

Washtenaw Community College Comprehensive Report

UAT 150 Incorporating Pipe Pre-Fabrication into Apprenticeship (UA 5016) Effective Term: Fall 2020

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 150

Org Number: 28200

Full Course Title: Incorporating Pipe Pre-Fabrication into Apprenticeship (UA 5016)

Transcript Title: Incorp Pre-Fabrication 5016

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: In this course, students will identify the journeyman pipe fabricator's roles and responsibilities in the growing trend of journeyman fabricators in the pipe industry today. Students will utilize methods and procedures used to prefabricate welded pipe from concept to completion in both the shop and field environments. In addition, students will then develop a fabricator lesson plan for a course that can be used at their home Training Center. 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. Identify the roles and responsibilities of a Journeyman Pipe Fabricator.

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. Describe and perform methods used for welded pipe prefabrication in a controlled environment.

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

3. Describe the strategy used to incorporate content into the existing content at the student's Training Center.

Assessment 1

Assessment Tool: Group 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

4. Present one lesson topic of pipe prefabrication in a classroom environment.

Assessment 1

Assessment Tool: Presentation

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

Course Objectives

1. List tasks of a Pipe Fabricator.
2. Identify welding processes used in pipe fabrication.
3. Indicate pipe examination requirements of pipe welds needed before being installed.
4. Review safety hazards and personal protective equipment (PPE) needed when performing welding.
5. Compare and contrast the benefits of pipe fabrication to welding at jobsite.
6. Review cost, labor, and financial savings when using pipe pre-fabrication.
7. Show equipment, ventilation, and lab area requirements for performing pipe weld fabrications.
8. Compare and contrast student's Training Centers of current Pipefitter Fabrication program requirements.
9. Categorize core elements of a Fabricator program.
10. Demonstrate operation of equipment (vendors).
11. Locate resources for training and lessons plans using UA OLR and Blackboard to assist with classroom teaching aids.
12. Design a basic pre-fabrication area for a jobsite.
13. Compare and contrast pre-fabrication welding methods to traditional location pipe welding methods.

New Resources for Course

Course Textbooks/Resources

Textbooks
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 02, 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>Apr 21, 2020</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Apr 28, 2020</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>May 05, 2020</i>