USC Iovine and Young Academy

Arts, Technology and the Business of Innovation

Acad275: Dev 1
4 Units
Tuesdays / Thursdays 2 – 4:50 p.m.
IYH210
Spring 2022

Website:	http://iyawebdev.com/acad275b
Instructor:	**Patrick Dent**
Office:	Online (and in IYH210)
Office Hours	*See course site for scheduled hours*
	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:	**Vidhi Mehta <vidhitus@usc.edu>**

IT Help: https://uscedu.sharepoint.com/sites/IYAStudent/SitePages/IT-Resources.aspx
Hours of Service: 8:30am – 6:30pm
Contact Info: iya.helpdesk@usc.edu

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
•	Dynamic (DHTML) and beginner Javascript

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
B	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

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, demo builds 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.

Spring 2022 addendum:

· Unless students provide an accommodation letter from USC's Office of Student Accessibility Services or a letter from IYA Student Services detailing visa or travel restrictions, attendance and active participation is expected in the classroom. Any student with such accommodations should submit their accommodation document to the instructor as soon as possible to discuss appropriate accommodations. Either classroom recordings or live remote access to the class via Zoom will be provided.

· Students who are experiencing illness should not attend class in person. Please inform the instructor in advance of any class sessions that you can't attend for medical reasons, and accommodations will be arranged to view recorded lectures and submit alternatives to any missed class participation. Students will not be penalized for not attending class in person under these circumstances.

· In the event that you find yourself experiencing COVID-19 related symptoms, in keeping with university recommendations, you should Stay home! This is the best way to prevent spreading COVID-19 as supported by scientific evidence; Please do not come to an in-person class if you are feeling ill, particularly if you are experiencing symptoms of COVID-19

HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE:

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.**

Software	IYA Short-Term License
Adobe Creative Cloud	$70 2021-2022 annual license (active through July 2022)

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 iya.helpdesk@usc.edu.

Course Schedule: A Weekly Breakdown

Week 1a   Jan 10   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 12   Basic HTML objects and tags. Images.
Lab: Classpage (due W2a)
Assignment: Tutorial Page (due W2a)

Week 2a   Jan 17   Review of Basic HTML, 'Good code.'
Intro to CSS, styles and stylesheets.
Assignment: Resume (due W2b)

Week 2b   Jan 19   Style review. "Divs", layout and the "box" model
Remote and local files. Folder structures.
*Lab***:** Calendar (due W3a)
Assignment: Film Article (due W3a)

Week 3a   Jan 24   CSS Part 2: Stylesheet review, Graphic css, "*caniuse.com*",
Display, position, max- and min-, visibility. Drop-down nav.
Using a 'visual editor', introduction to Dreamweaver,
DW intermediate tools and config.
Lab: Zen Garden lab (due 3b)
Project: Individual site project proposal (due 3b)

Week 3b   Jan 26   Creating re-usable CSS classes.
HTML Form objects.
Assignment: Survey (due W4a)
Project: Individual project HTML Front build (due W5b)

Week 4a   Jan 31   CSS3: position (con't), display (con't), opacity, columns,
embedded fonts, background image compositing, transitions.
Assignment: Interactive Article (due W4b)

Week 4b   Feb 02   Introduction to IA, Web design, color issues.
Using a 'visual editor', introduction to Dreamweaver.
HTML Review. Exam prep.
Lab: Practice exam (due W5a)

Week 5a   Feb 07   **HTML Examinations**

Week 5b   Feb 09   Introduction to Responsive Web Design, media queries
Introduction to Flexbox.
Lab: Print stylesheet (due W6a)

Lab: Frontpage design notes (due W6a)
Assignment: Responsive film review (due W7a)

Week 6a | Feb 14 | Etiquette and basics of design critiques. Critique.
Assignment: Peer critiques of frontpages (due W6b)

Week 6b | Feb 16 | Updated HTML5 "skeleton". H5 structural/semantic tags.
Review of Flexbox. HTML media tags.
iFrames and embedded video.
Lab: Frontpage "alternate" style tiles (due W7a)

Week 7a | Feb 21 | 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)
Assignment: Individual Project Milestone: Content Build (due W10b)

Week 7b | Feb 23 | Variables, Expressions, Functions
Lab: Function lab (due W8a)
Assignment: Calculator app (due 8b)

Week 8a | Feb 28 | Review of functions. Conditional Logic.
Lab: JS TV form page (due 8b)

Week 8b | Mar 02 | Working with external scripts, plug-ins.
Introduction to jQuery
Assignment: Interactive Photo Gallery (due W9a)

Week 9a | Mar 07 | Review of JS vs jQ syntax,
Intro to Dynamic Documents, Intro to Arrays
Assignment: Random photo page (due W10a)

Week 9b | Mar 09 | Array review, Data validation
Lab: Email validation (due W10a)

| | *Mar 14, 16* | *Spring Recess* |

Week 10a | Mar 21 | Regular Expressions, Data Transformation, Loops
Lab: Re-structuring data (due W11b)
Assignment: Dog photo page (due 11a)
Assignment: Individual Project: Final Build (due W12a)

Week 10b | Mar 23 | Searching through Arrays, Exam Prep
Assignment: Dynamic bookmark data page (due W11b)

Week 11a | Mar 28 | Scripting media. jQuery animation.
Group Project Teams and Content

Lab: Web animation (due W12a)
Assignment: Designs for Group Project (due W11b)

Week 11b   Mar 30   **JS Examinations**
Group Assignment: Group critique prep (due 12a)

Week 12a   Apr 04   Group Project Design critique.
Intro to source control, git, github
Lab: Github group repo (due W13a)
Group Project: Content Build (due W14a)
Group Project: Technical Proposal (due W14b)
Group Project: Final Build (due end of W15)

Week 12b   Apr 06   Data storage, object appends and prepend

Week 13a   Apr 11   JS Data Objects, JSON

Week 13b   Apr 13   AJAX, calling data APIs
Lab: API (due 13a)

Week 14a   Apr 18   Project technical scopes – group meetings with instructor:
check in, js requirement brainstorming

Week 14b   Apr 20   Special Topics (TBA)

Week 15a   Apr 25   Special Topics (TBA)

Week 15b   Apr 27   Web technologies overview, The Web development industry,
Next-generation development

               Apr 28   GROUP Project Final Build posted by 11:59pm

               May 04   *Student Presentations of Group Projects*

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 Research and Scholarship Misconduct.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call studenthealth.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), press "0" after hours – 24/7 on call studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086 eeotix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298 usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776 osas.usc.edu
OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 821-4710 campussupport.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (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.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC) ombuds.usc.edu
A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-3340 or otfp@med.usc.edu chan.usc.edu/otfp
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.