

INFO/CS 1300: Introduction to Web Design and Programming

Fall 2015

Instructor: Steve Paling

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Office: 231 Gates

Office Hours: MW 1:30-2:30 pm

Lectures: MW 12:20-1:10 pm, Statler Hall Auditorium

Lab Sections: Fridays in Carpenter and Phillips Hall

Class Discussion: <http://piazza.com>

Web Hosting: <http://info1300.coecis.cornell.edu/>

Grades, etc.: <https://cms.csuglab.cornell.edu/>

Course Description

The World Wide Web is both a technology and a pervasive and powerful resource in our society and culture. To build functional and effective web sites, students need technical and design skills as well as analytical skills for understanding who is using the web, in what ways they are using it, and for what purposes. In this course, students develop skills in all three of these areas through the use of technologies such as HTML, Cascading Style Sheets, and PHP. Students study how web sites are deployed and used, usability issues on the web, user-centered design, and methods for visual layout and information architecture. Through the web, this course provides an introduction to the interdisciplinary field of information science.

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 PHP to handle web forms and user interaction.
- Awareness of the technical underpinnings of web design, including the HTTP protocol, how forms work, the idea of the DOM model, and user events.

Administrative Information

Lecture sessions will meet on Mondays and Wednesdays from 12:20-1:10 p.m. in the Statler Hall auditorium. Lab sections will meet on Fridays in either Carpenter or Phillips Hall, at various times.

The lecture session will meet for the first time on Wednesday, August 26th, and for the last time on Wednesday, December 2nd. The lab sections will meet for the first time on Friday, August 28th, and for the last time on Friday, December 4th.

E-mail is the best way to reach me, and my e-mail address is sp2285@cornell.edu. My office is 231 Gates. I will hold office hours on Mondays and Wednesdays from 1:30-2:30 p.m. We can arrange appointments at other times if needed.

Textbooks

Krug, S. (2014). *Don't make me think, revisited: A common sense approach to Web and mobile usability*. San Francisco, CA: New Riders.

Robson, E. & Freeman, E. (2012). *Head first HTML and CSS* (2nd ed.). Sebastopol, CA: O'Reilly.

Ullman, L. (2011). *PHP for the Web: Visual quickstart guide* (4th ed.) . San Francisco, CA: Peachpit.

Watrall, E., & Siarto, J. (2009). *Head first Web design*. Sebastopol, CA: O'Reilly.

Williams, R. (2014). *The non-designer's design book* (4th ed.). San Francisco, CA: Peachpit.

Assignments

This section provides basic descriptions of the assignments for the semester and the percentage of the final grade that each assignment represents. More detailed descriptions and rubrics will be provided in class and on Piazza.

Project 0: Course Development Environment (1%)

Project 0 will involve a series of simple tasks such as logging into Piazza and uploading a file to the course Web server. Due: Tuesday Sept. 1 at 5 pm.

Project 1: Personal Web Site (19%)

Project 1 is a chance for you to develop a personal web presence suitable for a target audience of your choice. This might be a general personal site; it might be a professional site; it might be a site that emphasizes some interest of yours, e.g., a club or hobby. Due: Tuesday Sept. 22 at 5 pm.

Project 2: Redesigning an Existing Site (20%)

Project 2 is a chance for you to critique and redesign an existing site to improve aspects of its visual, information, and interaction design. Although designing new sites is a very visible kind of web design, improvement and redesign of existing sites is much more common. Due: Tuesday October 20 at 5 pm.

Project 3: A Basic Interactive Web Site (15%)

Project 3 is a chance for you to develop a simple but interesting site that uses HTML forms, CSS, and PHP together to provide an effective interactive experience. Due Tuesday November 15 at 5 pm.

Group final project: (re)design for an external client (35%)

The final project gives you real-world experience in designing and building a website as a design team for an external client. Your job is to find a suitable client and create an innovative, interactive, and interesting website for them. Due Tuesday December 8 at 5 pm.

Attendance and Participation (10%)

The default grade for attendance and participation is 9%. Please see the Attendance and Participation section below for details.

Grading Scale

Detailed criteria will be provided for each assignment:

- A+: 98-100%
- A: 94-98%
- A-: 90-93%
- B+: 87-89%
- B: 84-86%
- B-: 80-83%
- C+: 77-79%
- C: 74-76%
- C-: 70-73
- D+: 67-69
- D: 64-66%
- D-: 60-63%
- F: <60%

Late Assignments

Grades on late assignments will be lowered by 10% per day, including holidays and weekends. Because of this, late submission of work can have a substantial negative effect on your grade for the course. Extensions will only be granted for medical emergencies and similar situations, and must be arranged in advance except in cases of immediate emergencies such as hospitalization. If you are granted an extension for one assignment, you are less likely to receive extensions for subsequent assignments.

