Assurance of Student Learning Report 2023-2024	
College of Health and Human Services	*Department of Public Health*
Environmental Health Certificate 1743	
Grace Lartey	

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)**

*** Please include Curriculum Map as part of this document (at the end), NOT as a separate file.

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: Students will be able to assess potential environmental issues within the community.

Instrument 1	Direct Measure – PH/ENV 280 (equivalent courses) Assignment
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: Students will be able to design and implement effective strategies and interventions to improve on the environment and prevent or reduce health hazards.

Instrument 1	Direct Measure – PH 385 Assignment
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: Students will evaluate (environmental health) implemented strategies and interventions.

Instrument 1	Direct Measure – PH 385 Assignment
Instrument 2	Direct Measure – ENV 460 Assignment
Instrument 3	

Based on your results, check whether the program met the goal Student Learning Outcome 3.	☒ Met	☐ Not Met

Assessment Cycle Plan:

Post-graduation and employer surveys will be administered during the 2024/25 academic year to collect information for program modication in the 2025/26 academic year. Monitoring will continue. SLO 3 wording was modified slightly for 23-24 to align with the SLO wording submitted to the university CourseLeaf system in 2023.

Program Student Learning Outcome 1

Program Student Learning Outcome	**Students will be able to assess potential environmental issues within the community.**
Measurement Instrument 1	**PH/ENV 280 Assignment** **Direct Measure: Students will use the water footprint calculator to calculate how much water they use and ways to reduce their water usage to protect the environment.**
Criteria for Student Success	Students will calculate their water usage and demonstrate how they can reduce their water use to improve the environment with a score of 80 or higher on the assignment.

Program Success Target for this Measurement	80% of students enrolled in the certificate program will score 80 or higher on the assignment.	Percent of Program Achieving Target	The two students enrolled in the certificate program were not enrolled in the PH 280 course during the year under review.
Methods	Course instructor will provide data annually. The two students enrolled in the certificate program were not enrolled in the PH 280 course during the year under review.		
Measurement Instrument 2	Do you have other measures of assessment for SLO 1? If so, please add those here along with all the information below. If not, you may delete this section and move on to **"… whether the program met the goal Student Learning Outcome 1."**		
Criteria for Student Success			
Program Success Target for this Measurement		Percent of Program Achieving Target	
Methods			
Measurement Instrument 3	Do you have other measures of assessment for SLO 1? If so, please add those here along with all the information below. If not, you may delete this section and move on to **"… whether the program met the goal Student Learning Outcome 1."**		
Criteria for Student Success			
Program Success Target for this Measurement		Percent of Program Achieving Target	
Methods			

Based on your results, highlight whether the program met the goal Student Learning Outcome 1.	☒ Met	☐ Not Met

Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)

Results: The results were expected as the certificate program has consistently had low enrollment.

Conclusions: The program has started tracking post-graduation/employment data as part of the exposure and improvement measures. Employer survey will be administered for a better understanding of current needs and trends for program improvement.

**IMPORTANT - Plans for Next Assessment Cycle: Post-graduation and employer surveys will be administered for information to facilitate program modication in the near future. Monitoring will continue.

Program Student Learning Outcome 2			
Program Student Learning Outcome	**Students will be able to design and implement effective strategies and interventions to improve on the environment and prevent or reduce health hazards.**		
Measurement Instrument 1	**PH 385 Assignment** **Direct Measure: Students will write a paper/blog on an environmental health issue discussed in the media, identify the health risks of the issue to populations, review implemented interventions including policies, and recommend strategies for preventing or reducing the health hazard.**		
Criteria for Student Success	Students will identify a current environmental health issue in the media, discuss the associated risks, review implemented interventions including policies and recommend prevention or improvement strategies with a score of 80 or higher.		
Program Success Target for this Measurement	80% of students will score 80 or higher on the assignment.	**Percent of Program Achieving Target**	The two students enrolled in the certificate program were not enrolled in the PH 385 course during the year under review.
Methods	The course instructor will provide data annually. The two students enrolled in the certificate program were not enrolled in the PH 385 course during the year under review.		
Measurement Instrument 2			
Criteria for Student Success			
Program Success Target for this Measurement		**Percent of Program Achieving Target**	
Methods			
Measurement Instrument 3			
Criteria for Student Success			

Program Success Target for this Measurement		Percent of Program Achieving Target	
Methods			

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.	☒ Met	☐ Not Met

Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)

Results: The results were expected as the certificate program has consistently had low enrollment.

