

Assurance of Student Learning Report 2023-2024

College of Health & Human Services

Department of Public Health

Occupational Safety & Health Certificate

Jacqueline Basham

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 **Assessment Cycle**)

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages. Add more Outcomes as needed.

Program Student Learning Outcome 1: Identify and compile relevant information sources to assess an occupational safety and health problem.

Instrument 1 Final Project Presentation – ENV 321 Fundamentals of Industrial Hygiene

Instrument 2

Instrument 3

Based on your results, check whether the program met the goal Student Learning Outcome 1.

☒ Met

☐ Not Met

Program Student Learning Outcome 2: Interpret and communicate occupational safety and health regulations.

Instrument 1 Discussion Board – ENV 120 Introduction to Occupational Safety and Health

Instrument 2

Instrument 3

Based on your results, check whether the program met the goal Student Learning Outcome 2.

☒ Met

☐ Not Met

Program Student Learning Outcome 3: Apply appropriate field methods to collect occupational safety and health data.

Instrument 1 Comprehensive Proposal – ENV 321 Fundamentals of Industrial Hygiene

Instrument 2

Instrument 3

Based on your results, check whether the program met the goal Student Learning Outcome 3.

☒ Met

☐ Not Met

Assessment Cycle Plan:

All student learning outcomes were assessed during this cycle. The assessment indicates that the mean scores for all SLOs meet program success targets. The program is preparing students for jobs in the field, as indicated by a greater than 95% employment rate in the field. The program is further strengthened by the continuous review of the program, not only by faculty members, but by an EOHS advisory board. EOHS advisory board recommendations are incorporated into the courses and the learning objectives are then used to analyze that these needs are being met. It is important to note that the class utilized to analyze SLO1 and SLO3 learning objectives is only taught every 3 semesters and was not taught

during the 2023/2024 academic year, therefore, data from the Spring 2023 semester was used.

Program Student Learning Outcome 1				
Program Student Learning Outcome	Identify and compile relevant information sources to assess an occupational safety and health problem.			
Measurement Instrument 1	Direct measure of student learning: Students in ENV 321 Fundamentals of Industrial Hygiene, a junior/senior level course, were given a case study as a final project to determine the best way to monitor for a noise hazard within a factory. Students are given the issue related to noise and must design a monitoring program to the meet the Occupational Safety & Health Administration requirements for a Hearing Conservation Program. Students have to present their final project to the class as if they were presenting to the owner of the company. For SLO 1 the total score for the presentation was assessed.			
Criteria for Student Success	Student’s should score “Proficient” or greater on the OSH Presentation Rubric for SLOs. Scores on the rubric range from 0 – 50 points with those scoring 40 – 50 points being deemed “Proficient”, 39 - 25 points being deemed “Competent” and those scoring less than 25 points being deemed “Novice”.			
Program Success Target for this Measurement		75% of students should score “Proficient” or greater for SLO 1.	Percent of Program Achieving Target	100% of students scored “Proficient or greater for SLO 1.
Methods	Direct: Artifacts from the course were collected from all certificate students in the course during the specified time period (<i>N</i> = 7). The presentations were evaluated according to the OSH Presentation Rubric (Appendix 1). Each student presentation was scored according to the rubric. Total scores on the rubric were rated from Novice to Proficient. SLO 1 was assessed based on the total score.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.				<input checked="" type="checkbox"/> Met <input type="checkbox"/> Not Met
Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn’t, and plan going forward)				
<p>Results: The results show that students in the Occupational Safety and Health certificate are able to proficiently identify and compile relevant information sources to assess an occupational safety and health problem. It is important to note that the artifacts collected are the same for this report as the 2022/2023 report due to class rotation schedule. This class was previously offered in the Spring 2023 semester and will be offered again in Fall 2024. Therefore, the class was not offered during this assessment time period so prior artifacts were utilized. The number of students did change however as 1 of the previously evaluated students are no longer in the OSH certificate and 3 additional students in the class had added the certificate for the 2023-2024 academic year.</p> <p>Conclusions: After evaluation of the SLOs in the Fall 2022 semester by EOHS faculty members it was determined that more than one rubric was needed to analyze SLOs. Faculty members worked together to create the OSH presentation rubric for all OSH courses instead of utilizing one rubric for both reports and presentations. This allows faculty members to focus more specifically on presentation skills (soft skills) which is something the EOHS advisory board has indicated is needed within the EOHS profession. After reviewing results, faculty members have decided to keep this change in place.</p> <p>Plans for Next Assessment Cycle: Assessments for the EOHS program occur on a yearly basis, therefore, the next assessment of SLO 1 will occur in the Fall 2024 semester. The presentation will continue to be collected from the ENV 321 course. The program coordinator for the 2024/25 academic year, Jacqueline Basham, will be responsible for collecting and providing information and data related to SLO 1 from the instructor of record for ENV 321.</p>				

