

North Central Michigan College

NCMC MASTER COURSE SYLLABUS

Last Date Revised 10/27/06

DIVISION/AREA: Occupational

DEPARTMENT: CIS

ASSOCIATE DEAN: Dr. Robert Marsh

ORIGINATOR: Hwee-Joo Kam

DEAN OF INSTRUCTION: Dr. Timothy Dykstra

HOURS OF INSTRUCTION:

Credit hours: 3

Lecture: 2

Lab: 2

Contact hours: 70.4

COURSE TITLE: ePortal Development

COURSE ALPHA: CIS

COURSE NUMBER: 145

CATALOG DESCRIPTION:

PHP, Apache, and MySQL are the three key open source technologies that form the basis for most active Web servers. The core component of this course is developing e-Commerce websites using the open source AMP (Apache, MYSQL, PHP/Perl) model. The coursework involves creating PHP Web pages, developing database application and security, and integrating PHP with e-commerce and other technologies. Web sites are developed with strong links to real world business applications.

PREREQUISITE(S): CIS 105 or any other programming language.

COREQUISITE(S):

GENERAL EDUCATION/PROGRAM OUTCOMES:

- Think critically and analytically
- Independently acquire knowledge
- Select and use mathematical tools for problem solving and decision making

COURSE OBJECTIVES AND OUTCOMES:

At the successful conclusion of the course, the student will understand

- How PHP server-side scripting language works for connecting HTML-based Web pages to a backend database

- Syntax, functions, and commands for PHP, Apache, and MySQL
- Methods and techniques for building user-friendly forms
- How to easily store, update, and access information using MySQL
- Ways to allow the user to edit a database
- E-commerce applications using these three technologies
- How to set up user logins, profiles, and personalization
- Proper protocols for error handling

METHODS OF INSTRUCTION: Lecture, in class exercises, assignments, projects

METHODS OF EVALUATION: Programming assignments, quizzes, participation, final project

REQUIRED TEXT AT TIME OF COURSE ADOPTION/REVISION:

TEXTS: *PHP and MySQL Web Development, 3/E*; Luke Welling, Laura Thomson;

ISBN: 0-672-32672-8; Sams

OPTIONAL SUPPLEMENTARY MATERIALS:

Reasonable accommodations can be provided to students with documented disabilities. Please contact Learning Support Services at 348-6817 to arrange these.

SUGGESTED TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

(List general content description of what is being covered each week)

WEEK 1	<ul style="list-style-type: none"> • Course Overview • Introduction to HTML
WEEK 2	<ul style="list-style-type: none"> • Macromedia Dreamweaver & Fireworks (Hands-out) • Phase 1 of Final Project Due
WEEK 3	<ul style="list-style-type: none"> • Lecture: Chapter 1 – PHP Crush Course • Lab: In-Class Exercise • Homework Assignment 1 Due
WEEK 4	<ul style="list-style-type: none"> • Lecture: Chapter 3 – Array • In Class Exercise
WEEK 5	<ul style="list-style-type: none"> • Chapter 4 – String Manipulation and Regular Expression • Quiz 1 • Phase 2 of Final Project Due
WEEK 6	<ul style="list-style-type: none"> • Lecture: Chapter 5 – Reusing Code and Writing Functions • Homework Assignment 2 Due

WEEK 7	<ul style="list-style-type: none"> • Lecture: Chapter 8 – Designing your Web Database • Quiz 2
WEEK 8	<ul style="list-style-type: none"> • Chapter 8 continued • In Class Exercise • Homework Assignment 3 Due
WEEK 9	<ul style="list-style-type: none"> • Lecture: Chapter 10 - Working with Your MySQL Database • Phase 3 of Final Project due • Quiz 3
WEEK 10	<ul style="list-style-type: none"> • Lecture – Chapter 11: Accessing Your MySQL Database from the Web with PHP • Quiz 4 • Homework Assignment 4 Due
WEEK 11	No Class – Spring Break
WEEK 12	<ul style="list-style-type: none"> • Chapter 11 continued • Phase 4 of Final Project Due
WEEK 13	<ul style="list-style-type: none"> • Lecture – Chapter 22: Using Session Control in PHP • Homework Assignment 5 Due • Work on Phase 5 of the final project
WEEK 14	<ul style="list-style-type: none"> • Work on Phase 5 of the final project • Phase 5 of Final Project Due • Quiz 5
WEEK 15	<ul style="list-style-type: none"> • Lecture: eCommerce Security: SQL Injection and malicious code attack (Hands-out)
WEEK 16	<ul style="list-style-type: none"> • Lecture: eCommerce Security - Credit card validation and sending email (Hands-out) • In-Class Exercise • Phase 6 of Final Project Due

APPROVED FOR ADOPTION/REVISION BY THE CRD/AP COMMITTEE ON 11/1/06