

Assurance of Student Learning Reflection 2024-2025

College of Health and Human Services

Department of Public Health

Environmental and Occupational Health Science (548)

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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

Analyze environmental and occupational safety and health problems.

Evaluation

This program learning outcome is still applicable to the BS in EOHS. Students need to be able to be given a problem related to the environmental and occupational safety and health field and work to solve it. In order to do this students need to be able to analyze the problem (i.e. break it down into multiple parts) to know the best way to begin working towards a solution. The outcome is measurable utilizing a written laboratory report to see that students can look at data collected and break it down into different components to see what solutions are needed to improve the water quality within a local stream.

Measurement Instruments

This student learning outcome is measured utilizing a comprehensive written laboratory from the ENV 410/411 Water Treatment Processes & Lab courses. This is a form of direct measurement where the student is evaluated on their performance on a specified assignment. There are other options within our program for the SLO as we have multiple courses where students analyze problems related to EOHS. However, this will continue to be our measurement instrument as it is one of the most comprehensive assignments related to this SLO. Additionally, the Environmental Health Report Rubric was also discussed and determined to be sufficient to continue measuring this assignment.

Criteria & Targets

The criteria of 75% of students earning a proficient or greater score on their comprehensive lab report was reviewed and determined to be sufficient for the next cycle of evaluations. This criteria has not been consistently met each evaluation period and evaluation measures were actually changed during the 2022/2023 cycle. Results have been the following:

2021/2022: 71% of students in the program earned proficient or greater on their comprehensive final report for SLO1.
2022/2023 83% of students in the program earned proficient or greater on their comprehensive final report for SLO1.
2023/2024: 55.56% of students in the program earned proficient or greater on their comprehensive final report for SLO1.

Faculty will continue to work to improve student outcomes to consistently meet this goal.

Results & Conclusion	<u>Results:</u> The inconsistency in meeting this goal is what stood out over this assessment cycle. Technically the goal was met in 2021/2022 because 2 different instruments had been being used to measure SLO1. However, it was determined that each learning objective would be more clearly evaluated if one one instrument was utilized during the 2022/2023 evaluation period. This change in assessment helped to show that we need to improve on SLO1 and place more emphasis on writing, organization and presentation skills within our classes. This class is being taught during Fall 2025 and this is the first opportunity we will have to make this improvement since the conclusion was made. <u>Conclusions:</u> Utilizing 2 instruments to measure SLO1 did not work as it left ambiguity about whether the objective was being met. Therefore changes had been made during the 2022/2023 assessment to help address this ambiguity. Once this was changed we realized that students were not receiving the specific writing style instruction they needed within their ENG and COMM classes that was needed for EOHS reports. This SLO1 assessment helped to show the need for more writing instruction to be implemented within the Fall 2025 course.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Several changes were made during the previous assessment cycle that still need to be evaluated in the upcoming assessment cycles. The changes from 2 instruments to 1 instrument was only evaluated twice. Therefore, future evaluations are still needed to determine if this is going to be successful. Additionally, writing instruction is going to be increased during the Fall 2025 semester for the ENV 410/411 course to see if this improves results for SLO1. This will help us to determine if a different writing class needs to be implemented as a prerequisite or if instrument within the course will be sufficient.

