

# Washtenaw Community College Comprehensive Report

## UAT 220 Pipe Trades Applied Mathematics Effective Term: Spring/Summer 2016

### Course Cover

**Division:** Advanced Technologies and Public Service Careers

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 220

**Org Number:** 28200

**Full Course Title:** Pipe Trades Applied Mathematics

**Transcript Title:** Pipe Trade Applied Mathematics

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Web Page

**Reason for Submission:** Course Change

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Course description**

**Credit hours**

**Total Contact Hours**

**Outcomes/Assessment**

**Rationale:** Change credit hours and contact hours.

**Proposed Start Semester:** Fall 2009

**Course Description:** In this course, students learn methods of teaching about pipe trades applied mathematics. Topics to be covered include: teaching styles and methods, creating exam questions and applying mathematics to the plumbing and pipefitting industry. There will be a refresher on some important math functions, such as offsets, metric systems and calculator usage. On the final day of class, students will be required to demonstrate a basic math lesson to the class. 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. Describe the central concepts and skills of pipe trades applied mathematics.

### **Assessment 1**

**Assessment Tool:** Teaching demonstration

**Assessment Date:** Fall 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All

**Number students to be assessed:** 75% of all students through random sampling who teach the topic the subsequent year, minimum of 7 students

**How the assessment will be scored:** Departmentally-developed rubric

**Standard of success to be used for this assessment:** 75 percent of students will score 11 or higher out of 16.

**Who will score and analyze the data:** UAT faculty

2. Utilize approved industry and UA course/training materials to teach pipe trades applied mathematics.

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## Course Objectives

1. Identify the six-step method of trade teaching.
2. Recognize the features of good lesson plans and elements of effective teaching styles.
3. Identify the important features of an exam question.
4. Explain how to use a calculator.
5. Demonstrate appropriate use and knowledge of course materials.

## New Resources for Course

### Course Textbooks/Resources

Textbooks

Manuals

Periodicals

Software

### Equipment/Facilities

Level I classroom

### Reviewer

**Faculty Preparer:**

*Justin Carter*

**Department Chair/Area Director:**

*Scott Klapper*

### Action

*Faculty Preparer*

*Recommend Approval*

### Date

*Jun 15, 2015*

*Jun 17, 2015*

<b>Dean:</b> <i>Brandon Tucker</i>	<i>Recommend Approval</i>	<i>Jun 18, 2015</i>
<b>Curriculum Committee Chair:</b> <i>Kelley Gottschang</i>	<i>Recommend Approval</i>	<i>Sep 29, 2015</i>
<b>Assessment Committee Chair:</b> <i>Michelle Garey</i>	<i>Recommend Approval</i>	<i>Sep 29, 2015</i>
<b>Vice President for Instruction:</b> <i>Michael Nealon</i>	<i>Approve</i>	<i>Oct 06, 2015</i>