

**Course Assessment Report  
Washtenaw Community College**

Discipline	Course Number	Title
Welding and Fabrication	290	WAF 290 05/17/2019- Advanced Training and Weld Certification
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Welding and Fabrication	Alexander Pazkowski
Date of Last Filed Assessment Report		

**I. Review previous assessment reports submitted for this course and provide the following information.**

1. Was this course previously assessed and if so, when?

No

2. Briefly describe the results of previous assessment report(s).

3.

4. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

5.

**II. Assessment Results per Student Learning Outcome**

Outcome 1: Recognize and apply AWS standards and code requirements for specific welding materials, applications or locations.

- Assessment Plan
  - Assessment Tool: Lab exercises
  - Assessment Date: Winter 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Accredited check list

- Standard of success to be used for this assessment: 90% of students will pass with 100%.
- Who will score and analyze the data: Certified welding inspector

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2017

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
12	12

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students in the course were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

The course was held on campus.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The tool used for this assessment is a checklist we developed in order to stay in compliance with the American Welding Society. The checklist outlines the exact order of operations that our inspectors and instructors need to follow to certify a welder. The criteria include steps such as...

- Welder completes application for AWS certification
- Check base metal for proper edge preparation
- Check base metal for proper dimensions

The box for each set of criteria is checked or initialed by the inspector/instructor when the welder meets the criteria required of him/her during a weld test. Each question in the checklist relies on information that can be found in the applicable code as well as the weld procedure specification given to the welder at the beginning of the test. The completion of the test supervisor checklist does not rely

on the student passing or failing the test but only relies on the student correctly interpreting the requirements of the code and the weld procedure specification.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

Because this assessment tool was not dependent on the students passing or failing the certification test, all students who attempted the test passed as long as they were able to follow the directions outlined in the test supervisor checklist. Therefore 100% of the students assessed received 100%. The standard of success was met.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Based on the fact that every student who participated in this outcome passed with 100%, the outcome as it is currently written is strong. The students' understanding of the material in the outcome is perfect as they must ensure that each aspect of the class exercise is executed prior to moving onto the next step.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Because the outcome is currently successful, I will focus on the improvement of this outcome. Embedded at the end of the worksheet used in the outcome is verbiage to ensure that the proper paperwork is filed and sent through the proper avenues. Adding the completion of this paperwork to the outcome would give the students a better view of the process they must take to complete an industry certification.

Outcome 2: Perform certification test weldment that meets AWS standards.

- Assessment Plan
  - Assessment Tool: Test weldment
  - Assessment Date: Winter 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Accredited check list

- Standard of success to be used for this assessment: 80% will score 70% or higher.
- Who will score and analyze the data: Certified welding inspector

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2017

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
12	12

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

The course was held on campus.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

This assessment tool is completed only by the students who pass the certification test at the end of the semester. In order to pass the test, the students must meet the requirements of the qualification section of the applicable codebook for their test. Unlike the other assessment tools, the completion of this assessment is dependent on the students passing the test. The criteria outlined in the codebook states that in order to pass the test, the welder must pass a visual examination and a destructive test. Once these are passed the results will be recorded on the appropriate paperwork and submitted to the American Welding Society. All results are recorded on the Test Supervisor Checklist.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: No

Of the twelve students that took the test, only nine passed. Therefore, the standard of success was 75% and did not meet the requirement.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

According to the data from the assessment of the learning outcome, 75% of the students passed. This is only 5% shy of the target. The amount of time given to the students to achieve this goal is appropriate.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

To improve the success of this outcome, more focus should be put on isolating errors in the students' technique in the lab. I see no reason to change the standard of success in the student learning outcome of the master syllabi. However, different techniques can be used on the practical side of the course work to improve the success of the students.

Outcome 3: Perform visual inspection and destructive tests to code requirements.

