Washtenaw Community College Comprehensive Report

UAT 345 Cross Connection Control (UA 4008) Effective Term: Winter 2021

Course Cover

Division: Advanced Technologies and Public Service Careers Department: United Association Department **Discipline:** United Association Training **Course Number: 345** Org Number: 28200 Full Course Title: Cross Connection Control (UA 4008) Transcript Title: Cross Connection Control 4008 Is Consultation with other department(s) required: No Publish in the Following: College Catalog, Web Page Reason for Submission: Course Change **Change Information:** Consultation with all departments affected by this course is required. **Course description Outcomes/Assessment Objectives/Evaluation** Rationale: Revise course for UA

Proposed Start Semester: Spring/Summer 2020

Course Description: In this course, students will identify the hazards associated with cross-connection control of water systems. Topics include cross-connection terminology, fluid dynamics, and the proper use of backflow prevention methods, devices and assemblies. Students will conduct a hands-on site survey to identify and document the risks and hazards of cross-connections, as well as recommend the proper methods, devices, or assemblies to bring the site to compliance with approved standards. This course contains material previously taught in UAT 358. Limited to United Association Instructor Training program graduates.

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. Recognize backflow conditions and terminology such as backsiphonage backflow and backpressure backflow.

Assessment 1

Assessment Tool: Outcome-related written exam questions Assessment Date: Fall 2020 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: U.A. instructors

2. Identify cross-connections and determine the approved methods, devices or assemblies to protect drinking water systems.

Assessment 1

Assessment Tool: Outcome-related written exam questions Assessment Date: Fall 2020 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: U.A. instructors

3. Conduct on-site surveys, including documentation, notification and follow-up survey procedures. Assessment 1

Assessment Tool: Demonstration Assessment Date: Fall 2020 Assessment Cycle: Every Three Years Course section(s)/other population: All Number students to be assessed: All How the assessment will be scored: Observational checklist Standard of success to be used for this assessment: 80% of the students wills core 80% or higher. Who will score and analyze the data: U.A. instructors

Course Objectives

- 1. Recognize terms and concepts related to cross-connections and adequate backflow prevention practices.
- 2. Identify common symbols used in plan reading.

- 3. Recognize and interpret plumbing codes and local ordinances.
- 4. Recommend needed backflow prevention methods for a facility.
- 5. Classify different types of cross-connections and determine the level of hazard each presents to the occupants of a building, site or facility.
- 6. Discuss the causes of backsiphonage backflow.
- 7. Compare and contrast backpressure backflow and backsiphinage backflow.
- 8. Discuss the use of an approved method to control cross-connections in drinking water systems.
- 9. Identify and discuss approved devices and assemblies to control cross-connections in drinking water systems.
- 10. Identify the legal requirements and liabilities involved in a cross-connection survey.
- 11. Recognize the requirements for notifying the water supply owner of the results of a cross-connection survey.
- 12. Complete documentation of onsite cross-connection surveys for notification, verification, and conduct follow-up procedures.

New Resources for Course

Course Textbooks/Resources

Textbooks

Manuals

International Association of Plumbing and Mechanical Officials. <u>Backflow Prevention Reference</u> <u>Manual 3rd Edition</u>, IAPMO Group, 01-01-2016

Periodicals Software

Equipment/Facilities

Data projector/computer

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer:		
Tony Esposito	Faculty Preparer	Apr 16, 2020
Department Chair/Area Director:		
Marilyn Donham	Recommend Approval	Apr 28, 2020
Dean:		
Jimmie Baber	Recommend Approval	May 27, 2020
Curriculum Committee Chair:		
Lisa Veasey	Recommend Approval	Sep 25, 2020
Assessment Committee Chair:		
Shawn Deron	Recommend Approval	Sep 30, 2020
Vice President for Instruction:		
Kimberly Hurns	Approve	Oct 06, 2020