

Arts, Technology and the Business of Innovation

Acad275: Dev 1a

4 unit Fall 2023

Tuesdays and Thursdays 2pm in SLH100

Course Site: <a href="http://iyawebdev.com/acad275">http://iyawebdev.com/acad275</a>

**Instructor:** Patrick Dent

dent@usc.edu / 213-821-1400

(Note email preferred method of contact, will endeavor to response within 24 hrs M-F)

Office Hours: TBA

And additional individual hours by appointment.

Grader: Dhruvam Zaveri (dzaveri@usc.edu)

IT Help: https://uscedu.sharepoint.com/sites/IYAStudent/SitePages/IT-Resources.aspx

**Hours of Service:** 8:30 a.m. – 6:30 p.m. **Contact Info:** iyahelp@usc.edu

### **USC Technology Support Links**

Zoom information for students
Blackboard help for students
Software available to USC Campus

### **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

### **Required Readings and Supplementary Materials**

No required course textbook. Lecture notes, online resources and other readings will be posted on the course site.

### HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE

The following software are available for purchase online at the lovine and Young Academy discounted rate:

Software	IYA Short-Term License at USC Bookstore
Adobe Creative Cloud	\$70 2023–2024 annual license (active through July 2024)

### To purchase:

- Visit: <a href="https://commerce.cashnet.com/IOVINE">https://commerce.cashnet.com/IOVINE</a>
- 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 <a href="mailto:iyahelp@usc.edu">iyahelp@usc.edu</a>.

### **Iovine and Young Hall Cleanout**

The Academy is unable to store student projects and materials beyond the end of the semester. Students must remove all projects and personal materials from the Creators Studio, lockers/locker room, and other classrooms by the end of each semester. All projects and materials left in Iovine and Young Hall will be discarded the day after final exams end. No exceptions.

# **Grading Scale**

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

Α	100 - 94
A-	94 - 90
B+	90 - 87
В	86 - 83
B-	83 -80
C+	80 - 77
С	77 - 73
C-	73 - 70
D+	70 - 67
D	67 - 64
F	64 or below

# **Course Grading Breakdown**

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

# **Group Project Timeline** (Note: subject to change before W5)

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
- Contribute to the group project

Students are responsible for completing assignments and projects by stated deadlines. Most assignments will be uploaded by students to their server space and linked from a self-maintained assignment page.

### **Course Policies**

Individual student assignments and labs are expected to be completed by the individual student. While peers are encouraged to help each other, completed work needs to be the sole work of the student and should not include code written by other students, from web resources or artificial intelligence agents without clear citation. When in doubt it is best to ask the instructor and grader.

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. In most instances students will "post" their work to their assigned server space as defined on the course site.

It is 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 once you have posted the lab or assignment after the due date or you will not receive credit.

The Academy maintains rigorous academic standards for its students and on-time attendance at all class meetings is expected. Students cannot participate in class if they are not present, engaged and on-time, and accordingly points will be deducted for absences and tardies. 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.

Attendance will be conducted through a verbal role call or circulated attendance sheet at the start of lecture. You must respond or sign in to receive lecture attendance credit.

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. Additionally, students who need accommodations for religious observations should provide advanced notice to instructors and student athletes should provide Travel Request Letters. All accommodations remain at the discretion of the instructor, and appropriate documentation may be required.

