2017-2018 Assessment Cycle COS_Computer Science BS

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 multiinstitution 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 BS in Computer Science Program supports the College of Sciences at UL Lafayette's mission by providing quality education in computer science and by maintaining an ABET accredited program.

The Program Education Objectives (PEOs) for the Bachelor of Science in Computer Science are:

I. Our graduates will be able to apply theory, techniques, and methodologies to create computing systems that function effectively and reliably.

Outcomes: 1, 2, 3, 5 (these student learning outcomes support PEO I).

II. Our graduates will be able to work in teams, exhibit professionalism in their work, and grow professionally. Outcomes: 4. 6. 7 (these student learning outcomes support PEO II).

III. Our graduates will be well prepared to enter a computer science graduate program or a career in computer science and have the communication and analytical skills necessary for career advancement. Outcomes: 1,2,3,4,5,6,7 (these student learning outcomes support PEO III).

Consistency with the College's mission statement

The Program Educational Objectives directly support the College's mission statement cornerstone component "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."

Consistency with the University's mission statement

The Program Educational Objectives support the University's mission through provision of excellent undergraduate education in Computer Science. The Program is consistent with, and follows, all of the University's rules, regulations, and guidelines.

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	Outcome 1: Understand and use the fundamental principles of the science of computation including those of algorithm analysis, software design, operating systems, and database.(Imported)		
Legends			
Standards/Outcomes	 		
	Identifier	Description	
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.	
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.	
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.	

ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.		
ABET- CAC.CS.1.4	> The extent to which each program objective is being met must be periodically assessed.		
ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.		
ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions on the results must be documented.	taken based	
Assessment Measure	Criterion	Attachments	
Direct - Writing Exam	Outcome 1 is assessed through courses CMPS 340, CMPS 341, CMPS 455, and CMPS 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for		
	CAC.CS.1.3 ABET- CAC.CS.1.4 ABET- CAC.CS.1.5 ABET- CAC.CS.1.6 Assessment Measure Direct -	CAC.CS.1.3 documented, and used in program assessments. ABET- CAC.CS.1.4 > The extent to which each program objective is being met more periodically assessed. ABET- CAC.CS.1.5 > The results of the program?'s periodic assessments must be identify opportunities for program improvement. ABET- CAC.CS.1.6 > The results of the program?'s assessments and the actions on the results must be documented. Assessment Measure Criterion Direct - Writing Exam Outcome 1 is assessed through courses CMPS 340, CMPS 341, CMPS 455, and CMPS 460. In addition it is also assessed through indirect measure (graduating	

Goal/Objective	Outcome 2: Have the ability to analyze, design, implement, and test computer systems or components.(Imported)		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
	Identifier	Description	
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.	
	ABET- CAC.CS.1.1 > The program must have documented, measurable objectives.		
	ABET- CAC.CS.1.2> The program??s objectives must include expected outcomes for graduating students.		
	ABET- CAC.CS.1.3> Data relative to the objectives must be routinely collected and documented, and used in program assessments.		
	ABET- CAC.CS.1.4 > The extent to which each program objective is being met must be periodically assessed.		
	ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.	
	ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions taken based on the results must be documented.	

Assessment Measures			
	Assessment Measure	Criterion	Attachments
	Direct - Writing Exam	Outcome 2 is assessed through courses CMPS 430, 453, and 455. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 2 is to achieve an average rating of 2.8 or higher out of 4.	

Goal/Objective	Outcome 3: Be proficient in more than one programming language on more than one computing platform.(Imported)		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
	Identifier Description		
	CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.	
	ABET- CAC.CS.1.1	> The program must have documented, measurable objective	s.
	ABET- CAC.CS.1.2> The program??s objectives must include expected outcomes for graduating students.		es for
	ABET- CAC.CS.1.3> Data relative to the objectives must be routinely collected and documented, and used in program assessments.		nd
		> The extent to which each program objective is being met must be periodically assessed.	
		> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.	
		> The results of the program??s assessments and the actions on the results must be documented.	s taken based
Assessment Measures			
	Assessment Measure	Criterion	Attachments
	Direct - Writing Exam	Outcome 3 is measured through CMPS 351, CMPS 450, and CMPS 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 3 is to achieve an average rating of 2.8 or higher out of 4.0.	

