

2016-2017 Assessment Cycle COS_Mathematics BS

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 Department of Mathematics takes as its primary missions the advancement and dissemination of mathematical

thinking and knowledge through research and teaching. This includes the training of graduate students to demonstrate the ability to produce original research results, and the training of undergraduate majors for a wide variety of career options. It also includes equipping students in client disciplines such as the natural sciences, engineering, education, and business with the mathematical tools necessary for success. A more general mission is to empower all graduates of the University with a level of mathematical literacy and skill which will enable them to better understand and think critically about complex problems and issues which will confront them in our society.

Assessment Plan (due 1/20/17)

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

Assessment List

Goal/Objective	Expression of Mathematical Ideas: Upon completion of the program, a student majoring in mathematics should demonstrate the ability to express nontrivial mathematical ideas in a coherent, comprehensible, and correct manner as evidenced through the presentation of a proof or analysis of an applied problem.		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures			
	Assessment Measure	Criterion	Attachments
	Direct - Writing Exam	A sample of student work from a class assignment, an exam, or a presentation will be evaluated by two or more faculty using a common rubric. The number of samples evaluated for a particular student is limited to two different courses and no more than two items within each course. See attachments for rubric. Samples of student's work will be collected from various junior-level or senior-level courses in which the student is enrolled. As the student enrolls in courses suitable for evaluation, work will be collected and results compiled upon the student's graduation. The percentage of graduates who are rated "Excellent" or "Satisfactory" for this SLO will be computed in May of each year. If a student did not demonstrate competency with one sample, the committee may try to obtain another sample to evaluate. Sometimes it is possible to get more than one exercise/problem from the same course. The committee decided to limit the evaluated samples for a particular student to two different courses per outcome and will examine no more than two or three samples within each course. Number of students assessed = All mathematics seniors for 2016-2017. Definition of Success: At least 70% of the graduates in mathematics during the academic year receive ratings of "Excellent" or "Satisfactory".	

Goal/Objective	Upon completion of the program, a student majoring in mathematics should demonstrate understanding of the core concepts of linear algebra, specifically linear independence, vector
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Goal/Objective	Upon completion of the program, a student majoring in mathematics should demonstrate the ability to solve challenging problems using calculus in an advanced undergraduate mathematics course.		
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Results & Improvements (due 9/15/17)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for Expression of Mathematical Ideas: Upon completion of the program, a student majoring in mathematics should demonstrate the ability to express nontrivial mathematical ideas in a coherent, comprehensible, and correct manner as evidenced through the presentation of a proof or analysis of an applied problem.

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Assessment List Findings for the Assessment Measure level for Upon completion of the program, a student majoring in mathematics should demonstrate understanding of the core concepts of linear algebra, specifically linear independence, vector spaces, linear transformations, and eigenvectors.

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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

Discussed informally

Other (explain in text box below) (selected)

In the past, we have not shared our assessment results with the general faculty. This is definitely an area we need to improve on. Also for the last few years, we have been meeting our goals, but we have experienced a large growth in majors over the last four years. As a result, it seems one of our goals was not met this cycle. The result will first be discussed further with the Assessment Committee. Then with the teachers teaching the courses related to the goal that was not met.

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

Frequently (>4 times per cycle)

Periodically (2-4 times per cycle)

Once per cycle

Results were not shared this cycle (selected)

3) With whom were assessment results shared?

Please select all that apply.

Department Head

Dean / Asst. or Assoc. Dean

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)?

There seems to not been any effects based on the prior action plans because some were not carried through. The assessment in the Math Department needs a general overhaul and complete restructuring.

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

With the growth of the number of majors in our department, it seems that the quality of our majors may have gone down a bit since one of our goals was not met this cycle. I guess this is expected with growth but it something that needs to be addressed.

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)

