# Technologies for Desiging Interactive Web Experiences

## USC Jimmy Iovine and Andre Young Academy

**ACAD 599 (3 Units)** 

Summer 2017

#### **Objective**

This course teaches the basic languages and tools involved in designing interactive web experiences. Student will build and publish a web site with user-centric, interactive features.

#### **Concepts**

Core web languages of HTML, CSS and jQuery, building web experiences, designing user interactions, crafting web UIs that adapt to mobile, and basic understanding of common development platforms and techniques.

**Prerequisites** None.

**Instructor** Patrick Dent

Contact dent@usc.edu / 213-821-1400

Office Hours TBA

Grader TBA

**Lecture and Lab** Tuesdays and Thursdays 11 a.m. – 2 p.m.

(Session 542, May 23 – July 2, 2017)

Website TBA

**Required Textbooks** None.

#### **Grading**

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

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

### **Grading Scale**

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

Α	100-93
A-	92-90
B+	89-87
В	86-83
B-	82-80
C+	79-77
С	76-73
C-	72-70
D+	69-67
D	66-65
F	64 or below

#### **Policies**

No make-up exams (except for documented medical or family emergencies) will be offered nor will there be any changes made to the Final Exam schedule, except as permitted by university rules.

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.

#### **Incomplete and Missing Grades**

Excerpts for this section have been taken from the University Grading Handbook, located at <a href="http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html">http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html</a>. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations... for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) "is assigned when work is no completed because of documented illness or other 'emergency' occurring after the twelfth week of the semester (or 12<sup>th</sup> week equivalency for any course scheduled for less than 15 weeks)."

#### **Academic Integrity**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: <a href="http://www.usc.edu/dept/publications/SCAMPUS/gov/">http://www.usc.edu/dept/publications/SCAMPUS/gov/</a>. Students will be referred to the Office of Student Judicial Affairs and Community Standards (SJACS) for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <a href="http://www.usc.edu/student-affairs/SJACS/">http://www.usc.edu/student-affairs/SJACS/</a>.

If the instructor, a grader, or a lab assistant suspects you of academic dishonesty, it has to be reported to SJACS. Do not share lab assignments with another student. Do not submit another student's work as your own. Do not look at other students' papers during exams. Do not leave the room during an exam. Do not cheat! As Trojans, we are faithful, scholarly, skillful, courageous, and ambitious.

#### **Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. If you need accommodations for an exam, the form needs to be given to the instructor at least two weeks before the exam.

DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Contact info: 213-740-0776 (Phone), 213-740-6948 (TDD only), 213-740-8216 (FAX), <u>ability@usc.edu, http://sait.usc.edu/academicsupport/centerprograms/dsp/home\_index.html</u>.

### **Emergency Preparedness/Course Continuity in a Crisis**

In case of emergency, when travel to campus is difficult, if not impossible, USC executive leadership will announce a digital way for instructors to teach students in their residence halls or homes using a combination of the Blackboard LMS (Learning Management System), teleconferencing, and other technologies. Instructors should be prepared to assign students a "Plan B" assignment that can be completed 'at a distance.' For additional information about maintaining your classes in an emergency, please access: <a href="http://cst.usc.edu/services/emergencyprep.html">http://cst.usc.edu/services/emergencyprep.html</a>

## **Technologies for**

## **Designing Web Experiences**

**ACAD599 (3 units)** 

### **Course Outline**

Meeting 1 *Internet, Web Sites, and "Web Experiences"* 

Course introduction. Overview of the Internet and the

World Wide Web and related technologies.

What are web experiences?

Introduction to HTML. Basic FTP and 'uploading' files to a server.

Lab: Edit and post a Web page (due M2)

Meeting 2 Web Page Elements and Objects

Creating objects with html tags, HTML tag syntax.

**Project:** Tutorial web page (due aM3)

Meeting 3 "Design" layer of web pages

HTML, Image review. 'Good code.'

Intro to Styles and CSS. Internal and external stylesheets.

**Project:** Resume web page (due M4)

Meeting 4 Web Layouts

Stylesheet reviews, div layouts with classes. Introduction to Web design, color issues.

Lab: Calendar (due M4)

**Project:** Film Article package (due M5)

Meeting 5 *Graphic CSS. Navigations. Branding* 

Site branding and navigations.

Graphic CSS properties. CSS compounds. Div positioning. CSS-based navigations. *Lab:* Photoshop Exercises (due M6)

**Project:** Major project proposal (due M6)

Meeting 6 **Data interfaces** 

Highlights and tips for Photoshop application. HTML4 form objects. HTML5 form objects. **Project:** Political survey page (due M7)

**Project:** Major frontpage and graphics (due M9)

Meeting 7 *Interactive Design* 

Using a 'visual editor', Introduction to Dreamweaver.

HTML5 Semantic and meta tags.

CSS3: Position, opacity, colors, fonts, columns, background images, transitions, transforms. **Project:** Interactive news article (due M9(

Lab: Practice exam (due M8)

Meeting 8 HTML and CSS Exam

Meeting 9 **Design Critiques, Responsive Web Design** 

Introduction to Responsive Web Design, Media queries, Designing, writing stylesheets for multiple platforms.

**Lab:** Print stylesheet (due M10)

**Project:** Adaptive Film Article (due M10)

Meeting 10 **Dynamic Web Pages.** 

Intro to Interactivity, DHTML, scripting and jQuery. jQuery Syntax, selectors, effects, manipulation

Lab: jQuery exercises (due M11)

Project: Interactive page (due M11)

Meeting 11 Web Scripting

jQuery review. Intermediate jQuery. jQuery animation.

Client-side scripting and Javascript.

Lab: Storyboard of presentation (due M11)

Project: jQuery presentation (due M11)

Meeting 12 Responsive Web Sites

Responsive Web Design revisited.

Implementing a design comp. Creating RWD graphics.

Lab: Photoshop and RWD (due M12)

**Project:** RWD version of project frontpage (due M13)

Meeting 13 "Mobile First" Web Design

Building pages for mobile devices. jQuery Mobile framework.

Working with CSS frameworks. Intro to Bootstrap.

Lab: jQuery mobile page (due M14)

Project: Bootstrap page (due M14)

#### Meeting 14 Web languages, platforms and analytics

Search engines, meta tags and traffic reports Search engine optimization, Google Analytics.

Content Management Systems.

Web hosting and domains.

Web technologies overview, development industry.

Intro to development. Server-side scripting and databases.

**Lab:** Implementing Google analytics (Due M14 + 3 day)

Major project posted by midnight (Due M14 + 3 days)