J360 WEB DESIGN - FALL 2016

ROOM - FF 003
SECTIONS
14173 - Meets MW 8:30am - 10:30am
14175 - Meets MW 10:45am - 12:45pm
INSTRUCTOR - Nicolas Aguirre - naguirre@indiana.edu
OFFICE HOURS - FF M130S (Stack 4), Friday 10:00-11:00a

Description

Web design has a profound impact on our everyday experiences of work, recreation, and communication. This course focuses on developing practical, marketable skills for front-end web development. Fundamentally, this course focuses on **experience** and **design** as they relate to web development; technical details and coding are secondary. The internet is constantly evolving - sometimes in a way that is seemingly unpredictable and erratic. Upon completion of this course, students will have a strong foundation of the technical and design skills necessary to produce pleasant web experiences, and the skills to adapt to a constantly-changing medium.

Prerequisites

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(JOUR-J 110 or JOUR-H 110 or MSCH-C 101) and
(JOUR-J 200 or JOUR-H 200 or MSCH-C 225 or MSCH-H 225) and
(JOUR-J 210 or MSCH-C 226) with a grade of C- or better in each
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Objectives

In this course, you will:

- Learn principles of design and usability for web development
- Develop mastery of tools and applications for elegant web design
- Gain familiarity with the software development process
- Build an effective workflow and digital work environment
- Understand project management and version control for your code
- Produce aesthetic and functional websites using `HTML/CSS/JavaScript`
- Know how to develop for different platforms (mobile, responsive)
- Have numerous attractive portfolio pieces

- Gain a demonstrable command of front-end web languages
- Learn to adapt to a constantly-changing medium

Work

This class is project-driven, and demands consistent effort inside and outside of the classroom. Classes are intended to be variable and may feature lectures, tutorials, in-class exercises, discussions and lab time. Coverage of technical details such as code syntax is primarily handled outside of the classroom. Class time will generally be utilized to work on projects and review progress.

Projects

You will be responsible for completing five projects, which will constitute 75% of your grade. Each project will require critical thinking and analysis, prototyping and design, and also a good amount of coding.

Three of these assignments will be assigned by the instructor, and two of them can be chosen from a list of potential projects, or based off of individual or group interest in a particular facet of web development.

I am willing to adapt projects to fit the professional interests of students - we may focus on journalism, animation, data manipulation, or any number of other topics. Because this course aims to provide tangible skillsets and viable portfolio pieces, the instructor aims to provide projects that will prove enticing or useful to those considering working in the industry.

Project 1

Students will construct a minimal website outline using HTML. This project assesses students' knowledge of HTML tags and basic site structure. Project 1 aims to familiarize students with their text editors and development tools.

Project 2

The focus of Project 2 is CSS. Students will demonstrate their ability to add visual elements and style to sites. Project 2 will test students' knowledge of CSS selectors, properties, and values, as well as the Box-Model.

Project 3

Project 3 aims to add more functionality, aesthetics, and interactivity to websites. Basic JavaScript will be used to add interactivity or distinguishing design characteristics.

Students can gain extra points by using a CSS precompiler such as SCSS/SASS or Stylus.

Projects 4 and 5

Projects 4 and 5 will be chosen by the student. This course is relatively flexible with respect to creative boundaries, and students are welcome to propose their own projects. Many students will choose to build on existing sites, others may aim to focus on a specific facet of web development. I will attempt to cater to the interests and skillsets of the class as a whole. JavaScript libraries are likely to be used in some capacity.

Some potential topics:

- MomentJS
- C3, D3, Dimple or any other visualization library
- Velocity
- ScrollMagic
- P5.js, P5-game
- JQuery
- Leaflet
- VideoJS
- PHP
- WordPress
- RemarkJS

In-class Activities

Participation is an important element of this class. It is not enough to read about web design and its constituent languages; one must actively practice and hone their skills to be successful. Many of our classes will focus on the completion of certain exercises, tutorials, and discussions.

Final

There is no final exam for this class, the date of the final exam will be used to analyze and critique your fifth and final projects.

Grade

There are a total of **100** points in this class. The grade is divided as follows:

Assignment	Points
Five projects (15 each)	75
Attendance and participation	15
One tutorial or presentation	10
Total	**100**

Your grade will be assigned as follows:

Points	Grade
93 - 100	A
90 - 92	A-
87 - 89	B+
84 - 86	B
80 - 83	B-
77 - 79	C+
74 - 76	C
70 - 73	C-
67 - 69	D+
60 - 66	D
59 and below	F

Grading criteria will be given for each individual assignment.