# **Course Schedule: A Weekly Breakdown**

Week 1a	Jan 09	Course introduction. Overview of the Internet and the World Wide Web and related technologies. Introduction to HTML. FTP and 'uploading' files to a server. <i>Lab:</i> set up directories and permissions, upload image (due W1b)
Week 1b	Jan 11	Basic HTML objects and tags. Images.  Lab: Classpage (due W2a)  Assignment: Tutorial Page (due W2a)
Week 2a	Jan 16	Review of Basic HTML, 'Good code.' Intro to CSS, styles and stylesheets. Assignment: Resume (due W2b)
Week 2b	Jan 18	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 23	CSS Part 2: Stylesheet review, Graphic css, "caniuse.com", Display, position, max- and min-, visibility. Drop-down nav. <i>Lab:</i> Zen Garden lab (due 1/26) <b>Project:</b> Individual site project proposal (due 3b)
Week 3b	Jan 25	Creating re-usable CSS classes. HTML Form objects. Assignment: Survey (due W4a) Project: Individual project HTML Front build (due W5b)
Week 4a embedded for	Jan 30 nts, background	CSS3: position (con't), display (con't), opacity, columns, image compositing, transitions.  Assignment: Interactive Article (due W4b)
Week 4b	Feb 01	Introduction to IA, Web design, color issues, CSS3 review: background compositing, transitions. Using a 'visual editor', introduction to Dreamweaver. HTML Review. Exam prep. Lab: Practice exam (due W5a)
Week 5a	Feb 06	HTML Examinations
Week 5b	Feb 08	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 13	Etiquette and basics of design critiques. Critique. <b>Assignment:</b> Peer critiques of frontpages (due W6b)
Week 6b	Feb 15	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 20 Introdu basics.	Introduction to web objects, object-oriented scripting  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 22	Variables, Expressions, Functions  Lab: Function lab (due W8a)  Assignment: Calculator app (due 8b+)
Week 8a	Feb 27	Review of functions. Conditional Logic. <i>Lab:</i> JS TV form page (due 8b)
Week 8b	Feb 29	Review of Conditional Logic. Introduction to jQuery  Lab: Add jQuery to a college page (due W9a)  Lab: Add jQuery to a resource page (due W9a)
Week 9a	Mar 05	jQuery fundamentals  Assignment: Interactive Photo Gallery (due W10a)
Week 9b	Mar 07	Review of JS vs jQ syntax Intro to working with external scripts and plug-ins. Intro to Dyanmic Documents.  Lab: Implement a slideshow plug-in (due W10a)
	Mar 12, 14	Spring Recess
Week 10a	Mar 19	Review of Dynamic Documents, Intro to Arrays  Assignment: Random photo page (due W10b)  Assignment: Individual Project: Final Build (due W12a)

Week 10b	Mar 21	Array review, Data validation  Lab: Email validation (due W11a)  Assignment: Dog photo page (due 11b)
Week 11a	Mar 26	Regular Expressions, Loops Group Project Teams and Content  Lab: Re-structuring data (due W11b)  Assignment: Designs for Group Project (due W11b)
Week 11b	Mar 28	Searching through Arrays jQuery and Javascript review. Exam prep. <b>Assignment:</b> Dynamic bookmark data page (due W12B) <b>Group Assignment:</b> Group critique prep (due 12a)
Week 12a	Apr 02	Group Projects Design critique. Intro to source control, git, github Lab: Github group repo (due W12b) Group Project: Content Build (due W14a) Group Project: Technical Proposal (due W14b) Group Project: Final Build (due end of W15)
Week 12b	Apr 03	JS Examinations
Week 12b Week 13a	Apr 03 Apr 09	JS Examinations  Scripting media. jQuery animation.  Lab: Web animation (due W14a)
	·	Scripting media. jQuery animation.
Week 13a	Apr 09	Scripting media. jQuery animation.  Lab: Web animation (due W14a)
Week 13a Week 13b	Apr 09	Scripting media. jQuery animation.  Lab: Web animation (due W14a)  Data storage, timers
Week 13a Week 13b Week 14a	Apr 09 Apr 11 Apr 16	Scripting media. jQuery animation.  Lab: Web animation (due W14a)  Data storage, timers  JS Data Objects, JSON
Week 13b Week 14a Week 14b Week 15a Week 15b	Apr 09 Apr 11 Apr 16 Apr 18	Scripting media. jQuery animation.  Lab: Web animation (due W14a)  Data storage, timers  JS Data Objects, JSON  Calling data APIs
Week 13b Week 14a Week 14b Week 15a	Apr 09  Apr 11  Apr 16  Apr 18  Apr 23	Scripting media. jQuery animation.  Lab: Web animation (due W14a)  Data storage, timers  JS Data Objects, JSON  Calling data APIs  Special Topics (TBA)
Week 13b Week 14a Week 14b Week 15a Week 15b	Apr 09  Apr 11  Apr 16  Apr 18  Apr 23	Scripting media. jQuery animation.  Lab: Web animation (due W14a)  Data storage, timers  JS Data Objects, JSON  Calling data APIs  Special Topics (TBA)  Web technologies overview, The Web development

### **Statement on Academic Conduct and Support Systems**

### **Academic Integrity**

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the <u>USC Student Handbook</u>. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

### **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 <a href="mailto:osas.usc.edu">osas.usc.edu</a>. You may contact OSAS at (213) 740-0776 or via email at <a href="mailto:osas.rooteles.usc.edu">osas.rooteles.usc.edu</a>.

#### **Support Systems:**

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

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

<u>988 Suicide and Crisis Lifeline</u> - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

#### Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

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

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 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) 740-0411

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

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

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.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

### Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

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) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.