

Course Competencies Template - Form 112

GENERAL INFORMATION		
Phone #: 305-237-3928		
Course Title: DEVELOPING WEB SITES USING PHP/MYSQL		
□ B.A. □ B.S. □ B.A.S □ A.A. □ A.S. □ A.A.S. □ C.C.C. □ A.T.C. □ V.C.C		
Effective Year/Term: 2008-2009		
New Course Competency ☐ Revised Course Competency		
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework):		
The above course links to the following Learning Outcomes:		
☐ Social Responsibility ☐ Ethical Issues ☐ Computer / Technology Usage ☐ Aesthetic / Creative Activities ☐ Environmental Responsibility		
Course Description (limit to 50 words or less, must correspond with course description on Form 102): This is an intermediate course which provides students the opportunity to create web sites. Students will learn to develop dynamic, interactive web sites using PHP 5 an open source programming language and MySQL database. A.S. degree only. Prerequisite(s): COP-1822 (basic HTML or any beginning programming language) Correquisite(s):		

Course Competencies: (for further instruction/guidelines go to: http://www.mdc.edu/asa/curriculum.asp)

Competency 1: The student will demonstrate an understanding of the web development environment by:

- 1. Creating web pages using HTML, XHTML, CSS, and DTDs.
- 2. Describing client/server architecture including the role/function of web browsers, web servers and communication protocols.
- 3. Differentiating between client-side and server-side scripting.

Competency 2: The student will demonstrate an understanding of PHP within a dynamic web environment by:

- 1. Identifying the requirements and components for installing Apache, PHP and MySQL on a server-based operating system.
- 2. Describing the function of the Apache web server supporting PHP and MySQL.
- 3. Creating basic PHP scripts.

Competency 3: The student will demonstrate an understanding of PHP scripting language elements by:

- 1. Describing the PHP syntax.
- 2. Explaining the use of variables, constants, data types, operators, functions, arrays, and flow control in simple PHP programs.
- 3. Creating expressions using arithmetic, conditional, comparison operators.

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Competency 4: The student will demonstrate an understanding of functions and control structures by:

- 1. Developing programs that incorporate function definitions, function calls, and function returning values.
- 2. Creating programs that use if, else if, and else statements to evaluate conditions, and use logical operators (and, not, or) in conditional statements.
- 3. Creating programs that use while, do-while and for loops to create repetition.

Competency 5: The student will demonstrate an understanding of strings by:

- 1. Explaining string syntax.
- 2. Describing how to construct strings.
- 3. Using functions to manipulate strings.
- 4. Using strings to handle form submissions.

Competency 6: The student will demonstrate an understanding of arrays by:

- 1. Manipulating array elements.
- 2. Using and manipulating associative and multi-dimensional arrays.

Competency 7: The student will demonstrate an understanding of files and directories by:

- 1. Creating programs that manipulate files, e.g. create, open, read data from files, and write data to files.
- 2. Identifying file and directory information, and renaming and removing files from directories.

Competency 8: The student will demonstrate an understanding of databases and MySQL by:

- 1. Describing relational databases.
- 2. Designing and creating a relational database.
- 3. Creating a database using MySQL.

Competency 9: The student will demonstrate how to manipulate a MySQL database with PHP by:

- 1. Generating connections to a MySQL database with PHP.
- 2. Analyzing MySQL Errors.
- 3. Executing SQL statements with PHP.
- 4. Creating and deleting databases and tables with PHP.
- 5. Manipulating database records with PHP.

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