



Associate of Science in Computer Science

Career and Technical Education Degrees and Certificates

#1	<p>AS in Computer Science Student Learning Outcome</p> <p>Demonstrate basic programming skills in a given computer language.</p>
	<p>Courses in the degree plan that address this outcome</p> <p>COSC 1315 Fundamentals of Programming</p> <p>Introduction to computer programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files.</p>
	<p>Assessment Measure for this Outcome</p> <p>Concept and hands-on skill performance on exams and all the programming assignments will be used to appropriately assess the total set of knowledge, skills, and abilities of the student for COSC1315.</p>
	<p>Achievement Target for this Measure</p> <p>70% of assessed students will achieve a passing score on all the programming assignments and the exams for COSC 1315 course.</p>
	<p>Findings</p> <p>Fall 2010</p> <p>65% of students achieved a passing score on all the programming assignments.</p> <p>68% of students achieved a passing score on all the exams.</p>
	<p>Related Action Plans</p> <ul style="list-style-type: none">• Develop a rubric for assessing the programming assignments.• Develop a test blue print for the exams.• Early Alert and Gateway to College Alerts are strictly followed starting Spring 2009.• Better software development environment, tighter integration with textbook, expansion of teaching material (i.e. video lectures) will be implemented starting Fall 2010.
#2	<p>AS in Computer Science Degree Student Learning Outcome</p> <p>Demonstrate advanced programming skills and methods in a given computer language.</p>



	<p>Courses in the degree plan that address this outcome</p> <p>COSC 1337 Programming Fundamentals II</p> <p>Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering.</p>
	<p>Assessment Measure for this Outcome</p> <p>Concept and hands-on skill performance on exams and all the programming assignments will be used to appropriately assess the total set of knowledge, skills, and abilities of the student for the COSC 1337 course.</p>
	<p>Achievement Target for this Measure</p> <p>70% of assessed students will achieve a passing score on all the programming assignments and the exams for COSC 1337 course.</p>
	<p>Findings</p> <p>Fall 2010 100% of students achieved a passing score on all the programming assignments. 100% of students achieved a passing score on all the exams.</p>
	<p>Related Action Plans</p> <ul style="list-style-type: none">• Create a rubric to assess the programming assignments.• Create a test blue print for the exams.• Early Alert and Gateway to College Alerts are strictly followed starting Spring 2009.• Better software development environment, tighter integration with textbook, expansion of teaching material (i.e. video lectures) will be implemented starting Fall 2010.• Strict enforcement of prerequisites.
#3	<p>AS in Computer Science Degree Student Learning Outcome</p> <p>Demonstrate knowledge of advanced data structures in a given computer language.</p>
	<p>Courses in the degree plan that address this outcome</p> <p>COSC 2315 Data Structures</p>



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	Further applications of programming techniques. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.
	<p>Assessment Measure for this Outcome</p> <p>Concept and hands-on skill performance on exams and all the programming assignments will be used to appropriately assess the total set of knowledge, skills, and abilities of the student for the COSC 2315 course.</p>
	<p>Achievement Target for this Measure</p> <p>70% of students will achieve a passing score on the programming assignments and exams in COSC 2315.</p>
	<p>Findings</p> <p>Fall 2010 50% of students achieved a passing score on all the lab assignments. 100% of students achieved a passing score on all the exams.</p>
	<p>Related Action Plans</p> <ul style="list-style-type: none">• Create a rubric to assess the programming assignments• Create a test blue print for the final• It has been observed that many students enrolled in COSC 2315 do not have the necessary programming experience. It is essential that programming courses pre-requisites be enforced.• Early Alert and Gateway to College Alerts will be strictly followed starting Fall 2010.