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Outcome 4: Understand the professional, ethical, legal, and societal issues in the design and application of computer systems.(Imported)		
SLO - Student Learning Outcome/Objective (academic units);		
Identifier	Description	
ABET- CAC.CS.1	measurable objectives, including expected outcomes for grad program regularly assesses its progress against its objective	luates. The s and uses the
ABET- CAC.CS.1.1 > The program must have documented, measurable objectives.		es.
ABET- CAC.CS.1.2 > The program??s objectives must include expected outcome graduating students.		es for
ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected a documented, and used in program assessments.	nd
ABET- CAC.CS.1.4	> The extent to which each program objective is being met m periodically assessed.	ust be
ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must identify opportunities for program improvement.	be used to help
ABET- CAC.CS.1.6	> The results of the program??s assessments and the action on the results must be documented.	s taken based
Assessment Measure	Criterion	Attachments
Direct - Writing Exam	Outcome 4 is measured through CMPS 310 and CMPS 453. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 4 is to achieve an average rating of 2.8 or higher out of 4.	
	ABET- CAC.CS.1.3 ABET- CAC.CS.1.1 ABET- CAC.CS.1.1 ABET- CAC.CS.1.2 ABET- CAC.CS.1.3 ABET- CAC.CS.1.4 ABET- CAC.CS.1.4 ABET- CAC.CS.1.5 ABET- CAC.CS.1.5 ABET- CAC.CS.1.6	application of computer systems.(Imported) SLO - Student Learning Outcome/Objective (academic units); Identifier Description ABET- CAC.CS.1 Objectives and Assessments: Intent: The program has docur measurable objectives, including expected outcomes for grad program regularly assesses its progress against its objectives results of the assessments to identify program improvements the program??s objectives. ABET- CAC.CS.1.1 > The program must have documented, measurable objective graduating students. ABET- CAC.CS.1.2 > The program??s objectives must include expected outcome graduating students. ABET- CAC.CS.1.3 > Data relative to the objectives must be routinely collected a documented, and used in program assessments. ABET- CAC.CS.1.4 > The extent to which each program objective is being met m CAC.CS.1.5 ABET- CAC.CS.1.5 > The results of the program??s periodic assessments must identify opportunities for program improvement. ABET- CAC.CS.1.5 > The results of the program??s assessments and the action on the results must be documented. Assessment CAC.CS.1.6 Outcome 4 is measured through CMPS 310 and CMPS 453. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 4 is to achieve an

Goal/Objective	Outcome 5: Possess the ability to solve problems using efficient algorithms and data structures(Imported)		
Legends	SLO - Student L	earning Outcome/Objective (academic units);	
Standards/Outcomes			
	Identifier	Description	

ABET- CAC.CS.1	measurable objectives, including expected outcomes for grad program regularly assesses its progress against its objectives	uates. The and uses the
ABET- CAC.CS.1.1	> The program must have documented, measurable objective	S.
ABET- CAC.CS.1.2	> The program??s objectives must include expected outcome graduating students.	s for
ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected ar documented, and used in program assessments.	nd
ABET- CAC.CS.1.4	> The extent to which each program objective is being met me periodically assessed.	ust be
ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must b identify opportunities for program improvement.	e used to help
ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions on the results must be documented.	taken based
Assessment Measure	Criterion	Attachments
Direct - Writing Exam	Outcome 5 is measured through CMPS 450 and 455. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 5 is to achieve an average rating of 2.8 or higher out of 4.	
	ABET- CAC.CS.1.1 ABET- CAC.CS.1.2 ABET- CAC.CS.1.2 ABET- CAC.CS.1.3 ABET- CAC.CS.1.4 ABET- CAC.CS.1.4 ABET- CAC.CS.1.5 ABET- CAC.CS.1.6 ASSESSMENT Measure Direct - Writing	CAC.CS.1measurable objectives, including expected outcomes for gradu program regularly assesses its progress against its objectives results of the assessments to identify program improvements the program??s objectives.ABET- CAC.CS.1.1> The program must have documented, measurable objective graduating students.ABET- CAC.CS.1.2> The program??s objectives must include expected outcome graduating students.ABET- CAC.CS.1.3> Data relative to the objectives must be routinely collected ar documented, and used in program assessments.ABET- CAC.CS.1.4> The extent to which each program objective is being met mu periodically assessed.ABET- CAC.CS.1.5> The results of the program??s periodic assessments must be identify opportunities for program improvement.ABET- CAC.CS.1.6> The results of the program??s assessments and the actions on the results must be documented.ABET- CAC.CS.1.6> The results of the program??s assessments and the actions on the results must be documented.ABET- CAC.CS.1.6Outcome 5 is measured through CMPS 450 and 455. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders).

