USC Iovine and Young Academy

*Arts, Technology and the Business of Innovation*

# Acad275: Dev 1

4 Units
Tuesdays / Thursdays 5 – 7:20 p.m. in IYH210
Fall 2020

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| **Website:** | http://iyawebdev.com/acad275 |
| **Instructor:** | **Patrick Dent** |
| **Office:** | Online |
| **Office Hours** | Mondays 8 - 9 a.m. in pd zoom room for Dev2 async group<br>Tuesdays 1 - 1:50 p.m. (in Chris' Zoom Room)<br>Tuesdays 3:30 - 4:30 p.m. in Acad276 course room<br>Thursdays 3:30 - 4:30 p.m. in Acad276 course room<br>And by appointment |
| **Contact Info:** | dent@usc.edu / **213-821-1400**<br>***Note:*** *Email is the preferred method of contact.*<br>*I strive to respond within 24 hours (M - F).* |
| **Grader:** | **Aishwarya Mustoori** (mustoori@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 all of 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

Required Textbooks None

### Grading

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

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| Assignments | 30% |
| Participation and labs | 15% |
| Examinations | 20% |
| Group Projects | 35% |
| Total | 100% |

### Grading Scale

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

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

### 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 *OPTIONAL* SOFTWARE AT THE DISCOUNTED ACADEMY RATE THROUGH THE USC BOOKSTORE:**

The following first year software are now available for purchase **online** through the USC Bookstore at the Academy discounted rate:

| **Software** | **IYA Short-Term License at USC Bookstore** |
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| **Adobe Creative Cloud** | $70 2019-2020 annual license |

1. Visit the USC Bookstore online: https://www.uscbookstore.com/usciyasoftware
2. Select the software license(s) you would like to purchase.
3. When you proceed to checkout, add the Promo Code "IYASoftware" (This will override the listed taxes).
4. For shipping, select FedEx Home Delivery (free).
5. Once you complete your online purchase, you will receive a confirmation email/receipt. *(Note that even if a shipping charge appears on your invoice, it will not be charged to your credit card. This relates to a known technical problem with the Bookstore's online store.)*
6. Upload your receipt here to receive access to your purchased license.
7. You will be notified by email when the license has been activated

**Course Schedule: A Weekly Breakdown**

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| Week 1a | Aug 18 | Course introduction. Overview of the Internet and the World Wide Web and related technologies.<br>Introduction to HTML. FTP and 'uploading' files to a server.<br>***Lab:*** FTP to aludra, set up directories and permissions, upload image (due W1b) |
| Week 1b | Aug 20 | Basic HTML objects and tags. Images.<br>***Lab:*** Classpage (due W2a)<br>**Assignment:** Tutorial Page (due W2a) |
| Week 2a | Aug 25 | Review of Basic HTML, 'Good code.'<br>Intro to CSS, styles and stylesheets.<br>***Lab*:** Calendar (due W2b)<br>**Assignment:** Resume (due W2b) |
| Week 2b | Aug 27 | Style review. "Divs", layout and the "box" model<br>Remote and local files. Folder structures.<br>**Assignment:** Film Article (due W3a) |
| Week 3a | Sep 01 | CSS Part 2: Stylesheet review, Graphic css and "*caniuse.com"*, Display, position, max- and min-, visibility.<br>Drop-down nav.<br>***Lab:*** Zen Garden (due W3b)<br>**Project:** Individual site project proposal (due 3b) |
| Week 3b | Sep 03 | Creating re-usable CSS classes.<br>HTML Form objects.<br>**Assignment:** Survey (due W4a)<br>**Project:** Individual project HTML Frontpage build (due W6a) |
| Week 4a | Sep 08 | CSS3: position, opacity, display revisited, embedded fonts, columns, background image compositing, transitions.<br>**Assignment:** Interactive Article (due W5a) |
| Week 4b | Sep 10 | CSS3 review: background compositing, transitions.<br>HTML Review. Exam prep.<br>Introduction to IA, Web design, color issues.<br>Introduction to Graphic Production, Photoshop.<br>***Lab:*** Practice exam (due W5a) |
| Week 5a | Sep 15 | **HTML Examinations** |
| Week 5b | Sep 17 | Introduction to Responsive Web Design, media queries |

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| | | Lab: Frontpage design notes (due W6a)<br>***Lab:*** Print stylesheet (due W6a)<br>**Assignment:** Responsive film review (due W6b) |
| Week 6a | Sep 22 | Etiquette and basics of design critiques. Critique.<br>Using a 'visual editor', Introduction to Dreamweaver<br>Updated HTML5 "skeleton". H5 structural/semantic tags.<br>**Assignment:** Peer critiques of frontpages (due W6b) |
| Week 6b | Sep 24 | HTML media tags. iFrames and embedded video.<br>Image maps. Image sprites.<br>***Lab:*** Frontpage "alternate" style tiles (due W7a) |
| Week 7a | Sep 29 | Introduction to concepts in Dynamic HTML.<br>Introduction to web objects. Object-oriented scripting basics.<br>Introduction to jQuery<br>***Lab:*** Add jQuery to a college page (due W7b)<br>***Lab:*** Add jQuery to a resource page (due W7b) |
| Week 7b | Oct 01 | jQuery fundamentals<br>**Assignment:** Interactive Photo Gallery (due W8a) |
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| Week 8a | Oct 06 | Introduction to Javascript syntax and the DOM<br>**Assignment:** Build a Javascript color setter (due W8b)<br>**Assignment:** Individual Project Milestone: Content Build (due W10a) |
| Week 8b | Oct 08 | Variables, Expressions, Functions<br>***Lab:*** Function lab (due W9a)<br>**Assignment:** Group Project Pitches (due W9a) |
| Week 9a | Oct 13 | Review of functions. Conditional Logic.<br>***Lab:*** JS TV form page (due W9b)<br>**Assignment:** Calculator app (due W10a) |
| Week 9b | Oct 15 | Group project pitches<br>Review of Conditional Logic<br>Intro to working with external scripts and plug-ins.<br>***Lab:*** Implement a slideshow plug-in (due W10a)<br>**Assignment:** Individual Project: Final Build (due W12a) |
| Week 10a | Oct 20 | Arrays, Dynamic Documents<br>***Project Milestone 1:*** *Proposal and 3 Frontpage Designs (due W11a)*<br>**Assignment:** Random photo page (due W10b) |
| Week 10b | Oct 22 | Data validation |

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| | | ***Lab:*** Email validation (due W11a) |
| Week 11a | Oct 27 | Regular Expressions, Loops<br>***Lab:*** Re-structuring data (due W11b)<br>**Project Milestone 2**: Content build of Group Website (*tentatively* due W13a)<br>**Assignment:** Prep Group Critique (due W11b) |
| Week 11b | Oct 29 | Group Critique<br>Searching through Arrays<br>**Assignment:** Dynamic bookmark data page (due W12b) |
| Week 12a | Nov 03 | Scripting media. jQuery animation. Using other libraries<br>***Lab:*** Web animation (due W12b) |
| Week 12b | Nov 05 | jQuery and Javascript review. Exam prep.<br>**Project Assignment:** Group Project Technical Proposal (due W13b) |
| Week 13a | Nov 10 | **JS Examinations** |
| Week 13b | Nov 12 | JS Data Objects, JSON<br>Ajax (tentative).<br>Cookies. Timers.<br>Web technologies overview, The Web development industry, Next-generation development<br>***Lab:*** Build a cookie-driven page (due W15a) |
| | **Nov 17** | **Project Final Build posted** |
| | Nov 17 | *Student Presentations of Group Projects at 4:30pm* |

## 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.