

Arts, Technology and the Business of Innovation

Acad275: Dev 1

4 Units Tuesdays / Thursdays 2 – 4:50 p.m. Spring 2021

Website: http://iyawebdev.com/acad275

Instructor: Patrick Dent

Office: Online

Office Hours Tuesdays 1 - 1:50 p.m.

Tuesdays 3:30 - 4:30 p.m. Thursdays 3:30 - 4:30 p.m. Fridays 7:30 - 8:30 a.m. And by appointment

Contact Info: dent@usc.edu / 213-821-1400

Note: Email is the preferred method of contact. I will typically respond with 24 hours (M - F).

Grader: Aishwarya Mustoori (a) usc.edu>

IT Help: https://iovine-young.usc.edu/ait/index.html

Hours of Service: 8:30am - 5:00pm

Contact Info: iyhelp@usc.edu, 213-821-6917

Course Objective

Whether Twitter, Facebook, Google Maps, or Dropbox, the vast majority of cutting-edge software applications are now developed on the Web. Because of this, being able to develop websites scripting is a core competency that any innovative technologist must understand.

Student will learn the basics of web page creation and web objects, scripting and interactivity. By the end of the course students will not only have the skills to build an interactive web site but will have a solid foundation in scripting fundamentals.

Course Concepts

This course teaches JavaScript to provide an extremely interactive introduction to the logic of coding. It combines the programming with HTML/CSS, so that upon completion students will be able to create dynamic websites.

This course is intended to cover the basic technologies involved in publishing web pages and sites. This includes:

- HTML
- CSS
- DHTML

This class will also introduce students to web objects and scripting including:

- Fundamental scripting and programming concepts
- The Javascript and jQuery languages
- Manipulating and adding interactivity to web objects

Grading

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

Assignments	30%
Participation and labs	15%
Examinations	20%
Major Group Project	35%
Total	100%

Grading Scale

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

A	100-94
A-	94-90
B+	90-87
В	87-83
B-	83-80
C+	80-77
C	77-73
C-	73-70
D+	70-67
D	67-64
F	64 or below

Group Project Timeline [draft]

Due Week 12	Milestone	Design concepts
Due Week 14	Milestone	Content Build
Due end of Week 15	Milestone	Final Technical Build

Course Structure

Students are expected to:

- Participate in lecture discussions and critiques
- Complete weekly lab assignments and projects
- Manage and complete individual class projects

Students are responsible for completing assignments and projects by stated deadlines. Most assignments will be uploaded by students to their USC Web space and linked from an assignment page.

Policies

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

Due dates and requirements for all Labs and Assignments will be posted on the course site. Students will "post" their work to their USC web space as defined on the course site.

It if the student's responsibility to post work by the due date following the defined class procedures, even if you miss class. Work turned in late will lose 10% credit per day and late work is not accepted after two weeks past the due date. To receive credit for late work you MUST email the grader that you posted a lab or assignment after the due date or you will not receive credit.

An attendance sheet will be circulated each lecture. You must sign in for lecture to receive lecture attendance credit.

Academy Student Attendance Policy

The Academy maintains rigorous academic standards for its students and on-time attendance at all class meetings is expected. Each student will be allowed two excused absences over the course of the semester for which no explanation is required. Students are admonished to not waste excused absences on non-critical issues, and to use them carefully for illness or other issues that may arise unexpectedly. Except in the case of prolonged illness or other serious issue (see below), no additional absences will be excused. Each unexcused absence will result in the lowering of the final grade by 1/3 of a grade (e.g., an A will be lowered to A-, an A-will be lowered to B+, etc.).

Students remain responsible for any missed work from excused or unexcused absences. Immediately following an absence, students should contact the instructor to obtain missed assignments or lecture notes and to confirm new deadlines or due dates. Extensions or other accommodations are at the discretion of the instructor.

Automatically excused absences normally may not be used for quiz, exam or presentation days. Using an excused absence for a quiz, exam or presentation, such as in the case of sudden illness or other emergency, is at the discretion of the instructor.

In the case of prolonged illness, family emergencies, or other unforeseen serious issues, the student should contact the instructor to arrange for accommodation. Accommodation may also be made for essential professional or career-related events or opportunities. All accommodations remain at the discretion of the instructor, and appropriate documentation may be required.

HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE THROUGH THE USC BOOKSTORE:

The following software are available for purchase **online** at the Iovine and Young Academy discounted rate. **Please check your Academy course syllabi to see what software you will need.**

<u>Software</u>	IYA Short-Term License at USC Bookstore
Adobe Creative Cloud	\$70 2020-2021 annual license (active through July 2021)
Apple Logic Pro	\$35 semester license
Solidworks	\$35 semester license
Apple Final Cut Pro	\$35 semester license

To purchase:

- Visit: https://commerce.cashnet.com/IOVINE
- Select the software license(s) you would like to purchase by clicking "View Details" or the software title, and make your purchase
- You will receive an order confirmation receipt at the email address you provided
- You will be notified by email when the software license has been activated

If you have any questions about this process, please do not hesitate to contact Academy IT Support at iyhelp@usc.edu.

