J363 WEB & MOBILE DESIGN SPRING 2019

LOCATION— Franklin Hall 003
SECTIONS
13526 — Meets MW 8:30A – 10:30A
13366 — Meets MW 10:45A – 12:45P

INSTRUCTOR — Nic Aguirre — naguirre@indiana.edu
OFFICE HOURS — Franklin Hall 030M (Basement), Friday 10:30A – 11:30A

ASSISTANT — Briana Huskin — bhuskin@iu.edu

Description

Web design has a profound impact on our everyday experiences of work, recreation, and communication. You will develop 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, you 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

```
(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
```

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
- Build an effective workflow and digital work environment
- Produce aesthetic and functional websites using `HTML` and `CSS`
- Learn basic programming through `JavaScript`
- Learn to develop for different platforms (mobile, responsive)

- Build numerous attractive portfolio pieces
- Gain a demonstrable command of front-end web languages
- Learn to adapt to a constantly-changing medium

Structure

This course is divided into **four units**, each about 3-4 weeks in length.

Unit One: HTML

Unit One tackles the basics of web design and HTML, which is used to create the structural elements and content of a website. Class time will be spent familiarizing yourself with your text editor, analyzing websites, and learning fundamental web design concepts.

Unit Two: CSS

Unit Two focuses on CSS, which is used to control the style and appearance of HTML elements. You will learn how to import, create, and work with stylesheets. This unit will give you more creative control over how your sites look and feel.

Unit Three: Bootstrap

Unit Three will acquaint you with **Bootstrap**, a powerful framework for creating webpages. You will use Bootstrap's elegant grid system to create aesthetic, responsive websites.

Unit Four: JavaScript

Unit Four will introduce you to JavaScript. This unit will teach you how to introduce functionality and behavior into your website, while learning valuable programming principles that can be applied to other languages.

Work

Use of Class Time

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. An effort is made to create a more interactive and less passive experience for students.

Projects (55 pts.)

This class features **four** large-scale web design projects.

Project 1— HTML Tags and Attributes (10 pts.)

You will construct a basic 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— Styling and CSS (15 pts.)

The focus of Project 2 is CSS. You 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— Bootstrap Site (15 pts.)

You will design, prototype, and develop a single-page website using Bootstrap. This project is designed to combine all of the skills you've acquired throughout the semester.

Project 4— JavaScript (15 pts.)

You will use Javascript to create an interactive visualization, with JavaScript's p5.js library.

Homework (20 pts.)

This class has homework assignments designed to test and reinforce knowledge from class. Homework assignments typically involve a shorter or less involved coding task.

Codecademy

You will be given assignments to complete on Codecademy. In order to really learn and memorize code, you need to practice. While the Codecademy assignments are not graded, completing them will make your homeworks, projects, and quiz much easier.

Quizzes and Participation (20 pts.)

A quiz consists of either (a) an unannounced quiz or (b) an in-class lab activity. Quizzes are designed to ensure that students are completing their readings, Codecademy work, and following along with in-class coding 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. Most class days will feature a small participation exercise. They are to be finished during class and are generally graded on completion.

Students who come late or leave early are subject to losing participation points for that day.

Professionalism (5 pts.)

Students are expected to behave like adults. Unprofessional behavior will be met with a grade deduction in this category.

Unprofessional behavior includes (but is not limited to):

- Arriving to class late
- Leaving class early
- Failure to observe course policies
- Disrespect towards classmates or instructor
- Lack of consideration for classmates or instructor
- Behavior that distracts classmates or instructor
- Failure to practice academic integrity
- Excessive use of cell phone during class

Final

There is no final exam for this class.

Grading

Points

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

Assignment	**Points**
Project 1	10
Project 2	15
Project 3	15
Project 4	15
Homeworks (4 @ 5 pts each)	20
Quizzes/Participation	20
Professionalism	5
Total	**100**

Course Grade

Your grade will be assigned as follows:

Grade	Range
A+	100% to 97.0%
A	< 97.0% to 93.0%
A-	< 93.0% to 90.0%
B+	< 90.0% to 87.0%
B	< 87.0% to 83.0%
B-	< 83.0% to 80.0%
C+	< 80.0% to 77.0%
C	< 77.0% to 73.0%
C-	< 73.0% to 70.0%
D+	< 70.0% to 67.0%
D	< 67.0% to 63.0%
D-	< 63.0% to 60.0%
F	< 60.0% to 0.0%

Grading criteria will be given for each individual assignment.

Revisions

When software is created in a professional environment, changes and revisions are common. Factoring that web development is an iterative process, students are **sometimes** allowed to revise and resubmit assignments. Re-submitting work is a **privilege** granted at the instructor's discretion.

If you are re-submitting work:

1. You must have submitted the work by its due date. Late work is not eligible for re-submission.
2. The privilege to revise submitted work is only available for students who submitted substantial work;

incomplete or dysfunctional code is not eligible for resubmission. This is at the instructor's discretion.
3. You may only recover partial points lost.

Required Readings and Materials

Text

There is no assigned text. Most readings will come in the form of articles, tutorials, or content from W3Schools.

Codecademy

You will use Codecademy, a free online learning environment, to practice your coding skills outside of class.

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.

We will use:

1. A text editor— Atom is recommended.
2. A means of version control— Box is recommended. Google Drive and Dropbox are good alternatives. **Lost data is not an excuse for late or missing work**, so it is extremely important to have duplicate files for your work.

Hardware

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 recommended but not required. All students should have access to a Mac through the computer lab. Students who aren't using OS X are expected to learn PC keyboard shortcuts and find Windows-compatible substitutes for software.

It is also useful to have access to a large display, or dual display configuration. If you are bringing your own laptop to class, it is recommended to bring a mouse.

