# USC Iovine and Young Academy

Arts, Technology and the Business of Innovation

#### **ACAD 275 - Dev I**

Units: 4

Day-Time: Fall 2022, Tuesday/Thursday, 5:00pm - 7:50pm

Location: IYH 210

Instructor: Aaron Siegel

**Office:** IYH Lobby or Zoom meeting room listed on Blackboard. **Office Hours:** In person: Tuesdays, 12pm - 1:45pm IYH lobby.

Zoom: Mondays, 6pm - 8pm.

Contact Info: <a href="mailto:aaronsie@usc.edu">aaronsie@usc.edu</a>

#### IT Help:

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

Hours of Service: M-F, 9:00am - 6:00pm Contact Info: <u>iyahelp@usc.edu</u>, 213-821-6917

#### **USC Technology Support Links**

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

#### **Course Description**

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 is a core competency that any innovative technologist must understand.

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

#### **Learning Objectives and Outcomes**

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
- JavaScript

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

- Fundamental scripting and programming concepts.
- The JavaScript language and jQuery library.
- Manipulating and adding interactivity to web objects.

**Recommended Preparation**: Download and install the <u>FileZilla FTP client</u> and the <u>Visual Studio Code IDE</u> <u>software</u> in order to start uploading content to the web on day one.

#### **Course Notes**

The class will be a mix of technical demonstrations, software workshop exercises, lectures on the history and contemporary applications of web design, as well as collective critique sessions. Technical demonstrations may be recorded and shared with the students afterward for further review. Lecture materials will be made available on Blackboard.

#### **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 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 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.

#### **Technological Proficiency and Hardware/Software Required**

- Laptop computer with authorized installations of the following software:
  - Visual Studio Code
  - Adobe Photoshop CC
  - Adobe Illustrator CC
  - Adobe Dreamweaver CC.

#### **USC Technology Rental Program**

The university realizes that attending classes online and completing coursework remotely requires access to technology that not all students possess. If you need resources to successfully participate in your classes, such as a laptop or internet hotspot, you may be eligible for the university's equipment rental program. To apply, please submit an <u>USC Technology Rental Program Application</u>.

Grading Breakdown		<b>Grading Scale</b>		
Assignments	30%		A = 100 - 95	A- = 94 - 90
Participation and Labs	15%	B+ = 89 - 87	B = 86 - 83	B- = 82 - 80
Examinations	20%	C+ = 79 - 77	C = 76 - 73	C- = 72 - 70
Major Group Project	35%	D+ = 69 - 67	D = 66 - 63	D- = 62 - 60
Total:	100%	F = 59 and below	1	

#### **Assignments**

- 1. Tutorial Page: Create a webpage with a simple tutorial on ANY topic.
- 2. Resume: Create a web page that is an online resume for yourself.
- 3. Film Article: Use divs to lay out a film preview/review article package.
- 4. Individual Site Project Proposal: Written proposal for your individual class website project.
- 5. Individual Project HTML Front Build
- 6. Interactive Article: Interactive news article featuring CSS3.
- 7. Responsive Film Review: Create a relatively complex layout that adapts to different target screen widths.
- 8. Peer Critiques of Front Pages: Post critiques of the frontpages of the other members of your group.
- 9. *JavaScript Color Setter:* Write a simple JS app that sets the background and foreground colors of a page.
- 10. Calculator App: Create the graphics and scripting for a basic calculator app.
- 11. Individual Project Milestone: HTML, CSS and Content build.
- 12. *Group Project: Proposal:* Written and video pitch to create a website using a group of students from Acad 275.
- 13. *Interactive Photo Gallery:* Use jQuery (and a little graphics) to build an interactive photo gallery on a topic of your choice.
- 14. Random Photo Page: Use arrays to display a random photo.
- 15. Individual Project Final Build: Full build of your individual project web sites.
- 16. Dog Photo Page: Dynamic pages that load images from arrays and manipulate them.
- 17. Group Project: Designs for Group Project: Visual design options for the frontpage of the group site.
- 18. *Group Project: Prep Group Designs for Critique:* In the Mural environment, each group must answer prompts about the objectives and assumptions behind their website and paste their frontpage designs.
- 19. *Dynamic Bookmark Data Page:* Create a page with link information stored in arrays that the user can search through.
- 20. *Group Project: Content Build:* This build will contain the majority of the primary content pages of the site, laid out and with the final design implemented.
- 21. Group Project: Technical Proposal: Scripting requirements for group site final build.
- 22. *Group Project: Final Build:* When you complete your group website project you must post it to the class webspace of one of the group's members (and create a link to it from your assignment page) AND send an email to the instructor and grader. This email will list out how you fulfilled EACH of the above requirements, including references to specific pages, AND list out which members of the team worked on specific aspects of each requirement.

