

Washtenaw Community College Comprehensive Report

UAT 241 Advanced Water Supply Effective Term: Spring/Summer 2014

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 241
Org Number: 28200
Full Course Title: Advanced Water Supply
Transcript Title: Advanced Water Supply
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:
 Course description
 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 be provided with information on the latest advancements in advanced potable hot water and water supply systems and technologies. Green technologies, such as rainwater harvesting, water re-use, solar thermal potable water heating and geo-thermal systems, are also discussed. Students will develop teaching methods for topics such as water mains and services; building water supply systems; and cross connections, valves and pumps. Emphasis will be given throughout the course on the best way to develop the student instructor's own local training program. 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. Develop teaching methods used to explain the central concepts and skills of advanced potable hot water and water supply 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: Departmentally developed rubric

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

Who will score and analyze the data: Departmental faculty

2. Demonstrate methods of teaching on the proper maintenance and repair procedures related to advanced potable hot water and water supply.

Assessment 1

Assessment Tool: Student project

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: Departmentally-developed rubric

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

Who will score and analyze the data: Departmental faculty

3. Identify and explain the newest technologies in potable hot water heating and water supply.

Assessment 1

Assessment Tool: Written exam

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: Answer key and rubric

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

Who will score and analyze the data: Departmental faculty

4. Design a modular trainer to demonstrate a new water supply technology.

Assessment 1

Assessment Tool: Blueprint of modular trainer

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: Departmentally-developed rubric

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

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Recognize and explain the technology in the newest water supply advancements.

Matched Outcomes

2. Develop concepts and strategies needed to teach apprentices how to identify building water supply systems as well as gas and electrical requirements.

Matched Outcomes

3. Develop concepts and strategies needed to teach apprentices how to identify the features of domestic water heating, such as thermal expansion and temperature and pressure relief valves.

Matched Outcomes

4. Develop concepts and strategies needed to teach apprentices safe operating temperatures and to recognize the flammable vapor ignition resistant criteria.

Matched Outcomes

5. Develop concepts and strategies needed to teach apprentices installation procedures for water supply and domestic hot water systems.

Matched Outcomes

6. Compose a presentation on a water supply topic not found in the UA textbook.

Matched Outcomes

7. Write a test on a water supply topic to use when teaching an apprentice class.

Matched Outcomes

8. Discuss the use of experiments and modular trainers for illustrating textbook concepts.

Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks

International Pipe Trades Joint Training Committee. *Water Supply for United Association of Journeyworkers & Apprentices*, ed. International Pipe Trades Joint Training Committee, 2008

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Reviewer

Action

Date

Faculty Preparer:

Amanda Scheffler

Faculty Preparer

Jun 27, 2013

Department Chair/Area Director:

Scott Klapper

Recommend Approval

Feb 03, 2014

Dean:

Marilyn Donham

Recommend Approval

Feb 05, 2014

Vice President for Instruction:

Bill Abernethy

Approve

Mar 31, 2014