Policies

Attendance

Students should make a serious effort to attend every lecture. While attendance is not taken, I believe **attendance is the strongest guarantor of success** in this course.

Course material is cumulative in nature and class periods are used to develop programming skills and work on projects. You will also miss out on quizzes and participation activities if you miss class.

Deadlines

Deadlines are strict and non-negotiable. Late assignments will be accepted for the first three calendar days after a deadline. I will remove 15% for each day past the deadline *(Example— If you got 85 on an assignment but submitted it two days late, you're getting a 55)*.

Assignments may not be submitted after three calendar days have elapsed (Example— Deadline is September 8th, you cannot submit after September 11th)

The only **exception to this rule** is the final project, which cannot be submitted late.

Absences

Whether or not an absence is excused is **entirely at the discretion of the instructor**.

If you miss a quiz or participation exercise and have an **excused absence**, you have **one week** to make up that assignment at office hours. If you cannot attend scheduled office hours, it is your responsibility to reach out and schedule another meeting time.

If you know you are going to be absent or late on a certain day, please tell me ahead of time.

Lost Data

You are responsible for keeping backups/duplicates of your files. As an IU student, you should have access to a Box account. You can also use Google Drive or GitHub to maintain copies of your files. Losing your files is not an excuse for late or incomplete work.

I **highly recommend** getting a Box account. It is free, helps you to stay organized, and most importantly provides **backups** for your files.

Email

If you e-mail me, make sure you tell me:

- Who you are
- What class you're in

Getting help with code

- Use Canvas to send a message to both me AND the teaching assistant. You can use (Send to > Instructor) for this purpose.
- Include a screenshot if applicable *(e.g., something is displaying incorrectly)*
- Include your code. To share your code— compress your project folder, put it on Box, and share a downloadable link.

It can be difficult to diagnose coding problems via e-mail. I'll do my best, but you should consider talking with me after class, or coming to office hours if you're struggling with an assignment.

I will do my best to correct code over the e-mail, but students should not expect me to correct **more than three lines of code in an e-mail**.

Students should know that an e-mail response may take **up to 72 hours** depending on the time of the semester.

Food and Drink in Class

Sorry, they are not permitted.

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/

Academic Integrity

As a student at IU, you are expected to adhere to the standards and policies detailed in the Code of Student Rights, Responsibilities, and Conduct (Code). When you submit an assignment with your name on it, you are signifying that the work contained therein is yours, unless otherwise cited or referenced. Any ideas or materials

taken from another source for either written or oral use must be fully acknowledged. All suspected violations of the Code will be reported to the Dean of Students and handled according to University policies. Sanctions for academic misconduct may include a failing grade on the assignment, reduction in your final course grade, and a failing grade in the course, among other possibilities. If you are unsure about the expectations for completing an assignment or taking a test or exam, be sure to seek clarification beforehand.

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.

Stealing code

Students may not share code samples with one another. If you are using code that you didn't write, without giving credit, you are cheating.

Students with code that is identical or very similar (more than 75% the same) are subject to losing points, or a failing grade.

Sexual Misconduct

As your instructor, one of my responsibilities is to create a positive learning environment for all students. Title IX and IU's Sexual Misconduct Policy prohibit sexual misconduct in any form, including sexual harassment, sexual assault, stalking, and dating and domestic violence. If you have experienced sexual misconduct, or know someone who has, the University can help. If you are seeking help and would like to speak to someone confidentially, you can make an appointment with:

- The Sexual Assault Crisis Services (SACS) at (812) 855-8900 (counseling services)
- Confidential Victim Advocates (CVA) at (812) 856-2469 (advocacy and advice services)
- IU Health Center at (812) 855-4011 (health and medical services)

It is also important that you know that Title IX and University policy require me to share any information brought to my attention about potential sexual misconduct, with the campus Deputy Title IX Coordinator or IU's Title IX Coordinator. In that event, those individuals will work to ensure that appropriate measures are taken and resources are made available. Protecting student privacy is of utmost concern, and information will only be shared with those that need to know to ensure the University can respond and assist. I encourage you to visit stopsexualviolence.iu.edu to learn more.

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

This course is rich in content and skill levels vary widely among students. The instructor reserves the right to amend this syllabus to better match the needs of a given class.

Final Grade

The instructor reserves the right to adjust your final grade based on effort, participation, or conduct. This is uncommon.

Tentative Schedule

week 1	Mon 1/7, Wed 1/9	Intro to HTML, tags
week 2	Mon 1/14, Wed 1/16	HTML Structure, Intro to Atom
week 3	Mon 1/21	**MLK Jr. Day. No Class**
week 3	Wed 1/23	Divs, spans, and containers
week 4	Mon 1/28, Wed 1/30	Text, images, links
week 5	Mon 2/4, Wed 2/6	Introducing CSS
week 6	Mon 2/11, Wed 2/13	Selectors, class and id
week 7	Mon 2/18, Wed 2/20	Text styling
week 8	Mon 2/25, Wed 2/27	Layouts with styling
week 9	Mon ¾, Wed 3/6	Intro to Bootstrap
	Sun 3/10 – Sun 3/17	**SPRING BREAK**
week 10	Mon 3/18, Wed 3/20	Bootstrap grid system
week 11	Mon 3/25, Wed 3/27	Responsive design
week 12	Mon 4/1, Wed 4/3	JavaScript statements, data types
week 13	Mon 4/8, Wed 4/10	JavaScript variables and arrays
	Sun 4/14	**AUTO W**
week 14	Mon 4/15, Wed 4/17	JavaScript logic flow
week 15	Mon 4/22, Wed 4/24	Introducing p5.js
week 16	Mon 4/29 – Fri 5/3	**FINALS**