

Syllabus for INFO/CS 1300: Introductory Design and Programming for the Web

Fall 2017

Credits: 3

Prerequisites: None

Lectures: Mondays, Wednesdays 9:05-9:55 in 185 Statler Hall.

Labs/Sections: Fridays in 235, 236 Carpenter Hall and 225 Upson Hall.

Instructor: Kyle Harms

Contact:

course related: info1300-prof@cornell.edu;

non-course related: kyle.harms@cornell.edu

Schedule, staff, office hours: See course website.

Course web site: <https://cmsx.cs.cornell.edu/>

Course discussion: <https://piazza.com/cornell/fall2017/infocs1300/home>

This course is based on material by Dan Cosley and Steve Paling.

Course Overview

This course is designed to introduce students to the conceptual, design, and technical aspects of developing web sites. No prior knowledge of programming, or web or graphic design is assumed or necessary. In the course, we will cover basic web technologies such as HyperText Markup Language (HTML), Cascading StyleSheets (CSS), Javascript, and PHP.

We will also address information, visual, and interaction design principles; usability and user testing principles and processes; tools and techniques for working with clients and other users; and a number of other theories and principles that will help you be a better designer.

Goals

The overriding goal in this course is to develop a well-rounded set of tools for and ways of thinking about design. More specifically:

- Understanding and practicing the value of iteration and considering multiple design ideas.
- Experience with techniques to support rapid iteration including sketching, storyboarding, and prototyping.
- Experience with interacting with clients and users, both for understanding their needs, developing requirements, and testing design ideas and websites.
- Understanding and applying visual design principles around typography, color, and layout.
- Understanding and applying information design principles around content, structuring, and navigation.

- Building a vocabulary around design that will help you communicate with users, other designers, and yourself when doing design.
- Thoughtfully critiquing web designs, including visual, informational, navigational, and interaction elements; source code and technical quality; issues of aesthetics and usability; and questions of social acceptability, ethics, and impact.
- Using information and examples of web design and development for self-teaching, inspiration, and critique, and being able to adapt these examples to your own ends.
- Fluently using common HTML and CSS elements in constructing web sites, with awareness of more advanced elements of each.
- Using basic elements of Javascript and PHP to handle web forms and user sessions.
- Awareness of the technical underpinnings of web design, including the HTTP protocol, how forms work, the idea of the DOM model, and user events.
- Understanding how to properly use materials under proprietary and open source licenses in your own works.

Laptops and Cell Phones

In lecture, laptops and cell phones distract you from fully engaging with the material. Laptop use is strongly discouraged. If you plan on using a laptop, please sit in the designated laptop section. Cell phone use is not permitted in class.

Recording

Please do not record any portion of lecture, labs, or sections without asking for permission.

Expected Workload

High. This is a project-oriented class, and you can expect to spend 10-12 hours/week outside of class in preparation and assignments – more if the material is not natural for you or you are particularly inspired by the topic.

Attendance

You are required to attend lecture and the Friday labs/sections. Attendance is especially important because there is no required text for this course and I rarely post/share slides or notes from class. Additionally, I do my best to use class time to help you develop the skills you need to succeed on assignments and projects.

For most lectures and labs, I will ask you to turn in your in-class work for a grade. Sometimes I will ask you to bring something to class. Sometimes this will be a piece of paper from an in-class group activity. Sometimes this will be a note card with an answer on it. Sometimes it may be a quiz. Sometimes I may just take attendance. **The only way to receive credit for in-class participation is to attend class and lab.**

You are required to attend your registered Friday lab section. If you decide to attend a section for which you are not registered, you will not receive any participation credit for your attendance.

I will drop your lowest 2 participation grades. For days which you do not attend class or lab, excused or not, you will receive a 0. These two dropped grades are intended specifically for excused absences.

Readings and Texts

There are no required textbooks for this course. I will however assign readings through materials available online and through the library. If you read these off campus you will mostly likely need to use Cornell's VPN (<https://it.cornell.edu/cuvpn>).

These readings provide the background that lectures will build on. They also introduce design concepts and vocabulary that you will use in your projects. I don't regurgitate readings in class, so think of lectures and readings as complementary.

Exams

There is a final exam for this class. The date is set by the university registrar.

Projects (Assignments)

This is a project-based class, with three large individual projects and a final group project. Each has multiple milestones to make progress and get feedback that will help you turn in better final versions. You'll have a milestone or project final version due every week on Tuesday by 17:00 (5pm) Eastern Time.

Your grade for projects will be based on the process that you used to produce your final version, your design rationale, and lastly a valid and working copy. I will often ask you to provide your preliminary artifacts, like wireframes, to understand your design and development process.

Deadlines and Late Work

Assignments are due as stated. This will usually be 17:00 on Tuesdays. I will post any changes to the due dates on Piazza. Most assignments are graded the evening they are due and it creates extra work for the course staff if assignments are late. 1 minute late = 1 day late.

