

Interactive Web Development

ITP 301 (4 Units)



Objective

This course is intended to teach the basic programming tools and development techniques needed to create interactive web pages. The class will stress programming fundamentals using JavaScript and how to work with the jQuery library.

Concepts

Advanced HTML, dynamic HTML and CSS. Fundamentals of jQuery, scripting and object-oriented programming, and Javascript.

Prerequisites ITP 104

Instructor Zune Nguyen

Contact tridungn@usc.edu

Office Hours See course website

Lecture and Lab Tuesday, Thursday 4pm - 5:50pm, KAP 107

Website <http://itpwebdev.com/>

Textbooks None

Grading

The following percentage breakdown will be used in determining the grade for the course.

| | |
|---------------------------------|------|
| Assignments | 30% |
| Attendance, Participation, Labs | 15% |
| Midterm Exam | 20% |
| Final Project | 35% |
| <hr/> | |
| Total | 100% |

Grading Scale

The following shows the grading scale to be used to determine the letter grade.

| | |
|----|-----------------|
| A | 93% or up |
| A- | 90% - 92.99% |
| B+ | 87% - 89.99% |
| B | 83% - 86.99% |
| B- | 80% - 82.99% |
| C+ | 77% - 79.99% |
| C | 73% - 76.99% |
| C- | 70% - 72.99% |
| D+ | 67% - 69.99% |
| D | 65% - 66.99% |
| F | 64.99% or below |

Policies

Exams

No make-up exams (except for documented medical or family emergencies) will be offered.

Attendance

Attendance is mandatory; you can miss up to **two** lectures without affecting your grade.

Labs

Labs must be demonstrated to TAs before leaving lab session. No late lab submissions are accepted.

Late Assignments

10% per day penalty is applied for late assignments. No submissions are accepted 4 days after due date.

Grade Corrections

Any questions or concerns regarding grades must be addressed within 7 days after grades are posted on Blackboard. No corrections to any grades will be made after 7 days.

Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at <http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html>. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) “should only be assigned in unique or unusual situations... for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) “is assigned when work is not completed because of documented illness or other ‘emergency’ **occurring after the twelfth week** of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks).”

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. If you need accommodations for an exam, the form needs to be given to the instructor at least two weeks before the exam.

DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Contact info: 213-740-0776 (Phone), 213-740-6948 (TDD only), 213-740-8216 (FAX), ability@usc.edu, http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html.

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 Section 11, *Behavior Violating University Standards* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. 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/>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>. This is important for the safety whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men*

<http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicssupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu/> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

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Course Outline

Subject to change throughout the semester

| Week | Lecture | Lab | Assignment |
|---------------------|--|--------------------------------|------------------------------|
| 1 | Course Overview, Web Interactivity Intro to JavaScript | L1: Student Pages | |
| 2 | JS Object Properties Variables, Conditional Statements | L2: JS Photo Gallery | A1: Simplified Shopping Cart |
| 3 | Arrays, Loops Functions, Variable Scope | L3: Photo Gallery using Arrays | A2: JS Calculator |
| 4 | Keyboard & Form Events, Strings String Operations | L4: Password Validation | A3: Form Validation |
| 5 | External JS, Regular Expressions JavaScript Objects | L5: RegEx Validation | A4: Google Maps InfoWindow |
| 6 | Creating DOM Nodes Creating DOM Nodes Continued | L6: Dynamic Photo Gallery | A5: Dynamic DOM Manipulation |
| 7 | JSON, JSONP AJAX | | A6: The Movie DB |
| 8 | Intro to jQuery Midterm Review | L7: jQuery Photo Gallery | |
| 9 | Midterm Exam (Tue & Thu) | | |
| <i>Spring Break</i> | | | |

| | | |
|--------|---|--|
| 10 | Midterm Walkthrough JS, jQuery Plugins | A7: Final Project Proposal Final Project Assigned |
| 11 | Timers JS Animations | L8: Timer Countdown |
| 12 | Canvas Canvas Animations | |
| 13 | Cookies, DOM Storage Templating Engines, Handlebars | |
| 14 | <i>Lectures Cancelled</i> | |
| 15 | Front-end JS Frameworks, Vue.js The future of JavaScript | |
| Finals | Final Project Presentations | Final Project |