Program Student Learning Outcome 2	
Program Student Learning Outcome	Design processes and programs to solve problems in environmental and occupational health science.
Evaluation	This program learning outcome is still applicable to the BS in EOHS. Students need to be able to be given a problem related to the environmental and occupational safety and health field and work to solve it. In order to do this students need to be able to design a program or process that can be put into place to help solve a problem (i.e. noise levels within an industry). The outcome is measurable utilizing a written proposal to complete a noise hazard evaluation in the ENV 321 Fundamental of Industrial Hygiene course.
Measurement Instruments	This student learning outcome is measured utilizing a written proposal from the ENV 321 Fundamentals of Industrial Hygiene course. This is a form of direct measurement where the student is evaluated on their performance on a specified assignment. There are other options within our program for the SLO as we have multiple courses where students analyze problems related to EOHS. However, this will continue to be our measurement instrument as it is one of the most comprehensive assignments related to this SLO. Additionally, the Environmental Health Report Rubric was also discussed and determined to be sufficient to continue measuring this assignment.
Criteria & Targets	The criteria of 75% of students earning a proficient or greater score on their final proposal was reviewed and faculty members have decided to increase the program success target from 75% of students earning a proficient or greater on their final proposal to 85% of students earning a proficient or greater on their final proposal. This criteria has been consistently met over the last 3 year cycle. Results have been the following: 2021/2022: 87.5% of students in the program earned proficient or greater on their comprehensive final proposal for SLO2. 2022/2023 92% of students in the program earned proficient or greater on their comprehensive final proposal for SLO2. 2023/2024: 100% of students in the program earned proficient or greater on their comprehensive final proposal for SLO2. Faculty will continue to work to ensure student outcomes consistently meet this new goal of 85%.
Results & Conclusion	Results: The results were surprising in a good way that we were able to increase our goal 10 percentage points. Students have shown this SLO is particularly well demonstrated within our courses. This is an excellent measure to show that our students are able to design a program to successfully solve a problem in EOHS. Conclusions: SLO2 is our only SLO that has continued to be measured utilizing the same instrument and utilizing only 1 instrument. The successfulness of this SLO is what made our team realize the measurements for the other two SLOs needed to be evaluated and changed to reduce the ambiguity of determining if an SLO is being met.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	For the future evaluation period the target set will be increased from 75% of students in the program earning proficient or greater on their final proposal to 85% of students in the program earning proficient or greater on their final proposal. This assessment helped to demonstrate that our students were continually exceeding the previous goal set and that we could raise our standards to expect even greater success from our students.

Program Student Learning Outcome 3	
Program Student Learning Outcome	Communicate environmental and occupational safety and health strategies to a variety of audiences.
Evaluation	This program learning outcome is still applicable to the BS in EOHS. The ability to communicate well within EOHS is critical and has been mentioned multiple times within our advisory board meetings by industry professionals and alumni. In order to do this students need to be able to adequately communicate what they have experienced during their internship program. The outcome is measurable utilizing a comprehensive internship portfolio that is put together as part of the ENV 491 Internship course.
Measurement Instruments	This student learning outcome is measured utilizing a comprehensive internship portfolio from the ENV 491 Internship course. This is a form of direct measurement where the student is evaluated on their performance on a specified assignment. There are other options within our program for the SLO as we have multiple courses where students communicate problems related to EOHS. However, this will continue to be our measurement instrument as it is one of the most comprehensive assignments related to this SLO. Additionally, the Environmental Health Internship Portfolio rubric was also discussed and determined to be sufficient to continue measuring this assignment.
Criteria & Targets	The criteria of 75% of students earning a proficient or greater score on their internship portfolio was reviewed and faculty members have decided to increase the program success target from 75% of students earning a proficient or greater on their portfolio to 85% of students earning a proficient or greater on their portfolio. The 75% criteria has been consistently met over the last 3 year cycle. Results have been the following: 2021/2022: 100% of students in the program earned proficient or greater on their internship portfolio for SLO3. 2022/2023 100% of students in the program earned proficient or greater on their internship portfolio for SLO3. 2023/2024: 88.89% of students in the program earned proficient or greater on their internship portfolio for SLO3. Faculty will continue to work to ensure student outcomes consistently meet this new goal of 85%.
Results & Conclusion	Results: The results were surprising in a good way that we were able to increase our goal 10 percentage points. Students have shown this goal is particularly well demonstrated within our courses. Since the instrument used to evaluate SLO3 is part of the culminating experience for our students we decided a higher level of rigor would be appropriate for this measurement to ensure student learning. Conclusions: Utilizing 2 instruments to measure SLO3 did not work as it left ambiguity about whether the objective was being met. Therefore changes were made during the 2022/2023 assessment to help address this ambiguity. Once this was changed we realized that students were continually exceeding our standards for this target.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	For the future evaluation period the target set will be increased from 75% of students in the program earning proficient or greater on their internship portfolio to 85% of students in the program earning proficient or greater on their internship portfolio. Additionally, the changes from 2 instruments to 1 instrument was only evaluated twice. Therefore, future evaluations are still needed to determine if this is going to be successful in evaluating SLO3.

To add more outcomes, if needed, select the table above and copy & paste below.