

2016-2017 Assessment Cycle COS_Mathematics MS

Mission (due 1/20/17)

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 / Department / Program Mission

College Mission

Provide the college mission in the space provided. If none is available, write "None Available in 2016-2017."

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.

Department / Program Mission

Provide the department / program mission in the space provided. If none is available, write "None Available in 2016-2017".

The mission of the graduate program is to educate and prepare graduate students to make original contributions to

mathematical sciences and to apply their knowledge to solve important problems facing society. The goal of the M.S. program in particular is to further provide a solid basis that will prepare the student for either of: (i) pursuit of a higher degree in Mathematics; (ii) application of mathematics, mathematical techniques, statistics, or statistical techniques in an industry or scientific setting; or (iii) teach mathematics at the secondary or college level.

Our graduate program is committed to the following core values: Excellence in teaching and research; discovery of new knowledge; diversity in our students; professional and personal integrity. Our graduate program has been a central part of the teaching and research mission of our department, and is an important component of our long term planning. Our commitment to graduate education has enhanced our reputation. Our focus on excellent education is consistent with the College and University's focus on facilitating quality teaching and learning. Our focus on students' preparation is consistent with the College and University's focus on serving and preparing our students. Our mission and values are consistent with those for graduate programs in mathematics worldwide.

Assessment Plan (due 1/20/17)

Assessment List (Goals / Objectives, Assessment Measures and Criteria for Success)

Assessment List

Goal/Objective	Demonstration of Content Knowledge		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures	Assessment Measure	Criterion	Attachments
	Direct - Comprehensive Exam (graduate level)	Candidate is required to either pass three written Ph.D. Comprehensive exams at the M.S. level; or create a committee and pass a written exam on three subjects. Success in the outcome for terminal MS students is defined as at least 70% of students in any three-year period who attempt the examination are given rating which is at least satisfactory in accordance to the departmental rubric. Definition of success for students who are continuing to a PhD. is at least 70% of the students in a three-year period pass the exams at the PhD level with a rating which is at least satisfactory in accordance to departmental rubric.	

Goal/Objective	Demonstration of understanding of Mathematical Theory		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures			

	Assessment Measure	Criterion	Attachments
	Direct - Thesis	The student will defend the thesis in an oral defense before a committee made up of at least three mathematics graduate faculty members. Success is defined as more than half of the students taking this option will successfully defend their thesis and answer questions during the oral examination, with all examiners scoring the student "Satisfactory" or better with the departmental rubrics. Please note that very few students take this option.	

Goal/Objective	Dmonstration of research potential		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures	Assessment Measure	Criterion	Attachments
	Direct - Writing Exam	The student will demonstrate research potential by obtaining mathematical solutions and producing mathematical proofs that are not readily available in the literature.	

Results & Improvements (due 9/15/17)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for Demonstration of Content Knowledge

Goal/Objective	Demonstration of Content Knowledge		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures	Assessment Measure	Criterion	
	Direct - Comprehensive Exam (graduate	Candidate is required to either pass three written Ph.D. Comprehensive exams at the M.S. level; or create a committee and pass a written exam on three subjects. Success in the outcome for terminal MS students is defined as at least 70% of students in any three-year period who	

	level)	attempt the examination are given rating which is at least satisfactory in accordance to the departmental rubric. Definition of success for students who are continuing to a PhD. is at least 70% of the students in a three-year period pass the exams at the PhD level with a rating which is at least satisfactory in accordance to departmental rubric.		
Assessment Findings				
	Assessment Measure	Criterion	Summary	Attachments of the Assessments
Direct - Comprehensive Exam (graduate level)	<p>Has the criterion Candidate is required to either pass three written Ph.D. Comprehensive exams at the M.S. level; or create a committee and pass a written exam on three subjects. Success in the outcome for terminal MS students is defined as at least 70% of students in any three-year period who attempt the examination are given rating which is at least satisfactory in accordance to the departmental rubric. Definition of success for students who are continuing to a PhD. is at least 70% of the students in a three-year period pass the exams at the PhD level with a rating which is at least satisfactory in accordance to departmental rubric. been met yet?</p>	<p>In the three year period ending in 2017, eight terminal MS students completed the Comprehensive Exam. Seven of them passed it on the first try, with all of them rated satisfactory or better; 37.5% of the ratings were "Highly satisfactory or higher". The remaining student obtained two satisfactory and one unsatisfactory rating on the first attempt; and three satisfactory ratings on the second attempt.</p>		<p>- Assessment Process: Continuous monitoring: In the past two years we have instituted feedback processes for all graduate students, including terminal MS students. This allows the Graduate Coordinator to better monitor the students progress and make sure they are ready for the MS comprehensive exam. The high rate of success is a reflection of this.</p>