Course Schedule: A Weekly Breakdown

Week 1a	Jan 19	Course introduction. Overview of the Internet and the World Wide Web and related technologies. Introduction to HTML. FTP and 'uploading' files to a server. Lab: FTP to aludra, set up directories and permissions, upload image (due W1b)
Week 1b	Jan 21	Basic HTML objects and tags. Images. Lab: Classpage (due W2a) Assignment: Tutorial Page (due W2a)
Week 2a	Jan 26	Review of Basic HTML, 'Good code.' Intro to CSS, styles and stylesheets. Lab: Calendar (due W2b) Assignment: Resume (due W2b)
Week 2b	Jan 28	Style review. "Divs", layout and the "box" model Remote and local files. Folder structures. Assignment: Film Article (due W3a)
Week 3a	Feb 02	CSS Part 2: Stylesheet review, Graphic css, "caniuse.com", Display, position, max- and min-, visibility. Drop-down nav. <i>Lab:</i> Zen Garden (due W3b) Project: Individual site project proposal (due 3b)
Week 3b	Feb 04	Creating re-usable CSS classes. HTML Form objects. Assignment: Survey (due W4a) Project: Individual project HTML Front build (due W5b)
Week 4a	Feb 09	CSS3: position, opacity, display revisited, embedded fonts, columns, background image compositing, transitions. Assignment: Interactive Article (due W4b)
Week 4b	Feb 11	CSS3 review: background compositing, transitions. Flex box Introduction. HTML Review. Exam prep. Introduction to IA, Web design, color issues, Lab: Practice exam (due W5a)
Week 5a	Feb 16	HTML Examinations

W	eek 5b	Feb 18	Introduction to Responsive Web Design, media queries Using a 'visual editor', introduction to Dreamweaver Updated HTML5 "skeleton". H5 structural/semantic tags. Lab: Frontpage design notes (due W6a) Lab: Print stylesheet (due W6a) Assignment: Responsive film review (due W6b)
W	eek 6a	Feb 23	Etiquette and basics of design critiques. Critique. Assignment: Peer critiques of frontpages (due W6a)
W	eek 6b	Feb 25	HTML media tags. iFrames and embedded video. Image maps. Image sprites. <i>Lab:</i> Frontpage "alternate" style tiles (due W7a)
W	eek 7a	Mar 02	Introduction to concepts in Dynamic HTML. Introduction to web objects. Object-oriented scripting basics. Introduction to Javascript syntax and the DOM Assignment: Build a Javascript color setter (due W7b)
W	eek 7b	Mar 04	Variables, Expressions, Functions <i>Lab:</i> Function lab (due W8a) Assignment: Calculator app (due 8b)
W	eek 8a	Mar 09	Review of functions. Conditional Logic. Lab: JS TV form page (due 8b) Assignment: Individual Project Milestone: Content Build (due W10b)
W	eek 8b	Mar 11	Review of Conditional Logic. Intro to Frameworks and Libraries, Bootstrap Introduction. Introduction to jQuery Lab: Add jQuery to a college page (due W9a) Lab: Add jQuery to a resource page (due W9a)
W	eek 9a	Mar 16	jQuery fundamentals Assignment: Interactive Photo Gallery (due W10a)
W	eek 9b	Mar 18	Review of JS vs jQ syntax Working with external scripts and plug-ins. Intro to Dynamic Documents. Lab: Implement a slideshow plug-in (due W10b)
W	eek 10a	<i>Mar 23</i>	Wellness Day – NO CLASS
W	eek 10b	Mar 25	Review of Dynamic Documents, Intro to Arrays Assignment: Random photo page (due W11a) Assignment: Individual Project: Final Build (due W12a)

Week 11a	Mar 30	Array review, Data validation
		Lab: Email validation (due W11b) Assignment: Dog photo page (due 12a)
Week 11b	Apr 01	Regular Expressions, Loops Lab: Re-structuring data (due W12a) Assignment: Designs for Group Project (due W12a)
Week 12a	Apr 06	Design critique. Searching through Arrays Assignment: Dynamic bookmark data page (due W13a)
Week 12b	Apr 08	jQuery and Javascript review. Exam prep. Lab: Github group repo (due W13b) Group Project: Content Build (due W14a) Group Project: Technical Proposal (due W14a) Group Project: Final Build (due end of W15)
Week 13a	Apr 13	JS Examinations
Week 13b	Apr 15	Scripting media. jQuery animation. Using other libraries. Data storage, timers <i>Lab:</i> Web animation (due W14a)
Week 14a	Apr 20	JS Data Objects, JSON
Week 14b	Apr 22	Wellness Day – NO CLASS
		Ajax (tentative). <i>Lab:</i> Build a cookie-driven page (due W15a)
Week 15a	Apr 27	Special Topics (TBA)
Week 15b	Apr 29	Web technologies overview, The Web development industry, Next-generation development
	Apr 30	GROUP Project Final Build posted by 11:59pm
	May 06	Student Presentations of Group Projects

TBA Flexbox

Source control, Github

CSS Frameworks, Bootstrap *Lab:* Implement Bootstrap page

Object detection, return, Window and document objects, Dynamic form objects revisited **Lab:** Build a computer

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" 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, policy.usc.edu/scientific-misconduct.

Support Systems:

Student Health Counseling Services - (213) 740-7711 – 24/7 on call engemannshc.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) -213-740-9355 (WELL

https://studenthealth.usc.edu/sexual-assault/

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Relationship and Sexual Violence Prevention and Services provides immediate therapy services for situations related to gender- and power-based harm (e.g., sexual assault, domestic violence, stalking). (wording from the site)

Office of Equity and Diversity (OED) | Title IX - (213) 740-5086 equity.usc.edu, titleix.usc.edu

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

USC Policy Reporting to Title IX (213) 740-5086

https://policy.usc.edu/reporting-to-title-ix-student-misconduct/

The university encourages individuals to report prohibited conduct to the *Title IX Office*. Individuals can report to the university *Title IX Coordinator* in the *Office of Equity and Diversity*.

Bias Assessment Response and Support - (213) 740-2421 studentaffairs.usc.edu/bias-assessment-response-support

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

The Office of Disability Services and Programs - (213) 740-0776

dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710

studentaffairs.usc.edu/ssa

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call dps.usc.edu

Non-emergency assistance or information.