Program Student Learning Outcome 2			
Program Student Learning Outcome	Interpret and communicate occupational safety and health regulations.		
Measurement Instrument 1	Direct Measure of Student Learning: Students in ENV 120 Introduction to Occupational Safety and Health completed an analysis of an occupational safety and health regulation. This required each student to interpret the regulation and communicate the regulation through a discussion. The assignment met SLO 2 by requiring students to analyze a scenario at a workplace and develop a discussion based on interpretation and application of the regulation. Students then write the discussion board as if they were having to communicate the regulation to an employee at their workplace.		
Criteria for Student Success	Students should score 80% or greater on the assignment.		
Program Success Target for this Measurement	75% of students will score 80% or greater (20 of 25 points) on the assignment.	Percent of Program Achieving Target	100% of students scored 80% or greater for SLO 2.
Methods	Direct: Artifacts from ENV 120 Introduction to Occupational Safety and Health course were collected from all certificate students in the course during the specified time period (N = 3). Discussion Boards were evaluated according to the rubric in the course which requires that students communicate the regulation to an employee and then review other students' posts and address ways in which that student could improve. SLO 2 was assessed based on the total score for the discussion board.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.			<input checked="" type="checkbox"/> Met <input type="checkbox"/> Not Met
Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)			
<p>Results: The results show that students in the Occupational Safety and Health certificate are able to interpret and communicate an occupational safety and health regulation. Regulations related to radiation hazards are subject to change due to new and developing OSH standards. Evaluators will continue to ensure that the most up-to-date information is given regarding radiation hazards so that students are able to practice effective communication with the most recent regulations in safety.</p> <p>Conclusions: After evaluation of the SLOs in the Fall 2023 semester by EOHS faculty members it was determined that discussion board comments and participation seem to be lacking. There may need to be more emphasis placed on completing discussion boards as part of the class or to change this to a different type of assignment instead of utilizing a discussion board. SLO 2 will continue to be analyzed utilizing the discussion board from the ENV 120 course for this academic year but this will be evaluated again Fall 2024 semester and may potentially change for the 2024-2025 assessment period.</p> <p>Plans for Next Assessment Cycle: Assessments for the EOHS program occur on a yearly basis, therefore, the next assessment of SLO 2 will occur in the Fall 2024 semester. The discussion board responses will continue to be collected from the ENV 120 course at this time but may be changed to a more relevant format in the future. The program coordinator for the 2024/25 academic year, Jacqueline Basham, will be responsible for collecting and providing information and data related to SLO 2 from the instructor of record for ENV 120.</p>			

Program Student Learning Outcome 3			
Program Student Learning Outcome	Apply appropriate field methods to collect occupational safety and health data.		
Measurement Instrument 1	Direct measure of student learning: Students in ENV 321 Fundamentals of Industrial Hygiene, a junior/senior level course, were given a case study as a final project to determine the best way to monitor for a noise hazard within a factory. Students are given the issue related to noise and must design a monitoring program to meet the Occupational Safety & Health Administration requirements for a Hearing Conservation Program. Students have to create a comprehensive proposal as their final project for the class as if they were presenting the proposal to the owner of the company. This requires them to explain the problem, explain the program they have developed to solve the problem, and create a timeline and a budget required to implement the solution. For SLO 3 the final score for the comprehensive proposal was evaluated.		
Criteria for Student Success	Student's should score "Proficient" or greater on the OSH Reports Rubric (Appendix 2) for SLOs. Scores on the rubric range from 0 – 100 points with those scoring 80 –100 points being deemed "Proficient", 79 - 50 points being deemed "Competent" and those scoring less than 50 points being deemed "Novice".		
Program Success Target for this Measurement	75% of students should score "Proficient" or greater for SLO 3.	Percent of Program Achieving Target	100% of students scored proficient or greater for SLO 3.
Methods	Direct: Artifacts from the ENV 321 Fundamentals of Industrial Hygiene course were collected from all certificate students in the course ($N = 7$). The proposals were evaluated according to the OSH Reports Rubric (Appendix 2). Each student proposal was scored according to the rubric. Total scores on the rubric were rated from Novice to Proficient. SLO 3 was assessed based on the total score for the proposal.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.			<input checked="" type="checkbox"/> Met
Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)			
<p>Results: The results show that students in the Occupational Safety and Health certificate are able to apply appropriate field methods to collect occupational safety and health data. This included creating a budget and timeline both of which are skills our EOHS advisory board have indicated are needed for new professionals within the field. It is important to note that the artifacts collected are the same for this report as the 2022/2023 report due to class rotation schedule. This class was previously offered in the Spring 2023 semester and will be offered again in Fall 2024. Therefore, the class was not offered during this assessment time period so prior artifacts were utilized. The number of students did change however as 1 of the previously evaluated students are no longer in the OSH certificate 3 additional students in the class had added the certificate for the 2023-2024 academic year.</p> <p>Conclusions: After evaluation of the SLOs in the Fall 2022 semester by EOHS faculty members it was determined that the OSH report rubric needed to be more broad to be easier to use by all faculty members in multiple courses. Faculty members worked together to create the OSH report rubric for all OSH courses. This</p>			

