NYU TANDON SCHOOL OF ENGINEERING

Intro to Web Development

Technology, Culture + Society, IDM DM-UY 2193 A | Fall 2025

Monday + Wednesday 10:00 am - 11:50 am September 2 - December 11 IDM - 370 Jay Street, room 308

Bright Space

Course Github: https://github.com/IDMNYU/webDev_A_Fall2022

Professor: rebecca (marks) leopold

Contact: rebleo@nyu.edu || rm|444@nyu.edu
Office: 370 Jay Street, 3rd Floor, room 344

Office hours: By appt - in person: Mondays or remote. Schedule at least 24 hours in advance.

Course Pe-requisites:

Basic computer knowledge. Familiarity with programming is preferred but not required.

Course Description:

This section of 2193 is an introduction to the fundamentals of front end programming through the lens of visual culture and iterative process. Students are asked to think critically about contemporary imaging + networking tools, techniques and practices while experimenting with interactive media. The semester is scheduled in sequence for an incremental understanding of best web authoring practices. Using the web browser as a creative tool, students will explore responsive web development: the command line, Git + Github and the fundamentals of HTML5, CSS3 and contemporary JavaScript (aka EcmaScript 6). Students will create and maintain websites that take into consideration aesthetic quality, user experience and technical expertise.

Course Objectives:

- * Web Development Workflow
- * Unix (command line)
- * HTML5 / CSS3
- * Responsive Web
- * Native Javascript

Student Learning Outcomes:

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

- 1. Become comfortable with discomfort by proactively learning querying the web to research open source tools + documentation
- 2. Practice effective digital hygiene including navigating system file paths
- 3. Design, build, and develop assets for professional quality front end websites
- 4. Use the Github workflow and GH Pages to publish and maintain sites
- Feel comfortable participating in discussions, presenting research and work to the class using the HDMI connection, collaborate successfully on code projects, learn skills to create their own developer / creative communities

Course Structure:

Class time will be spent as a combination of lecture, discussion, in class exercises, critique, user testing + student presentations. Homework will consist of weekly projects that ask students to respond to readings, thinking critically about the cultural implications of networked technologies while building on each week's technical material. Students should expect to build a new web page every week.

Students should expect to spend roughly 5 hours each week on supplemental work outside the classroom in this course. This may include reading assignments, writing, exam preparation, research, homework assignments, building, writing code, study time, unsupervised lab work, unsupervised group work, etc.

Required Materials:

- Students will need a laptop for class (if this is an issue, come talk to me).
- Text editing software Visual Studio Code
- Web Browser: Chrome or Firefox
- Command Line Mac Terminal or Windows Power Shell
- Git, Github Account + Github pages

Course Machines:

Computers (not devices) are the only machines that can be used for this course and should be closed during classmate presentations and critique. There will be a zero tolerance policy regarding the use of any software that does not relate to course material during class time. The misuse of communication technologies will negatively impact your performance in this course.

Research + Resources:

All materials for this class are open source + can be accessed via this repository and Brightspace. Regular updates to the class repo will contain links to starter code gone over during class as well as links to further technical reading. Pick and choose what is of most interest to you - the repo is a jumping off point for your own research + you can always return back to a week to catch up on missed material. Additionally, students will be responsible for citing + discussing their research methods and discoveries with the class.

- For the majority of the semester students are required to use a grainular tool kit outlined in class. This means leaning on documentation rather than pre-existing code or libraries.
- Required Text: The web is a vast trove of thirty plus years worth of folks thinking they have the answer to yr coding questions. Do not belive everyone you read, nor trust that a code snippet is the be-all solution to yr project. For that reason Mozilla Developer Network is the "textbook" for this class and should be your primary resource.
- Open Source vs. Plagerism: Plagerism is strictly forbidden. If you intend to implement some one else's code you must cite your sources. That said, much of learning web dev from the grainular level is how you use the tools to put your puzzle together. This means what you chose to build a project about or for (the word content) become integral to its originality and your technical development. We'll discuss this more throughout the semester.

Readings:

Students will be asked to engage with a variety of texts from the world of art, film, philosophy, technology and literature. Authors include: Ralph Ellison, Jon Berger, Tim Berners Lee, Shannon Mattern, Marshall McLuhan, Selma Sharif, Susan Sontag, among others. Readings will be assigned weekly, provide by the professor and accessible via the Brightspace.

Attendance + Tardiness

Attendance will be taken at the beginning of every class.

Two late arrivals of more than 15 minutes will equal one unexcused absence. Each unexcused absence will cause your grade to drop one letter grade. Three or more absences will result in failing the course. Excused absences (bereavement, etc.) require written documentation and prior notification, via email, to the Office of Advocacy, Compliance and Student Affairs. eng.studentadvocate@nyu.edu.

***Leaving the room during class: This class is 110 minutes long. Only get up to leave the room if it is absolutely necessary. Constant coming and going is very distracting for both students and the professor. We will have ample studio + co-working time where you can move in and out freely.

Use of Generative AI:

Images + text:

You may not use any AI tools in the production process. All websites and reading responses must be authored by you.

Ideation:

Generative AI (GenAI) can be extremely useful to facilitate creativity and productivity. However, its overuse has many pitfalls, including negatively affecting your own growth by "outsourcing" your learning process. This course views GenAI this way: It's exciting to mess around with new technology, but you can only really learn by doing. When we ask you to create something, it's not just the end result we're looking for. The process of creating things enables us to develop our skills and our aesthetic sensibilities – the things that make us valuable long-term in a career – so we must be careful about skipping parts or all of that process.