Goal/Objective	Outcome 6: Cor	nmunicate effectively, both orally and in writing.(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);	
Standards/Outcomes		
	Identifier Description	
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.
	ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.

		> The extent to which each program objective is being met must be periodically assessed.	
	ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must b identify opportunities for program improvement.	e used to help
		> The results of the program??s assessments and the actions on the results must be documented.	taken based
A			
Assessment Measures			
	Assessment Measure	Criterion	Attachment

Goal/Objective	Outcome 7: Work effectively, both independently and in a team.(Imported)		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
	Identifier Description		
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.	
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.	
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.	
	ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.	
	ABET- CAC.CS.1.4	> The extent to which each program objective is being met must be periodically assessed.	
	ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.	
	ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions taken based on the results must be documented.	
Assessment Measures			

Assessment Measure	Criterion	Attachments
Direct - Writing Exam	Outcome 7 is measured through CMPS 453, 455, and 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 7 is to achieve an average rating of 2.8 or higher out of 4 on its 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 computer science (CMPS) program uses direct assessment (tests and practical implementations or development of software projects) and indirect assessments (graduating senior surveys, alumni surveys, employer surveys) to assess outcomes. The program expects to achieve the goals and outcomes on a continual basis as much as possible. If an outcome is not achieved to expected level, then appropriate changes are made (such as in instruction or instruction material) in order to achieve better results. This is done on a continual basis, by following an assessment plan.CMPS's assessment plan includes includes and covers all core CMPS courses at 300 and 400 levels. The data, findings, and action plans are shared via email and in meetings with the faculty of CMPS as well as assessment committee in CMIX.

Results & Improvements (due 9/15/18)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for Outcome 1: Understand and use the fundamental principles of the science of computation including those of algorithm analysis, software design, operating systems, and database.(Imported)

Goal/Objective		derstand and use the fundamental principles of the science of computation of algorithm analysis, software design, operating systems, and rted)
Legends		
Standards/Outcomes		
	Identifier	Description

	ABET- CAC.CS.1	Objectives and Assessme measurable objectives, inc	luding expected	outcomes for grad	duates. The
		program regularly assesse results of the assessments the program??s objectives	to identify progr		
	ABET- CAC.CS.1.1	> The program must have	documented, me	easurable objectiv	es.
	ABET- CAC.CS.1.2	> The program??s objective graduating students.	ves must include	expected outcom	es for
	ABET- CAC.CS.1.3	> Data relative to the object documented, and used in pressure to the second			Ind
	ABET- CAC.CS.1.4	> The extent to which each periodically assessed.	n program object	ive is being met m	iust be
	ABET- CAC.CS.1.5	> The results of the progra identify opportunities for pr			be used to help
	ABET- CAC.CS.1.6	> The results of the progra on the results must be door		nts and the action	s taken based
Assessment Measures					
	Assessment Measure	Criterion			
	Direct - Writing Exam	Outcome 1 is assessed t 455, and CMPS 460. In a measure (graduating stud target for outcome 1 is to 4.	addition it is also dents survey, su	assessed through rveys from stakeh	indirect olders). The
Assessment Findings					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion Outcome 1 is assessed through courses CMPS 340, CMPS 341, CMPS 455, and CMPS 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 1 is to achieve an average rating of 2.8 or higher out of 4. been met yet?	This outcome was not assessed this year, per our assessment plan.		

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Assessment List Findings for the Assessment Measure level for Outcome 2: Have the ability to analyze, design, implement, and test computer systems or components.(Imported)

Goal/Objective	Outcome 2: Have the ability to analyze, design, implement, and test computer systems or components.(Imported)						
Legends	SLO - Student Learning Outcome/Objective (academic units);						
Standards/Outcomes							
	Identifier	Description					
	ABET- CAC.CS.1	Objectives and Assessme measurable objectives, in program regularly assess results of the assessment the program??s objectives	cluding expected es its progress ag s to identify progr	outcomes for grac ainst its objective	duates. The s and uses the		
	ABET- CAC.CS.1.1	> The program must have	documented, me	easurable objective	es.		
	ABET- CAC.CS.1.2	> The program??s objecti graduating students.	ves must include	expected outcom	es for		
	ABET- CAC.CS.1.3	Ind					
	ABET- CAC.CS.1.4	> The extent to which eac periodically assessed.	h program object	ive is being met m	nust be		
	ABET- CAC.CS.1.5	> The results of the progra identify opportunities for p	•		be used to help		
	ABET- CAC.CS.1.6	> The results of the progra on the results must be do		nts and the action	s taken based		
Assessment Measures							
	Assessment Criterion Measure						
	Direct - Writing Outcome 2 is assessed through courses CMPS 430, 453, and 455. Ir addition it is also assessed through indirect measure (graduating stud survey, surveys from stakeholders). The target for outcome 2 is to ac an average rating of 2.8 or higher out of 4.						
Assessment Findings							
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives		
	Direct - Writing Exam	Has the criterion Outcome 2 is assessed through courses CMPS 430, 453, and 455. In	Note assessed this year per the				

