MIS3501 – Data Centric Application Development
Spring 2017

About the Instructor:

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Office hours: By Appointment (please e-mail)

Class Locations and Time:

Alter Hall 602 5:30 pm - 8:00 pm, Wednesday (section 3)

On the web: http://community.mis.temple.edu/mis3501003spring2017 (section 3)

Course Description:

This hands-on PHP programming course uses open source software (Apache, PHP and MySQL) to provide the student with a fundamental programming background. Students will develop the skills necessary to create interactive, database-driven web sites.

This class is intended to teach a specific set of skills. Consequently, this class is designed to develop individual proficiency and reward individual achievement. Programming requires creativity, clear methodical thinking, and attention to detail. Among other things, students will be expected to learn HTML, PHP and MySQL command syntax.

In order to develop a web application, the student must develop competency in a number of different technologies. This class is structured so that individual technologies are introduced, and then combined to create increasingly more sophisticated results.

Course Objectives:

- Learn the basic structure and syntax of the PHP language
- Handle user input via form processing and URL tokens
- Interface PHP pages with MySQL databases
- Perform other programming-related activities (upload files to a server, manage file directories, authenticate users, etc.)
- Gain the knowledge necessary for continued, independent development of programming skills

Textbook and Materials:

Murach's PHP and MySQL (2nd Edition) by Joel Murach and Ray Harris, ISBN 978-1-890774-79-0

Online resource: https://lynda.temple.edu/default.aspx

Development Tools:

1. XAMPP (http://www.apachefriends.org/en/xampp.html) XAMPP is a bundled installation of Apache, MySQL and PHP.
2. NetBeans IDE for HTML5 and PHP (http://netbeans.org/downloads)
3. For Microsoft PC users:
    a. Notepad++ (http://notepad-plus-plus.org)
    b. SSH (http://download.temple.edu)
4. For Mac users:
    a. Text Wrangler (http://www.barebones.com/products/textwrangler)
    b. Fugu SSH (http://sourceforge.net/projects/fugussh/files/Unstable/fugu-1.2.1pre1/Fugu-1.2.1pre1.zip/download)

Evaluation and Grading:

Item	Percentage
Exams (3)	75%
Quizzes (2)	20%
Participation	5%

Scale

94 – 100	A	73 – 76	C
90 – 93	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	B	63 – 66	D
80 – 82	B-	60 – 62	D-
77 – 79	C+	Below 60	F

Students who fail to earn the required portfolio points will receive an "Incomplete" for this course regardless of performance on exams or class participation! See the MIS Department Portfolio Requirement section of this document for details.

Once a grade is communicated to you electronically you will have a 2-week window of time to approach me and question the grade you received. I will not consider grade adjustments after this window has closed. Of course, during the last week of the semester, study days, and finals week, this 2-week window shortens and I will not consider grade adjustments 48 hours after the last day of final exams.

Exams:

Exams are hands-on technical exercises completed in a fixed amount of time.

There will be three exams during the semester.

Make-up exams and quizzes will not be given. Exceptions are reserved for documented hospitalization or other extreme circumstances. If an exception is made, students may find the content of the make-up exam or quiz to be more difficult than the original. It is, therefore, to your advantage to show up for the exam or quiz at the scheduled time and take it with the rest of the class.

Quizzes:

There will be two quizzes given in the semester. They will require students to learn HTML, CSS and SQL topics on their own, outside the classroom. Lynda videos will be assigned to provide instruction relevant to the quiz.

Participation:

Participation counts for a portion of the class grade. Participation grades are determined through a confluence of the following factors:

- Did you complete the technical challenges and turn them in on time?
- Did you participate in the in-class exercises?
  Note that the above indicators are the most concrete measure of class participation.
- Did you attend class regularly?
- Did you thoughtfully contribute to course related conversations in class and online?
- Did you work independently? Or did you rely too heavily on assistance from others?
- Did you manage your time responsibly and consider scheduled quiz and exam dates in your decision-making?
- Did your conduct distract other students and/or impede their learning?

