2017-2018 Assessment Cycle COS_Computer Science 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."
The primary purpose of the MS program in computer science is to prepare students for positions in industry and to prepare them for doctoral programs in computer science.

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	Students should be knowledgeable about computer algorithms, their use, and their complexity.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	Criterion	Attachments
Direct - Project	Computer algorithms are taught in CSCE 500. Students are taught about the theory and efficiency of algorithms and they learn to apply algorithms to solve computational problems. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.	

Goal/Objective	Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture, and programming language.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	Criterion	Attachments
Direct - Project	Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture, and programming language. This will be measured from courses such as CMPS 455, CSCE 555, CMPS 460, CSCE 562, CSCE 565, CMPS 430, CSCE 530 on an assessment schedule such that each year at least one area is covered. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.	

Goal/Objective	Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	Criterion	Attachments
Direct - Project	Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software. Projects from courses such as CSCE 555, CMPS 455, CMPS 460, CSCE 562, CSCE 565, and CSCE 553 will be used to evaluate this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.	

Goal/Objective	Students must be able to demonstrate written and oral communication skills on a topic of computing.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	Criterion	Attachments
Direct - Project	This will be assessed based on students written reports and oral presentations presented in a core course such as CSCE 555, CSCE 562, CSCE 565, and CSCE 553. Percentage of students who achieve 80% or more marks will indicate the degree of success for this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.	

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

The program has applied a variety of courses to assess the learning outcomes of students including the understanding of theoretical and fundamental concepts of computing, the ability to develop software to solve computational problems, and written and oral communication skills. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. The results of assessment are sent out to the whole department through email annually.

Results & Improvements (due 9/15/18)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for Students should be knowledgeable about computer algorithms, their use, and their complexity.(Imported)

<table>
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<tr><td>Direct - Project</td><td>Has the criterion Computer algorithms are taught in CSCE 500. Students are taught about the theory and efficiency of algorithms and they</td><td>This outcome was measured in CSCE 500, fall 2017 and spring 2018. In fall 2017, 92 percent of students in CSCE 500 achieved either</td><td></td><td>- Assessment Process: Continuous monitoring: The outcome for this assessment has been well achieved. We will continue to</td></tr>
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	learn to apply algorithms to solve computational problems. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. been met yet? Met	the developed or exemplary state. In spring 2018, 100 percent of students in CSCE 500 achieved either the developed or exemplary state. This outcome is above the 70 percent threshold. The target for this outcome is met.		monitor in the coming academic year.

Assessment List Findings for the Assessment Measure level for Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture, and programming language.(Imported)

Goal/Objective	Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture, and programming language.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	Criterion
Direct - Project	Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture, and programming language. This will be measured from courses such as CMPS 455, CSCE 555, CMPS 460, CSCE 562, CSCE 565, CMPS 430, CSCE 530 on an assessment schedule such that each year at least one area is covered. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.

Assessment Findings

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion Students must possess knowledge of fundamental concepts of computing from areas such as	This outcome was measured in CSCE 550 and CSCE 555. In CSCE 550 fall 2017, 86 percent of students		- Assessment Process: Continuous monitoring: The outcome for this assessment has been well

		database, operating systems, computer architecture, and programming language. This will be measured from courses such as CMPS 455, CSCE 555, CMPS 460, CSCE 562, CSCE 565, CMPS 430, CSCE 530 on an assessment schedule such that each year at least one area is covered. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. been met yet? Met	achieved the developed or exemplary level on the evaluation rubric. The target for this course is met. In CSCE 555 spring 2018, 95 percent of students achieved the exemplary level on the evaluation rubric. The target for this course is met.		achieved. We will continue to monitor in the coming academic year.

Assessment List Findings for the Assessment Measure level for Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software.(Imported)

Goal/Objective	Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

Assessment Measure	**Criterion**
Direct - Project	Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software. Projects from courses such as CSCE 555, CMPS 455, CMPS 460, CSCE 562, CSCE 565, and CSCE 553 will be used to evaluate this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.

Assessment Findings	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion Students must possess the ability to develop software to solve a computational problem. This must be evidenced through development and demonstration of working software. Projects from courses such as CSCE 555, CMPS 455, CMPS 460, CSCE 562, CSCE 565, and CSCE 553 will be used to evaluate this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. been met yet? Met	This outcome was measured on the implementation projects in CSCE 550, CSCE 530, and CSCE 555. In CSCE 550 fall 2017, 100 percent of students achieved developed or exemplary status on the implementation projects. The target for this class is met. In CSCE 530 spring 2018, 86 percent of students achieved developed or exemplary status on the implementation projects. The target for this class is met. In CSCE 555 spring 2018, 89 percent of students achieved developed or exemplary status on the implementation projects. The target for this class is met.		- Assessment Process: Continuous monitoring: The outcome for this assessment has been well achieved. We will continue to monitor in the coming academic year.

Assessment List Findings for the Assessment Measure level for Students must be able to demonstrate written and oral communication skills on a topic of computing.(Imported)

Goal/Objective	Students must be able to demonstrate written and oral communication skills on a topic of computing.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);
Standards/Outcomes	
Assessment Measures	

	Assessment Measure / **Criterion** Direct - Project: This will be assessed based on students written reports and oral presentations presented in a core course such as CSCE 555, CSCE 562, CSCE 565, and CSCE 553. Percentage of students who achieve 80% or more marks will indicate the degree of success for this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.
Assessment Findings	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion This will be assessed based on students written reports and oral presentations presented in a core course such as CSCE 555, CSCE 562, CSCE 565, and CSCE 553. Percentage of students who achieve 80% or more marks will indicate the degree of success for this outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. been met yet? Met	This outcome was measured by written reports and oral presentations presented in CSCE 555. In CSCE 555 Spring 2018, 89 percent of students achieved Developed or Exemplary state on the rubric on oral presentation and writing. The target for this course is met.		- Assessment Process: Continuous monitoring: The outcome for this assessment has been well achieved. We will continue to monitor in the coming academic year.

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
Other (explain in text box below)

All faculty and staff in CACS were emailed a copy of the detailed assessment report.

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.

The program has achieved all its outcomes.

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.

With robust data collection and mapping, the program has achieved the outcomes.

Attachments (optional)
Upload any documents which support the program / department assessment process.