If you anticipate turning an assignment in late, you should notify your section TAs prior to the deadline. Prior notification will not, in most cases, alter the penalties for submitting the work late. However, I will take prior notification as a sign of active participation in the course despite the late work. Lack of prior notification will be construed as lack of participation.

Incompletes

An incomplete will only be granted when a student is demonstrably unable to fulfill the course requirements in a timely manner. An incomplete should not be considered a substitute for a bad grade, and it is not a remedy for excessive time commitments. Unless you find yourself in truly extraordinary circumstances, e.g., fighting a serious illness, you should assume that any request for an incomplete will be denied.

An unfinished incomplete will be resolved to a grade of F if the remaining course material is not turned in by the deadline for the incomplete. An incomplete, when granted, only provides an extension of the deadline for turning in work. It does not change the grading standards in any other way.

Additional information on incompletes is available at <http://courses.cornell.edu/content.php?catoid=12&navoid=2089#Grades>.

Grade Changes

The TAs and I will spend many hours during the semester grading assignments. Because of that, requests for grade changes can be a serious and time-consuming process. The requests need to be treated accordingly. If you have a question about a grade, consult your section TA first. If you are not satisfied with the outcome, you can request a change directly from me. I will not consider a grade change unless you fill out the form provided on Piazza and meet with me in person in my office. Any disrespect of a TA, or me, may result in immediate dismissal of the grade change request, even if the request is otherwise justified.

Other Grading Policies

In order to pass the course a student must successfully submit all assignments in reasonable form, and must show a reasonable pattern of attendance. No assignments for extra credit will be accepted under any circumstances.

An assignment may receive a lower grade than it would otherwise if the assignment contains errors in spelling or grammar, or is difficult to read because of sloppy appearance or formatting.

Attendance and Participation

Class attendance is mandatory. *Attendance* is defined as being present for the entire class meeting. Anything substantially less than that, e.g., leaving early, will be considered an absence. If illness or an emergency prevents you from attending a lab section, please notify your section TAs, and any team members for group projects, by e-mail or telephone before class begins. You should also make arrangements with another student to copy her or his notes. An absence will be excused only if the absent student notifies the section TAs in advance of the lab, or if the absent student can clearly demonstrate that such notification was not possible. If a student does not notify the section TAs of an absence prior to the start of class, the student should assume that the absence will be considered unexcused. Graded in-class assignments that are missed because of an unexcused absence cannot be made up. You do not need to notify me if you miss a lecture class. Attendance for lectures will be handled with clickers. I will not take formal attendance each week with the clickers, but I will look at your overall pattern of attendance as indicated by your response to clicker questions.

Elements of the participation grade include, but are not restricted to, the following: participation in general class and lab discussion beyond any graded in-class assignments; willingness to consult with the instructor or TAs to resolve any difficulties or uncertainties about course or assignment requirements; appropriate notification of the section TAs regarding absences and late work; regular efforts to keep track of all information posted to Piazza, including downloading any assigned readings posted there. Behavior such as sleeping, talking, or engaging in activities not related to class may result in a lower participation grade.

Cell phones and similar devices must be turned off or set to ring silently during class. Phone conversations are not allowed during class time. Computer use during class should be restricted to activities that are relevant to class.

You are responsible for all information posted to Piazza or sent via e-mail.

These policies assume a reasonable pattern of class attendance. Excessive absences or tardiness, or inappropriate behavior, may result in grade penalties beyond the normal 10% for attendance and participation.

Communication

You should activate your Cornell e-mail account immediately if you have not already done so. If you prefer to use another e-mail account, it is your responsibility to forward your Cornell e-mail to the other account. Failure to activate, check, and properly maintain your Cornell e-mail will not be considered an extenuating circumstance if you miss important information.

During the semester I am almost always able to reply to e-mail in less than a business day. I expect the same from students. However, students usually do not need to reply to general messages sent to the entire class or section.