- Assessment Plan
  - Assessment Tool: Lab exercises
  - Assessment Date: Winter 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Accredited check list
  - Standard of success to be used for this assessment: 90% of students will pass with 100%.
  - Who will score and analyze the data: Certified welding inspector

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2017

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
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3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

The course was held on campus.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

This Assessment is broken up into two parts. I will describe both parts of the assessment below. As a prequel to this section, it should be mentioned that both parts of this assessment are scored as "yes/no" criteria on the AWS Test Supervisor checklist mentioned in the first assessment. Both portions of this assessment are subcriteria of the tool used of the first learning outcome for this course.

**Perform Visual Examination-** At the beginning of the semester, each student in the course declares a test they will perform at the end of the semester. The visual assessment for each weldment must be performed using the applicable code for that test. The completion of this part of the assessment is not based on whether or not the student passes or fails the visual examination, but whether or not the student is able to properly interoperate the verbiage in the codebook for their test.

**Perform a Destructive Test-** For this part of the assessment, the students must apply the requirements of the applicable codebook and perform a destructive bend test on the weldment they are being tested on. As stated above, the completion of this part of the assessment is not based on whether the student successfully passes the test, but whether the student is able to interpret the applicable code.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

Based on the fact that the success of this assessment isn't based on the student passing or failing the certification test, 100% of the students completed both of these assessments with a 100% percent success rate. Therefore, the standard of

success has been met. This assessment should be noted for a syllabi update in the future.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

The strength of this outcome is that the success of the outcome is not determined on the student passing the test weldment. The purpose of the outcome is to teach the students how to measure welds to codebook standards.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

The current standard of success for this outcome was that 90% of students would score 100%. I think that by adding the additional stipulation to the practical portion of the class that 100% of the students need to pass a visual examination and a destructive test at least once through the semester will lower the success rate to an acceptable amount as required by the master syllabi.

Outcome 4: Identify and describe the requirements and duties of the certified welding inspector.

- Assessment Plan
  - Assessment Tool: Test
  - Assessment Date: Winter 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Departmentally-developed rubric
  - Standard of success to be used for this assessment: 80% will score 70% or higher.
  - Who will score and analyze the data: Department faculty
- 1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2017

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
12	0

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

None of the students in this class were assessed because we do not perform this assessment in this course. The duty of certified welding inspectors is covered in the WAF 140 inspection and testing class and becomes redundant information when presented in this class.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

NA

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

NA

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: No

The standard of success was not met because this assessment does not belong in this course and will be moved in the future to the WAF 140 Inspection and Testing class.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

This is a redundancy based on the fact that this information is already covered in the WAF 140 course and will be removed on the next master syllabus update.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

This is a redundancy based on the fact that this information is already covered in the WAF 140 course and will be removed on the next master syllabus update.

### III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

2.

3. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

Based on the assessment of student learning outcome number 4, there are very simple things that could be done to benefit the student and make the class more challenging in an appropriate way.

4. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

This information will be shared in the department meeting.

- 5.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Course Assignments	In the course assignment used for SLO number 1, I will add the completion of AWS required paperwork as a requirement to finish the course.	Adding the completion of this paperwork gives students a better view of the process necessary to complete an industry certification.	2020
Course Assignments	In the course assignment used for SLO number 3, I will add the additional stipulation that each student shall pass at least one bend test and visual assessment during the semester.	The rationale for this change is to add the motivation for each student to pass the test weldment without being held to earning an industry credential.	2020

6. Is there anything that you would like to mention that was not already captured?

7.

### III. Attached Files

#### [Test Supervisor Checklist](#)

<b>Faculty/Preparer:</b>	Alexander Pazkowski	<b>Date:</b> 06/04/2019
<b>Department Chair:</b>	Glenn Kay II	<b>Date:</b> 06/19/2019
<b>Dean:</b>	Brandon Tucker	<b>Date:</b> 07/08/2019
<b>Assessment Committee Chair:</b>	Shawn Deron	<b>Date:</b> 08/23/2019