Course Assessment Report Washtenaw Community College

Discipline	Course Number	Title	
Auto Body Repair (new)	114	ABR 114 08/17/2023- Applied Auto Body Welding	
College	ge Division		
Advanced Technologies Advanced Technologies and Public Service Careers and Public Service Careers		Transportation Technologies	
Faculty Preparer		Timothy VanSchoick	
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?

Yes
This course was assessed in Winter 2012.

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

Based on the assessment data, we identified outdated practices and refined the inlab experience to align more closely with current industry demands.

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

To better support our students, we developed additional digital content, including video reviews and learning segments for all assignments, quizzes, and tests. This provided students with on-demand access to essential resources, allowing those who needed extra time to review materials at their own pace.

II. Assessment Results per Student Learning Outcome

Outcome 1: Identify MIG welding equipment and demonstrate set-up techniques.

- Assessment Plan
 - Assessment Tool: Written and practical exams
 - Assessment Date: Winter 2019

- Course section(s)/other population: All
- Number students to be assessed: All
- How the assessment will be scored: Scored using an answer key and a departmentally-developed rubric
- Standard of success to be used for this assessment: 75% of the 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)
	2024	

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

# of students enrolled	# of students assessed
26	18

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.

26 students were enrolled but only 18 completed the final exam.

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.

All students that completed the final exam were assessed.

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

The goal is for 75% of students to achieve a score of 80% or higher. Success is tracked using a 1-5 scale on the student achievement record, where a score of 1 indicates the need for improvement and a score of 5 represents the highest level of proficiency.

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

Out of 18 students, 15 (83%) achieved a score of 80% or higher on the student

achievement record, meeting the standard of success for this assessment tool.

However, only 13 students (72%) reached the 80% benchmark on the final exam, which falls short of the established success criteria.

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

Students have shown significant improvement in setting up welding equipment thanks to the instructional videos we created featuring our welding machines. These videos are accessible throughout the semester, allowing students to review them as needed.

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.

Starting in the Fall 2025 semester, we are updating the timeline for key procedures to enhance student success. Currently, students have the entire semester to complete the disassembly and reassembly tasks on their achievement record for the welding machine. Moving forward, this requirement will be completed before they begin welding. Additionally, for the final exam, we've observed that students who do not utilize the available review materials on Blackboard tend to perform poorly. Emphasizing the importance of these resources will be a critical focus in helping students succeed.

Outcome 2: Recognize and apply principles of I-Car welding that meet destructive testing standards.

- Assessment Plan
 - Assessment Tool: Written and practical exams
 - Assessment Date: Winter 2019
 - Course section(s)/other population: All
 - o Number students to be assessed: All
 - How the assessment will be scored: Scored using an answer key and a departmentally-developed rubric

- Standard of success to be used for this assessment: 75% of the 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)
	2024	

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

# of students enrolled	# of students assessed
26	18

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.

26 students were enrolled but only 18 completed the final exam.

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.

All students that completed the final exam were assessed.

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

The goal is for 75% of students to achieve a score of 80% or higher. Success is measured using a 1-5 scale on the student achievement record, where a score of 1 indicates a need for improvement, and a score of 5 represents the highest level of proficiency.

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

Out of 18 students, 15 (83%) scored 80% or higher on the student achievement

record, successfully meeting the standard of success for this assessment tool.

However, 13 out of 18 students (72%) scored 80% or higher on the final exam,

falling short of the established success criteria.

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

Students have the opportunity to observe and actively participate in destructive testing of their welds, emphasizing the importance of creating welds that are not only visually appealing, but also structurally sound.

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.

Currently, we perform destructive testing on only one of the four required welds for the class. Starting in Fall 2025, we will begin testing all four welds, though only the current one will be used for scoring purposes. If this expanded testing proves effective, we will consider incorporating it into the students' achievement record. Additionally, we've observed that students who do not take advantage of the review materials available on Blackboard tend to underperform on the final exam, highlighting the importance of thorough preparation.

Outcome 3: Weld various types of steel using MIG brazing techniques.

- Assessment Plan
 - Assessment Tool: Written and practical exams
 - Assessment Date: Winter 2019
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Scored using an answer key and a departmentally-developed rubric
 - Standard of success to be used for this assessment: 75% of the 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)
	2024	

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

# of students enrolled	# of students assessed
26	18

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.

