

**Course Assessment Report  
Washtenaw Community College**

Discipline	Course Number	Title
Welding and Fabrication	230	WAF 230 08/19/2019- Advanced Shielded Metal Arc Welding (SMAW)
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Welding and Fabrication	Amanda Scheffler
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: Weld pipe in the 2G, 5G and 6G positions.

- Assessment Plan
  - Assessment Tool: Welded Samples
  - Assessment Date: Fall 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: The welds will be scored as pass or fail in meeting an applicable AWS welding code.

- Standard of success to be used for this assessment: 80% of students will create passing welds in accordance with an AWS welding code.
- Who will score and analyze the data: Departmental 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)
	2019	

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

# of students enrolled	# of students assessed
26	26

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.

N/A

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.

This course has only main campus classes in the morning, afternoon, evening and weekends.

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

The students' welded samples which were given to instructors to be scored as pass or fail and documented on the students' objective sheets.

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 data for this SLO is not kept on file.

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

This data is not kept on file; there is nothing to interpret.

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.

Areas of student achievement are unknown. An area of improvement is the WAF department could start keeping copies of objective sheets on file so this data can be used, or the department could find a different assessment tool.

Outcome 2: Weld sheet, plate, "C" channel and "H" beams in all positions.

- Assessment Plan
  - Assessment Tool: Welded Samples
  - Assessment Date: Fall 2019
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: The welds will be scored as pass or fail in meeting an applicable AWS welding code.
  - Standard of success to be used for this assessment: 80% of students will create passing welds in accordance with an AWS welding code.
  - Who will score and analyze the data: Departmental 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)
	2019	

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

# of students enrolled	# of students assessed
26	26

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.

N/A

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.

This course has only main campus classes in the morning, afternoon, evening and weekends.

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

The students' welded samples which were given to instructors to be scored as pass or fail and documented on the students' objective sheets.

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 data for this SLO is not kept on file.

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

This data is not kept on file; there is nothing to interpret.

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.

Areas of student achievement are unknown. An area of improvement is the WAF department could start keeping copies of objective sheets on file so this data can be used, or the department could find a different assessment tool.

Outcome 3: Identify American Welding Society (AWS) codes and standards for weld qualifications.

- Assessment Plan
  - Assessment Tool: Written exam
  - Assessment Date: Fall 2019
  - 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: Departmental 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)
	2019	

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

# of students enrolled	# of students assessed
26	26

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.

N/A

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.

This course has only main campus classes in the morning, afternoon, evening and weekends.

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

A written exam on Blackboard was used to assess this SLO.

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: <u>No</u>
19 of 26 students scored 80% or above. 73% of students met the standard of success.

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

73% of students met the standard of success. Three students did not take the test. If those three students with scores of zero are eliminated from the data, then the students' success rate is: 82% of students who took the exam scored 80% or above and met the standard of success. The reasons for the three students not taking the exam are unknown.

- 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.

After reviewing the data (reviewing the questions students got right or wrong on the exam in Blackboard), it appears the biggest room for improvement is for students to better recall which F number an electrode is classified as and the weld characteristics of those F numbers.

Planned changes to this course include adding specific course materials, a graded quiz and a practice quiz, exclusively on F numbers, for students to reference and test themselves on the memorization of electrode classifications and F numbers.

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

- 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.

N/A

- 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?

My overall impression is undecided on how this course is meeting the needs of students. This assessment brought to light more areas of improvement for faculty than for students. Faculty need to either change data collection and retention of welded samples or change the tool used for this assessment or change the SLO.

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

I will share this new information with my department and discuss how to remedy the lack of data for assessment for this course.

- Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
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Assessment Tool	Add a graded quiz on BB to help ensure students practice memorizing F numbers and electrode characteristics.	This will be done to help encourage students to practice memorization.	2020
Course Materials (e.g. textbooks, handouts, on-line ancillaries)	Add course materials specifically about F numbers and electrode characteristics for students to reference.  Add a practice quiz for students to self-assess and practice their memorization of F numbers.	Looking at the Blackboard exam data showed students were getting more questions wrong that were referencing F numbers.	2020
Other: Data collection	Implement a new data collection procedure for all students in all sections, for the student skills checklist for the individual items on the list.	We need to discuss ways to capture all the data from the students in order to assess all the outcomes.	2020

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

6.
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### III. Attached Files

[SLO 3 data](#)

**Faculty/Preparer:** Amanda Scheffler **Date:** 08/19/2019  
**Department Chair:** Glenn Kay II **Date:** 08/20/2019  
**Dean:** Brandon Tucker **Date:** 08/29/2019  
**Assessment Committee Chair:** Shawn Deron **Date:** 11/22/2019