# CSCI 4000 Syllabus (05)

COURSE NUMBER:	CSCI 4000	
COURSE TITLE:	Advanced Web Development	
CREDITS:	3	
PREREQUISITES:	CSCI 3300	
INSTRUCTOR:	Name: Office: Office Hours: Phone: E-mail:	Leong Lee Maynard 214 Mon/Wed 9:00am-10:00am, 11:10am-12:15pm Fri 9:00am-10:00am, or by appointment 931-221-7038 leel@apsu.edu

CLASS WEB SITE: Please refer to D2L

## PROGRAMMING TUTORING

Check out programming peer tutoring service/timing/venue at <u>this link</u>, or use the following URL: http://www.apsu.edu/csci/opportunities\_resources/computer-science-tutoring-services.php

# COURSE DESCRIPTION

This course covers advanced concepts of server-based web processing. Create dynamic web pages by using data from a backend database. Acquire and demonstrate web programming skills through a server-side programming language. Identify and apply server-side programming concepts such as requests, functions, data types, operators, arrays and control structures.

## COURSE OBJECTIVES

Upon successful completion of this course students should be able to

- 1. Write and deploy JavaScript programs.
- 2. Identify and apply JavaScript programming.
- 3. Manipulate the Document Object Model.
- 4. Updating Web Pages with AJAX.
- 5. Write PHP programs by embedding PHP in HTML.
- 6. Deploy PHP enabled Apache web server and MySQL database server.
- 7. Use the MVC (Model-View-Controller) pattern to organize PHP code.
- 8. Identify and apply PHP programming concepts such as requests, functions, data types, operators, arrays and control structures.
- 9. Write server side PHP programs to get data from forms.

### TIME AND PLACE OF CLASS: Mon/Wed/Fri 10:10am-11:05am, Maynard 242

#### REQUIRED LEARNING RESOURCES

- Textbooks: Murach's PHP and MySQL, 3rd Edition, by Joel Murach, Ray Harris, ISBN-13: 978-1943872381, Mike Murach & Associates.
- Others: A USB Flash Drive Laptop Computer with Internet Access

# ATTENDANCE POLICY AND CLASS PARTICIPATION

Students are expected to attend all classes, arrive on time and participate in classroom discussions. Students are expected to remain in class until the class is finished unless extenuating circumstances such as illness requires the student to leave. If a student leaves class early, the instructor must be notified as to the reason that the student left. Any student who has not attended class and/or submitted assignments for a three week period will receive an FA grade.

## ASSIGNMENTS / PROJECTS

Assignments (projects) will be both written and programming. The instructor will not make any adjustments to a student's code when grading, so if any submitted program does not compile (or run) the student will get a zero on the "correctness" portion of the grade (or **50 points** off the overall grade), with no exceptions. Program source code will be turned in electronically.

#### LATE POLICY AND MAKEUP EXAMS

Assignments (projects) are due on the stipulated due dates, and may be turned in **up to 7** calendars days late with a **25% late penalty**. No assignment will be accepted more than 7 calendar days after the original due date! Students with planned absences, whether for university events, religious observance, or other reason, are expected to make arrangements with the instructor to turn in assignments or take exams before the scheduled date of the assignment or test.

Exam/test dates are on the schedule on the following page — if there are any changes, they will be announced at least one week in advance if possible. A missed exam may be made up only if it was missed due to an extreme emergency and arrangements are made before the exam date. Exams may not be taken early or late due to personal travel plans.

#### EVALUATION AND GRADING

Each student activity will contribute to the final grade in the class according to the following percentages.

Activity	Percentage
Assignments	50%
Mid-semester exam	25%
Final exam	25%

Final Percentage	Final Grade	
90 - 100	A	
80 - 89	В	
70 - 79	С	
60 - 69	D	
Below 60	F	

#### POLICY ON MINORS

Minors (any non-student under the age of 18) accompanying staff, faculty, students or visitors on campus are not permitted in the classroom.

#### DISABILITY POLICY

Any student who has a disability that may affect his/her academic performance is encouraged to make an appointment with me to discuss this matter, or you may contact Disability Services; telephone 221-6230; tty 221-6278; fax 221-7102.

