Washtenaw Community College Comprehensive Report

UAT 135 Industrial Rigging Certification (UA 5011)
Effective Term: Fall 2020

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 135
Org Number: 28200
Full Course Title: Industrial Rigging Certification (UA 5011)
Transcript Title: Industrial Rigging Cert (5011)
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Web Page
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 and develop methods for incorporating a rigging course and curriculum taught at their local Training Center. Students will define and demonstrate safe rigging practices, virtual and actual hand-signaling, crane and equipment set-up, sling stress and center of gravity calculations. In addition, students will prepare for and take the Electrical Power Research Institute (EPRI) certification exam on rigging. Limited to United Association program participants.

Course Credit Hours

Variable hours: No
Credits: 3
Lecture Hours: Instructor: 45 **Student:** 45
The following Lab fields are not divisible by 15: Student Min, Instructor Min
Lab: Instructor: 3 **Student:** 3
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 48 **Student:** 48
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. Complete rigging fundamentals and safety requirements for the E.P.R.I. Industrial Rigging certification exam.
   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. Calculate and document load weight and the location of the center of gravity.
   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

3. Demonstrate competencies of the E.P.R.I. Industrial Rigging certification exam, including crane technology and signals.
   Assessment 1
   Assessment Tool: Skills 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: Skills observation 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. Prepare and present a classroom activity using the UA online resources for industrial rigging.
   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. Discuss and describe rigging equipment selection, inspection, and application.
2. Discuss site and weather condition variables that affect rigging and lifting.
3. Discuss OSHA compliance regulations for test sites.
4. Review all safety requirements and Personal Protection Equipment (PPE) associated with rigging and lifting loads.
5. Calculate and manage parameters for the center of gravity of loads and equipment.
6. Discuss and document the effect of the center of gravity on load and handling equipment.
7. Explain and discuss the block load factor, Diameter to Diameter (D/d) ratio and coefficient of friction.
8. Demonstrate crane set-up with pre-lift meeting, view lift plan, and documentation.
9. Demonstrate hand, audio, and radio crane signals.
10. Locate and navigate United Association Online Learning Resources (UAOLR) for resources and activities for the student's local Training Center.
11. Download and utilize programs available on the UAOLR.
12. Present a five-minute classroom activity for class critique.

New Resources for Course

Course Textbooks/Resources

Textbooks

International Association of Plumbing and Mechanical Officials. *Rigging* , ed. American Technical Institute, 2015

Manuals

Periodicals

Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Tony Esposito	*Faculty Preparer*	*May 21, 2020*
Department Chair/Area Director:		
Marilyn Donham	*Recommend Approval*	*May 27, 2020*
Dean:		
Jimmie Baber	*Recommend Approval*	*May 27, 2020*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Jun 19, 2020*
Assessment Committee Chair:		
Shawn Deron	*Recommend Approval*	*Jun 23, 2020*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Jul 06, 2020*