ITP 303: Full-Stack Web Development
Units: 4
Fall 2021 – T/Th – 12:00PM - 1:50 PM

Location: Zoom. Check Blackboard for zoom link.

Instructor: Nayeon Kim
Office: THH 210
Office Hours: See course website.
Contact Info: All general course assignments/questions should be asked on Piazza (every student will receive an invitation at the start of the semester).
Personal questions should be directed via email at nayeonki@usc.edu.
Expect responses within 36 hours on weekdays, 48 hours on weekends.

Teaching Assistants: Aaqib Ismail, Abbas Zaidi, Jenny Jeh
Office: See course website.
Office Hours: See course website.
Contact Info: See course website.

IT Help: Provided by Viterbi IT
Hours of Service: 8am – 5pm, Mon-Fri
Contact Info: engrhelp@usc.edu

Course Website: http://itpwebdev.com/fall-2021/itp-303-12pm/

Course Description

This course is intended for students who have completed at least one fundamental computer programming course and want to learn how to build a fully functional web application. Prior web programming skills are not required. This is a hands-on course where students will learn core web technologies by creating web pages and applications every week. Students will first create static websites using core front-end languages such as HTML, CSS, JavaScript. Then students will learn basic database design and implement them using relational database management systems (RDBMS). Students will write and submit SQL queries to databases and create data interfaces using PHP. Students will also be exposed to common frameworks and libraries such as Bootstrap (CSS), jQuery (JS), and Laravel (PHP).

Learning Objectives

- Students will build a complete web application from scratch utilizing core web technologies. Students will:
    - Create static, responsive web pages using HTML and CSS.
    - Implement interactivity on web pages using vanilla JavaScript.
    - Design databases.
    - Write SQL queries to create, retrieve, update and delete records from databases.
    - Identify advantages of using web frameworks and libraries such as Bootstrap, jQuery, and Laravel.

Prerequisite(s): ITP 265 or CSCI 103

Course Notes

All course material (lecture notes, slides, assignments, labs, resources, etc.) are posted weekly on the course website. In this course, Blackboard is only used for students to view their grades. All other pertinent course information is found on the course website.

Technological Proficiency and Hardware/Software Required

Students should have access to their own computer running either Windows or MacOS and should be familiar with the basic operation of their computer. Loaner laptops are available in ITP's main office (OHE 412) for students to check out if they have no access to their own laptop.
Required software (all available at no cost):

- Sublime Text 3 (or similar text editor such as Atom or VS Code)
- FileZilla
- MAMP
- Internet Browser (Google Chrome preferred)

Required Materials

No textbook is required.

Readings such as excerpts from other books or online articles will be provided on the course website.

Grading Breakdown

Item	% of Grade
Assignments	30
Labs	12
Midterm Exam	28
Final Project	30
Total	**100**

Grading Scale

Course final grades will be determined using the following scale

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 and below

Percentages will be rounded to the nearest whole number. For instance, 89.5% is an A-, but 89.4% is a B+. Under this policy, an 89.49999% would be a B+.

Per the University's policy, students taking the class as a Pass/No Pass must earn a of 70% or higher in order to receive a Pass.

Assignment/Lab Submission Policy

- Usually **one** assignment and **one** lab are assigned every week. All assignment requirements and their deadlines are listed on the course website. It is the students' responsibility to read and adhere to requirements and deadlines.
- To submit an assignment, students must upload their completed work on the USC server as defined by the instructor (covered in class during week 1). Only files on the server are graded. Students **may not** submit assignments in any other way (e.g. email, Blackboard, Google Drive, etc.).
- Students may use up to **three (3) extensions** on any assignment. An extension extends the deadline of any assignment up to for an extra 72 hours. Only one extension per lab or assignment. Extensions can be requested via a Google Form posted on the class website and must be requested **within one hour after the deadline of the assignment.**
- Any assignment turned in after the deadline without an extension results in a score of **zero (0). No late penalty exists in this course.**

Grading Timeline

Assignments will be graded within ten days after the due date. Feedback about the assignment will be posted on Blackboard along with the score.

Late Work
Late work is not accepted in the classes. However, students may request up to **three (3) extensions** on any assignment or lab. See Assignment/Lab Submission Policy above for more details.

Grading Issues
Students will have seven days after graded feedback is given to contest scores (e.g. assignments and exams). After seven days, scores will not be changed. To contest a grade, email the TA that graded the assignment with the name of assignment and write the reasons as clearly as possible.

Midterm Exam
There are **two** midterm exams in this course. No make-up exams (except for documented medical or family emergencies) will be offered. Final projects take place of the final exam.

Adding the Course After the First Day
The University allows students to add courses until the end of week 3. However, it is the responsibility of students who add after the first class to **immediately notify the instructor** and make a plan to catch up on any missed work.

