Syllabus

Tandon School of Engineering of New York University

Technology, Culture and Society

Integrated Digital Media

DM-UY 2193 A Intro to Web Development

Fall 2023 – Professor Effie J. Rieper

Tuesday + Thursday 2:00PM EST - 4:00PM EST

To contact professor: er129@nyu.edu

A note about this syllabus

This is a living document, as are the materials in this course repository. There are certain aspects of our course, such as our calendar or grading criteria, that will not differ from this syllabus unless there are extenuating circumstances. However, the pacing of this course may vary depending on student need, comprehension and technologies that are sometimes rapidly changing in the midst of our learning process. I will do everything in my power to update you on any changes ASAP (in class and via email) and to stay fully transparent about what you are expected to learn, produce, and share. Please engage in open communication, as I will do the same.

Course Pre-requisites

Basic computer knowledge. Basic familiarity with any programming/scripting language is preferred but not required.

Course Description

In this course, students focus on client-side programming. Assignments are arranged in sequence to enable the production of a website of professional quality in design and production, or push The Web as an abstract medium. This studio stresses interactivity, usability, and the quality and appropriateness of look and feel.

This course will provide a basic understanding of the methods and techniques of developing a simple to moderately complex web site. Using the current standard web page language, students will be instructed on creating and maintaining a simple web site using HTML5, CSS3, JavaScript and various external libraries.

Program Learning Objectives

Students will:

1 – Students will develop conceptual thinking skills to generate ideas and content in order to solve problems or create opportunities. Students will develop a research and studio practice through inquiry and iteration.

2 – Students will develop technical skills to realize their ideas. Students will understand and utilize tools and technology, while adapting to constantly changing technological paradigms by learning how to learn. Students will be able to integrate/interface different technologies within a technological ecosystem.

3 – Students will develop critical thinking skills that will allow them to analyze and position their work within cultural, historic, aesthetic, economic, and technological contexts.

4 – Students will gain knowledge of professional practices and organizations by developing their verbal, visual, and written communication for documentation and presentation, exhibition and promotion, networking, and career preparation.

5 – Students will develop communication skills to actively and effectively work in a team or group.

Student Learning Outcomes

By the end of the course, students will be able to:

1 - Design, build, and develop content for a professional-quality website.

2 - Understand and implement the iterative process

3 - Learn how to proactively learn, also known as self-regulated learning. In any learning situation, you should study beforehand, make/do, debug, reflect, adjust, and do it all over again (iteration). Learning happens in a cycle.

4 - Create an internal developer / creative community

5 - Apply their new technical ability to deconstruct technological systems with the same rigor to deconstructing the social and economic systems that brought them into our day-to-day lives.

Course Objectives

- User Interface (UI) / User Experience (UX)
- HTML5 / CSS3
- The Responsive Web (flexible media & media queries)
- Javascript/Javascript Libraries

SOFTWARE REQUIREMENTS

- Browser: Chrome or Firefox
- Github Account: github.com/join (To be done as a class, will coordinate if you already have an account.)
- Developer Tools for Chrome or Firefox
- HTML Text Editor: https://www.sublimetext.com/
- Web Server Space
  - We will be using Github Pages to host your websites, but will learn about other free and commercial alternatives as well.

Course Structure

Class time will be spent as a combination of lecture, review, and in class exercises. Homework will consist of online tutorials as well as weekly projects that build on each week's topics of discussion.

Generally, new technical concepts will be introduced on Thursday along with larger-scale homework assignments, and Tuesdays will primarily be spent viewing your completed assignments as a class for instructor and group feedback, questions, and issue debugging.

Readings

There is no required textbook for this course, however students will be required to complete various online tutorials between classes.

We will rely on language and library specific documentation and https://www.w3schools.com/ extensively– one of our goals as a class is to "learn how to learn" by becoming adept at navigating these online resources.

Zoom and Class Recordings

One of the most valuable parts of a university learning environment is the chance to receive feedback and participate in group discussion; your presence and perspectives bring that value to everyone in the class.

This course is held **in person**. For the sake of having a recording to view, and for those who run into unforseen issues, it is simultaneously streamed over Zoom. All class material is available through our GitHub and Google Doc, all Zoom meetings will be recorded and uploaded directly after class, and I am available to assist with any code issues directly via email.

