University of Louisiana at Lafayette

Detailed Assessment Report
2015-2016 Computer Science MS
As of: 11/17/2016 10:56 AM CENTRAL
(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request*.)

Mission / Purpose

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.

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Understand, use, and analyze computer algorithms
Students should be knowledgeable about computer algorithms, their use, and their complexity.

Related Measures

M 1: Understand, use, and analyze computer algorithms
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.

How it is measured:
The percentage of students who received satisfactory score on the rubric.

Source of Evidence: Project, either individual or group

Target:
At least 70% of the students will achieve Developed or Exemplary state on evaluation rubric.

Finding (2015-2016) - Target: Met
Outcome 1: This outcome was measured in CSCE 500, Fall 2015.
In fall 2015, 81 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.

Related Action Plans (by Established cycle, then alpha):

Action Plan
Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Understand, use, and analyze computer algorithms | **Outcome/Objective:** Understand, use, and analyze computer algorithms

Continued implementation
Continue the best practices of pedagogy, assessment, and evaluation as all goals were met successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Understand, use, and analyze computer algorithms
> | **Outcome/Objective:** Understand, use, and analyze computer algorithms

Continued Implementation of Assessment
Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem
> **Measure:** Understand, use, and analyze computer algorithms | **Outcome/Objective:** Understand, use, and analyze computer algorithms
> **Measure:** Demonstrate communication Skills | **Outcome/Objective:** Demonstrate communication Skills
> **Measure:** Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

SLO 2: Possess knowledge of fundamental concepts of computing
Students must possess knowledge of fundamental concepts of computing from areas such as database, operating systems, computer architecture,
and programming language.

Related Measures

M 2: Possess knowledge of fundamental concepts of computing
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.

Minimum 70% of students must achieve Developed or Exemplary state on evaluation rubric.

Source of Evidence: Project, either individual or group

Target:
Fifty percent or more students receive a grade of 80 percent on the system technologies project.

Finding (2015-2016) - Target: Met
Outcome 2: This outcome was measured in CSCE 550 and CSCE 555.

In CSCE 550 (Fall 2015), 100 percent of students achieved the developed or exemplary level on the evaluation rubric. The target for this course is met.

In CSCE 555 (Fall 2015), more than 70 percent of students achieved the exemplary level on the evaluation rubric. The target for this course is met.

Related Action Plans (by Established cycle, then alpha):

Action Plan

Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as all goals were met successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

Continued Implementation of Assessment

Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem
> **Measure:** Understand, use, and analyze computer algorithms | **Outcome/Objective:** Understand, use, and analyze computer algorithms
> **Measure:** Demonstrate communication Skills | **Outcome/Objective:** Demonstrate communication Skills
> **Measure:** Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

SLO 3: Ability to develop software to solve a computational problem

Students must possess the ability to develop software to solve a computational problem. This must be evidenced
through development and demonstration of working software.

Related Measures

M 3: Ability to develop software to solve a computational problem

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.

Source of Evidence: Project, either individual or group

Target:
At least 70% of the students must achieve Developed or Exemplary status on the evaluation rubric.

Finding (2015-2016) - Target: Met
Outcome 3: This outcome was measured on the implementation projects in CSCE 550, 555, and 561.

In CSCE 550, 100 percent of students achieved developed or exemplary status on the implementation projects. The target for this class was met.

In CSCE 555, over 70 percent of achieved developed or exemplary status on the implementation projects. The target for this class was met.

In CSCE 561, 100 percent of students achieved developed status and 85 percent of students achieved exemplary status on the implementation projects. The target for this class was met.

Related Action Plans (by Established cycle, then alpha):

Improve performance in computer architecture project

30.77 percent of students achieved a grade of 80 percent or more in the computer architecture project for CMPS 460G project. The objective is to achieve 50 percent of students receiving a grade of 80 or above in this project.

Established in Cycle: 2012-2013
Implementation Status: Finished
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem

Implementation Description: Increase proportion of class lecture time devoted to explaining the concepts and requirements of the project.
Projected Completion Date: 05/2014
Responsible Person/Group: Instructor(s) of CMPS 430G
Additional Resources: None.

Action Plan

Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as all goals were met successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem

Continued Implementation of Assessment
Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem
Measure: Understand, use, and analyze computer algorithms | **Outcome/Objective:** Understand, use, and analyze computer algorithms
Measure: Demonstrate communication Skills | **Outcome/Objective:** Demonstrate communication Skills
Measure: Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

SLO 4: Demonstrate communication Skills
Students must be able to demonstrate written and oral communication skills on a topic of computing.

Related Measures

M 4: Demonstrate communication Skills
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.

Source of Evidence: Project, either individual or group

Target:
At least 70% of the students must achieve Developed or Exemplary state on evaluation rubric.

Finding (2015-2016) - Target: Met
Outcome 4: This outcome was measured on written reports or oral presentations presented in CSCE 555 and CSCE 561.

In CSCE 555 (Fall 2015), above 70 percent of the students achieved developed or exemplary status. The target for this course is met.

In CSCE 561 (Fall 2015), 100 percent of the students achieved developed status and 85 percent of the students achieved exemplary status. The target for this course is met.

Related Action Plans (by Established cycle, then alpha):

Action Plan
Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Demonstrate communication Skills |
Outcome/Objective: Demonstrate communication Skills

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as all goals were met successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Demonstrate communication Skills |
> **Outcome/Objective:** Demonstrate communication Skills

Continued Implementation of Assessment

Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
> **Measure:** Ability to develop software to solve a computational problem | **Outcome/Objective:** Ability to develop software to solve a computational problem
> **Measure:** Understand, use, and analyze computer algorithms | **Outcome/Objective:** Understand, use, and analyze computer algorithms
> **Measure:** Demonstrate communication Skills | **Outcome/Objective:** Demonstrate communication Skills
> **Measure:** Possess knowledge of fundamental concepts of computing | **Outcome/Objective:** Possess knowledge of fundamental concepts of computing

Analysis Questions and Analysis Answers

How were assessment results shared and evaluated within the unit?
All faculty and staff in CACS were emailed a copy of the detailed assessment report.

Identify which action plans [created in prior cycle(s)] were implemented in this current cycle. For each of these implemented plans, were there any measurable or perceivable effects? How, if at all, did the findings appear to be affected by the implemented action plan?
The program achieved all its outcomes.

What has the unit learned from the current assessment cycle? What is working well, and what is working less well in achieving desired outcomes?
With robust data collection and mapping, the program has achieved the outcomes.