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Assessment List Findings for the Assessment Measure level for Demonstration of understanding of Mathematical Theory

Goal/Objective	Demonstration of understanding of Mathematical Theory				
Legends	SLO - Student Learning Outcome/Objective (academic units);				
Standards/Outcomes					
Assessment Measures	Assessment Measure		Criterion		
	Direct - Thesis	The student will defend the thesis in an oral defense before a committee made up of at least three mathematics graduate faculty members. Success is defined as more than half of the students taking this option will successfully defend their thesis and answer questions during the oral examination, with all examiners scoring the student "Satisfactory" or better with the departmental rubrics. Please note that very few students take this option.			
Assessment Findings	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Thesis	Has the criterion The student will defend the thesis in an oral defense before a committee made up of at least three mathematics graduate faculty members. Success is defined as more than half of the students taking this option will successfully defend their thesis and answer questions during the oral examination, with all examiners scoring the student "Satisfactory" or better with the departmental rubrics. Please note	One student completed the MS program with thesis option in the past year. He was unanimously rated at the "Highly Satisfactory" level by all examiners.		- Assessment Process: Continuous monitoring: This option is seldom taken, as most MS students prefer to meet the requirements through the non-thesis option. In the past 5 years, one student has taken this option. We continue to monitor and review in the few instances it is taken.

		that very few students take this option. been met yet? Met			
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Assessment List Findings for the Assessment Measure level for Dmonstration of research potential

Goal/Objective	Dmonstration of research potential				
Legends	SLO - Student Learning Outcome/Objective (academic units);				
Standards/Outcomes					
Assessment Measures	Assessment Measure		Criterion		
	Direct - Writing Exam	The student will demonstrate research potential by obtaining mathematical solutions and producing mathematical proofs that are not readily available in the literature.			
Assessment Findings	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion The student will demonstrate research potential by obtaining mathematical solutions and producing mathematical proofs that are not readily available in the literature. been met yet? Met	All terminal MS students met this requirement; this is evidenced through final exams in the graduate level sequences, as well as the MS exam component.		- Assessment Process: Continuous monitoring: This is reviewed every year as students complete their MS.

Reflection (Due 9/15/17)

Reflection

1) How were assessment results shared in the unit?

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 (selected)

Other (explain in text box below)

2) How frequently were assessment results shared in the unit?

Frequently (>4 times per cycle)

Periodically (2-4 times per cycle) (selected)

Once per cycle

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

4) What were the measurable or perceivable effects on your current (2016-2017) findings based on prior action plans (created in 2015-2016)?

Performance at MS exams has improved, with students arriving at the exam better prepared and with a clearer idea of what to expect in them. Timely feedback results from professors on student performance has also allowed timely intervention and correction where necessary.

5) What has the unit learned from the current assessment cycle?

The timely feedback is helping. A bit more is needed, with feedback now received normally at the end of the semester. Informal feedback during the semester has been helpful, and the Department should consider mechanisms for getting that mid-semester feedback on a broader and more formal basis.

Attachments

Attachments

Upload any supporting documents related to your assessment plans, results, or improvements. Documents may include rubrics, survey questions, reports, etc. There is no limit to the number of documents you can upload.

Click "Select File" to upload document(s)