



School of Engineering
*Information
Technology Program*

ITP 301: Front-End Web Development

Units: 4

Fall 2023 – Tue, Thu – 4pm-5:50pm

Location: KAP 107

Instructor: Zune Nguyen

Office Hours: See course website

Contact Info: zune@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 teaches client-side development concepts and technologies used in the web development industry. Students will first learn basic programming theory using JavaScript. They will then apply these concepts to create website front-ends. Students will also explore different tools, libraries, and frameworks used in front-end web development.

Learning Objectives

- Learn and apply programming concepts to create website front-ends.
- Write client-side code to communicate with third-party APIs.
- Explore back-end libraries and frameworks currently used in the industry.

Prerequisite(s): ITP 104 or intermediate knowledge of HTML & CSS.

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 | 10% |
| Assignments | 45% |
| Labs | 15% |
| Midterm Exam | 20% |
| Final Project | 10% |
| <hr/> | |
| 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 |

Asynchronous Learning

All lectures will be recorded and made available to students for asynchronous learning. This course can be taken and completed asynchronously.

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; participation questions will be given at the end of each lecture. All participation submissions are due within 24-hours after the lecture ends. One (1) lowest participation score will be dropped.

Students participating asynchronously may answer prompt questions to receive full attendance & participation credit.

Late Assignments

A 10% per day penalty is applied to late assignments. No submissions are accepted after five (5) days beyond the due date. To receive a grade, students must notify the grader once the late assignment is submitted.

Late Labs

No late lab submissions are accepted.

Grade Corrections

Any questions or concerns regarding grades must be addressed within seven (7) days after grades are posted on Blackboard. 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 | Lab | Assignment |
|----------------|--|-------------------------------|---------------------------------|
| 1 | Course Overview, Intro to JavaScript | L1: Student Pages | A1: JS Photo Gallery |
| 2 | Variables, Variable Scope | L2: Currency Converter | A2: Shopping Cart |
| 3 | Conditional Statements | L3: Shopping Cart w/ Funds | A3: Calculator |
| 4 | Arrays, Loops, Functions | L4: Updated Photo Gallery | A4: Liar's Dice |
| 5 | JavaScript Objects, Spread Operator | L11: To Do List | |
| 5 | Intro to React, Rendering | L5: StackBlitz & React Setup | A5: Static Page Rendering |
| 6 | Components, Props, Conditional Styling | L6: Static Page w/ Components | A6: Shopping Cart w/ React |
| 7 | Events, States, Dynamic Styling | L7: Photo Gallery w/ React | A7: Shopping Cart w/ Item Count |
| 8 | Lifting State Up | L8: Shopping Cart w/ Subtotal | |
| 9 | Input Validation | L9: Form Validation | A8: Final Project Proposal |
| 10 | Regular Expressions | L10: Password Validation | |
| 11 | Midterm Exam (10/31) | | |
| 12 | JSON, AJAX | L11: The Movie DB API | A9: Final Project Static Page |
| 13 | TypeScript | L12: TypeScript Page | |
| 14 | React Build | | |
| 15 | React Native | | |
| 16 (Finals) | Final Project 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>