Curved Grading:

Per Fox School policy individual extra credit opportunities cannot be offered as a way to compensate for poor academic performance earlier in the semester.

Individual quizzes or exams are not curved. A single curve to the overall numeric grades for the class at the end of the semester, after all quizzes and exams are completed, may be applied to conform the class to the required GPA distribution for the school. There is no guarantee that such a curve will be applied.

Technical Challenges:

Throughout the semester technical challenges that supplement classroom instruction will be assigned. These technical challenges are not graded however they are collected. They are the best way to prepare for the exams and/or quizzes. As a result students are advised to take these challenges seriously, and complete them on their own outside of class.

Attendance:

Attendance is strongly encouraged. It is the student's responsibility to catch up if class is missed. While every student is encouraged to use office hours to help them gain a better understanding of material, office hours are NOT for helping students catch up on material they missed because they were absent.

Plagiarism and Academic Dishonesty:

Please see the following:
http://bulletin.temple.edu/undergraduate/about-temple-university/student-responsibilities/

It is important to do your own work, and to not present the work of others as if it were your own. Cheating and plagiarism will not be tolerated in this class. Penalties for such actions range from a failing grade for the course to expulsion from the program.

Student and Faculty Academic Rights and Responsibilities:

The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link:
http://policies.temple.edu/getdoc.asp?policy_no=03.70.02

MIS Department Portfolio Requirement:

The MIS department has instituted a portfolio requirement for MIS majors. This class is a checkpoint to ensure that students are focused on this requirement and on track to earn their 1,000 points by graduation. Students who have **not yet taken** MIS2501 must earn a **minimum of 200 points** by the end of the semester. **All other students (that is, those who have taken MIS2501 or are taking it this semester) must earn 400 points** by the end of the semester. **Students who fail to earn the required portfolio points will receive an "Incomplete" for this course regardless of performance on exams or class participation!**

You are **STRONGLY** encouraged to, at a minimum, do the following to earn portfolio points:

1. Create an e-Portfolio and have it listed with the department.
2. Become an active member of AIS and participate in professional development activities.
3. Attend the IT Awards Reception (spring semester only) and the MIS Department's Career Fair.
4. Volunteer your time for department-sponsored events.
5. Discuss opportunities to earn points for projects with your MIS instructors.

Finally, here are two excellent resources that describe why the MIS portfolio points are important to you.

1. http://community.mis.temple.edu/current-students/professionalachievement
2. http://community.mis.temple.edu/store

Schedule:

Keep in mind that all dates are tentative – check the Community site regularly for changes in the schedule.

Before Class Begins:

The semester will move quickly. Before the first day of class students are required to acquire the book and install the software we are using. This information was made available via email. Tutorial videos can be found here:

Software Installation:

For PC Users:
https://foxsbm.webex.com/foxsbm/lsr.php?RCID=1b3ad9faadb0d644926fe0c27189361a

For Mac Users:
https://foxsbm.webex.com/foxsbm/lsr.php?RCID=d834da19fe95798979616a15380abd14

Lynda Training[1]:

"HTML Essential Training" videos with James Williamson: The Introduction, Chapter 1 (The Importance of HTML and Basic HTML syntax only) and Chapter 2 of the Lynda (https://lynda.temple.edu/default.aspx) videos are required for Day 1.

