

Dynamic Website Development

CIS-241 1

Fall Term 2024-2025 School Year Section 1 3.00 Credits 08/26/2024 to 12/13/2024 Modified 10/09/2024

Course Description

This course addresses the high level of integration of graphics, programming, and dynamic data/information supplied by database management systems (DBMS). The coursework includes discussion and integration of graphics, still images, client and server side scripting languages and data supplied by a DBMS. A PHP/MySQL based electronic portfolio will be developed by each individual student during the course and posted to the Internet to provide potential employers with the student's resume, CIS Programming syllabi and samples of the student's computer programming work in HTML, CSS, JavaScript, PHP, MySQL, C# and Java. Prerequisite: CIS 130, CIS 196

Outcomes

Technical Skills

- PHP and MySQL integration
- MVC Format for developing dynamic websites
- Cookies, Sessions, and Persistent Data
- File Uploads/Downloads
- Web Forms
- Secure Websites with PHP and MySQL

Professionalism/Communication

Students will demonstrate professional interaction within group projects and during code review sessions. Proper conflict resolution will occur to promote the project/group and complete tasks assigned.

Critical Thinking

Students will provide flexible and dynamic solutions to problems that utilize the design patterns they determine are the best fit.

Course Materials

Murach's PHP and MySQL

Author: Joel Murach, Ray Harris

Publisher: Murach

Edition: 3rd

ISBN: 978-1-943872-38-1

Deliverables

Code Review

Students will determine a time to meet synchronously with their team and record the meeting. A video recording of the meeting, along with each team member's notes should be turned in for these assignments.

Homework

Deliverable may vary. Please read the description for each Homework assignment to determine the form of deliverable.

Project

Projects will be PHP websites with MySQL databases. Deliverable will require all elements necessary to run the PHP site, including the folders containing the pages and other content, as well as an export of the MySQL database used.

Evaluation Procedures and Grading

Criteria

Type	Weight	Topic	Notes
Homework	40%		
Projects	30%		
Final Project	30%		

Course Outline

When	Topic	Notes
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When	Topic	Notes
Unit 1 Weeks 1-5	Intro to PHP/MySQL	• WAMP Server • Basic PHP • Basic MySQL • PDO Objects
Unit 2 Weeks 6-11	Dynamic Web Applications	• The MVC Format • Web Forms • Arrays and Control Statements • Cookies and Sessions • Functions and Libraries
Unit 3 Weeks 11-16	Web Security	• Objects in PHP • Regular Expressions/Data Validation • Exception Handling • Reading/Writing Files • Secure Socket/Encryption • Login Systems