allows faculty members to have a broad rubric that can be tailored to individual courses. This ensures that all faculty members are evaluating based on the same basic principles while still allowing for assessment of specific skills related to the course material. After reviewing results, faculty members have decided to keep this change in place.

Plans for Next Assessment Cycle: Assessments for the EOHS program occur on a yearly basis, therefore, the next assessment of SLO 3 will occur in the Fall 2024 semester. The proposal will continue to be collected from the ENV 321 course. The program coordinator for the 2024/25 academic year, Jacqueline Basham, will be responsible for collecting and providing information and data related to SLO 3 from the instructor of record for ENV 321.

***** Please include Curriculum Map (below/next page) as part of this document**

Appendix 1 - OSH Presentation Rubric

	Novice	Competent	Proficient
Presentation Skills	Points: 0 (0.00%) Student did not complete presentation component	Points: 10 (20.00%) Student gave presentation but did not interact with the audience, read directly from the slides and/or was unable to answer questions related to presentation	Points: 20 (40.00%) Student gave a well formed presentation while engaging the audience and was able to provide reasonable answers to questions and comments.
Presentation	Points: 0 (0.00%) No presentation was created	Points: 15 (30.00%) Only a portion of the presentation was created (i.e. no budget or conclusion was given but an introduction and assessment plan were created)	Points: 30 (60.00%) All parts of the presentation were created (i.e. title page, introduction, assessment plan, budget, conclusion, references) and done in a well organized

	Novice	Competent	Proficient
			way that was easy to understand

Appendix 2 - OSH Reports Rubric

	Novice	Competent	Proficient
Formatting & Organization	Points: 1 (1.00%) Report is not organized or formatted in any recognizable manner but the is completed	Points: 5 (5.00%) Report has some formatting and organization but information is not always in the correct areas and it is hard to find where specific information is located	Points: 10 (10.00%) Report is formatted and organized in a way that is easy to read and quickly find the information that is needed.
Content	Points: 0 (0.00%) Student does not provide a report	Points: 40 (40.00%) Students report has some of the sections required but not all and/or students	Points: 80 (80.00%) Students report has all required sections with all

	Novice	Competent	Proficient
		report has all sections required but there is needed information left out	needed information included
References	Points: 0 (0.00%) References are not given	Points: 5 (5.00%) At least some references are given but not formatted correctly	Points: 10 (10.00%) All references used to create the report are provided and formatted correctly

Appendix 3 – OSH Certificate Curriculum Map

Program name:	Occupational Safety & Health Certificate (1705)				
Department:	Public Health				
College:	Health & Human Services				
Contact person	Jacqueline Basham, MPH, ASP				
Email:	jacqueline.basham@wku.edu				
KEY:					
I = Introduced					
R = Reinforced/Developed					
M = Mastered					
A = Assessed					
			Learning Outcomes		
			LO1:	LO2:	LO3:
			Identify and compile relevant information sources to assess an occupational safety and health problem.	Interpret and communicate occupational safety and health regulations.	Apply appropriate field methods to collect occupational safety and health data.
Course Subject	Number	Course Title			
ENV	120	Introduction to Occupational Safety and Health	I	I R A	I
ENV	221	Safety and Health Standards, Codes, and Regulations	R	I R M	R
ENV	321	Fundamentals of Industrial Hygiene	R M A	R	R M A
ENV	322	Physical Hazards Control	R	R	R
ENV	423	Safety Program Management	M	R	M