Week	Date	Topics	Readings and tasks due
1	1/18/17	Course Introduction, Software used in this class Chapter 1 – Introduction to web development with PHP • The architecture of a web application • The product discount application Activities: • http://mis3501.temple.edu/jshafer/unixtut/ • HTML exercise • Exercises 1.1, 1.3	Software installations (per video tutorial sent out), Lynda – HTML Essential Training (see above) Lynda – HTML Essential Training, with James Williamson (Sections 3 & 5) Murach – pages 4 – 21

[1] If your machine does not possess dual monitors I strongly suggest you stream the Lynda videos on a tablet next and work on the PC next to the tablet. This will dramatically increase your productivity

Week	Date	Topics	Readings and tasks due
2	1/25/17	Chapter 1 – Introduction to web development with PHP • How to edit and test a PHP application • How to use NetBeans to develop a PHP Application Chapter 2 – How to code a PHP application • Basic PHP skills • How to get data from a request Activities: • Review Solution to Challenge 1 • CSS exercise • Exercise 2.1	Lynda – HTML Essential Training, with James Williamson (Sections 6 & 7) Murach – Pages 22 - 41 Murach – Pages 46 - 57 Murach – Pages 58 – 71 Challenge 1
3	*2/1/17	QUIZ 1 – HTML Chapter 2 – How to code a PHP application • Conditional Statements Activities: • Exercise 2.2 • Review challenge solutions 2.1	Challenge 2.1
4	2/8/17	Chapter 2 – How to code a PHP application • Loops and Counters Chapter 2 – How to code a PHP application • How to use PHP documentation Activities: • Exercise 2.3,2.4 • Review challenge solutions 2.2,2.3 • Review for Exam 1	Murach – Pages 72 - 91 Challenges 2.2 and 2.3

5	2/15/17	Exam 1 Chapter 3 – Introduction to relational databases and MySQL • An introduction to relational databases • The SQL statements for data manipulation • An introduction to MySQL • How to use phpMyAdmin	Murach – Pages 96 - 123

Week	Date	Topics	Readings and tasks due
6	2/22/17	Activities: • Exercise 3.1 • MySQL Exercise 1 • Updating your MySQL password • MYSQL Exercise #2 • Export / Import your Work	Lynda - MySQL Essential Training with Bill Weinman, Chapter 2
7	3/1/17	Quiz 2 – MySQL Review Exam 1	
8	3/8/17	Chapter 4 – How to use PHP with a MySQL database • Intro to PDO • Using PDO with INSERT, UPDATE and DELETE Chapter 4 – How to use PHP with a MySQL database • Using PDO with SELECT statements Activities: • PDO Exercise 1 • PDO Exercise 2 • PDO Exercise 3 Review Challenge Solutions 4.1	Murach – Pages 138 - 156 Challenge 4.1

9	3/15/17	Spring Break – No Class!	

Week	Date	Topics	Readings and tasks due
10	**3/22/17	Chapter 5 – How to use the MVC pattern to organize your code • Introduction to functions Chapter 6 – How to test and debug a PHP application • An introduction to testing and debugging • How to debug with xDebug and NetBeans Activities: • Review PDO Exercise 3 (suggestion box) • PDO Exercise 4 (suggestion box with functions) • Review challenge solution 4.2 • Review for Exam 2	Murach – Pages 160 – 179 Murach – Pages 180 – 188 Murach – Pages 192 – 202 Challenge 4.2
11	3/29/17	Exam 2	
12	4/5/17	Chapter 5 – How to use the MVC pattern • MVC concepts Activities: • Begin challenge 5.1 together in class Chapter 7 – How to work with form data • Radio Buttons • Check boxes • Special characters Chapter 7 – How to work with form data • Selection lists • text areas	Challenge 5.1 Murach – Pages 210 – 223 Murach – Pages 224 – 230

Week	Date	Topics	Readings and tasks due
13	4/12/17	Chapter 12 – How to work with cookies and sessions • How to work with sessions • How to work with cookies Activities: • Exercise 12.2 • Review challenge solution 7	Murach – Pages 326 – 339 Murach – Pages 350 – 365 Challenge 7
14	4/19/17	Chapter 12 – How to work with cookies and sessions • How to work with cookies • How to work with sessions Activities: • Review challenge solution 12 • Review for final exam	Challenge 12
15	4/26/17	Exam 3	

* Monday 1/30/2017 - Last day to add or drop a course

** Wednesday 3/22/2017 - Last day to withdraw from a course