ssessed through direct measure raduating students urvey, surveys from akeholders). The target r outcome 2 is to chieve an average	assessment.		
raduating students irvey, surveys from akeholders). The target r outcome 2 is to			
arvey, surveys from akeholders). The target r outcome 2 is to			
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ting of 2.8 or higher out			
4. been met yet?			
et			
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	4. been met yet?	4. been met yet?	4. been met yet?

Assessment List Findings for the Assessment Measure level for Outcome 3: Be proficient in more than one programming language on more than one computing platform.(Imported)

Goal/Objective	Outcome 3: Be proficient in more than one programming language on more than one computing platform.(Imported)					
Legends	SLO - Student Learning Outcome/Objective (academic units);					
Standards/Outcomes						
	Identifier	Description				
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.				
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.				
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.				
	ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.				
	ABET- CAC.CS.1.4	> The extent to which each program objective is being met must be periodically assessed.				
	ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.				
	ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions taken based on the results must be documented.				
Assessment Measures						
	Assessment Measure	Criterion				
	Direct - Writing Exam	Outcome 3 is measured through CMPS 351, CMPS 450, and CMPS 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 3 is to achieve an average rating of 2.8 or higher out of 4.0.				

Assessment Findings					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion Outcome 3 is measured through CMPS 351, CMPS 450, and CMPS 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 3 is to achieve an average rating of 2.8 or higher out of 4.0. been met yet? Met	This outcome was not assessed this year, per our assessment plan.		

Assessment List Findings for the Assessment Measure level for Outcome 4: Understand the professional, ethical, legal, and societal issues in the design and application of computer systems.(Imported)

Goal/Objective	Outcome 4: Understand the professional, ethical, legal, and societal issues in the design and application of computer systems.(Imported)					
Legends	SLO - Student Learning Outcome/Objective (academic units);					
Standards/Outc omes						
	Identifier	Description				
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.				
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.				
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.				
	ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.				
	ABET- CAC.CS.1.4	> The extent to which each program objective is being met must be periodically assessed.				
	ABET- CAC.CS.1.5	> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.				
	ABET- CAC.CS.1.6	> The results of the program??s assessments and the actions taken based on the results must be documented.				

Assessment Measures					
	Assessme Measure	nt Crite	rion		
	Direct - Wri Exam	also a from	assessed thro	sured through CMPS 310 and CMPS 453. In add ough indirect measure (graduating students surve). The target for outcome 4 is to achieve an avera f 4.	ey, surveys
Assessment					
Ū	Assessm ent Measure	Criterion	Summar y	Attachments of the Assessments	Improvem ent Narrative s
	Direct - Writing Exam	Has the criterion Outcome 4 is measured through CMPS 310 and CMPS 453. In addition it is also assessed through indirect measure (graduatin g students survey, surveys from stakeholde rs). The target for outcome 4 is to achieve an average rating of 2.8 or higher out of 4. been met yet? Met	CMPS 310: 87% of the students scored Develope d or Exemplar y scores on the rubric. Please see the file attached. CMPS 453: There were 56 students in CMPS 453 in Fall 2017. Percenta ge of students who met Outcome 2 in different levels on the rubric: • 1.78% of students	ABET_310Rubric_Fall2017.doc Outcome_2_4_6_7_CMPS_453_rubricEvalua tion_F17.docx	- Assessme nt Process: Continuou s monitoring : The outcome is achieved successful ly and nearly the entire class did extremely well. This outcome is to be monitored to replicate such success in the future as well.

	between	
	0 – 49	
	(Amateur	
) •	
	23.21%	
	of	
	students	
	between	
	50 - 69	
	(Developi	
	ng) •	
	35.71%	
	of	
	students	
	between	
	70 – 84	
	(Develop	
	ed)	
	Clearly,	
	approx.	
	75%	
	students	
	achieved	
	Develope	
	d or	
	Exemplar	
	y grade on the	
	rubric, and 98%	
	students	
	received	
	Developi	
	ng, Develope	
	Develope	
	d, or Exampler	
	Exemplar	
	y grade on the	
	rubric. •	
	39.28%	
	of	
	students	
	between	
	85 – 100 (Fuerende	
	(Exempla	
	ry)	

