Syllabus CSE 108 01, Spring 2026

Instructor:

Ammon Hepworth, PhD

Designation:

CSE 108: Full Stack Web Development

Catalog Description:

This course covers topics related to both front end and backend web development including web security, scalable architecture, web frameworks, databases, and ORM's. Languages discussed and used in the class include Python, HTML, CSS, JavaScript, and SQL. A major element of this course is the team project to build and deploy a fully functioning web application.

Textbooks and Other Required Materials:

Various online resources

Course Objective:

Students should be able to develop a web application with a database backend using modern web technologies and principles.

Prerequisites:

CSE 022 & CSE 024 combination or equivalent knowledge

Course Policies:

All lectures will be remote over Zoom. All labs will be in person. Please attend all lectures and the lab section which you are assigned.

For lab assignments, you may work together with other students if you wish or when an assignment asks for explicit collaboration. Giving each other help in finding bugs and in understanding the assignment is encouraged. It is permissible to allow other students to see small portions of your code on-screen during lab, but you may not allow them to copy directly. In general, the deadline for submission for a lab will be before the start of the next week's lab.

Remember to be responsible, respectful and kind.

Academic Dishonesty Statement:

a. Each student in this course is expected to abide by the University of California, Merced's Academic Honesty Policy. Any work submitted by a student in this course for academic credit will be the student's own work.

b. You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e mail, an e mail attachment file, a diskette, or a hard copy. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Policy can also be extended to include failure of the course and University disciplinary action.

c. During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

Disability Statement:

Accommodations for Students with Disabilities: The University of California Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities based on the principles of independent living, accessible universal design and diversity. I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances. Students are encouraged to register with Disability Services Center to verify their eligibility for appropriate accommodations.

Topics:

Programming with Python, web development, web servers, databases, object relational mapping, web frameworks, data visualization libraries

Class/laboratory Schedule:

Lecture: Thursdays 4:00-6:20pm, Zoom
Lab: See class schedule for the day/time of the section you are assigned (labs are in person)

Midterm/Final Exam Schedule:

Midterm: Apr 23, during class on campus – location to be determined

Final presentations on during final time on Tues, May 12 8am-11am (over Zoom)

Assessment/Grading Policy:

30% midterm
35% final project
30% labs
5% lab attendance

Grades: if you get 90% you'll get at least an A-, 80% will give you at least a B-, and 70% at least a C-.

Contact Information:

Email: ahepworth@ucmerced.edu
Office: N/A

I will try to answer your emails within 48 hours. However, I may not be able to answer emails after 5pm or on weekends/holidays.

TAs:
Qhelile Sibanda - qsibanda@ucmerced.edu
Tri Dang - tridang@ucmerced.edu

Office Hours:

Instructor: After class or by appointment **(see TA's for help with the labs)**
TA: Lab sessions will be used as office hours, or by appointment

Course Calendar:

Tentative schedule, subject to change

Week	Lab – Tues, Weds, Fri	Lecture - Thursday
01 (1/19 – 1/23)	**No Lab**	1 - Class overview and Python Intro
02 (1/26 – 1/30)	**No Lab**	2 - Python
03 (2/2 – 2/6)	Lab 1 – Python	3 - HTML/CSS
04 (2/9 – 2/13)	Lab 2 – HTML / CSS	4 - JavaScript
05 (2/16 – 2/20)	Lab 3 – Frontend with JS	5 - React
06 (2/23 – 2/27)	Lab 4 – Frontend with React	6 - HTTP, AJAX and REST
07 (3/2 – 3/6)	Lab 5 – Web app w/existing backend	7 - Web frameworks
08 (3/9 – 3/13)	Lab 6 – Web app backend	8 - SQL / ORM
09 (3/16 – 3/20)	Lab 7 – Web app with SQL DB	9 - Scalable architecture
10 (3/23 – 3/27)	**Spring Break**	**Spring Break**
11 (3/30 – 4/2)	Lab 8 – Web app mini project	10 - Web security and auth
12 (4/6 – 4/10)	Lab 8 Continued	11 - Website Hosting, Web Sockets
13 (4/13 – 4/17)	**Lab 8 presentations**	12 - Midterm review
14 (4/20 – 4/24)	Project help during lab	**Midterm (Apr 23 on campus)**
15 (4/27 – 5/1)	Project help during lab	13 - Special Topics
16 (5/4 – 5/8)	Project help during lab	14 - Job talk
5/12		**Final (Tues, May 12 at 8am)**