

IML 400
Creative Coding for the Web

Fall 2014
4 units
Mondays, 6:00 – 8:50 pm
SCI L105

Instructor: Raphael Arar
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Office Hours TBA

COURSE DESCRIPTION

IML400: Creative Coding for the Web is a practical foundational course on creative web development and analysis. It provides a conceptual framework to understand, analyze and design for the web of today, and it serves as a practical introduction to HTML, CSS and Javascript as building blocks.

The class will be divided in two sections: discussion and workshop.

Discussion time will serve to review and analyze previous assignments, as well as to study the web as a participatory rich media platform, and to introduce and explore key concepts in web design.

Workshop time will offer an introduction to new techniques, and the technical nuances presented by the implementation of assignments.

GRADING BREAKDOWN

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|---|-----|
| • Discussion / Workshop Participation and Performance | 20% |
| • Assignments (including reading reports) | 40% |
| • Final Project | 40% |

ASSIGNMENTS

Assignment delivery is every Monday unless a different deadline is specified. The inability to meet deadlines will have a negative impact on grades. For team assignments each member of the team should have a page with the assignment in their storm accounts.

WORKSHOP

Students should upload the result of each workshop session to their storm accounts every time.

READINGS

Some weeks there will be readings. Students are expected to upload a brief essay about each reading in their storm accounts.

REFERENCE MATERIAL

Pointers to books and online links will be provided in the class website.

UPLOADING WORK

Students are expected to follow the proposed organization schema for their online projects:

1.- Index file:

<http://storm.usc.edu/~username/index.html>

This file should feature a list of links to all the work made by the student.

2.- Image directory:

<http://storm.usc.edu/~username/images>

All images used by webpages located in the root directory should be located there.

3.- Stylesheet directory:

<http://storm.usc.edu/~username/css>

All CSS files should be located there.

4.- Javascript directory:

<http://storm.usc.edu/~username/js>

All javascript files should be located there.

5.- Assignment files:

<http://storm.usc.edu/~username/assignment-x.html>

The main html file for each assignment should be named assignment-x.html, where x corresponds to the number of this assignment.

All secondary files (html, CSS, javascript or images can have arbitrary names). 6.- Workshop session files:<http://storm.usc.edu/~username/workshop-x.html>

The same holds for the reading report files.

7.- Reading report files:

<http://storm.usc.edu/~username/reading-x.html>

And the same holds for the assignment files.

8.- Final project directory and files:

<http://storm.usc.edu/~username/final/>

WEEKLY SCHEDULE

The following weekly schedule is subject to change. Please consult the course wiki for the most current information, assignments and due dates.

Details about assignments and readings will be provided in the class website located at <http://usc.raphaelrar.com>

Week 1: August 25, 2014

Student Introductions. Scoping the class. Student skill survey. The web in our lives. Class mechanics: syllabus, assignments, deadlines, grading. Tools and resources. Intro to Web Coding: HTML, CSS and Javascript today. Chrome and Chrome developer tools. Previous class websites and projects.

Workshop-1:

Hello World - Intro to HTML. Storm setup.

Week 2: No Class / Labor Day

Week 3: September 8, 2014

Vannevar Bush: Science Fiction and Innovation. Imagine the web in the future.

Workshop-2:

Storm directory structure Review. Assignments, workshop exercises, reading essays, and Github (maybe). Intro to HTML. The div tag. Intro to CSS. Ids versus classes. Reading source code from pages online. Learning to search for tools and resources. Learning to steal. Using Chrome's Developer Tools to investigate other websites.

Week 4: September 15, 2014

Assignment-1 and Assignment-2 presentations and discussion. Intro to Visual Design. Layout and grids. Navigation. Links to other pages. Interactivity. Introduction to User Interfaces. Human Interface Principles. The importance of interaction design. Pages and buttons.

Workshop-3:

Dive into HTML and CSS from a layout perspective: Position, Margins, Floats, etc.

Week 5: September 22, 2014

Assignment-3 presentations and discussion. The web as a medium to tell stories. What's your story? Transcending information design. Artistic outlets of web.

Workshop-4:

Cover page reviews.

Week 6: September 29, 2014

Assignment-4 presentations and discussion. Pages and hyperlinks. What are the advantages? What are the limitations? The web versus print. Responsive Web Design.

Workshop-5:

Introduction to Javascript. Introduction to JQuery and JQueryUI. Fades, wipes and slideshows. Using Chrome's Developer Tools to test and debug Javascript.

Week 7: October 6, 2014

Assignment-5 presentations and discussion. Do the effects and animated transitions enhance or cripple the reading experience? Introduction to design thinking. Design Patterns and the web. Process, iterations. Modularity.

Workshop-6:

Web services and APIs. Embedding external data to your page. Github.

Week 8: October 13, 2014

Assignment-6 presentations and discussion. Art direction. Styles of representation. Analytical review of key website types like stores, social media sites, etc. Importance of visual consistency. Readability versus eye candy, where is the balance?

Workshop-7:

CSS rendering effects. CSS transitions. JQueryUI and other extension libraries.

Week 9: October 20, 2014

Assignment-7 presentations and discussion. Continuation to design thinking. Review of Design Patterns and the web. Review of Process, iterations. Modularity. Form versus function. Review of UI design and Wireframes: visualizing user experience flows.

Workshop-8:

Previous assignments review and troubleshooting.

Week 10: October 27, 2014

Final Project Discussion. Theme and scope.

Workshop-9:

To be specified.

Week 11: November 3, 2014

Final Project Discussion. Design and Planning. Technical resources.

Workshop-10:

To be specified.

Week 12: November 10, 2014

Project proposal approval. Design and Concept feedback to final project proposals.

Workshop-11:

Technical feedback to final project proposals. Final Project kick off.

Week 13: November 17, 2014

Design and Concept feedback to final project first iteration.

Workshop-12:

Technical feedback to final project first iteration.

Week 14: November 24, 2014

Design and Concept feedback to final project Second iteration.

Week 15: December 1, 2014

Design and Concept feedback to final project Third iteration.

FINAL EXAMINATION: Monday, December 15, 2014, 7:00 – 9:00 p.m.

Final Project Presentations and Discussion

POLICIES

Fair Use and Citation Guidelines

We assert that all of our course work is covered under the Doctrine of Fair Use. In order to make this claim, however, all projects will need to include academically appropriate citations in the form of a Works Cited section, which covers all sources, in order to receive a passing grade. The Works Cited is either included in the project or as a separate document, as appropriate to your project. The style we use is APA 5th edition and you may refer to these guidelines:

<http://owl.english.purdue.edu/owl/resource/560/01/>

Statement on 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:

<http://www.usc.edu/dept/publications/SCAMPUS/gov/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at:

<http://www.usc.edu/student-affairs/SJACS/>.

Statement for 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 me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday.

Emergency Plan

In the event that classes cannot convene at the university, all IML courses will continue via distance education. Specifically, the IML portal and course wikis will be deployed to enable faculty-student interaction (asynchronously and also via virtual office hours), complete syllabi, course readings and assignments, software tutorials, project assets, parameters and upload instructions, peer review processes and open source alternatives to professional-level software used in the IML curriculum. Further details are available on the course wiki.