

# 2017-2018 Assessment Cycle COS\_Geology MS

## 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."*

Mission Statement: Our mission is to provide maximum value to our students, our community, and society through education and research focused on Energy and the Environment. Value for our students – Our goal is maximizing the

return on investment for undergraduate and graduate students enrolled in our programs. We strive to provide the strongest set of skills, experiences, and opportunities for students who aspire to careers (in industry or academics) within the fields of energy and/or the environment. Value for our community – Our educational and research focus areas reflect the strengths and address the challenges of our region. Louisiana is at the forefront of the petroleum exploration and production industry and also boasts more than 40% of the wetlands in the U.S. These coastal wetlands are highly-productive and represent an enormous biological and economic resource. The state of Louisiana has identified “water management” and the “next wave of oil and gas production” as target areas for development. It is estimated that in Louisiana alone between 100,000 and 195,000 jobs will be created in these areas over the next 20 years. Our program will help provide the intellectual, research, and problem-solving capacity to address these needs. Value for society – The sustainability of energy and environmental resources are two of the biggest scientific challenges we face nationally and globally. Our goal is to provide the next generation of scientists with the tools to work within these fields and a framework for addressing complex problem solving. Relationship to UL’s mission – Our mission reflects the University of Louisiana at Lafayette’s commitment to achieving excellence in undergraduate and graduate education, in research, and in public service. Our focus on value for students, community, and society, mirrors UL’s broader commitment to promote regional economic and cultural development and to find solutions to national and world issues. Relationship to FIRST Louisiana – The Fostering Innovation through Research in Science and Technology (FIRST) in Louisiana plan was adopted by the Board of Regents as the framework for research within their master plan for higher education. The plan identifies Earth Sciences (among the foundational sciences) as a target for expansion and growth. Our focus areas and mission are directly aligned with the translational research domains of Energy, Environmental Sciences (and Coastal sciences) identified in FIRST Louisiana. Vision: Excellence – We will become a preeminent institution in the Gulf Coast Region (and the U.S.) for training students in fundamental and applied research in the areas of Energy and the Environment. Our strategic plan includes goals and metrics in the areas of faculty productivity (teaching and research) and student success that are designed to evaluate our progress. Opportunity – We will offer unique educational and research opportunities to support the success of our students. These opportunities include internships, networking, research experiences, flexible degree plans, and original course content. Our strategic plan includes goals and metrics in the areas of student success (placement, time-to-degree, internship participation, research participation, etc.) that are designed to evaluate our progress. Community – We will serve the community through work in K-12 classrooms, teacher education programs, engagement with businesses, participation in philanthropic events, and local problem-solving. Our strategic plan includes goals and metrics involving employer surveys, recruiting activities, and enrollment numbers that are designed to evaluate our progress.

#### **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) Advanced topics mastery - assessed via comprehensive exam.		
Legends	OO - Outcome/Objective (administrative units); PO - Program Objective (academic units); SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Attachments</b>
	Direct - Thesis	maintain the graduation rate above 20	Rubric_A_for_Comps.doc Rubric_C_for_written_thesis_2014_2015.doc

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Goal/Objective	2) Research progress – assessed via thesis research hours.								
Legends									
Standards/Outcomes									
Assessment Measures	<table border="1"> <thead> <tr> <th>Assessment Measure</th> <th>Criterion</th> <th>Attachments</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Assessment Measure	Criterion	Attachments			
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Goal/Objective	3) Written communication – assessed via written thesis.								
Legends									
Standards/Outcomes									
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Goal/Objective	4) Oral presentation ability – assessed via oral thesis defense.(Imported)								
Legends									
Standards/Outcomes									
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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

We have recorded the data of the evaluation of every thesis advisor on the research performance of the graduate students. The data can be used to monitor the progress of our MS program, which shows steadily improvements.

## Results & Improvements (due 9/15/18)

### Results and Improvement Narratives

#### Assessment List Findings for the Assessment Measure level for 1) Advanced topics mastery - assessed via comprehensive exam.

Goal/Objective	1) Advanced topics mastery - assessed via comprehensive exam.								
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Assessment Findings	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>				
	Direct - Thesis	Has the criterion maintain the graduation	We have 21 Master graduate students successful	Thesis_evaluation_spring_2018.xlsx Rubric_B_for_research_project_2014_2015.doc	- Assessment Process: Continuous monitoring:				

		<p>on rate above 20 been met yet? Met</p>	<p>lly graduate during academic year 2017-2018. Our IBA team had won world champion the third time.</p>	<p>Rubric_D_for_oral_defense_of_thesis_2014_2015.doc</p>	<p>We are keeping records of evaluation according to the class 599 registers.</p>
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**Assessment List Findings for the Assessment Measure level for 2) Research progress – assessed via thesis research hours.**

Goal/Objective	2) Research progress – assessed via thesis research hours.														
Legends															
Standards/Outcomes															
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**Assessment List Findings for the Assessment Measure level for 3) Written communication – assessed via written thesis.**

Goal/Objective	3) Written communication – assessed via written thesis.				
Legends					
Standards/Outcomes					

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**Assessment List Findings for the Assessment Measure level for 4) Oral presentation ability – assessed via oral thesis defense.(Imported)**

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Legends														
Standards/Outcomes														
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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

Presented formally at staff / department / committee meetings (selected)

Discussed informally

Other (explain in text box below)

We share the thesis writing evaluation results within department.

#### 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 (selected)

Departmental assessment committee (selected)

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.

24 graduates in this academic year. The thesis writing results show better average points than previous year. Five graduate students won the world champion of IBA competition.

#### 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.

Our master program is still strongly attractive to students.

#### Attachments (optional)

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