Plagiarism and Individual Work Policy
It is okay to discuss solutions to specific problems with other students, but it is **not** okay to look through another student's code. It does not matter if this code is online or from a student you know, it is cheating. Do not share your code with anyone else in this or a future section of the course, as allowing someone else to copy your code carries the same penalty as copying the code yourself.

Synchronous session recording notice
All lectures will be recorded and provided to all students asynchronously. Recordings can be accessed through Blackboard -> USC Zoom Pro Meeting -> Cloud Recording. Note: USC policy prohibits sharing of any synchronous and asynchronous course content outside of the learning environment.

Course Material Policy
Do not reproduce, distribute, or post any lecture material (including lecture recordings), assignments, assignment solutions, or exams publicly without written consent of the instructor. You may take notes and make copies of course materials for your own use. You may not post course materials on sites like Course Hero. Doing so is a copyright violation and in some cases may also be an academic integrity violation that will be dealt with accordingly.

SCampus Section 11.12(B)

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (SeeSection C.1 Class Notes Policy).

Course Schedule: A Weekly Breakdown
Subject to change

Week		Lecture	Lab	Assignment
1	08/24	Course Overview, The WWW, Intro to HTML	L1: Student Page (due 8/27)	A1: Interests Page (due 8/30)
	08/26	Intro to CSS, Divs, Box Model		
2	08/31	Page Layouts, CSS Compound Selectors, Fonts, Positions	L2: Updated Student Page (due 9/1)	A2: Responsive Product Page (due 9/6)
	09/02	Responsive Web Design		
3	09/07	Flexbox, CSS Frameworks, Bootstrap	L3: Flexbox Nav (due 9/8)	A3: Bootstrap Company Website (due 9/13)
	09/09	Bootstrap continued, Intro to JavaScript		
4	09/14	JS Events and Traversal	L4: JS Photo Gallery (due 9/15)	A4: T-shirt Customizer (due 9/20)
	09/16	Forms, User Input Validation Basics		
5	09/21	JS Objects, DOM Manipulation	L5: Contacts List (due 9/22)	A5: Movie DB API Search (due 9/27)
	09/23	JSON, AJAX, Using Third-Party web APIs		
6	09/28	jQuery	L6: To Do List Starter (due 9/29)	A6: To Do List App (due 10/4)
	09/30	TBD JS Topic		
7	10/05	No class		
	10/07	**Midterm: Client-side** (24 hours to take the exam)		
8	10/12	Database Basics, Designing Databases	L7: Simple Film Database (due 10/13)	
	10/14	**Fall Recess, no class**		
9	10/19	Intro to SQL, Retrieving Data from DB	L8: SELECT SQL Statements (due 10/20)	A7: Full SQL Statements (due 10/25)
	10/21	Data Manipulation in SQL		

10	10/26	Intro to PHP	L9: PHP Form Output (due 10/27)	A8: DVD Search pages (due 11/01)
	10/28	PHP MySQLi, Search		
11	11/02	CRUD Part 1	L10: Football Search App (due 11/03)	A9: DVD CRUD Application (due 11/08)
	11/04	CRUD Part 2		
12	11/09	No class, Review Session		A10: Final Project Proposal (due 11/17)
	11/11	**Midterm: Server-side** (24 hours to take exam)		
13	11/16	Memberships, Sessions		A11: Final Project Front-end (due 11/29)
	11/18	AJAX & PHP		
14	11/23	cURL, Server-side REST APIs		
	11/25	**Thanksgiving Break, no class**		
15	11/30	Special Topics, TBD		
	12/02	Special Topics, TBD		
-		**Final Project due 12/09 11:59pm** Final Project Presentations (Final Exam time) 12/14 11am-1pm		

Statement on Academic Conduct and Support Systems

Academic Conduct
Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" https://policy.usc.edu/scampus-part-b/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

Support Systems
Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. https://engemannshc.usc.edu/counseling/

National Suicide Prevention Lifeline - 1-800-273-8255
Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. http://www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.
https://engemannshc.usc.edu/rsvp/

Sexual Assault Resource Center
For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: http://sarc.usc.edu/

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086
Works with faculty, staff, visitors, applicants, and students around issues of protected class.
https://equity.usc.edu/

Bias Assessment Response and Support
Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. https://studentaffairs.usc.edu/bias-assessment-response-support/

The Office of Disability Services and Programs
Provides certification for students with disabilities and helps arrange relevant accommodations. http://dsp.usc.edu

Student Support and Advocacy – (213) 821-4710
Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. https://studentaffairs.usc.edu/ssa/

Diversity at USC
Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. https://diversity.usc.edu/

USC Emergency Information
Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, http://emergency.usc.edu

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.
Provides overall safety to USC community. http://dps.usc.edu