# ACADEMIC MISCONDUCT

Students are expected to conduct themselves appropriately at all times. Academic and classroom misconduct will not be tolerated. Students must read the "Code of Student Conduct" in the new Student Handbook for an understanding of what will be expected of them within the academic setting.

Students are required to turn in their own work and not the work of others. Collaboration on homework, assignments, quizzes, and exams is prohibited, unless otherwise specified by the instructor. Likewise, **plagiarism** of other's work or web-related sources constitutes a serious infraction. This includes submitting work very similar to another student's project, copy and paste from Internet searches, and Internet sites for hiring coders to complete a project. "Penalties for academic misconduct will vary with the seriousness of the offense and may include, but not limited to, a grade of "F" on the work in question, a grade of "F" in the course, reprimand, probation, suspension and expulsion." (Quoted from APSU Academic and Classroom Misconduct). Protect your own work. Do not leave your assignments on the hard drives of the computers or printers in the lab for others to see.

Week /	Торіс	Reading	Remarks / Due / Exam
Date			
<b>1</b> 1/16, Tue	Introduction to web development with PHP	PHP Ch. 1	
<b>2</b> 1/22, Mon	How to code a PHP application	PHP Ch. 2	
<b>3</b> 1/29	How to code control statements How to create and use arrays	PHP Ch. 8 PHP Ch. 11	1/29: Last day to drop classes without record
<b>4</b> 2/5	Introduction to relational databases with MySQL	PHP Ch. 3	Assignment 1 Due – 2/5 Monday
<b>5</b> 2/12	How to use PHP and MySQL database	PHP Ch. 4	
<b>6</b> 2/19	How to use PHP and MySQL database	PHP Ch. 4	Assignment 2 Due – 2/19 Monday
<b>7</b> 2/26	How to work with strings and numbers	PHP Ch. 9	2/26: Last day to drop classes with an automatic "W" Assignment 3 Due $- 3/2$ Friday
<b>8</b> 3/5			3/4-3/10: Spring Break, no class
<b>9</b> 3/12	How to use MVC pattern to organize vour code	PHP Ch. 5	<b>Mid-semester exam</b> – 3/14 Wednesday
<b>10</b> 3/19	How to use MVC pattern to organize your code	PHP Ch. 5	Assignment 4 Due – 3/22 Thursday
<b>11</b> 3/26	How to work with form data How to work with dates	PHP Ch. 7 PHP Ch. 10	<ul> <li>3/30: Last day to drop classes with a</li> <li>"W", "F";</li> <li>3/30: Good Friday Holiday</li> <li>3/31: Mandatory "F" period begins</li> </ul>
<b>12</b> 4/2	Create and use arrays (advanced)	PHP Ch. 11	Assignment 5 Due – 4/4 Wednesday
<b>13</b> 4/9	AJAX	JavaScript Examples	
<b>14</b> 4/16	AJAX	JavaScript Examples	Assignment 6 Due – 4/20 Friday

# TOPICAL OUTLINE/CALENDAR

Week /	Торіс	Reading	Remarks / Due / Exam
Date	_	_	
15	Exam Revision		4/25, Wed: Last day of classes
4/23			Note: Final Exam
16	5/1, Tue, 1:30pm-3:30pm: Final		Note: Final Exam
4/30	Exam		

# LAPTOPS AND OTHER ELECTRONIC DEVICES IN THE CLASSROOM

Cell phones must be turned off or on vibrate during class. NO cell phone can be answered during class unless there is an emergency situation and you have discussed the emergency with the instructor prior to class. No text messaging is permitted during class. Laptops/ tablets are permitted whenever the student considers the laptop/tablet as an enhancement of his/her learning experience. However, the student MUST be using the laptop/tablet in a manner that directly relates to the content of this class such as viewing the slides from the lecture or taking notes. The laptop/tablet must not be a distraction to others in the class. No other electronic devices will be allowed in class without prior consent of the instructor.

# CAVEAT

The above schedule and procedures are subject to change in the event of extenuating circumstances.