

Assurance of Student Learning Reflection 2024-2025

<i>Ogden College of Science and Engineering</i>	<i>School of Engineering and Applied Sciences</i>
<i>Civil Engineering, 534, 534P</i>	
<i>Dr. Shane M. Palmquist</i>	
Is this an online program? ☐ Yes ☒ No	Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here ☒ Yes, they match! (If they don't match, explain on this page under Evaluation)

Instructions: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your **ASL Rep** by **May 15, 2025**.

Program Student Learning Outcome 1

Program Student Learning Outcome	Ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
Evaluation	The current student learning outcome is still relevant and required for assessment as required by ABET, which accredits all engineering programs in the United States. The outcome should not be changed. The outcome is measureable and includes measureable verbs as per Bloom's Taxonomy. The civil engineering program has an appropriate number of student learning outcomes, SLOs, to measure on a regularly basis.
Measurement Instruments	Yes, the measurement instrument is measuring the outcome. There has been no change in the SLO, and this is the best instrument to use and is used in our ABET process as well. This measure is direct, and the artifact is appropriate. The CE faculty do not anticipate that AI will affect the assignment nor the measurement. The rubric used appears to be a good fit for the learning outcome. No adjustment is needed at this time.
Criteria & Targets	Does Criteria for Success (level of performance students will have achieved for your program to have been successful--ex., students will have earned 3/4 for documentation and citation on capstone essays) need to be changed? No change is needed at this time as the CE faculty believe that this works really well. A target of 3 out of 4 is desired and has been achieved.
Results & Conclusion	Results: Results were reasonable and were expected. The target has been achieved. Student performance over the past three (3) cycles has been relatively consistent and in all cases met the target value of 3 out of 4. Conclusions: The rubric, assessment tool, and the artifact assessed worked well. Using final exams as the artifact assessed has worked well since this assessment occurs using an artifact from the end of the semester, which helps shows the student performance in achieving the learning outcome.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Our three-year assessment plan for the next cycle (2025-26, 2026-27, 2027-28) is to keep doing what we have been doing. Making major changes is not feasible at this time. However, in the future we plan on limiting how many final exams and areas of final exams reviewed. This is a result of limited faculty in the program. We do not plan on changing the fundamental artifact, which is final exams.

Program Student Learning Outcome 2	
Program Student Learning Outcome	Upon graduation, our students have the ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
Evaluation	The current student learning outcome is still relevant and required for assessment as required by ABET, which accredits all engineering programs in the United States. The outcome should not be changed. The outcome is measureable and includes measureable verbs as per Bloom's Taxonomy. The civil engineering program has an appropriate number of student learning outcomes, SLOs, to measure on a regularly basis.
Measurement Instruments	Yes, the measurement instrument is measuring the outcome. There has been no change in the SLO, and this is the best instrument to use and is used in our ABET process as well. This measure is direct, and the artifact is appropriate. The CE faculty do not anticipate that AI will affect the assignment nor the measurement. The rubric used appears to be a good fit for the learning outcome. No adjustment is needed at this time.
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Results & Conclusion	<u>Results:</u> Results were reasonable and were expected. The target has been achieved. Student performance over the past three (3) cycles has been relatively consistent and in all cases met the target value of 3 out of 4. <u>Conclusions:</u> The rubric, assessment tool, and the artifact assessed worked well. Using final exams as the artifact assessed has worked well since this assessment occurs using an artifact from the end of the semester, which helps shows the student performance in achieving the learning outcome.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Our three-year assessment plan for the next cycle (2025-26, 2026-27, 2027-28) is to keep doing what we have been doing. Making major changes is not feasible at this time. However, in the future we plan on limiting how many attributes assessed as five (5) is a bit to high. This will probably change to three (3) or four (4) at most. This is a result of limited faculty in the program. We do not plan on changing the fundamental artifact at this time.

Program Student Learning Outcome 3	
Program Student Learning Outcome	Graduates of the civil engineering program should show an ability to communicate effectively with a range of audiences.
Evaluation	The current student learning outcome is still relevant and required for assessment as required by ABET, which accredits all engineering programs in the United States. The outcome should not be changed. The outcome is measureable and includes measureable verbs as per Bloom's Taxonomy. The civil engineering program has an appropriate number of student learning outcomes, SLOs, to measure on a regularly basis.
Measurement Instruments	Yes, the measurement instrument is measuring the outcome. There has been no change in the SLO, and this is the best instrument to use and is used in our ABET process as well. This measure is direct, and the artifact is appropriate. The CE faculty do not anticipate that AI will affect the assignment nor the measurement. The rubric used appears to be a good fit for the learning outcome. No adjustment is needed at this time.
Criteria & Targets	Does Criteria for Success (level of performance students will have achieved for your program to have been successful--ex., students will have earned 3/4 for documentation and citation on capstone essays) need to be changed? No change is needed at this time as the CE faculty believe that this works really well. A target of 3 out of 4 is desired and has been achieved.
Results & Conclusion	Results: Results were reasonable and were expected. The target has been achieved. Student performance over the past three (3) cycles has been relatively consistent and in all cases met the target value of 3 out of 4. Conclusions: The rubric, assessment tool, and the artifact assessed worked well. Using final exams as the artifact assessed has worked well since this assessment occurs using an artifact from the end of the semester, which helps shows the student performance in achieving the learning outcome.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Our three-year assessment plan for the next cycle (2025-26, 2026-27, 2027-28) is to keep doing what we have been doing. Making major changes is not feasible at this time. However, in the future we plan on limiting how many attributes assessed as five (5) is a bit to high. This will probably change to three (3) or four (4) at most. This is a result of limited faculty in the program. We do not plan on changing the fundamental artifact at this time.