

Washtenaw Community College Comprehensive Report

UAT 225 Plumbing Fixtures (UA 4003) Effective Term: Fall 2020

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 225

Org Number: 28200

Full Course Title: Plumbing Fixtures (UA 4003)

Transcript Title: Plumbing Fixtures (UA 4003)

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog

Reason for Submission: Course Change

Change Information:

Consultation with all departments affected by this course is required.

Course title

Course description

Outcomes/Assessment

Objectives/Evaluation

Rationale: Revise course from UA

Proposed Start Semester: Spring/Summer 2020

Course Description: In this course, students will recognize the design and function of plumbing fixtures used in the industry, including institutional fixtures, fixture controls, appliances, and accessories.

Students will review the proper piping and prefabrication needed for correct installation practices and manufacturers' recommendations. The fixtures and practices will be discussed from their earliest uses to the latest innovations using PowerPoint® presentations, videos, and classroom discussion. The title of this course was previously Plumbing Fixtures. Limited to United Association 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. Recognize the historical development of modern plumbing fixtures and codes.

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 the various types of plumbing fixtures and installation methods.

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 receive 80% or higher.

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

3. Identify the differences in the operation and function plumbing fixtures, appliances, and accessories.

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

Course Objectives

1. Identify the common problems found in plumbing.
2. Define fixture unit values.
3. Identify functions and classifications for water closets, urinals, lavatories, sinks, tubs, showers and bidets.
4. Compare and contrast institutional, residential and commercial fixtures.

5. Define the hydraulic principles of various valves, controls and metering devices.
6. Recognize the historical context of plumbing fixtures.
7. Recognize the negative effects of unsanitary conditions.
8. Identify the various types of plumbing fixtures and their uses.
9. Review the evolution and implementation of the plumbing codes.
10. Identify the key components which classify specific plumbing fixtures.
11. Compare and contrast the different flushing systems for water closets and urinals.
12. List and describe the material used for manufacturing plumbing fixtures.
13. Compare and contrast the differences among plumbing appliances, fixtures, and accessories.
14. Recognize challenges associated with plumbing appliance installations.
15. Discuss safety issues and proper personal protection equipment (PPE) associated with the installation of plumbing devices.
16. Identify the installation requirements and jurisdictional issues for plumbing accessories.

New Resources for Course

Course Textbooks/Resources

Textbooks

International Pipe Trades Joint Training Committee. *Plumbing Fixtures and Appliances*, First ed.
International Pipe Trades Joint Training Committee, 2018

Manuals

Periodicals

Software

Equipment/Facilities

Level II classroom

Data projector/computer

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Apr 20, 2020</i>
Department Chair/Area Director: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Apr 28, 2020</i>
Dean: <i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>May 27, 2020</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Jul 23, 2020</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Aug 25, 2020</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Aug 26, 2020</i>