Conclusions: The program has started tracking post-graduation/employment data as part of the exposure and improvement measures. Employer survey will be administered for a better understanding of current needs and trends for program improvement.

**IMPORTANT - Plans for Next Assessment Cycle: Post-graduation and employer surveys will be administered for information to facilitate program modication in the near future. Monitoring will continue.

Program Student Learning Outcome 3	
Program Student Learning Outcome	**Students will evaluate implemented strategies and interventions.**
Measurement Instrument 1	**PH 385 Assignment** **ENV 460 Assignment** **Direct Measures: 1) Students will write a paper/blog on an environmental health issue discussed in the media, identify the health risks of the issue to populations, review implemented interventions including policies, and recommend strategies for preventing or reducing the health hazard.** **2) Students will review an environmental health policy related to air pollution, its impact on public health.**
Criteria for Student Success	80% of students will score 80 or higher on each assignment.

Program Success Target for this Measurement	80% of students will score 80 or higher on each of the assignments.	Percent of Program Achieving Target	The two students enrolled in the certificate program were not enrolled in the PH 385 course during the year under review. While both students were enrolled in the ENV 460 course, only one student participated in the environmental health policy assignment by the due date. This student scored 100% on the assignment. Since the second student did not submit the assignment, the program's target will be based on the one submitted

				assignment.
Methods	Since the second student did not participate in the assignment, data from the one student was used in the assessment. Course instructor will provide data annually.			
Measurement Instrument 2				
Criteria for Student Success				
Program Success Target for this Measurement		**Percent of Program Achieving Target**		
Methods				
Measurement Instrument 3				
Criteria for Student Success				
Program Success Target for this Measurement		**Percent of Program Achieving Target**		
Methods				
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.			☒ **Met**	☐ **Not Met**

Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)

<u>**Results**</u>: The results were expected as the certificate program has consistently had low enrollment.

<u>**Conclusions**</u>: The program has started tracking post-graduation/employment data as part of the exposure and improvement measures. Employer survey will be administered for a better understanding of current needs and trends for program improvement.

****IMPORTANT** - <u>**Plans for Next Assessment Cycle**</u>: Post-graduation and employer surveys will be administered for information to facilitate program medication if the near future. Monitoring will continue.

CURRICULUM MAP TEMPLATE

Program name:	Environmental Health Certificate
Department:	Public Health
College:	College of Health & Human Services
Contact person:	Grace Lartey
Email:	grace.lartey@wku.edu

KEY:

I = Introduced

R = Reinforced/Developed

M = Mastered

A = Assessed

			Learning Outcomes		
			LO1:	**LO2:**	**LO3:**
			Students **Students assess potential environmental issues within the community.**	Students will **design and implement effective strategies and interventions to improve on the environment and prevent or reduce health hazards.**	Students will **evaluate implemented strategies and interventions.**
Course Subject	**Number**	**Course Title**			
PH/ENV	280	Introduction to Environmental Science	M/A	I/R	I/R
ENV	460	Environmental Management	M	M	M/A
PH	385	Environmental Health	M	M/A	M/A

PH 385: Environmental Health
Blog 1: Environmental Policy and Regulation
Every day in mainstream media, there is a long list of environmental and occupational health stories describing health problems affecting all types of populations. Reflecting on what environmental health is, the goal of this blog is to increase your awareness of contemporary environmental health challenges around the globe and exploring local, state, federal, regional and global efforts through policies to control them with the view to reducing the impact on health of our communities.

Guidelines for the Blog:
The article has to be an environmental or occupational health story that is local, national or international. It has to focus on the health of a population (e.g. air pollution, drinking water contamination, pesticides, toxic waste, etc.) and not individual health.
Write two to three paragraphs on the following:
1. In your own perspective, what is the environmental or occupational health issue discussed in the news item selected?
2. What regulatory/policy framework instituted to address the issue?
3. What influences different agencies (governmental, private sector, not for profit, community, etc.) to initiate and implement abatement/control measures?
4. What is the potential impact of the environmental or occupational health factor to health care and overall public health?