With this in mind, the spirit of our policy is: **GenAl tool use is permitted to help you ideate but not to actually make things.** If you're using the tools to actively do the work for you, that's not permitted. It may not be used to develop answers for your reading responses.

Grading Policy:

Participation (20% of grade): Please arrive on time having completed the assignments. Engaging in class discussions and peer feedback are not only expected, but will be reflected in your grade. Please arrive on time having completed the readings and other daily assignments. Students must attend all classes on time. This Office then alerts Professors if the absence may be excused. Excessive absences are grounds for failing the course. Attendance will be taken at the beginning of every class. Lateness may be marked as an absence. 2 late arrivals of 15 minutes or more equals one missed class.

Weekly Writing, Design + Code Exercises (40% of grade): will be executed through the semester by following in class demonstrations, online tutorials and assigned readings. These assignments will be essential for learning markup and coding and to successfully complete more complex projects.

Students will be expected to document their work, write reading and personal reflections on a website built for + during class using **Github Pages**. We will build this site together incrementally during the first few weeks, following assignments + projects are added + linked to throughout the semester. It is mandatory that you use **Github pages to publish your sites**. Any assignment submitted using a content management system or other non-granular tool will receive a failing grade.

Pair Programming Presentations (20% of grade)

The midterm assignment will be a project that demonstrates a working knowledge of HTML and CSS elements. This project must be completed, published + presented in class. There will be an additional PPP when we get to JavaScript.

Final Project (20% of grade)

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 + presented in class.

Letter Grades:

Letter grades for the entire course will be assigned as follows

Letter	Points	Percent
Α	4.00	92.5% and higher
A-	3.67	90.0 - 92.49%
B+	3.33	87.5 - 89.99%
В	3.00	82.5 - 87.49%
B-	2.67	80.0 - 82.49%
C+	2.33	77.5 - 79.99%
С	2.00	72.5 - 77.49%
C-	1.67	70.0 - 72.49%
D+	1.33	67.5 - 69.99%
D	1.00	62.5 - 67.49%
D-	0.67	60 - 62.49%
F	0.00	59.99% and lower

Academic 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 212-998-4980 or mosescsd@nyu.edu. You

must be registered with CSD to receive accommodations. Information about the Moses Center can be found at http://www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.

If you are experiencing an illness or any other situation that might affect your academic performance in a class, please email the Office of Advocacy, Compliance and Student Affairs:

Course Schedule

This is an outline. It will change. If no reading or topic is listed, that means TBD not that there isn't one

	⊕ Part 1 - Introduction to Web 1.0 - 2.0 ⊕
Week 0	* hello world(s)!
Week 1	 * Intro to Course + participants * What is the web? * Creating a basic HTML page using a text editor * Github * Assignment #1: Maintaining the Zoo + Setting up Github
Week 2	 * Git and Git Pages * Review local vs. remote: file paths * HyperText Narratives + Web 1.0 * < a href="http://www.google.com> Hyperlinking * Assignment #2: Vannear Bush + Tim Berners Lee
Week 3	 * Intro to CSS styling * HTML Box Model * Assignment #3: Web 2.0 Surveillance and Art - Christian Fuchs

	\oplus Part 2 - Why build a website? Making things w/ CSS \oplus
Week 4	 * CSS Positioning * Classmate portraits * Intro to net.art * Assignment #4: Ways of Seeing - John Berger
Week 5	 * Responsive Web Design * CSS Flexbox + Grids * Assignment #5: <u>Personal Effects</u> - Solmaz Sharif
Week 6	 * Fall Break - class meets Tuesday + Wed October 10 + 11 * CSS Animation * Assignment #6: Animation
Week 7	 * net.art Pair programming Presentations * Intro to JavaScript

	\oplus Part 3 - Programming in the Browser with JavaScript \oplus
Week 8	* Intro to JavaScript + the DOM * Assignment #7: theButton
Week 9	* Native JavaScript * Assignment #8: <u>The Medium is the Massage</u> - Marshall McLuhan
Week 10	 * Programming in the Browse\r w p5.js * Intro to JQuery * Assignment #9: Pair programming project 2
Week 11	* Pair programming studio* Assignment #10: Pair programming project 2
Week 12	* Pair programming project 2 presentations
Week 13	* Final Project Proposals
Week 14	* Final Project User Testing
Week 15	Final Projects Due (Presentations)

Dates:

Tuesday, Sept 2 - Classes begin

Monday, Sept 15 - Add/drop deadline

Tuesday, Sept 16 - Equipment Room and Design Lab access available

Monday, Oct 13 - Fall Break, no classes

Tuesday, Oct 14 - Classes run on a Monday schedule

Monday, Nov 24 - Withdrawal deadline

Wednesday, Nov 26 - Classes run on a Friday schedule

Thursday, Nov 27 & Friday Nov, 28 - Thanksgiving recess, no classes

Thurs, Dec 11 - Last day of undergraduate classes

Fri, Dec 12 - IDM Showcase

STATEMENT ON INCLUSION

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.

RESOURCES FOR NON-CITIZEN STUDENTS

More than 40 percent of NYU students are international students. A smaller number are undocumented students, but many more come from mixed status families and communities. As a professor, I am committed to doing everything I can to ensure that every student, regardless of immigration status, is safe in this classroom. Following the recommendation of the NYU chapter of the AAUP, I encourage students to seek free legal support and other resources through NYU's Immigrant Defense Initiative. NYU IDI provides an extensive list of updates and resources. Students may also consult the "Know Your Rights" information provided by the New York Immigration Coalition.