Acad275: Dev 1
4 Units
Tuesdays, Thursdays 2 – 4:50 p.m. in SKS404
Spring 2019

Website:  http://iyawebdev.com/acad275
Instructor:  Patrick Dent
Office:  STO331
Office Hours:  TBA
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:  Akshat Barbhaya <abarbhay@usc.edu>

IT Help: Academy IT
Hours of Service: 8:30-5:00pm
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 Internet. As a result 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 have acquired 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 concepts students will need 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.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Participation and labs</td>
<td>15%</td>
</tr>
<tr>
<td>Examinations</td>
<td>20%</td>
</tr>
<tr>
<td>Group Projects</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

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

- **A**: 100-93
- **A-**: 92-90
- **B+**: 89-87
- **B**: 86-83
- **B-**: 82-80
- **C+**: 79-77
- **C**: 76-73
- **C-**: 72-70
- **D+**: 69-67
- **D**: 66-65
- **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 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.
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.
Course Schedule: A Weekly Breakdown

Week 1a  Jan 8  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 10  Basic HTML objects and tags. Images.
Lab: Classpage (due W2a)
Assignment: Tutorial Page (due W2a)

Week 2a  Jan 15  Review of Basic HTML, ‘Good code.’
Intro to CSS, styles and stylesheets.
Lab: Calendar (due W2b)
Assignment: Resume (due W2b)

Week 2b  Jan 17  Style review. “Divs”, layout and the “box” model
Remote and local files. Folder structures.
Assignment: Film Article (due W3a)

Week 3a  Jan 22  CSS Part 2: Stylesheet review, Graphic css and “caniuse.com”, Display, position, max- and min-, visibility. Drop-down nav.
Lab: Zen Garden (due W3b)
Project: Individual site project proposal (due 3b)

Week 3b  Jan 24  Creating re-usable CSS classes.
HTML Form objects.
Assignment: Survey (due W4a)
Project: Individual project HTML Frontpage build (due W5b -)

Week 4a  Jan 29  CSS3: position, opacity, display revisited, embedded fonts, columns, background image compositing, transitions.
Assignment: Interactive Article (due W4b)

Week 4b  Jan 31  CSS3 review: background compositing, transitions.
HTML Review. Exam prep.
Introduction to IA, Web design, color issues,
Wire framing and style tiles
Lab: Practice exam (due W5a)

Week 5a  Feb 05  HTML Examinations
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>5b</td>
<td>Feb 06</td>
<td>Using a ‘visual editor’, General introduction to Dreamweaver Updated HTML5 “skeleton”. HTML5 structural/semantic tags. HTML media tags. iFrames and embedded video. Image maps. Image sprites. <strong>Assignment:</strong> Peer critiques of frontpages (due W6a) <strong>Lab:</strong> Frontpage “alternate” style tiles (due W6a) <strong>Lab:</strong> Sprite graphic (due W6a)</td>
</tr>
<tr>
<td>6a</td>
<td>Feb 12</td>
<td>Introduction to Responsive Web Design, media queries <strong>Lab:</strong> Print stylesheet (due W6b) <strong>Assignment:</strong> Responsive film review (due W7a)</td>
</tr>
<tr>
<td>6b</td>
<td>Feb 14</td>
<td>TBA <strong>Project:</strong> Responsive frontpage/homepage (due W8a)</td>
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<tr>
<td>7a</td>
<td>Feb 19</td>
<td>Introduction to concepts in Dynamic HTML. Introduction to web objects. Object-oriented scripting basics. Intro to working with external scripts and plug-ins. <strong>Lab:</strong> Interactive info page (due W7b)</td>
</tr>
<tr>
<td>7b</td>
<td>Feb 21</td>
<td>Introduction to jQuery <strong>Lab:</strong> Implement a slideshow plug-in (due W8a) <strong>Lab:</strong> Add jQuery to a form (due W8a) (Tentative) <strong>Group Project1 with IF</strong> (due TBA, roughly early March)</td>
</tr>
<tr>
<td>8a</td>
<td>Feb 26</td>
<td>jQuery fundamentals <strong>Assignment:</strong> Interactive Photo Gallery (due W8b)</td>
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<tr>
<td>8b</td>
<td>Feb 28</td>
<td>Introduction to Javascript syntax and the DOM <strong>Assignment:</strong> Build a Javascript color setter (due W9a)</td>
</tr>
<tr>
<td>9a</td>
<td>Mar 05</td>
<td>Variables, Expressions, Functions <strong>Lab:</strong> Function lab (due W9b) <strong>Assignment:</strong> Calculator app (due W10a)</td>
</tr>
<tr>
<td>9b</td>
<td>Mar 07</td>
<td>Conditional Logic, Editing Style Properties <strong>Lab:</strong> Edit CSS properties of web objects (due W10a)</td>
</tr>
</tbody>
</table>

**Mar 12, 14**  
*Spring Break*
Week 10a  Mar 19  TBA

Week 10b  Mar 21  Arrays, Dynamic Documents  
**Assignment:** Random photo page (due W11a)

Week 11a  Mar 26  Data validation  
**Lab:** Email validation (due W11b)  
**Group Project2:** C.S. group business website *(tentatively due 4/26)*

Week 11b  Mar 28  Regular Expressions, Loops  
**Lab:** Re-structuring data (due W12a)

Week 12a  Apr 2  Searching through Arrays  
**Assignment:** Dynamic bookmark data page (due W13a)

Week 12b  Apr 4  Scripting media. jQuery animation. Using other libraries  
**Lab:** Web animation (due W10b)

Week 13a  Apr 9  jQuery and Javascript review. Exam prep.  
**Project:** Group Project Technical Proposal (due W14a)

Week 13b  Apr 11  **JS Examinations**  
*TBA*  
*Object detection, return,*  
*Window and document objects,*  
*Dynamic form objects revisited*  
**Lab:** Build a computer *(due W13b)*

Week 14a  Apr 16  JS Data Objects, JSON

Week 14b  Apr 18  Ajax *(tentative).*  
Cookies. Timers.  
**Lab:** Build a cookie-driven page *(due W15a)*

Week 15a  Apr 23  Special Topics *(TBA)*

Week 15b  Apr 25  Web technologies overview, The Web development industry,  
Next-generation development

*(Tentative)*  Apr 26  **GROUP Project Final Build posted by 6pm**

May 2  **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 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) 740-4900 – 24/7 on call engemannshc.usc.edu/rsvp
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

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.

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 Iovine and Young Academy Software Purchase

The following software is available for purchase online through the USC Bookstore. It is recommended, but not required, that you have Adobe CC installed on your laptop for ACAD275.

<table>
<thead>
<tr>
<th>Software</th>
<th>IYA Short-Term License at USC Bookstore</th>
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<tbody>
<tr>
<td>Adobe Creative Cloud</td>
<td>$70 2018-2019 license (expires July 31, 2019)</td>
</tr>
<tr>
<td>Apple Final Cut Pro</td>
<td>$35 semester license (expires May 10, 2019)</td>
</tr>
<tr>
<td>Apple Logic Pro</td>
<td>$35 semester license (expires May 10, 2019)</td>
</tr>
<tr>
<td>SolidWorks</td>
<td>$35 semester license (expires May 10, 2019)</td>
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How to purchase software at the Academy rate through the USC Bookstore:

1. Visit the USC Bookstore online here.
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.
6. Upload your receipt here if you are an undergraduate student, and here if you are a graduate student to receive access to your purchased license
7. You will be notified by email when the license has been activated