Academic Misconduct

Students are encouraged to discuss assignments, help one another, and learn from each other. Students are additionally encouraged to use a variety of information resources, including online materials, books, papers, and the instructor, to aid their work and expand their knowledge. However, all work except team projects is to be completed by the individual student. **Academic dishonesty in any form is not tolerated, nor is assisting another person to cheat.**

Absolute integrity is expected of every Cornell student in all academic undertakings. Integrity entails a firm adherence to a set of values, and the values most essential to an academic community are grounded on the concept of honesty with respect to the intellectual efforts of oneself and others. Academic integrity is expected not only in formal coursework situations, but in all University relationships and interactions connected to the educational process, including the use of University resources. While both students and faculty of Cornell assume the responsibility of maintaining and furthering these values, this document is concerned specifically with the conduct of students.

A Cornell student's submission of work for academic credit indicates that the work is the student's own. All outside assistance should be acknowledged, and the student's academic position truthfully reported at all times. In addition, Cornell students have a right to expect academic integrity from each of their peers. The full version of Cornell's Code of Academic Integrity is available at <http://cuinfo.cornell.edu/aic.cfm>.

Also read the Style Requirements section of this syllabus for more specific information about citation style and providing proper credit for external material you use in the course.

Students with Disabilities

Cornell University is committed to equality of educational opportunity for all students. 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.

Style Requirements

All written assignments components should be word-processed or typed on one side of standard 8.5"x11" white paper with a 12-point font and 1" margins on all sides (or some reasonable equivalent for electronic submissions). Use double or single spacing as appropriate. Typically, the body of a paper will be double-spaced, and block quotes, references, etc., will be single-spaced.

Assignment components submitted on paper should be firmly stapled, bound, or placed in an envelope. Do not fasten assignments with paper clips. If you paper clip an assignment, I take no responsibility for any part of the assignment that is missing.

I encourage the effective use of formatting conventions such as page numbers, section headings, bullet points, and other means for clarifying professional writing. You should also run spelling and grammar checks on all assignments, both automatically and by hand. If you have not checked the spelling and grammar on an assignment, the assignment is not finished and should not be submitted in that form.

Whenever you use external material for a course assignment, you must follow APA citation guidelines. You can find an APA cheatsheet at <http://www.library.kent.edu/files/APACheatSheet.pdf>. Images and other media may be credited differently (see section on Credit for Media). There are no other exceptions to this rule, and no other citation style is allowed unless explicitly indicated. Improper citation style may result in substantial grade penalties. Because practices for citing traditional material such as books and articles (online and paper) are so well established, this is your only warning about this policy.

Hand-written exercises done in class or lab should be written legibly and turned in with your name at the top of the page.

Credit for Media

This section applies only to rich media such as images, videos, and music. For policies regarding citations of traditional media such as articles and books (online and paper), see the previous section. APA style works poorly for media such as images and music. Because of that, students may provide credit for external media in a variety of ways. We will discuss this in class. However, credit for *all* external media used in your projects *must* be given. Violation of this policy can result in substantial penalties:

- For a first offense, the student's grade for that assignment will be lowered 25%, and the student will be given a warning.
- For a second offense, the student's grade for that assignment will be lowered 50%, and the student will receive another warning.
- For a third offense, the student will receive no credit for the assignment, and I will decide, in consultation with the TAs, whether the student's behavior constitutes an academic integrity violation. The penalties for such a violation can be severe. Please see <http://cuinfo.cornell.edu/aic.cfm>.

Computer Skills

Successful completion of the program requires certain basic computer skills. I will conduct class and lab sessions with the assumption that each student has successfully mastered the following computer skills:

- Be able to save files to removable and networked media (flash drives, networked drives, etc.) and retrieve the files later.
- Be able to log in to, and use, Piazza and your Cornell e-mail.
- Be able to create and use directories or folders on computer storage media.
- Be able to save a file to the computer desktop and e-mail the file to yourself.
- Understand the difference between a plain text editor and a word processor.
- Understand file extensions and how they affect use of a file.

If you lack any of these skills, mastering them should become an immediate priority. I will not stop class or lab sessions to explain any of these skills.

Bringing some type of removable storage (or a laptop) with you to lab sessions should be routine.

General Notes on Succeeding in this Course

The most successful students often share a number of behaviors that contribute to their success. Fortunately, these behaviors are possible for virtually everyone:

- Attend class and remain attentive.
- Pay attention to detail, especially technical details in code.
- Turn in work on time.
- Buy the required textbooks, do all of the assigned readings, and engage those readings critically.
- Treat assignments as projects to be crafted with care, rather than as checklists or simple requirements.
- Show more concern for quality than for grades.
- Ask questions to resolve uncertainty.