Washtenaw Community College Comprehensive Report

UAT 356 Corrosive Resistant Alloys
Effective Term: Spring/Summer 2014

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 356
Org Number: 28200
Full Course Title: Corrosive Resistant Alloys
Transcript Title: Corrosive Resistant Alloys
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 develop methods of teaching that focus on the procedures and techniques utilized in welding corrosion resistant alloys such as high nickel alloys. As the piping industry turns to the use of these materials, students train their members to develop the skills necessary to address the industry's welding needs. Students must provide their own personal safety equipment. Limited to United Association Instructor Training program graduates.

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

No Level Required

Requisites

Enrollment Restrictions

Open only to graduates of the UA Instructor Training Program.

General Education

Degree Attributes

Below College Level Pre-Reqs

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify common problems with welds on corrosive resistant materials.
   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
   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 methods of teaching the concepts of welding corrosion resistant alloys.
   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

3. Demonstrate teaching practicum for welding corrosion resistant alloys.
   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: Skills 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. Provide a teaching explanation of the need for corrosion resistant alloys in the piping industry.
   Matched Outcomes
2. Identify specific weld procedures used for corrosive resistant alloys.
   Matched Outcomes
3. Demonstrate proper safety precautions used when welding special alloys.
   Matched Outcomes
4. Demonstrate correct joining techniques for welding special alloys.
   Matched Outcomes

5. Prepare teaching strategies to use UA and vendor supplied teaching aids and material when teaching corrosive resistant alloy material at the home local.
   Matched Outcomes
6. Demonstrate how to set up a purge on a coupon.
   Matched Outcomes
7. Demonstrate proper procedures for welding high nickel materials.
   Matched Outcomes
8. Demonstrate a teaching explanation of common issues with welding corrosive resistant materials.
   Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom

Reviewer	Action	Date
Faculty Preparer:		
Amanda Scheffler	*Faculty Preparer*	*Jul 25, 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*	*Apr 28, 2014*