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
- 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

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>Major Group Project</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.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-94</td>
</tr>
<tr>
<td>A-</td>
<td>94-90</td>
</tr>
<tr>
<td>B+</td>
<td>90-87</td>
</tr>
<tr>
<td>B</td>
<td>87-83</td>
</tr>
<tr>
<td>B-</td>
<td>83-80</td>
</tr>
<tr>
<td>C+</td>
<td>80-77</td>
</tr>
<tr>
<td>C</td>
<td>77-73</td>
</tr>
<tr>
<td>C-</td>
<td>73-70</td>
</tr>
<tr>
<td>D+</td>
<td>70-67</td>
</tr>
<tr>
<td>D</td>
<td>67-64</td>
</tr>
<tr>
<td>F</td>
<td>64 or below</td>
</tr>
</tbody>
</table>

Group Project Timeline [draft]

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Milestone</th>
<th>Design concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 12</td>
<td>Design concepts</td>
<td>Design concepts</td>
</tr>
<tr>
<td>Week 14</td>
<td>Content Build</td>
<td>Content Build</td>
</tr>
<tr>
<td>End of Week 15</td>
<td>Final Technical Build</td>
<td>Final Technical Build</td>
</tr>
</tbody>
</table>
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.
HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE THROUGH THE USC BOOKSTORE:

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.

<table>
<thead>
<tr>
<th>Software</th>
<th>IYA Short-Term License at USC Bookstore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Creative Cloud</td>
<td>$70 2020-2021 annual license (active through July 2021)</td>
</tr>
<tr>
<td>Apple Logic Pro</td>
<td>$35 semester license</td>
</tr>
<tr>
<td>Solidworks</td>
<td>$35 semester license</td>
</tr>
<tr>
<td>Apple Final Cut Pro</td>
<td>$35 semester license</td>
</tr>
</tbody>
</table>

To purchase:

- Visit: [https://commerce.cashnet.com/IOVINE](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 iyhelp@usc.edu.
Course Schedule: A Weekly Breakdown

Week 1a  Jan 19  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 21  Basic HTML objects and tags. Images.  
Lab: Classpage (due W2a)  
Assignment: Tutorial Page (due W2a)

Week 2a  Jan 26  Review of Basic HTML, ‘Good code.’ Intro to CSS, styles and stylesheets. 
Lab: Calendar (due W2b)  
Assignment: Resume (due W2b)

Week 2b  Jan 28  Style review. “Divs”, layout and the “box” model 
Remote and local files. Folder structures.  
Assignment: Film Article (due W3a)

Lab: Zen Garden (due W3b)  
Project: Individual site project proposal (due 3b)

Week 3b  Feb 04  Creating re-usable CSS classes. 
HTML Form objects.  
Assignment: Survey (due W4a)  
Project: Individual project HTML Front build (due W5b)

Week 4a  Feb 09  CSS3: position, opacity, display revisited, embedded fonts, columns, background image compositing, transitions.  
Assignment: Interactive Article (due W4b)

Week 4b  Feb 11  CSS3 review: background compositing, transitions.  
Flexbox Introduction. 
HTML Review. Exam prep. 
Introduction to IA, Web design, color issues,  
Lab: Practice exam (due W5a)

Week 5a  Feb 16  HTML Examinations
Week 5b  Feb 18  Introduction to Responsive Web Design, media queries
Using a ‘visual editor’, introduction to Dreamweaver
Updated HTML5 “skeleton”. H5 structural/semantic tags.
Lab: Frontpage design notes (due W6a)
**Assignment:** Responsive film review (due W6b)

Week 6a  Feb 23  Etiquette and basics of design critiques. Critique.
**Assignment:** Peer critiques of frontpages (due W6a)

Week 6b  Feb 25  HTML media tags. iFrames and embedded video.
Image maps. Image sprites.
**Lab:** Frontpage “alternate” style tiles (due W7a)

Week 7a  Mar 02  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)

Week 7b  Mar 04  Variables, Expressions, Functions
**Lab:** Function lab (due W8a)
**Assignment:** Calculator app (due 8b)

Week 8a  Mar 09  Review of functions. Conditional Logic.
**Lab:** JS TV form page (due 8b)
**Assignment:** Individual Project Milestone: Content Build
(due W10b)

Week 8b  Mar 11  Review of Conditional Logic.
Intro to Frameworks and Libraries, Bootstrap
**Introduction.**
Introduction to jQuery
**Lab:** Add jQuery to a college page (due W9a)
**Lab:** Add jQuery to a resource page (due W9a)

Week 9a  Mar 16  jQuery fundamentals
**Assignment:** Interactive Photo Gallery (due W10a)

Week 9b  Mar 18  Review of JS vs jQ syntax
Working with external scripts and plug-ins.
Intro to Dynamic Documents.
**Lab:** Implement a slideshow plug-in (due W10b)

Week 10a Mar 23  Wellness Day – NO CLASS

Week 10b Mar 25  Review of Dynamic Documents, Intro to Arrays
**Assignment:** Random photo page (due W11a)
**Assignment:** Individual Project: Final Build (due W12a)
Week 11a  Mar 30  Array review, Data validation

*Lab:* Email validation (due W11b)
*Assignment:* Dog photo page (due 12a)

Week 11b  Apr 01  Regular Expressions, Loops
*Lab:* Re-structuring data (due W12a)
*Assignment:* Designs for Group Project (due W12a)

Week 12a  Apr 06  Design critique.
Searching through Arrays
*Assignment:* Dynamic bookmark data page (due W13a)

Week 12b  Apr 08  jQuery and Javascript review. Exam prep.
*Lab:* Github group repo (due W13b)
*Group Project:* Content Build (due W14a)
*Group Project:* Technical Proposal (due W14a)
*Group Project:* Final Build (due end of W15)

Week 13a  Apr 13  **JS Examinations**

Week 13b  Apr 15  Scripting media. jQuery animation. Using other libraries.
Data storage, timers
*Lab:* Web animation (due W14a)

Week 14a  Apr 20  JS Data Objects, JSON

*Week 14b*  *Apr 22*  **Wellness Day – NO CLASS**

Ajax (tentative).
*Lab:* Build a cookie-driven page (due W15a)

Week 15a  Apr 27  Special Topics (TBA)

Week 15b  Apr 29  Web technologies overview, The Web development industry,
Next-generation development

**Apr 30**  GROUP Project Final Build posted by 11:59pm

**May 06**  *Student Presentations of Group Projects*
TBA Flexbox

Source control, Github

CSS Frameworks, Bootstrap

Lab: Implement Bootstrap page

Object detection, return,
Window and document objects,
Dynamic form objects revisited

Lab: Build a computer
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).

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.
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.

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

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.

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.

Non-emergency assistance or information.