You are given 4 slip days for the semester to use for late assignments. You may use no more than 2 slip days per assignment. A slip day is any day, including weekends and holidays. Once you have used all of your slip days, any late work will receive a 0. If you are turning in an assignment late, please notify the course staff via info1300-prof@cornell.edu once you have submitted the late work.

Under exceptional circumstances (documented illness or family emergency, etc.) you may petition in advance to have your late assignments accepted without penalty; please note that, since homework assignments are given well ahead of time, "too much work in other classes" or "I already used up my slip days" is not considered an exceptional circumstance. Further, computer failure or data loss is not considered an exceptional circumstance. Take precautions to back up your data or use the computers on campus.

Extra Credit

As a general rule of thumb, I do not offer extra credit.

Grading

I grade to a scale, not to a curve. Letter grades are assigned by the *integer-part* of your percentage; the *decimal-part* is not a factor. For example: 96.01, 96.5, and 96.99 are all A's. 97.0 is an A+.

A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
F	0-59%

Your grade is computed as the following weighted average:

Participation	15%
Project 1	15%
Project 2	15%
Project 3	15%
Final Project	30%
Final Exam	10%

Feedback and Grading Questions

We will try to make rubrics available along with assignment requirements. You're entitled to a good explanation of why you got the grade you did, and smart versions of you will use the rubrics to think about your assignments before you turn them in.

Further, you'll get feedback on almost everything you do before you have to turn in a final version. Milestones are chances to get feedback and ask questions that will let you turn in higher-quality final versions. They do need to be good enough to demonstrate that you've made progress; clearly un-thoughtful milestone work will result in lower grades.

Grade Changes

If you think that a grade you receive does not follow the rubric, first wait 24 hours before you do anything. The teaching staff will not discuss any changes to grades within 24 hours of an assigned being returned. Next, ask your section TA about your assignment. They can't regrade your assignment, but they can help you understand, and if they see that a grade should be changed, they can accept your regrade request form. If the TA believes that the grade should be changed, you'll need download and print the regrade request form from the course website. Fill it out and hand it to your section TA.

The senior course staff, including the instructor, handle all regrade requests. If we accept your request, we will regrade the entire assignment, not just one part. Please be aware that I tend to grade less generously compared to the TAs. It is possible that you will receive a lower grade than the original one you were given.

Some advice for regrade requests:

1. Don't say it's 'unfair'. We may make mistakes, and some elements around design have a subjective element so we may even just have disagreements. But 'unfair' is a bad argument that disrespects all the work TAs and staff put into helping you.
2. If you're trying to get a grade changed, then have a cogent argument based on course ideas. If you can't explain in detail why the grade is wrong, I'm not likely to be sympathetic.
3. All members of the teaching staff work very hard to ensure fair grading. We have built-in procedures to our grading process to ensure fair grading across TAs.

Policies

Collaboration, Academic Integrity, and Cheating

Group assignments are meant to be worked on in groups. They are not meant to be done by one person without review and passed off as the group's work.

Individual assignments are meant to be one's own work.

In both cases, it's fine to ask questions and get help from other people -- that's part of what Piazza is for, and it's common practice to learn tech stuff from others.

Looking things up and getting ideas from other sources is also okay, if you cite. Giving credit to HTML, CSS, images, Javascript, PHP, and other resources you incorporate into projects is the right thing to do. It's also easy: include an explicit note that you got something from somewhere, as with the copyright notice on the pie chart

or on a "credits" page, or through including comments in source code. Finally, it's useful: it helps people, including you, find good resources later.

Not citing, on the other hand, is basically plagiarism: copying of others' work and passing it off as your own, whether intentional or not. This is not okay: it will get you into serious trouble both academically (think "expelled") and professionally (think "sued"). Check out <http://plagiarism.arts.cornell.edu/tutorial/index.cfm> for more info, but in this class, it's easy to avoid by not copying from sources verbatim and acknowledging any web resources you reference, access, or are inspired by when you write or do your projects. Please just cite the resources you use. It is the right thing to do.

Cheating is lame. It cheapens the experience, and I hate that. If it occurs, I will deal with it in accordance with University policies. That likely means a lowered grade (think 0) and a report to the office of academic integrity. Check out Cornell's "Code of Academic Integrity" (<http://cuinfo.cornell.edu/aic.cfm>) for more info.

Incompletes and Withdrawals

If you're going to withdraw, earlier is better for us managing our work and for you in managing your own. As for incompletes, here's an excerpt of an official Cornell statement (<https://cals.cornell.edu/academics/advising/faculty-staff/grading>):

"The symbol of Incomplete is only appropriate when two basic conditions are met:

1. The student has substantial equity at a passing level in the course with respect to work completed;
2. The student has been prevented by circumstances beyond his/her control, such as illness or family emergency, from completing all of the course requirements on time."

You don't want to take incompletes. As with late adds, they rarely work well, often lead to academic chicanery, and are especially problematic in a class with a major group project component. So don't plan on getting one, unless something drastic happens to you in the last three weeks of the semester.