Code Plagiarism

It's super easy to find code online. As tempting as this is, I am going to ask that you write your all of own code for the first 2/3 of the semester. This will help you grasp and retain the fundamentals. It does help to write the code from any references out, line by line. Code that is not written by you can not be submitted as a homework assignment.

If you use code from elsewhere (which you will at times), I expect you to cite the work and author, as well as to comment each line, as to what each line does programmatically. Do *not* summarize several lines of code from a high level. I expect you to comment each line on a granular level. In addition in these cases, I am also looking for significant modification of the code, for you to enact your own ideas and to experiment heavily. Significant modification means beyond variable name and value changes. It's bending these concepts to your idea, especially graphically. It's not a copy and paste job.

If you use code from online, whether for inspiration, modification or reference, I expect to see a link in your comments from where you got the code and who wrote it. Otherwise it will be considered as plagiarism, and you will fail the assignment. The code must have a reference, along with URL and be commented LINE BY LINE.

Seriously.

Grading

NOTE: While you are expected to document and host your work on Github or another external server, links to assignments, projects, and documentation will be submitted and graded on NYU Classes. This will allow me a space to privately communicate any notes and point deductions connected to each student's assignment. It will also allow you to track your progress in the class. After midterm and final presentations, grades from the NYU Classes gradebook will be migrated to Albert.

Grades will be determined according to the following breakdown:

Regular Assignments 25%

We will have weekly assignments that are relevant to material from the previous class. When it is assigned, each assignment will contain a breakdown of how many points it is worth and the grading criteria. Most assignments will include a Learning Log, where you will be asked to provide some assessment of your clarity on a topic after doing a tutorial. Please refer to the Learning Logs file in this repository for more instructions. Late assignments will lose a point for each day they are late.

Mid-Term Project - 20%

The midterm assignment will be a project that demonstrates a working knowledge of HTML and CSS elements. This project must be completed, published, and presented.

Participation and "Attendance" - 20%

While attendance in the Zoom session will not be mandatory, participating in discussion about your assignments and providing feedback to your peers on their assignments is an extremely valuable part of your education. For those unable to attend class in real-time, your participation grade will be derived from coordinating with me directly and providing feedback to other students via our Google Doc.

Final Project - 20%

Class will culminate with final projects. It is expected that these will be both technology and content driven. The final project will be built over the course of several weeks. This project must be completed, published, and presented.

Documentation/Self-Asssessments - 15%

5% - Students will be expected to document their work on Github. This will involve regular

publishing of source code and assignments, using comments and README files as necessary. (Github will be a topic we cover in class.)

10% - Students will perform three self assessments on their work throughout the semester. Specific instructions and deadlines on these assessments will be provided when they are assigned.

Qualitative Grading Overview

Each student will be judged on the quality, experimentation, and improvement that their work shows.

A. Excellent (90-100)

Performance, participation, and attendance of the student has been of the highest level, showing sustained excellence in meeting course responsibilities. Work clearly differentiates itself from other work, has memorable impact, pursues concepts and techniques above and beyond what is discussed in class. The student thoroughly understands the web design and development process.

B. Very Good / Good (80-89)

Performance, participation, and attendance of the student has been good, though not of the highest level. Work demonstrates a better than average web design and development process.

C. Satisfactory (70-79)

Performance and attendance of the student has been adequate, satisfactorily meeting the course requirements. Work is average and competent, showing a basic understanding of the web design and development process.

D. Poor; Below Average (60-69)

Performance and attendance of the student has been less than adequate. Work is lacking in many or most areas that show any understanding of visual foundation. Problems may include lack of interest, procrastination, poor planning and poor craft.

F. Unacceptable (59 & Below)

Performance and attendance of the student has been such that course requirements have not been met. Work shows no overall understanding of the course material on many levels or either a severe lack of interest.

Accommodations

If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities at 1-212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found atwww.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.

Inclusive Learning

The NYU Tandon School values an inclusive and equitable environment for all our students. I hope to foster a sense of community in this class and consider it a place where individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations, and abilities will be treated with respect. It is my intent that all students' learning needs be addressed, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. If this standard is not being upheld, please feel free to speak with me.