ITP 303: Full-Stack Web Development
Units: 4
Fall 2023
Tue | DMC 203 | 4pm-7:20pm
Thu | THH 114 | 4pm-7:20pm

Instructor: Hannah Nguyen
Office Hours: See Blackboard
Contact Info: hnguyen0@usc.edu

IT Help: Provided by Viterbi IT
Hours of Service: 8am – 5pm, Mon-Fri
Walk-in: DRB 205
Contact Info: (213) 740-0517
Email: engrhelp@usc.edu

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.
  - 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

Technological Proficiency and Hardware/Software Required

Students should have access to their own computers running either Windows, MacOS, or Linux, and should be familiar with the basic operation of their computers.

Grading Breakdown

Attendance & Participation	5%
Assignments	50%
Midterm Exams	30%
Final Project	15%
Total	100%

Grading Scale

Course final grades will be determined using the following scale:

A	93% or up
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%
F	62% or below

Exams

No make-up exams will be offered. Failure to submit an exam on time or submitting blank work will result in a 0% for the exam grade.

Attendance & Participation

Lecture attendance is mandatory; each student can miss one (1) lecture without losing attendance & participation credit.

Assignment Extensions

Each student is given five (5) no questions asked extension days to use throughout the semester. Extensions may only be used for assignments and a maximum of two (2) extensions may be used for the final project. They cannot be used for Attendance & Participation questions, nor Exams. To receive a grade, students must notify the grader once the late assignment is submitted.

Grade Corrections

Any questions or concerns regarding grades must be addressed within seven (7) days after grades are posted. No changes to any grades will be made after seven (7) days.

Academic Integrity

All coursework is expected to represent each student's individual effort. Students may not collaborate, share, or look at other students' code.

Course Material

All lectures will be recorded and made available to students enrolled in the course. These class recordings are made available only for access by students in this class for educational purposes only and shall not be disclosed to any other party for any purpose.

Students may not reproduce, distribute, or post any course material, including notes, assignments, labs, and tests, without the instructor's written consent. Refer to *SCampus* in Part B, Section 11.12 for more information https://policy.usc.edu/scampus/.

Course Schedule

Note: Subject to change throughout the semester

Week	Lecture	Assignment
1	Course Overview HTML & CSS	A1: Web Resume
2	Page Layouts, Compound CSS Selectors, Display	A2: Interests Page
3	Fonts, Position Property, Transitions, Transformations	A3: Fonts, Drop-down Menu, Overlay Captions
4	Responsive Web Design, CSS Frameworks, Bootstrap	A4: Responsive Interests Page
5	Intro to JavaScript, Keyboard & Form Events, RegEx	A5: Registration Form Validation
6	DOM Manipulation	A6: DOM Manipulation
7	JavaScript Objects, JSON, AJAX	A7: The Movie DB
8	DOM Storage	A8: Dashboard w/ Storage M1: Final Project Proposal
9	**Client-Side Exam**	
10	Database Basics, Designing Databases Intro to SQL	A9: Football Schedule DB Design M2: Final Project Front-End Pages
11	Data Manipulation in SQL, Intro to PHP	A10: SQL Statements
12	CRUD	A11: DVD CRUD Pages
13	Include, Require, Constants, Pagination, Sessions, Cookies, Membership System	
14	AJAX: JS & PHP, cURL, REST APIs	M3: Final Project Database
15	**Server-Side Exam**	
(Finals)	**Final Projects Due**	

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