

Washtenaw Community College Comprehensive Report

UAT 209 Methods in Teaching Backflow Prevention Certification (UA 4006) Effective Term: Fall 2020

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 209

Org Number: 28200

Full Course Title: Methods in Teaching Backflow Prevention Certification (UA 4006)

Transcript Title: Teaching Backflow Certif 4006

Is Consultation with other department(s) required: No

Publish in the Following:

Reason for Submission: New Course

Change Information:

Rationale: New United Association course.

Proposed Start Semester: Fall 2020

Course Description: This course prepares students to establish teaching certification classes for backflow testing at their local Training Center in accordance with the American Society of Safety Engineers (ASSE) Series 5000 Professional Qualification Standard. Students will identify the code requirements along with practical set-up and use of a wet lab to train individuals on backflow testing procedures. In a hands-on lab, students will test and troubleshoot various sizes and types of backflows using certified equipment. Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 **Student:** 45

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

Lab: Instructor: 3 **Student:** 3

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 48 **Student:** 48

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 hydraulics involved in water systems.

Assessment 1

Assessment Tool: Outcome-related 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. Recognize the curriculum process to establish a backflow certification program at the student's local Training Center.

Assessment 1

Assessment Tool: Discussion

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 will score 80% or higher.

Who will score and analyze the data: U.A. Instructors

3. Demonstrate backflow testing procedures using wet lab trainers as per ASSE Series 5000 Professional Qualification Standard.

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 will score 80% or higher.

Who will score and analyze the data: U.A. Instructors

4. Identify ASSE code requirements related to backflow prevention and certification.

Assessment 1

Assessment Tool: Outcome-related 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

Course Objectives

1. Identify liquid properties including pressures and flow through a piping system.
2. Review safety issues, including personal protective equipment (PPE), when dealing with temperatures and pressure of liquid.
3. Identify the approved training materials for cross-connection control education.
4. Identify the requirements needed to create an ASSE-approved wet lab for testing.
5. Identify the approved training materials for cross-connection control education.
6. Review the history of backflow and the health hazards involved when no precautions are present.
7. Identify the types of backflows and the systems they are designed for.
8. List curriculum and classroom items required to operate an ASSE-approved certification class at the student's local Training Center.
9. Review code requirements relevant to backflow prevention and certification.
10. Disassemble and assemble various types and sizes of backflow preventers.
11. Test and troubleshoot backflow preventers with certified testing equipment.
12. Indicate the procedure and process to record and document backflow testing results with proper officials.

New Resources for Course

Course Textbooks/Resources

Textbooks

UA / IAPMO. *Backflow Reference Manual*, 3rd ed. Upper Marlboro, Maryland: American Technical Publishers, 2019

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>Apr 03, 2020</i>
Department Chair/Area Director: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Apr 06, 2020</i>
Dean: <i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Apr 13, 2020</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Jun 09, 2020</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Jun 16, 2020</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Jun 17, 2020</i>