26 students were enrolled but only 18 completed the final exam.

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.

All students that completed the final exam were assessed.

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

The goal is for 75% of students to achieve a score of 80% or higher. Success is recorded on the student achievement record using a 1-5 scale, where a score of 1 indicates the need for improvement, and a score of 5 represents the highest level of proficiency. The final exam was not used to assess this outcome, as the student achievement record has proven to be a more effective and reliable evaluation tool.

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

Out of 18 students, 14 (78%) achieved a score of 80% or higher on the student achievement record, just meeting the established standard of success.

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

Students enjoy this type of welding because it offers a unique experience compared to standard steel welding. Currently, we provide only a limited amount of practice with this method, as it has less frequent application in the industry.

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.

Given the industry's demand for this skill, we are considering offering it as an extra credit opportunity rather than including it in the standard scoring criteria.

Outcome 4: Demonstrate plasma cutting procedures on various materials.

- Assessment Plan
 - Assessment Tool: Written and practical exams
 - Assessment Date: Winter 2019
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Scored using an answer key and a departmentally-developed rubric
 - Standard of success to be used for this assessment: 75% of the 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)
	2024	

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

# of students enrolled	# of students assessed
26	18

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.

26 students were enrolled but only 18 completed the final exam.

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.

All students that completed the final exam were assessed.

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

Seventy-five percent of students are expected to score 80% or higher. The course measures success using a 1-5 scale on the student achievement record, where a score of 1 indicates a need for improvement and a score of 5 represents the highest level of proficiency. The final exam is not used to assess this outcome, as the student achievement record provides a more effective and comprehensive evaluation tool.

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>Yes</u>

Out of 18 students, 14 (78%) scored 80% or higher on the student achievement record, just meeting the established standard of success. Upon further review, attendance emerged as a critical factor in student performance. Those who missed class or did not take advantage of the available review materials demonstrated lower competency compared to students who consistently attended and actively engaged with the resources.

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

Students excel with this process, as plasma cutting is straightforward and requires minimal practice to achieve proficiency.

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.

Plasma cutting is a valuable tool and skill in the industry, primarily utilized in fabrication rather than collision repair. Its limited use in collision repair is due to the potential risk of damaging the vehicle from the molten metal generated during the cutting process.

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.

We have greatly improved the structure and organization of the Blackboard site and its content. One of the most significant enhancements is the recording of the key lecture that serves as the foundation for the semester. Previously, the in-class I-CAR presentation took about three hours to complete, and students who missed that day would miss critical information. With the lecture now recorded, students can access it anytime throughout the semester, ensuring everyone has the opportunity to review and reinforce their understanding as needed.

2. 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?

Students who consistently attend class and complete assignments develop strong welding skills. Recognizing that some students may need additional time to fully grasp the material, we created instructional videos, providing them with the flexibility to review the content as often as needed to enhance their understanding and proficiency.

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

Instructors with access can review the updates and incorporate them into their own classes. If an instructor from ABR or any other department wishes to access the materials, we will gladly provide them with the necessary permissions.

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	Update all tools to "outcome-related" written or practical exams. Separate out the tools for outcomes with more than one assessment tool. Remove written exam from Outcomes #3 and #4.	For more accurate and specific assessment data collection.	2025
Course Assignments	Implementing that students do a disassembly and re- assembly of the welding machine before they start	Currently the students watch a video of the process. They watch the instructor do the process and they	2024

Intended Change(s)

4.

welding for the	need to accomplish
semester. This wil	1
give them a better	8
understanding of	the semester.
how the machine	
works and if any	Changing this
issues come about	0 0
during the semeste	L L
e	o frustration some
•	n. students get when
	their welding
	machine isn't
	working properly.