Assessment List Findings for the Assessment Measure level for Outcome 5: Possess the ability to solve problems using efficient algorithms and data structures(Imported)

Goal/Objective	Outcome 5: Possess the ability to solve problems using efficient algorithms and data structures(Imported)
Legends	SLO - Student Learning Outcome/Objective (academic units);

Standards/Outcomes					
	Identifier	Description			
	ABET- CAC.CS.1	Objectives and Assessme measurable objectives, inc program regularly assesse results of the assessments the program??s objectives	cluding expected es its progress ag s to identify progr	outcomes for grad gainst its objective	duates. The s and uses the
	ABET- CAC.CS.1.1	> The program must have	documented, me	easurable objectiv	es.
	ABET- CAC.CS.1.2	> The program??s objectiv graduating students.	ves must include	expected outcom	es for
	ABET- CAC.CS.1.3	> Data relative to the object documented, and used in			nd
	ABET- CAC.CS.1.4	> The extent to which each periodically assessed.	h program object	ive is being met m	ust be
	ABET- CAC.CS.1.5	> The results of the progra identify opportunities for p			be used to help
	ABET- CAC.CS.1.6	> The results of the progra on the results must be door		ents and the action	s taken based
Assessment Measures					
	Assessment Measure	Criterion			
	Direct - Writing Exam	Outcome 5 is measured assessed through indire from stakeholders). The rating of 2.8 or higher ou	ct measure (grac target for outcon	luating students s	urvey, surveys
Assessment Findings					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion Outcome 5 is measured through CMPS 450 and 455. In addition it is also	This outcome was not assessed this year, per our		

	out of 4. been met yet? Met		

Assessment List Findings for the Assessment Measure level for Outcome 6: Communicate effectively, both orally and in writing.(Imported)

Goal/Objective	Outcome 6: C	ommunicate	effectively,	both orally and in writing.(Imported)				
Legends	SLO - Studen	t Learning C	utcome/Obje	ective (academic units);				
Standards/Outc omes								
	Identifier	Descrip	tion					
	ABET- CAC.CS.1	objective assesse	es, including s its progres nents to iden	ssments: Intent: The program has document expected outcomes for graduates. The prog s against its objectives and uses the results tify program improvements and to modify the	ram regularly of the			
	ABET- CAC.CS.1.1 > The program must have documented, measurable objectives.							
	ABET- CAC.CS.1.2			bjectives must include expected outcomes for	or graduating			
	ABET- CAC.CS.1.3> Data relative to the objectives must be routinely collected and used in program assessments.							
	ABET- CAC.CS.1.4		> The extent to which each program objective is being met must be periodically assessed.					
	ABET- CAC.CS.1.5		> The results of the program??s periodic assessments must be used to help identify opportunities for program improvement.					
	ABET- CAC.CS.1.6		sults of the plate the pla	program??s assessments and the actions tallocumented.	ken based on			
Assessment Measures								
Weasures	Assessmen Measure	t Criter	ion					
	Direct - Writi Exam	sured through CMPS 430, 453, and 460. In a indirect measure (graduating students survey target for outcome 6 is to achieve an average in rubric.	y, surveys from					
Assessment Findings			Γ					
	Assessm ent Measure	Criterion	Summar y	Attachments of the Assessments	Improvem ent Narrative s			

· · · · · · · · · · · · · · · · · · ·		1			
	Direct -	Has the	CMPS	rubricEvaluation_F17.docx	-
	Writing	criterion	430: 83%	Outcome_2_4_6_7_CMPS_453_rubricEvalua	Assessme
	Exam	Outcome	of the	tion_F17.docx	nt
		6 is	students		Process:
		measured	achieved		Continuou
		through	Develope		s
		CMPS	d or		monitoring
		430, 453,	Exemplar		: The
					results
		and 460.	y rating		
		In addition	on the		exceed
		it is also	rubric,		our
		assessed	from		expectatio
		through	evaluatio		ns for this
		indirect	n of their		outcome.
		measure	research		We will
		(graduatin	report.		monitor
		g students	CMPS		this
		survey,	460		outcome
		surveys	(based		in the
		from	on the		future to
		stakeholde	data from		replicate
		rs). The	Spring		the best
		target for	2018):		practices
		outcome 6	Percenta		followed
		is to	ge of		this year.
		achieve an	students		tino your.
		average	who		
		rating of	fulfilled		
		2.8 or	Outcome		
			6 in		
		higher out			
		of 4 on	different		
		rubric.	levels: •		
		been met	3.27% of		
		yet?	students		
		Met	between		
			50 – 69		
			(Developi		
			ng) •		
			14.75%		
			of		
			students		
			between		
			70 – 84		
			(Develop		
			ed) •		
			83.60%		
			of		
			students		
			between		
			85 – 100		
			(Exempla		
			ry) CMPS		
			453:		
			Percenta		
			ge of		
			students		

