

COUNTY COLLEGE OF MORRIS

Course Information Outline

Course Title_ Advanced Web Programming PREFIX&NUMBER CMP-2xx
Lecture Hours 2 Laboratory Hours 2 Credit Hours 3 Course Fee yes
Department Chairperson Approval Nancy E. Brown Date 1-28-15
Division Dean Approval SA Date 1.29.15

General Education Information:			
Categories:			
<input type="checkbox"/> Communications	<input type="checkbox"/> History	<input type="checkbox"/> Humanities	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Science	<input type="checkbox"/> Social Science	<input type="checkbox"/> Technological Competency	
<input type="checkbox"/> Diversity (check if course also meets diversity category)			
Integrated Goals: (check all that apply)			
<input type="checkbox"/> Ethical Reasoning and Action		<input type="checkbox"/> Information Literacy	

- Catalog Course Description**
This advanced course in Web Development introduces the student to creating interactive and dynamic Web sites using current Web programming. Building on concepts and principles of computer programming and scripting languages, students will interact with Web server technologies and develop front end, advanced professional Web sites with fully functioning back end support.
- Prerequisite(s)** CMP 128 – Computer Science I
CMP 244 – Web Page Design II
- Co-requisite(s)**
- Textbooks:** Beginning PHP5, Apache, and MySQL Web Development
By: Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Jeremy Stolz, Michael K Glass
- Supplementary Books and/or Materials** Flash drive or external hard drive
- Specialized equipment, supplies, facilities, for classes limited by enrollment or restricted by accreditation and/or equipment limitations.** (Information will be used to determine differential funding category.)

Computer, CCM Web space for each student, FTP client, CCM Web server set up with PHP, MySQL (phpMyAdmin), and mail

7. Course Content (List of Topics)

I. Using PHP

- A. How PHP functions as a server-side scripting language
- B. Elements of the basic PHP development process
- C. Embedding PHP statements within HTML documents

II. Using comments within PHP scripts Data and Variables in PHP

- A. Functions of the different data types in PHP
- B. Using PHP operators
- C. Working with PHP variables
- D. Receiving form input into PHP scripts

III. Controlling Script Flow in PHP

- A. Using conditional statements (if, else if, else, and switch)
- B. Using loops to repeat statements (for and while)
- C. Using logical operators

IV. Using PHP Functions

- A. Using basic PHP functions
- B. Creating user-defined PHP functions

V. Using Arrays for List Data

- A. Understanding how arrays work within PHP code
- B. Creating and modifying sequential and associative arrays
- C. Using loops with arrays (for and for each)
- D. Sorting arrays
- E. Using multidimensional arrays

VI. Managing Multiple-Form Applications

- A. Using hidden form fields
- B. Sending an e-mail from a PHP script
- C. Using browser cookies
- D. Using PHP sessions

VII. Using Databases with PHP Scripts

- A. Choosing and installing a database system
- B. Creating and managing a MySQL database
- C. Creating tables with SQL
- D. Retrieving, inserting, updating, and deleting data using SQL
- E. Using PHP's MySQL functions to retrieve, insert, update, and delete data

8. Statement of Course LEARNING OUTCOMES

Upon successful completing of this course, students will be able to:

- Develop front-end, advanced professional Web sites with fully functioning back-end support.
- Create dynamic, interactive Web sites using current Web programming and server-side scripting languages.
- Configure and connect database server technologies.
- Develop critical thinking and decision-making skills in assignment and project completion.

9. Statement of Relation to Curriculum(s)

PREFIX & NUMBER: CMP 2XX

This advanced course offers a comprehensive opportunity for Web students to build upon the knowledge gained in the Web courses presently offered. This course is added to the Web Development Track of the Digital Media Technology #3530 degree, and offered as an elective in the Web Development Certificate #0352 and a CIS elective choice in the Computer Science #2500, CIS Management Information Systems Option #3501, CIS Technical Support Option #3502 and CIS Game Development Option #3504.

10. Format for offering the course (check all that apply)

☒ Traditional

☐ On-Line

☒ Hybrid