New York City College of Technology
The City University of New York

Department of Communication Design

COMD 4763 - Dynamic Web II

Course Description

Building on dynamic web interface tools learned in COMD 3663 Dynamic Web I, students will learn to use server-side technologies that enable them to build richer and more fulfilling user experiences. The course will focus on the use of PHP and MySQL as server-side technologies.

2 cl hrs, 2 lab hrs, 3 cr

Prerequisites
COMD 3652

Course Objectives

INSTRUCTIONAL OBJECTIVES	ASSESSMENT
For the successful completion of this course, students should be able to:	**Evaluation methods and criteria**
Understand the concepts and appropriate uses of server-sided scripting and accessing information stored in a relational database.	Students will demonstrate competency by implementation of a database and HTML pages with PHP scripting.
Be proficient in basic to intermediate PHP scripting	Tests and exercises
Show proficiency working with an established CMS (e.g., Wordpress or Joomla)	Implement in their final project Test and exercises

INSTRUCTIONAL OBJECTIVES	ASSESSMENT
Understand the use of cookies and session variables.	Students will display competency through implementation and tests of knowledge.
Develop a complete website using an established CMS based on PHP/MySQL.	Students will display competency through a major web design project.

General Education Outcome covered:	How the outcome is assessed:
Academic and Professional Reading The student will demonstrate the ability to read pertinent information using industry-specific sources.	Evaluate through class discussion and written tests if students absorbed information from industry-specific sources.
Oral Communication Listening: The student will demonstrate the ability to discern pertinent information from irrelevant information.	Evaluate how well students absorbed and consequently applied the learning though oral critiques of projects.
Thinking Critically The student will demonstrate the ability to evaluate evidence and apply reasoning to make valid inferences.	Evaluate through class critique to determine how well students were able to advance their project concepts by applying evidence and using logic to make decisions.

Teaching/Learning Method

- Lectures and readings
- Demonstration
- Project based labs
- Research assignments
- Blackboard

Required Text
None

Suggested Text:
Build Your Own Database Driven Website
Using PHP and MySQL, 3rd Edition
Kevin Yank
Sitepoint
ISBN: 0-9752402-1-8

Attendance (College) and Lateness (Department) Policies:
Attendance is taken and is important to success in this class. Both absences and arrival

more than 15 minutes after the start of class will be marked. If excessive, the instructor will alert the student that he or she may be in danger of not meeting the course objectives and participation expectations, which could lead to a lower grade.

Academic Integrity Standards

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion.

Grading

- 90% = Course projects/assignments
- Final Project 50%
- Exercises/Assignments 30%
- Quiz 10%
- 10% = Class preparation/participation/attendance
- CP/P/A 10%

Topics

WEEK	Lecture Topic	Laboratory Exercise	Homework Assignment
1	Overview of server-side scripting Confirm student prerequisites. What is servers-sided scripting? What is a relational database? Confirm availability of PHP and MySQL on students' server	Review course syllabus. Ensure appropriate hosts and domain registration.	Ensure appropriate host and domain registration.
2	A Content Management System: Introduction	Install Wordpress/Joomla Select and install theme	Install Wordpress/Joomla Select and install theme Conceive final project
3	Comparison of Javascript and Actionscript and PHP scripting.	Write PHP scripts	Write PHP scripts

WEEK	Lecture Topic	Laboratory Exercise	Homework Assignment
4	Using PHP includes Introduction to the use of Apache environment variables	Executing PHP includes Experiment with Apache environment variables	Executing PHP includes Experiment with Apache environment variables Prepare to present final project concept
5	CMS designs considerations: design options when working with templated CMS	Experiments with design implementation	Prepare for presentation of Final Project concept
6	Presentation of Final Project concept	Presentation of Final Project concept	Begin development of final project
7	Continuation of CMS designs considerations: design options when working with templated CMS	Implement design options for final project	Implement design options for final project Prepare for quiz
8	Using cookies to enhance the user experience	Quiz Exploring cookies	Complete exercises Continue design and implementation of final project.
9	Blending back end and front end technologies for better user experiences (e.g., language detection) Combining PHP and Javascript	Implementing PHP and Javascript to detect preferred language and allow user to choose	Complete language detection
10	Presenting rotating random content using PHP	Implement rotating content (e.g., banner ad, picture of the day)	Complete rotating content exercise
11	htaccess files redirects, url rewrites understanding the difference between 301 and 302 redirects	implement redirects using htaccess file implement url rewriting using htaccess	Complete exercises Continue development of final project
12	SEO for CMS-driven websites Duplicate content issues with CMSs	Implement SEO for CMS-driven website Use meta robots and htaccess to resolve duplicate content issues	Complete SEO of website Use meta robots and htaccess to resolve duplicate content issues
13	Assessment of final project	Assessment of final project	Developing final project
14	Q&A of final project technical challenges	Final lab before project presentation and critique	Completion of final project
15	Final presentations.	Final Project Presentations and critique.	

Bibliography

Build Your Own Database Driven Website
Using PHP and MySQL, 3rd Edition
Kevin Yank
Sitepoint
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PHP and MySQL Web Development
Luke Wellington and Laura Thomson
Addison Wesley
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ISBN-13:9730672329166