

COURSE SYLLABUS



Education That Works For a Lifetime

Course Title:	Object-Oriented Programming Using C++	Date submitted:	Sept. 22, 2014 AAC:14-130	
Department:	Business and Technology			
Curriculum:	Computer Information system			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101) <input type="text" value="CSC*213"/> Course Type: <input type="text" value="X"/> A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture M: Seminar N: Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio	Prerequisites:		
	Elective Type: <input type="text" value="G/LAS"/> E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science	C- or better in Programming Logic and Design with Visual Basic (CSC*126), or permission of Program Coordinator		
	Credit Hours: <input type="text" value="3"/> Developmental: (yes/no) <input type="text" value="No"/> Lecture: <input type="text" value="1.5"/> Clinical: <input type="text" value="0"/> Lab: <input type="text" value="1.5"/> Studio: <input type="text" value="0"/> Other: <input type="text" value="0"/> TOTAL: <input type="text" value="3"/>	Corequisites:		
	Contact Hours: Lab: <input type="text" value="1.5"/> Studio: <input type="text" value="0"/> Other: <input type="text" value="0"/> TOTAL: <input type="text" value="3"/>	None		
	Class Maximum: <input type="text" value="24"/> Semesters Offered: <input type="text" value="F/Sp/Su"/>	Other Requirements:		
		None		
	Catalog Course Description:	Introduces students to object oriented programming in Microsoft's .net environment. Topics covered include basic principles of programming using C++, algorithmic and procedural problem solving, program design and development, basic data types, control structures, functions, arrays, pointers, and introduction to classes for programmer-defined data types.		
	Topical Outline: List course content in outline format.	1. Introduction to C++ 2. Expression and interactivity 3. Making Decision 4. Looping 5. Functions and subroutines 6. Introduction to Classes and Objects 7. Arrays 8. Searching and Sorting 9. Pointers		
	Outcomes: Describe measurable skills or knowledge that students should be able to	Upon successful completion of this course, the student will be able to do the following: COURSE: At the end of semester, student will be able to:		

<p>demonstrate as evidence that they have mastered the course content.</p>	<ol style="list-style-type: none"> 1. develop Programming algorithms 2. test and Solve computer Problems using algorithms 3. demonstrate an understanding of the software development process by using requirements to design, implement and test C++ programs 4. create, compile and run C++ programs 5. create and use Objects <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <ol style="list-style-type: none"> 1. Demonstrate and apply algorithmic thinking ability <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <ol style="list-style-type: none"> 2. Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes. <p>Demonstrates: Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.</p> <p>Does Not Demonstrate: Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.</p>
<p>Evaluation: List how the above outcomes will be assessed</p>	<p>Assessment will be based on the following criteria:</p> <ol style="list-style-type: none"> 1. Students will write short programs to demonstrate basic skills. 2. Students will write at least two long programs to demonstrate the ability to solve a complex problem. 3. One or more of these projects will be uploaded to ePortfolio. 4. Written examinations
<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required:</p> <ol style="list-style-type: none"> 1. Room will require Media Control System (Computer and multimedia projector) 2. Microsoft Visual studio 3. Computer Lab
<p>Textbook(s)</p>	<p>Textbook: Refer to current academic year printout</p>