## **Weekly Class Schedule**

Week	Tuesday	Thursday
1	8/23: 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 8/25).	8/25: Basic HTML objects and tags. Images. LAB: Classpage (due 8/30).
2	8/30: DUE: Tutorial Page. Review of Basic HTML, 'Good code.' Intro to CSS, styles, and stylesheets.	9/1: DUE: Resume. Style review. "Divs", layout and the "box" model Remote and local files. Folder structures. LAB: Calendar (due 9/6).
3	9/6: DUE: Film Article. CSS Part 2: Stylesheet review, Graphic css, "caniuse.com", Display, position, max- and min-, visibility. Drop-down nav. LAB: Zen Garden (due 9/8).	9/8:  DUE: Individual site project proposal.  Creating reusable CSS classes. HTML Form objects.
4	9/13: DUE: Survey. CSS3: position, opacity, display revisited, embedded fonts, columns, background image compositing, transitions.	9/15: DUE: Interactive article. CSS3 review: background compositing, transitions. Flexbox Introduction. HTML Review. Exam prep. Introduction to IA, Web design, color issues. LAB: Practice exam (due 9/20).
5	9/20: HTML Examination.	9/22: DUE: Individual project HTML front build. Introduction to Responsive Web Design, media queries. Introduction to Dreamweaver. Updated HTML5 "skeleton". H5 structural/semantic tags. LAB: Print stylesheet (due 9/27).
6	9/27: DUE: Peer critiques of frontpages. Etiquette and basics of design critiques.	9/29: DUE: Responsive film review. Intro to Dreamweaver. HTML media tags. iFrames and embedded video. LAB: Frontpage "alternative" style tiles (due 10/4)
7	10/4: Introduction to concepts in Dynamic HTML. Introduction to web objects. Object-oriented scripting basics. Introduction to Javascript syntax and the DOM.	10/6:  DUE: Javascript color setter.  Variables, Expressions, Functions.  LAB: Functions (due 10/11).

8	10/11: Review of functions. Conditional logic. LAB: JavaScript TV form page (due 10/18).	10/13: Fall Recess - NO CLASS!
9	10/18: DUE: Calculator app. Introduction to jQuery. LAB: Add jQuery to a college page (due 10/20). LAB: Add jQuery to a resource page (due 10/20).	10/20: DUE: Group project proposals. Review of JS vs jQuery syntax . jQuery fundamentals. Intro to Frameworks and Libraries. Bootstrap Introduction.
10	10/25: Working with external scripts and plug-ins. Intro to Dynamic Documents. Group Project pitches.  LAB: Implement a slideshow plug-in (due 10/27).	10/27: DUE: Interactive Photo Gallery. DUE: Individual Project Milestone. Review of Dynamic Documents, Intro to Arrays.
11	11/1:  DUE: Random photo page.  Array review. Data validation. Group projects and teams announced.  LAB: Email validation (due 11/8).	11/3: Regular Expressions. Loops. LAB: Restructuring data (due 11/10).
12	11/8: DUE: Individual Project: Final Build. DUE: Group Project: Designs for Group Project. DUE: Group Project: Prep Group Designs for Critique. Group Design critique. Searching through Arrays.	11/10: DUE: Dog photo page. Intro to source control. GitHub. jQuery and Javascript review. Exam prep.
13	11/15: DUE: Dynamic bookmark data page. JavaScript Examination.	11/17: Local storage. Timers. Scripting media. jQuery animation.  LAB: Web animation (due 11/22).
14	11/22: DUE: Group Project: Content Build. JS Data Objects, JSON.	11/24: Thanksgiving - NO CLASS!
15	11/29: Special Topics (TBA).	12/1: Web technologies overview. The web development industry. Next-generation development
FINAL	12/8: Thursday, December 8th, 4:30pm - 6:30pm. DUE: Presentations of Group Project Final Build	

