

Washtenaw Community College Comprehensive Report

UAT 239 AWS-CWI Certified Welding Inspector (UA 8001) Effective Term: Spring/Summer 2022

Course Cover

College: Advanced Technologies and Public Service Careers

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 239

Org Number: 28200

Full Course Title: AWS-CWI Certified Welding Inspector (UA 8001)

Transcript Title: AWS-CWI Cert Weld Inspect 8001

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog

Reason for Submission: Course Change

Change Information:

Consultation with all departments affected by this course is required.

Course title

Course description

Distribution of contact hours

Outcomes/Assessment

Objectives/Evaluation

Rationale: Update course for relevancy

Proposed Start Semester: Winter 2022

Course Description: In this course, students prepare to take the American Welding Society's Certified Welding Inspectors certification exam. Students will review relevant guidelines, policies, and procedures to identify the requirements of a welding inspector, interpret code standards, and demonstrate evaluations of weldments for acceptable standards. Upon completion of the course, students will have the opportunity to take the AWS-CWI Exam. Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 45 Student: 45

Lab: Instructor: 15 Student: 15

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 60 Student: 60

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. Recognize the policies, procedures, responsibilities and skills required as a Certified Welding Inspector in accordance with the American Welding Society.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Fall 2022

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 students will score 80% or higher.

Who will score and analyze the data: U.A. instructors

2. Identify and interpret the welding code requirements of AWS welding standards.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Fall 2022

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 hands-on inspection, evaluation, and documentation of weldments for acceptance standards in accordance with the American Welding Society.

Assessment 1

Assessment Tool: Demonstration

Assessment Date: Fall 2022

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 80% or higher.

Who will score and analyze the data: U.A. instructors

Course Objectives

1. Discuss weld inspection criteria.
2. Identify various welding and cutting operations.
3. Visually inspect and analyze weld joints.
4. Identify welding procedures and processes used in certified welding inspection.
5. Demonstrate proper use of inspection tools and the personal protective equipment (PPE) required.

6. Review applicable code requirements for welding.
7. Differentiate between procedure and performance qualification records and documentation requirements.
8. Demonstrate the procedure of classifying weld profiles and discontinuities as acceptable or unacceptable.
9. Interpret charts from the AWS CWI code book.
10. Identify weld symbols in isometric diagrams.
11. Discuss visual and non-destructive examination (NDE) testing procedures.

New Resources for Course

Course Textbooks/Resources

Textbooks

Welding Inspection Society . *Welding Inspection Technology* , 6th ed. Miami, Florida: Welding Inspection Society , 2020, ISBN: 978-1-64322-0.

American Petroleum Institute. *API Standard 1104, Standard for Welding Pipelines and Related Facilities*, 21 ed. American Petroleum Institute, 2014

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Oct 07, 2021</i>
Department Chair/Area Director: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Oct 08, 2021</i>
Dean: <i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Oct 11, 2021</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Dec 01, 2021</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Dec 01, 2021</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Dec 08, 2021</i>

Washtenaw Community College Comprehensive Report

UAT 239 AWS-CWI Certified Welding Inspector Effective Term: Spring/Summer 2014

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 239

Org Number: 28200

Full Course Title: AWS-CWI Certified Welding Inspector

Transcript Title: AWS-CWI Cert Welding Inspector

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:

Outcomes/Assessment

Objectives/Evaluation

Rationale: Course update

Proposed Start Semester: Spring/Summer 2014

Course Description: This is an intensive seven day course designed to prepare a candidate to successfully complete the American Welding Society (AWS) Certified Welding Inspector (CWI) Examination. Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 60 **Student:** 60

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60

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. Recognize and apply the policies and skills required of an American Welding Society's Certified Welding Inspector.

Assessment 1

Assessment Tool: AWS Certification 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 pass the AWS examination.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Explain weld inspection criteria.
Matched Outcomes
2. Identify various welding and cutting operations.
Matched Outcomes
3. Visually inspect and analyze weld joints.
Matched Outcomes
4. Identify various welding procedures.
Matched Outcomes
5. Demonstrate proper use of inspection tools.
Matched Outcomes
6. Demonstrate how to navigate through a code book.
Matched Outcomes
7. Interpret and identify when to apply code requirements.
Matched Outcomes
8. Differentiate between procedure and performance qualification records and requirements.
Matched Outcomes
9. Classify weld profiles and discontinuities as acceptable or unacceptable.
Matched Outcomes
10. Identify welding terminology.
Matched Outcomes
11. Interpret charts from the code book.
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

Feb 02, 2014

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

Mar 31, 2014