Analysis, Critiques, Revisions

Following the completion of each project, students and the instructor will assess each individual submission. The intent is to spur meaningful discussion about design, and attract new ideas and opportunities for improvement. Because web development is an iterative process, students are allowed to revise and resubmit assignments.

Required Readings and Materials

There are no required readings, but the following is recommended:

- *Don't Make Me Think: Revisited* by Steve Krug

Software

Software is a focal point of this course, and an effort was made to ensure that free, cross-platform software will be used wherever possible. Tools, applications, and services prove invaluable in web development. A good deal of class time will be spent assisting students with installation and configuration of software.

We will use:

1. A text editor - Webstorm is recommended. Good alternatives are SublimeText and TextWrangler.
2. A means of version control - GitHub is recommended, Google Drive, Box, and Dropbox are good alternatives.
3. A way to host your content - IU Pages or GitHub Pages are recommended. You can also purchase a domain and hosting services through a domain provider such as JustHost.

Hardware needs

While web development can be done from any operating system, the instructor teaches workflow for OS X users. Access to a computer with Mac OS X is highly recommended. All students should have access to a Mac through the computer lab. Students who aren't using OS X will not benefit as much from lectures and tutorials.

It is also useful to have access to a large display, or dual display configuration.

Policies

Attendance

Students should make a serious effort to attend every lecture. A repeated pattern of absence or tardiness will result in a deduction of points from your participation grade.

Food and Drink in Class

Sorry, they are not permitted.

Deadlines

Deadlines are strict and non-negotiable. Late assignments will be accepted for the first five calendar days after a deadline. After that, I will remove 10% daily. Assignments may not be submitted after five calendar days have elapsed (Example - Deadline is September 8th, you cannot submit after September 13th)

Proper Attribution for Referenced Works

By nature, code is re-usable and extensible. It is both acceptable and encouraged to utilize and adapt examples of code; this is common on websites like StackOverflow. However, the sources for all referenced code must be given in your code commenting. I will assist students with finding code that is reusable (such as under the GNU license), and help with giving proper credit to the source.

Students with Disabilities

If any student requires assistance or academic accommodations for a disability, please contact me by after class, by e-mail, or during office hours. The student must have established eligibility for disability support services through the Office of Disability Services for Students.
For more information - https://studentaffairs.indiana.edu/disability-services-students/

Religious Holidays

It is the policy of Indiana University that instructors must reasonably accommodate students who want to observe their religious holidays at times when academic requirements conflict with those observances. This policy is intended to ensure that both faculty and students are fully aware of their rights and responsibilities in the accommodation of students' religious observances.

Source: http://enrollmentbulletin.indiana.edu/pages/relo.php

Syllabus

Our schedule will be followed more rigidly in the first half of the semester, and more loosely in the second half. Courses such as this one will have a wide array of students with varying strengths and weaknesses. Because this course is rich in content, I reserve the right to amend this syllabus to better match the needs of a given class.

Schedule

Schedule is subject to change. The last half of the semester is more variable as students will have their choice

of projects.

	Dates	Activity
August	Mon 8/22, Wed 8/24	Review syllabus, set up development applications.
	Mon 8/29, Wed 8/31	Introduction to HTML
September	*Mon 9/5 (Labor Day)*	*No class.*
	Wed 9/7	The Document Object Model, HTML tags, begin Project 1
	Mon 9/12, Wed 9/14	Project 1
	Mon 9/19, Wed 9/21	**Project 1 due Friday 9/23**
	Mon 9/26, Wed 9/28	CSS; Front-end Design; begin Project 2
October	Mon 10/3, Wed 10/5	Project 2
	Fri 10/7 - Sun 10/9	*Fall Break*
	Mon 10/10, Wed 10/12	**Project 2 due Friday 10/14**
	Mon 10/17, Wed 10/19	Intro to Bootstrap; FontAwesome; begin Project 3
	Mon 10/24, Wed 10/26	Intro to JavaScript; continue Project 3
October/November	Mon 10/31, Wed 11/2	**Project 3 due Friday 11/4**
November	Mon 11/7, Wed 11/9	Intro to JQuery; JavaScript Libraries
	Mon 11/14, Wed	

	11/16	Begin project 4
	Sun 11/20 - Sun 11/27	*Thanksgiving Break*
	Mon 11/28, Wed 11/30	**Project 4 due Friday 12/2**
December	Mon 12/5, Wed 12/7	Begin Project 5
	Sat 12/10	*Classes End*
	Wed 12/14	Students will submit and present **Project 5** *from 8:00am - 10:00am*