

Washtenaw Community College Comprehensive Report

UAT 259 Backflow Repair and Maintenance Effective Term: Spring/Summer 2014

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 259

Org Number: 28200

Full Course Title: Backflow Repair and Maintenance

Transcript Title: Backflow Repair & Maintenance

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Credit hours

Total Contact Hours

Outcomes/Assessment

Objectives/Evaluation

Rationale: Course update

Proposed Start Semester: Spring/Summer 2014

Course Description: In this course, students will learn about methods of teaching the repair and maintenance of large diameter backflow assemblies from various manufacturers. The main topics covered include troubleshooting and repairing the assemblies and following appropriate safety measures. Students who wish to be certified as "Backflow Repair and Maintenance Instructors" must receive a passing grade on the written and practical examinations, and must have a current backflow prevention certificate. Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 1

Lecture Hours: Instructor: 15 Student: 15

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

Lab: Instructor: 5 Student: 5

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 20 Student: 20

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 methods of teaching the central concepts of backflow repair and maintenance utilizing UA approved materials.

Assessment 1

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Performance parameters with rubric

Standard of success to be used for this assessment: 75% of students will achieve 75% or above.

Who will score and analyze the data: Departmental faculty

2. Demonstrate teaching practicum on maintenance and repair procedures of backflow prevention assemblies.

Assessment 1

Assessment Tool: Skill assessment

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Skill checklist with rubric

Standard of success to be used for this assessment: 75% of students will achieve 75% or above.

Who will score and analyze the data: Departmental faculty

3. Test, troubleshoot and repair various backflow preventers to manufacturers' standards.

Assessment 1

Assessment Tool: Skill assessment

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Skill checklist with rubric

Standard of success to be used for this assessment: 75% of students will achieve 75% or above.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Identify concepts, terms, and principles of backflow, back-pressure, and back siphonage.

Matched Outcomes

2. Identify proper backflow methods, devices, and approved assemblies.

Matched Outcomes

3. Recognize the importance of maintenance, repair, and troubleshooting in relation to safety and test procedures.

Matched Outcomes

4. Recognize the methods of performing cross-connection control surveys.

Matched Outcomes

5. Demonstrate appropriate use and knowledge of course materials.

Matched Outcomes

6. Demonstrate how to test the following backflow assemblies to ensure they meet manufacturers' standards: reduced pressure zone, double-check valve, pressure vacuum breaker and spill resistant pressure vacuum breaker.
Matched Outcomes
7. Explain the concepts of new technologies in backflow repair and maintenance procedures.
Matched Outcomes
8. Identify components and parts from various backflow assemblies.
Matched Outcomes
9. Trouble-shoot, identify and execute proper repairs on various backflow assemblies.
Matched Outcomes
10. Identify different local, state and national codes and standards relating to backflow maintenance and repair procedures.
Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Other: Large open classroom to set up 12 tables with backflow assemblies.

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Amanda Scheffler</i>	<i>Faculty Preparer</i>	<i>Jun 27, 2013</i>
Department Chair/Area Director: <i>Scott Klapper</i>	<i>Recommend Approval</i>	<i>Feb 03, 2014</i>
Dean: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Feb 05, 2014</i>
Vice President for Instruction: <i>Bill Abernethy</i>	<i>Approve</i>	<i>Apr 10, 2014</i>