

Washtenaw Community College Comprehensive Report

UAT 137 Radiographic Film Interpretation (UA 8011) Effective Term: Spring/Summer 2019

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 137

Org Number: 28200

Full Course Title: Radiographic Film Interpretation (UA 8011)

Transcript Title: Radiograph Film Interpret 8011

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog

Reason for Submission: New Course

Change Information:

Rationale: New United Association course

Proposed Start Semester: Spring/Summer 2019

Course Description: In this course, students will acquire the basic skills and techniques required to view and interpret radiographic films (x-rays) as they relate to the welding industry. Students will be introduced to the theory and hands-on practical labs for interpreting x-ray films to access the quality of piping welds as well as installation, calibration, operation, and maintenance of equipment. 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 techniques used to produce radiographic films.

Assessment 1

Assessment Tool: Written Exam

Assessment Date: Spring/Summer 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 80% of the students will score 100%

Who will score and analyze the data: UA Training Coordinator

2. Critique and interpret image to determine if weld is within accepted tolerances.

Assessment 1

Assessment Tool: Written Exam

Assessment Date: Spring/Summer 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 80% of the students will score 100%

Who will score and analyze the data: UA Training Coordinator

Course Objectives

1. Review the importance of weld inspection as it applies to the piping industry.
2. Review safety procedures and equipment used when dealing with radiography.
3. Install and operate x-ray and gamma ray equipment for proper imaging.
4. Compare and contrast radiographic sources and the penetrating ability of x-rays and gamma rays to acceptable level for results.
5. Identify and incorporate exposure techniques used for imaging.
6. Evaluate radiographic image quality for compliance for specific metals.
7. Articulate possible abnormalities in image indications, discontinuities, and defects.

New Resources for Course

Course Textbooks/Resources

Textbooks

Charles Hellier and George Wheeler. *Radiographic Interpretation* , Third ed. American Welding Society , 2016

Manuals

Periodicals

Software

Equipment/Facilities

Reviewer

Faculty Preparer:

Tony Esposito

Action

Faculty Preparer

Date

Dec 19, 2018

