

2017-2018 Assessment Cycle COS_Environmental Science BS

Mission (due 12/4/17)

University Mission

The University of Louisiana at Lafayette offers an exceptional education informed by diverse worldviews grounded in tradition, heritage, and culture. We develop leaders and innovators who advance knowledge, cultivate aesthetic sensibility, and improve the human condition.

University Values

We strive to create a community of leaders and innovators in an environment that fosters a desire to advance and disseminate knowledge. We support the mission of the university by actualizing our core values of equity, integrity, intellectual curiosity, creativity, tradition, transparency, respect, collaboration, pluralism, and sustainability.

University Vision

We strive to be included in the top 25% of our peer institutions by 2020, improving our national and international status and recognition.

College / VP and Program / Department Mission

Mission of College or VP-area

Provide the mission for the College or VP-area in the space provided. If none is available, write "None Available in 2017-2018."

Our mission is to serve our students, the citizens of Louisiana, the nation, and the world, through innovative and stimulating educational experiences and compelling research initiatives that create knowledge, deepen our basic understanding of the world around us, further economic development, and enhance quality of life. In support of our mission, The College of Sciences seeks to:

Develop broad-thinking students into mature, ethical professionals, scientists, and researchers with the necessary creativity, critical thinking, and problem solving skills required to make significant contributions to industry, government, and the academic sector.

Recruit and support top-notch teaching and research faculty engaged in scientific endeavors that are recognized nationally for their relevance and impact.

Enrich scientific research and education through on-campus collaborations, multidisciplinary programs, large-scale multi-institution initiatives, as well as partnerships with government and industry.

Foster scientific literacy within the University, the citizens of Louisiana, and the nation by providing stimulating courses for our students and by partnering with educators at the K-12 and community college level.

Provide leadership in the translation and application of research into practical solutions that will benefit our local community, the state of Louisiana, our natural environment, industries of the Gulf Coast region, and society as a whole.

The Ray P. Authement College of Sciences will emerge as a preeminent college of sciences in the Southeast and Gulf Coast region of the United States. The College will be recognized nationally for its innovative education, scholarly research activities addressing our nation's grand challenges, and for its diverse student body with exemplary academic achievements, leadership abilities, and global perspectives.

Mission of Program / Department

Provide the program / department mission in the space provided. The mission statement should concisely define the purpose, functions, and key constituents. If none is available, write "None Available in 2017-2018."

Preparation of environmental science work force with very high level of work quality, problem solving skills, and capability for integration and the application of knowledge gained to enhance environmental quality and sustainability.

Attachment (optional)

Upload any documents which support the program / department assessment process.

Assessment Plan (due 12/4/17)**Assessment Plan (Goals / Objectives, Assessment Measures and Criteria for Success)****Assessment List**

Goal/Objective	(1) Students will demonstrate high level of work quality. (2) Students will demonstrate problem solving skills. (3) Students will demonstrate practical application of theoretical knowledge gained.(Imported)														
Legends	SLO - Student Learning Outcome/Objective (academic units);														
Standards/Outcomes															
Assessment Measures	<table border="1"> <thead> <tr> <th>Assessment Measure</th> <th>Criterion</th> <th>Attachments</th> </tr> </thead> <tbody> <tr> <td>Direct - Internship Evaluation</td> <td>Until now, the ENVS 472 (3, 0, 3) is a mandatory course for the environmental science students. Each student has to do an internship with off-campus agency/organization for 200 hours to complete this course. The supervisors/cooperators of the students are requested to rate their respective interns in terms of various criteria including attendance, punctuality, general attitude, work quality, appearance, attitude toward suggestions, initiative, problem solving skills, practical application of theoretical knowledge, and professionalism. Rating is done 1 - 5, 5 the best. The average scores on work quality, problem solving skills, and practical application will be used as measures of the assessment.</td> <td></td> </tr> <tr> <td>Direct - Internship Evaluation</td> <td>Measures: Success will be considered if >75% of the student intern receive excellent on: (1) Work quality (2) Problem solving skills, and (3) Application of theoretical knowledge.</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Assessment Measure	Criterion	Attachments	Direct - Internship Evaluation	Until now, the ENVS 472 (3, 0, 3) is a mandatory course for the environmental science students. Each student has to do an internship with off-campus agency/organization for 200 hours to complete this course. The supervisors/cooperators of the students are requested to rate their respective interns in terms of various criteria including attendance, punctuality, general attitude, work quality, appearance, attitude toward suggestions, initiative, problem solving skills, practical application of theoretical knowledge, and professionalism. Rating is done 1 - 5, 5 the best. The average scores on work quality, problem solving skills, and practical application will be used as measures of the assessment.		Direct - Internship Evaluation	Measures: Success will be considered if >75% of the student intern receive excellent on: (1) Work quality (2) Problem solving skills, and (3) Application of theoretical knowledge.				
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Program / Department Assessment Narrative

The primary purpose of assessment is to use data to inform decisions and improve programs (student learning) and departments (operations); this is an on-going process of defining goals and expectations, collecting results, analyzing data, comparing current and past results and initiatives, and making decisions based on these reflections. In the space below, describe the program's or department's overall plan for improving student learning and/or operations (the "assessment plan"). Consider the following:

- 1) What strategies exist to assess the outcomes?
- 2) What does the program/department expect to achieve with the goals and objectives identified above?
- 3) How might prior or current initiatives (improvements) influence the anticipated outcomes this year?