 -		
	who	
	fulfilled	
	Outcome	
	6 in	
	different	
	levels: •	
	17.85%	
	of	
	students	
	between	
	70 – 84 (Develop	
	(Develop	
	ed) •	
	82.14%	
	of	
	students	
	between	
	85 – 100	
	(Exempla	
	ry) 99%	
	of the	
	students	
	met	
	Develope	
	d, or	
	Exemplar	
	y score	
	on the	
	rubric.	

Assessment List Findings for the Assessment Measure level for Outcome 7: Work effectively, both independently and in a team.(Imported)

Goal/Objective	Outcome 7: Work effectively, both independently and in a team. (Imported)					
Legends	SLO - Student Learning Outcome/Objective (academic units);					
Standards/Outc omes						
	Identifier	Description				
	ABET- CAC.CS.1	Objectives and Assessments: Intent: The program has documented, measurable objectives, including expected outcomes for graduates. The program regularly assesses its progress against its objectives and uses the results of the assessments to identify program improvements and to modify the program??s objectives.				
	ABET- CAC.CS.1.1	> The program must have documented, measurable objectives.				
	ABET- CAC.CS.1.2	> The program??s objectives must include expected outcomes for graduating students.				
	ABET- CAC.CS.1.3	> Data relative to the objectives must be routinely collected and documented, and used in program assessments.				
	ABET- CAC.CS.1.4	> The extent to which each program objective is being met must be periodically assessed.				

	ABET- CAC.CS.1.				ogram??s periodic assessments must be used or program improvement.	to help		
	ABET- CAC.CS.1.			esults of the pr must be docun	ogram??s assessments and the actions taken be nented.	based on the		
Assessment Measures								
	Assessme Measure	nt	Criter	ion				
	Direct - Wri Exam	iting	g Outcome 7 is measured through CMPS 453, 455, and 460. In addition it is also assessed through indirect measure (graduating students survey, surveys from stakeholders). The target for outcome 7 is to achieve an average rating of 2.8 or higher out of 4 on its rubric.					
Assessment Findings						1.		
	Assessm ent Measure	Crite	erion	Summary	Attachments of the Assessments	Improve ment Narrative s		
	Direct - Writing Exam	7 is mea throu CMF 453, and In ac it is a asse throu indim mea (grac g stu surve from stake ers). targe	rion come sured ugh 2S 455, 460. ddition also essed ugh ect sure duatin udents ey, eys ehold The et for ome 7	CMPS 460: Percentag e of students who fulfilled Outcome 7 in different levels: • 1.63% of students between 0 – 49 (Amateur) • 3.27% of students between 50 – 69 (Developin g) • 14.75% of students between 70 – 84 (Develope d) • 81.96% of	Outcome_2_4_6_7_CMPS_453_rubricEvalu ation_F17.docx rubricEvaluation_F17_1docx	- Assessme nt Process: Continuou s monitoring : The results exceed our expectatio ns for this outcome. We will monitor this outcome in the future to replicate the best practices followed this year.		

	of 4 on its rubric. been met yet? Met	(Exemplary) CMPS430 (Fall 2017: additional point of measurem ent): 95% of the students achieved rating of 3 or 4 on the rubric, thus 	
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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 (selected) Presented formally at staff / department / committee meetings (selected) Discussed informally Other (explain in text box below)

2) How frequently were assessment results shared?

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) 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.

Continued practice of our successful methods are continuing to produce excellent results. We will keep mentoring and supporting the instructors to follow the best practices in instruction and support.

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.

Improved coverage of current material; improved SEIs; improved rating from graduating seniors.

Attachments (optional)

Upload any documents which support the program / department assessment process. ABET_310Rubric_Fall2017_1_.doc Outcome_2_4_6_7_CMPS_453_rubricEvaluation_F17.docx rubricEvaluation_F17_1_.docx Revised_Plan_of_Assessment_CMPS_Effec_2014_2015.doc