## CSCI 4000 Syllabus (10)

# March 23 Updated Version

| COURSE NUMBER: | CSCI 4000                |   |  |
|----------------|--------------------------|---|--|
| COURSE TITLE:  | Advanced Web Development |   |  |
| CREDITS:       | 3                        | -   |  |
| PREREQUISITES: | CSCI 3300                |   |  |
| INSTRUCTOR:    | Name:                    | Leong Lee   |  |
|                | Office:                  | Maynard 206/207   |  |
|                | Office Hours:            | by appointment, email <u>leel@apsu.edu</u> for Zoom meeting |  |
|                | Phone:                   | 931-221-7038  |  |
|                | E-mail:                  | leel@apsu.edu   |  |

CLASS WEB SITE: Please refer to D2L

PROGRAMMING TUTORING Closed!

#### 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: Tue/Thu 12:45pm-2:10pm, 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. (You can use an earlier edition, 2<sup>nd</sup> Edition.)
- Others: A USB Flash Drive Laptop Computer with Internet Access

## ATTENDANCE POLICY AND CLASS PARTICIPATION

Quote from APSU Faculty Handbook: "Online course content and interaction (instructor-to-student, student-to-student) is delivered 100% online via a learning management system. Student attendance in online courses is defined as active participation, which will be characterized by the student's timely submission of assignments.

#### **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          | Total 75 Points     |
|-------------------|---------------------|
| Assignments       | 50 points           |
| Mid-semester exam | 0 points (canceled) |
| Final exam        | 25 points           |

| Final Percentage | Final Grade |
|------------------|-------------|
| 90 - 100         | А           |
| 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      | 1   | 8          |  |
| 1         | Introduction to web development with      | PHP Ch. 1  | 1/20: MLK Holiday, APSU closed               |
| 1/21, Tue | PHP                                       |            |  |
| 2         | How to code a PHP application             | PHP Ch. 2  |  |
| 1/27, Mon |   |            |  |
| 3         | How to code control statements            | PHP Ch. 8  | Assignment 1 Due – 2/9 Sunday                |
| 2/3       | How to create and use arrays              | PHP Ch. 11 |  |
| 4         | Introduction to relational databases with | PHP Ch. 3  |  |
| 2/10      | MySQL                                     |            |  |
| 5         | How to use PHP and MySQL database         | PHP Ch. 4  | Assignment 2 Due – 2/23 Sunday               |
| 2/17      |   |            |  |
| 6         | How to use PHP and MySQL database         | PHP Ch. 4  |  |
| 2/24      |   |            |  |
| 7         | How to work with strings and numbers      | PHP Ch. 9  | Assignment 3 Due – 3/8 Sunday                |
| 3/2       |   |            |  |
| 8         |   |            | 3/8-3/14: Spring Break, no class             |
| 3/9       |   |            |  |
| 9         |   |            | 3/16-3/22: Extended <b>Spring Break</b> , no |
| 3/16      |   |            | class  |
|           |   |            | 3/17: Last day to drop with an               |
|           |   |            | automatic "W"                                |
|           |   |            | Mid-semester exam – Canceled                 |
| 10        | How to use MVC pattern to organize        | PHP Ch. 5  |  |
| 3/23      | your code                                 |            |  |
| 11        | How to use MVC pattern to organize        | PHP Ch. 5  | Assignment 4 Due – 4/5 Sunday                |
| 3/30      | your code                                 |            |  |
| 12        | How to work with form data                | PHP Ch. 7  | 4/10, Fri: Good Friday, APSU Closed          |
| 4/6       | How to work with dates                    | PHP Ch. 10 |  |
| 13        | Create and use arrays (advanced)          | PHP Ch. 11 | Assignment 5 Due – 4/19 Sunday               |
| 4/13      |   |            |  |
| 14        | AJAX                                      | JavaScript |  |
| 4/20      |   | Examples   |  |

## TOPICAL OUTLINE/CALENDAR

| Week / | Торіс          | Reading    | Remarks / Due / Exam              |
|--------|----------------|------------|-----------------------------------|
| Date   |                |            |                                   |
| 15     | AJAX           | JavaScript | Assignment 6 Due – 4/29 Wednesday |
| 4/27   |                | Examples   | 4/29, Wed: Last day of classes    |
| 16     | Not Applicable |            | Final Project Submission: 5/6     |
| 5/4    |                |            |                                   |

## 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.