# 2016-2017 Assessment Cycle COS\_Computer Science 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 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.

# **Assessment Plan (due 1/20/17)**

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

## **Assessment List**

Goal/Objective	Students should be knowledgeable about computer algorithms, their use, and their complexity.			
Legends	SLO - Student Le	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.			
Legends	SLO - Student Le	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes				
Assessment Measures				
	Assessment Criterion Measure			
	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
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	must be evidenced through development and demonstration of working software.		
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.		
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.	

# Results & Improvements (due 9/15/17)

# **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.

Goal/Objective	Students should be knowledgeable about computer algorithms, their use, and their complexity.				
Legends	SLO - Student Learning Outcome/Objective (academic units);				
Standards/Outcomes					
Assessment Measures					
	Assessment Measure	Criterion			
	Direct - Project	Computer algorithms theory and efficiency computational probler Developed or Exemple	of algorithms and th ms. At least 70% of	ey learn to apply the students mus	algorithms to solve
Assessment Findings	Assessment	Criterion	Summary	Attachments	Improvement
	Measure	Criterion	Summary	of the Assessments	Narratives
	Direct - Project	Has the criterion 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. been met yet? Met	This outcome was measured in CSCE 500, Fall 2016. In fall 2016, 88 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.		- Assessment Process: Continuous monitoring: Continued Implementation of Assessment

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.

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

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 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	This outcome was measured in CMPS 450, CSCE 550, and CSCE 555. In CMPS 450 (Sec. 001) Fall 2016, 71 percent of students achieved the developed or exemplary level on the evaluation rubric. In CMPS 450 (Sec. 002) Fall 2016, 100 percent of students achieved the developed or exemplary level on the evaluation rubric. The target for this course is met. In CSCE 550 Fall 2016, 100 percent of students achieved the developed or exemplary level on the evaluation rubric. The target for this course is met. In CSCE 550 Fall 2016, 100 percent of students achieved the developed or exemplary level on the exemplary level on the exemplary level on the		- Assessment Process: Continuous monitoring: Continued Implementation of Assessment

	evaluation rubric. The target for this course is met.	

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.

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.					
Legends	SLO - Student Le	earning Outcome/Obj	ective (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	Improvement Narratives	
		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	This outcome was measured on the implementation projects in CSCE 555. In CSCE 550 Fall 2016, 80 percent of students achieved developed or exemplary status on the implementation projects. In CSCE 550 Spring 2017, 78 percent of students achieved developed or exemplary status on the implementation projects. The target for this class is met.	Assessments	- Assessment Process: Continuous monitoring: Continued Implementation of Assessment	

outcome. At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric. been met yet? Met

# 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.

Goal/Objective	Students must be able to demonstrate written and oral communication skills on a topic of computing.						
Legends	SLO - Student Learning Outcome/Objective (academic units);						
Standards/Outcomes							
Assessment Measures							
	Assessment Measure	Criterion					
	Direct - Project	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 565, and CSCE 553. Percentage of students who achieve 80% or more marks will	This outcome was measured on written reports and oral presentations presented in CSCE 555. In CSCE 555 Fall 2016, 80 percent students achieved Developed or Exemplary state on the rubric on oral presentation, 100 percent students achieved		- Assessment Process: Continuous monitoring: Continued Implementation of Assessment		

	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	Developed or Exemplary state on the rubric on writing. In CSCE 555 Spring 2017, 89 percent students achieved Developed or Exemplary state on the rubric on oral presentation, 78 percent students achieved Developed or Exemplary state on the rubric on oral presentation, 78 percent students achieved Developed or Exemplary state on the rubric on writing. The target for this course is met.		
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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 (selected)

Presented formally at staff / department / committee meetings Discussed informally

Other (explain in text box below)

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

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

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) What were the measurable or perceivable effects on your current (2016-2017) findings based on prior action

## plans (created in 2015-2016)?

The program has achieved all its outcomes.

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

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

## **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)