Accommodations

Student Disability Services (SDS) is the designated office at Cornell that obtains and files disability-related documents, certifies eligibility for services, determines reasonable accommodations, and develops plans for the provision of accommodations for students. More information about services available for Cornell students with disabilities can be found at <http://sds.cornell.edu/>.

The earlier you contact me about a disability or other challenge you face, the easier it is for me to help you. If you need an accommodation for this class, please provide me a copy of your letter from SDS.

Other Policies

I respect and uphold University policies and regulations pertaining to the observation of religious holidays; assistance available to the physically handicapped, visually and/or hearing impaired students; plagiarism;

sexual harassment; and racial or ethnic discrimination. You are advised to become familiar with the respective University regulations and are encouraged to bring any questions or concerns to my attention.

Tentative Schedule

This is a tentative schedule, but should be close to what really happens. The Piazza Course Info at a Glance is more definitive. This schedule is subject to change as necessary throughout the semester.

Week 1		
Wed 8/23	Course Logistics & Web Basics	Assigned: Project 1, Milestone 1
Fri 8/25	Lab/Section 1	
Week 2		
Mon 8/28	HTML & Organizing Information	
Tue 8/29		Due: Project 1, Milestone 1 @ 17:00
Wed 8/30	CSS & Color	Assigned: Project 1, Milestone 2
Fri 9/1	Lab/Section 2	
Week 3		
Mon 9/4	<i>No Class</i>	
Tue 9/5		Due: Project 1, Milestone 2 @ 17:00
Wed 9/6	CSS Layout, Positioning, & Alignment	Assigned: Project 1, Milestone 3
Fri 9/8	Lab/Section 3	
Week 4		
Mon 9/11	Intellectual Property & Licensing	
Tue 9/12		Due: Project 1, Milestone 3 @ 17:00
Wed 9/13	User Centered Design	Assigned: Project 1, Final
Fri 9/15	Lab/Section 4	
Week 5		
Mon 9/18	Designing for Mobile Devices	
Tue 9/19		Due: Project 1, Final @ 17:00
Wed 9/20	Responsive Design	Assigned: Project 2, Milestone 1
Fri 9/22	Lab/Section 5	
Week 6		
Mon 9/25	Javascript	

Tue 9/26		Due: Project 2, Milestone 1 @ 17:00
Wed 9/27	Designing Algorithms & Debugging Javascript	Assigned: Project 2, Milestone 2
Fri 9/29	Lab/Section 6	
Week 7		
Mon 10/2	jQuery	
Tue 10/3		Due: Project 2, Milestone 2 @ 17:00
Wed 10/4	jQuery	Assigned: Project 2, Final
Fri 10/6	Lab/Section 7	
Week 8		
Mon 10/9	<i>No Class</i>	
Tue 10/10		
Wed 10/11	Introduction to Final Project & Working in Groups	Assigned: Final Project, Milestone 1
Fri 10/13	Lab/Section 8	
Week 9		
Mon 10/16	Forms & PHP	
Tue 10/17		Due: Project 2, Final @ 17:00
Wed 10/18	Forms & PHP	Assigned: Project 3, Milestone 1
Fri 10/20	Lab/Section 9	
Week 10		
Mon 10/23	Client-side Validation	
Tue 10/24		Due: Final Project, Milestone 1 @ 17:00
Wed 10/25	Server-side Validation	Assigned: Final Project, Milestone 2
Fri 10/27	Lab/Section 10	
Week 11		
Mon 10/30	User Testing	
Tue 10/31		Due: Project 3, Milestone 1 @ 17:00
Wed 11/1	Better Error Handling	Assigned: Project 3, Milestone 2
Fri 11/3	Lab/Section 11	
Week 12		
Mon 11/6	Control Structures	
Tue 11/7		Due: Project 3, Milestone 2 @ 17:00

Wed 11/8	Control Structures	Assigned: Project 3, Final
Fri 11/10	Lab/Section 12	
Week 13		
Mon 11/13	HTTP Protocol, Sessions, & Cookies	
Tue 11/14		Due: Final Project, Milestone 2 @ 17:00
Wed 11/15	Ethics of Tracking	Assigned: Final Project, Milestone 3
Fri 11/17	Lab/Section 13	
Week 14		
Mon 11/20	Designing with Inkscape and Editing with GIMP	
Tue 11/21		Due: Project 3, Final @ 17:00
Wed 11/22	<i>No Class</i>	
Fri 11/24	<i>No Lab/Section</i>	
Week 15		
Mon 11/27	Accessibility	
Tue 11/28		Due: Final Project, Milestone 3 @ 17:00
Wed 11/29	Wrap-up	Assigned: Final Project, Final
Fri 12/1	Lab/Section 14	Due: Final Project, Final @ 17:00
Finals Week		
Mon 12/11	14:00-16:30 Final Exam	