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

The following first year software are now available for purchase online through the USC Iovine and Young software catalog at the Academy discounted rate:

<u>Software</u>	IYA Short-Term License at USC Bookstore
Adobe Creative Cloud	\$70 2022-2023 annual license

#### 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 iya.helpdesk@usc.edu.

#### **Assignment Rubrics**

Student work will be assessed based on:

- Level of understanding and execution of software skills on assignments.
- Degree of complexity of the assignment goal both creatively and technically.
- Innovative application of tools and concepts covered in class.

#### **Assignment Submission Policy**

Submit all of your digital assets for your assignments via FTP to your assigned web account at least one hour prior to the start of the class session.

#### **Grading Timeline**

Checkpoints and assignments will be reviewed, graded, and provided with feedback within a week of submission.

#### Late work

Late work will be reduced by 10% each class session after it is due. After three class sessions, work can no longer be submitted for grade consideration.

#### **Participation**

In-class participation is an important and required component of the learning methodology for this course. You are expected to attend class and coordinate with classmates on group projects, as well as maintain communication and progression of your group assignments outside of class. Come to an agreement with group mates on a specific medium for communication and how to make up for a missed class session or meeting.

#### Classroom norms

Students are expected to be respectful of each other and the space in which they inhabit. We are all here to have a positive learning experience, have fun, get to know each other, and grow as creative thinkers. Students being disruptive to the class who do not cease their activities will be asked to leave and if necessary will be escorted out by DPS officers.

#### Zoom etiquette

Students unable to attend class in person will be able to attend synchronously on Zoom. It is expected that students will have their camera on for the duration of class. You may be called on in order to participate in class discussions, critiques, or sharing/presenting work. If you are unable to keep your camera on during the synchronous Zoom session, contact the instructor prior to the class session to discuss expectations and accommodations needed.

#### Synchronous session recording notice

Synchronous sessions will be recorded and provided to all students asynchronously (through recorded Zoom sessions integrated into Blackboard). USC has a policy that prohibits sharing of any synchronous and asynchronous course content outside of the learning environment.

#### SCampus Section 11.12(B)

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relation to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

#### **Academy 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 ½ of a grade (e.g., an A will be lowered to A-, and A- will be lowered to a B+, etc.). In addition, being tardy to class will count as one-third of an absence. Three tardies will equal a full course absence.

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. 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.

#### Fall 2022 addendum:

- Unless students provide an accommodation letter from USC's Office of Student Accessibility
  Services (OSAS) 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.

#### **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. <u>All projects and materials left in Iovine and Young Hall will be discarded two days after final exams end. No exceptions</u>.

#### **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" <a href="mailto:policy.usc.edu/scampus-part-b">policy.usc.edu/scampus-part-b</a>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on <a href="mailto:Research and Scholarship Misconduct">Research and Scholarship Misconduct</a>.

#### **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.rontdesk@usc.edu">osas.rontdesk@usc.edu</a>.

#### 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.

### $\textit{Office for Equity, Equal Opportunity, and Title IX (EEO-TIX)} - (213) \ 740-5086 \\$

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) 442-33*40 or <a href="mailto:ottp@med.usc.edu/ottp">ottp@med.usc.edu/ottp</a>

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