	Novice	Proficient	Excellent
Reflection	*Points: 0 – 0* Only includes mere description of theoretical knowledge; no reflection is demonstrated beyond description.	*Points: 0 – 0.5* Shows satisfactory ability to relate acquired knowledge to environmental or occupational policy and its administration.	*Points: 0.6 – 1.0* Proficiently demonstrated reflection and deep thinking of acquired knowledge and concepts, and integrate them into different issues from a wide range of perspectives.
Content	*Points: 0 – 0.5* Questions are not well answered and/or not related to environmental or occupational health.	*Points: 0.6 – 1.0* One or two of the questions are well answered while rest of the questions are not answered at all or wrongly answered.	*Points: 1.1 – 2.0* All the questions correctly answered and put in context.
Discussion	*Points: 0 – 0.5* Only initial post was made. No comments on colleagues' posts.	*Points: 0.6 – 1.0* Two posts were made, initial post and one comment on colleague's post. Comments merely agreeing with the posts.	*Points: 1.1 – 2.0* Made three posts, one initial post and two comments on colleagues' post. Comments are thought provoking and understanding of environmental health issue.

ENV 280 - Assignment – Water Footprint Calculator – ENV 280

Please use the above link to calculate your water footprint and copy and paste your results into Microsoft word. Once this has been completed, please discuss the areas in which you can reduce your water usage and what you learned from using the water footprint calculator and the water PowerPoints.

	Novice	Competent	Proficient	Distinguished
Formatting	Points: **1** (4.00%) Follows only 1 of the formatting guidelines	Points: **2** (8.00%) Follows only half of the formatting guidelines	Points: **3** (12.00%) Follows all but one of the formatting guidelines	Points: **4** (16.00%) Follows all formatting guidelines
Calculator Results	Points: **0** (0.00%) No footprint results are given	Points: **2** (8.00%) Only the overall total of the footprint is given	Points: **4** (16.00%) Overall total and category totals are shown	Points: **6** (24.00%) Entire footprint results are completed including total score, category totals, and sub-category totals
Content	Points: **0** (0.00%) Results are not discussed and no discussion is given about ways to reduce water usage	Points: **5** (20.00%) Only results are discussed and no discussion is given about ways to reduce water usage	Points: **10** (40.00%) Results are discussed and minor discussion is given about ways to reduce water usage	Points: **15** (60.00%) All results are discussed and thoughtful insight is given about ways to reduce water usage

ENV 460 Grading Rubric

Learning Outcomes	Exemplary - 4	Proficient - 3	Apprentice - 2	Novice - 1	Score
Compile environmental	Information was collected from	Information was collected from	Information was collected from	Information was collected from	

health information	relevant sources in a manner that provided interpretation of the environmental health issue, problem, or methods applied.	relevant sources in a manner that provided synthesis of the environmental health issue, problem, or methods applied.	relevant sources with some interpretation, but a synthesis of the environmental health issue, problem, or methods applied was not provided.	relevant sources with no interpretation or synthesis of the environmental health issue, problem, or methods applied was not provided.	
Explanation of the environmental health problem	Environmental health issue or problem was comprehensively stated and explained.	Environmental health issue or problem was clearly stated and explained.	Environmental health issue or problem was clearly stated but not explained.	Environmental health issue or problem was not clearly stated or explained.	
Apply methods to assess the environmental health problem or issue	Field and laboratory methods were applied correctly in a manner that provided a comprehensive analysis of the problem.	Field and laboratory methods were applied correctly in a manner that provided an analysis of the problem.	Field and laboratory methods were applied correctly, yet not in manner that provided an analysis of the problem.	Field and laboratory methods were not applied correctly, and did not provide an analysis of the problem.	
Present results of the assessment	Data analysis was correct and presented through a series of graphs and tables that were explained in the report.	Data analysis was correct and presented through a graph or table that that was explained in the report.	Data analysis had errors and a table or graph was presented, yet it was not explained in the text of the report.	Data analysis had errors and a table or graph was not presented nor explained the report.	
Develop conclusions and recommendations of the assessment	Conclusions and recommendations were developed that provided a comprehensive solution to the environmental health problem.	Conclusions and recommendations were discussed that provided a solution to the environmental health problem.	Conclusions and recommendations were presented, but did not provide a solution to the environmental health problem.	A Conclusion was presented, with not recommendations, and it did not include a solution to the environmental health problem.	