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



III. Attached Files

ABR 114 data

Faculty/Preparer:	Timothy VanSchoick	Date: 01/31/2025
Department Chair:	Rocky Roberts	Date: 01/31/2025
Dean:	Eva Samulski	Date: 01/31/2025
Assessment Committee Chair:	Jessica Hale	Date: 03/28/2025

COURSE ASSESSMENT REPORT

I. Background Information

1. Course assessed:

Course Discipline Code and Number: ABR 114 Course Title: Applied Auto Body Welding Division/Department Codes: VCT/ABRD

2. Semester assessment was conducted (check one):

	Fall 20
\boxtimes	Winter 2012

- Spring/Summer 20
- 3. Assessment tool(s) used: check all that apply.
 - Portfolio
 - Standardized test
 - Other external certification/licensure exam (specify):
 - Survey
 - Prompt
 - Departmental exam
 - Capstone experience (specify):
 - Other (specify): Achievement Record/Task List
- 4. Have these tools been used before?
 - ☐ Yes ⊠ No

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.

5. Indicate the number of students assessed and the total number of students enrolled in the course.

21 of 21 students who completed the course were assessed

6. If all students were not assessed, describe how students were selected for the assessment. (Include your sampling method and rationale.)
26 students were enrolled only - 21 completed the final exam

II. Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment.

None

2. List each outcome that was assessed for this report exactly as it is stated on the course master syllabus. (You can copy and paste these from CurricUNET's WR report.)

Identify and demonstrate principles of welding equipment and set-up techniques Identify and demonstrate principles of I-Car welding and cutting procedures.

3. For each outcome that was assessed, indicate the standard of success exactly as it is stated on the course master syllabus. (You can copy and paste these from CurricUNET's WR report.)

80% of the students will achieve 85% or higher on the exam and student achievement record.

4. Briefly describe assessment results based on data collected during the course assessment. Indicate the extent to which students are achieving each of the learning outcomes listed above and state whether the standard of success was met for each outcome. *In a separate document, include a summary of the data collected and any rubrics or scoring guides used for the assessment.*

Approved by the Assessment Committee July 2011 10 gged 6 26/12 - -

COURSE ASSESSMENT REPORT

11 students (52%) scored 85% or higher on the exam and student achievement record. This does not meet the standard of success as established for this course. 13 of 21 students (62%) scored 85% or higher on the student achievement record. 8 students (38%) scored 85% or higher on the final exam.

In review, the individual records attendance plays a key factor in students' success. 73% of the students that attended 14 or 15 classes meet the standard of success.

5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in the assessment results. (This should be an interpretation of the assessment results described above and a thoughtful analysis of student performance.)

Strengths: Students performed better in the practical portions of the class than on the written exam.

Weaknesses: Students need better preparation for the written portion of the final exam, as only 29% scored an 85% or higher. In Quiz 3, modules 1-5, students did not perform to standard, possible solution to break up content between different days.

III. Changes influenced by assessment results

- If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses. (*If students met all expectations, describe your plan for continuous improvement.*)
 Help prepare better for written final exam
 Change how quiz 3 is presented
 Stressing the importance of attendance
 Reinforce the need to complete all homework
- 2. Identify intended changes that will be instituted based on results of this assessment activity (check all that apply). Please describe changes and give rationale for change.
 - a. Outcomes/Assessments on the Master Syllabus Change/rationale:
 - b. Objectives/Evaluation on the Master Syllabus Change/rationale:
 - c. Course pre-requisites on the Master Syllabus Change/rationale:
 - d. [1st Day Handouts Change/rationale:
 - e. Course assignments Change/rationale: Require completion of reviews
 - f. Course materials (check all that apply)
 - Textbook
 Handouts
 Other:
 - g. Instructional methods Change/rationale:
 - h. Individual lessons & activities Change/rationale: Revise Quiz 3 modules 1-5
- 3. What is the timeline for implementing these actions? Fall 2012

IV. Future plans

WASHTENAW COMMUNITY COLLEGE

COURSE ASSESSMENT REPORT

- 1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this course. Worked well to address areas that need change.
- 2. If the assessment tools were not effective, describe the changes that will be made for future assessments.
- Which outcomes from the master syllabus have been addressed in this report? All <u>X</u> Selected ______ If "All", provide the report date for the next full review: _____Fall 2014_____.

If "Selected", provide the report date for remaining outcomes: ______.

Submitted by:

Print:TimVanschoick Faculty/Preparer	Signature T. whan Scho. it	Date: 5-30-12
Print:Scott Malnar Department Chair	Signature	Date: 5.30-12
Print:Ross Gordon Dean/Administrator	Signature_hun GA	Date: 6/25/12

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