- 4) What is the plan for using data to improve student learning and/or operations?
 5) How will data be shared within the Program/Department (and, where appropriate, the College/VP-area)?

Assessment Process

Through the synthesis and evaluation of previous cycle's internship reports and student learning outcomes, we have decided to improve on the following two aspects:

1) As we consistently found out student interns especially from Junior years lacking necessary knowledge and skills such as water quality, soil health, field techniques, and data handling and analysis to excel in their internships, we decided to place internships only during the Senior year or for those students who have completed necessary courses and have developed skills that are required for their successful internships.

2) In order to develop student' skills on data handling, management, and graphing, etc. we required students enrolled in laboratory courses to pool their laboratory data, create excel database, and perform necessary analysis for their lab reports.

Results & Improvements (due 9/15/18)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for (1) Students will demonstrate high level of work quality. (2) Students will demonstrate problem solving skills. (3) Students will demonstrate practical application of theoretical knowledge gained.(Imported)

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Assessment Findings									

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Internship Evaluation	<p>Has the criterion Until now, the ENVS 472 (3, 0, 3) is a mandatory course for the environmental science students. Each student has to do an internship with off-campus agency/organization for 200 hours to complete this course. The supervisors/cooperators of the students are requested to rate their respective interns in terms of various criteria including attendance, punctuality, general attitude, work quality, appearance, attitude toward suggestions, initiative, problem solving skills, practical application of theoretical knowledge, and professionalism. Rating is done 1 - 5, 5 the best. The average scores on work quality, problem solving skills, and practical application will be used as measures of the assessment. been met yet? Not met</p>	<p>Although the percentage of interns receiving "Excellent" on "Work Quality" and "Problem Solving Skills" were impressively high (86% on each category) during this cycle compared to 73.3% in previous cycle, percentage of interns receiving "Excellent" on "Practical Application of Theoretical Knowledge" was 72% which was slightly lower than that of the previous cycle (73.3%), and is still less than the threshold score of 75% for "Success". The scores on "Practical Application of Theoretical Knowledge" for this cycle and the previous cycle were much improved from that of the 2015-2016 cycle (60%).</p>		<p>- Assessment Process: Continuous monitoring: We incorporated additional hands-on activities and lab in our courses. For example, we have recently introduced 1 hr lab credit on ENVS 490 Environmental Pedology course.</p>
Direct - Internship Evaluation	<p>Has the criterion Measures: Success will be considered if >75% of the student intern receive excellent on: (1)</p>	<p>A close study of the internship reports revealed that</p>		<p>- Assessment Process: Continuous monitoring: We will</p>

		<p>Work quality (2) Problem solving skills, and (3) Application of theoretical knowledge. been met yet? Not met</p>	<p>the interns in general were required to have some level of laboratory determination of environmental samples, mapping, data collection and handling, field surveys, plant identification, and use of GPS/compass. Similar findings were recorded during the previous cycle and a plan was developed by the faculty to address such issues. We will continue emphasizing "hands-on" activities in lab classes.</p>		<p>continue monitoring the progress with emphasis on hands-on, laboratory measures for student learning success.</p>
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Reflection (Due 9/15/18)

Reflection

The primary purpose of assessment is to use data to inform decisions and improve programs and operations; this is an on-going process of defining goals and expectations, collecting results, analyzing data, comparing current and past results and initiatives, and making decisions based on these reflections. Recalling this purpose, respond to the questions below.

1) How were assessment results shared in the program / department?

Please select all that apply. If "other", please use the text box to elaborate.

- Distributed via email (selected)
- Presented formally at staff / department / committee meetings
- Discussed informally (selected)
- Other (explain in text box below)

2) How frequently were assessment results shared?

Frequently (>4 times per cycle)
 Periodically (2-4 times per cycle)
 Once per cycle (selected)
 Results were not shared this cycle

3) With whom were assessment results shared?

Please select all that apply.

Department Head (selected)
 Dean / Asst. or Assoc. Dean
 Departmental assessment committee
 Other faculty / staff (selected)

4) Consider the impact of prior applied changes. Specifically, compare current results to previous results to evaluate the impact of a previously reported change. Demonstrate how the use of results improved student learning and/or operations.

The first time in the history of three assessment cycles, the percentage of interns receiving "Excellent" on "Work Quality" and "Problem Solving Skills" , 86% on each category, "met" the criterion for "Success". The percentage score of 86% on these categories was an increase from 73.3% in 2016-2017 cycle and 70% and 60%, respectively, in 2015-2016 cycle. This cycle's percentage of intern receiving "Excellent" on "Practical Application of Theoretical Knowledge" was 72% which was slightly below the previous cycle's 73.3%, but was much higher from that of 2015-16 cycle (60%).

5) Over the past three assessment cycles, what has been the overall impact of "closing the loop"? Provide examples of improvements in student learning, program quality, or department operations that are directly linked to assessment data and follow-up analysis.

The assessment cycles helped us in identifying areas for improvement and developing plan for improvement. As a result of assessment, we emphasized laboratory skills, hands-on activities, and also timely placement of students in internship programs for better student learning success.

Attachments (optional)

Upload any documents which support the program / department assessment process.