key elements and the rights associated with OSHA Hazard Communication Standards.
4. Discuss common health and medical issues associated with the roofing and waterproofing industry.
5. Discuss Safety Data Sheets (SDS), their use and mandatory locations on job sites.
6. Demonstrate the process of recognizing safety hazards while utilizing information available in the SDS.
7. Identify safety practices while working with and around hazardous chemicals.
8. Demonstrate identifying, selecting, inspecting, and donning PPE used on the job sites.
9. Recognize known and possible unknown locations where RF radiation may be used.
10. Review safety issues associated with RF radiation and the PPE required when working near its vicinity.
11. Develop RF radiation curriculum for the students' local Training Centers.
12. Recognize the process and documentation needed when reporting Hazard Communication safety issues.
13. Discuss methods of preventing workers from entering locations where Hazard Communication safety exists or has the potential to exist.
14. Discuss how OSHA policies and required safety issues can be presented in a lesson plan form.
15. Utilize online resources to create videos and training opportunities for classroom hands-on activities.
16. Discuss methods to encourage student participation in safety procedures and policies.
17. Create lesson plan within the time constraints of the course hours.

### **New Resources for Course**

#### **Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

#### **Equipment/Facilities**

**Reviewer**

**Faculty Preparer:**

*Tony Esposito*

**Action**

*Faculty Preparer*

**Date**

*Jan 02, 2024*

**Department Chair/Area Director:**

*Marilyn Donham* *Recommend Approval* *Jan 23, 2024*

**Dean:**

*Jimmie Baber* *Recommend Approval* *Jan 25, 2024*

**Curriculum Committee Chair:**

*Randy Van Wagnen* *Recommend Approval* *May 17, 2024*

**Assessment Committee Chair:**

*Jessica Hale* *Recommend Approval* *May 20, 2024*

**Vice President for Instruction:**

*Brandon Tucker* *Approve* *May 30, 2024*