Program Assessment Plan

American University

Academic Program: CAS: Computer Science - BS

Academic Program: CAS: Computer Science - BS

Contact Person for Assessment: Prof. M. Mehdi Owrang
Unit Website Address: http://www.american.edu/cas/cs/
Unit's Primary Department: Comp Sci
COLA Reader -1: Teresa Larkin
COLA Reader -2: Lynne Arneson

Learning Outcome: Programming Skills

Programmatic objectives are to ensure that upon graduation students possess strong problem solving and programming skills; are capable of using standard software development tools to create, analyze, modify, and repair software applications.

Outcome Year: 2009-2010
2010-2011
2011-2012
Start Date: 05/11/2009
Outcome Status: Active Learning Outcome

Assessment Plan

Assessment Measure	Target	Schedule/Cycle	Active
Evaluation of sample programming projects in CSC-281 from the perspective of a potential employer of an entry-level programmer. **Measure Type:** Final Paper/ Final Project	The quality of architectural design, class implementations, attribute implementations, method implementations, efficiency, style and documentation must be equivalent or exceed those expected of an entry level programmer.	A sampling of ten CSC-281 projects should be evaluated at the end of odd years (2009S, 2011S, ...) by a committee of the Department named by the Department Chair). The Chair is responsible for acting on the data.	Yes
Evaluation of sample programming projects in CSC-544 from the perspective of a potential employer of an entry-level programmer. **Measure Type:** Final Paper/ Final Project	The quality of architectural design, class implementations, attribute implementations, method implementations, efficiency, style and documentation must be equivalent or exceed those expected of an entry-level programmer.	Half of the CSC-544 student projects should be evaluated at the end of every three years (2010S, 2013S,...) by an instructor named by the Chair, who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes
Review of Internship Employers evaluation and Internship reports. **Measure Type:** Field Work/ Internship	Employers are satisfied with student interns' work, and student reports indicate their program of studies adequately prepare them for the internship.	Internships should be evaluated at the end of three-year cycles beginning in 2010S by the Internship Advisor who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes
Survey of alumni. **Measure Type:** Survey	Overall satisfaction of accomplishment.	Alumni surveys should be evaluated at the end of three-year cycles beginning in 2011S by the Alumni Advisor who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes

Assessment Plan

Assessment Measure	Target	Schedule/Cycle	Active
Final Exam and Evaluation of sample programming projects in CSC280 from the perspective of a potential employer of a very entry-level programmer. **Measure Type:** Final Paper/ Final Project	The correctness of the implementation, satisfaction of the projects' requirements, providing test cases for every function, and the efficiency of coding must be equivalent or exceed those expected of a very entry level programmer.		Yes

Related Courses

- CSC-281 - Introduction to Computer Science II
- CSC-544 - Object Oriented Programming

Learning Outcome: Computer Systems Skills

Programmatic objectives are to ensure that upon graduation students possess strong skills in developing and maintaining computer systems and networks of computer systems.

Outcome Year: 2009-2010
2010-2011
2011-2012
Start Date: 05/11/2009
Outcome Status: Active Learning Outcome

Assessment Plan

Assessment Measure	Target	Schedule/Cycle	Active
Demonstration of projects in operating systems, computer architecture and network design courses. **Measure Type:** Final Paper/ Final Project	Successful demonstration of the projects.	Half of the Systems projects in CSC-330, 546, and 564 should be evaluated at the end of three years (2011S, 2014S,...) by an instructor named by the Chair who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes

Learning Outcome: Design Database Systems

Programmatic objectives are to ensure that upon graduation students have the ability to design and implement database systems to accept, store, and manage structured and unstructured electronic data.

Outcome Year: 2009-2010
2010-2011
2011-2012
Start Date: 05/11/2009
Outcome Status: Active Learning Outcome

Assessment Plan

Assessment Measure	Target	Schedule/Cycle	Active
Evaluation of sample programming projects in CSC-281 from the perspective of a potential employer of an entry-level programmer. **Measure Type:** Final Paper/ Final Project	The quality of architectural design, class implementations, attribute implementations, method implementations, efficiency, style and documentation must be equivalent or exceed those expected of an entry level programmer.	CSC-281 projects should be evaluated at the end of odd years (2009S, 2011S, ...) by a committee of the Department named by the Department Chair. The Chair is responsible for acting on the data.	Yes

Assessment Plan			
Assessment Measure	**Target**	**Schedule/Cycle**	**Active**
Evaluation of sample programming projects in CSC-544 from the perspective of a potential employer of an entry-level programmer. **Measure Type:** Final Paper/ Final Project	The quality of architectural design, class implementations, attribute implementations, methods implementations, efficiency, style and documentation must be equivalent or exceed those expected of an entry level programmer.	Half of the CSC-544 student projects should be evaluated at the end of every three years (2010S, 2013S,...) by an instructor named by the Chair, who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes
Evaluation of sample projects in CSC-570. **Measure Type:** Final Paper/ Final Project	Project must show adequate ability to design and implement database systems to accept, store, and manage structured and unstructured electronic data.	Half of the CSC-570 projects are evaluated at the end of every three years (2009S, 2012S,2015S...) by an instructor named by the Chair, who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes
Review of Internship Employers evaluation and Internship reports. **Measure Type:** Field Work/ Internship	Employers are satisfied with student interns' work, and, student reports indicate their program of studies adequately prepare them for the internship.	Internships should be evaluated at the end of three-year cycles beginning in 2010S by the Internship Advisor who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes

Related Courses

- CSC-281 - Introduction to Computer Science II
- CSC-544 - Object Oriented Programming
- CSC-570 - Database Management Systems

Learning Outcome: Theoretical Foundation

Programmatic objectives are to ensure that upon graduation students possess a sound theoretical foundation providing student flexibility and adaptability to future computer technology.

Outcome Year: 2009-2010
2010-2011
2011-2012
Start Date: 05/11/2009
Outcome Status: Active Learning Outcome

Assessment Plan			
Assessment Measure	**Target**	**Schedule/Cycle**	**Active**
Review of Internship Employers evaluation and Internship reports. **Measure Type:** Field Work/ Internship	Employers are satisfied with student interns' work, and, student reports indicate their program of studies adequately prepare them for the internship.	Internships should be evaluated at the end of three-year cycles beginning in 2010S by the Internship Advisor who reports the findings to the Chair. The Chair is responsible for acting on the data.	Yes