DHSS-GA.1122: Web Development Digital Humanities and Social Science Thursday, 1:45–4:45 p.m. 194 Mercer Street, Room 306B

Instructor: Divya Mehra, dm4924@nyu.edu For office hours, please contact me via email.

## **Course Description**

This course provides an introduction to web design and development with a focus on digital archives, materiality, information visualization, and user interaction. Through a project-based approach, students will apply design and interaction principles to create their own archive.

We will explore how digital collections are created, modified, and preserved. Students will discuss readings by scholars such as Johanna Drucker, Wendy Hui Kyong Chun, and Sue Breakell. From a technical perspective, students will gain a fundamental understanding of HTML, CSS, and JavaScript, and walk away with their own digital archive.

### **Course Objectives**

- 1. Learn the fundamentals of HTML, CSS, and JavaScript in order to create well-designed websites.
- 2. Learn methods and techniques for troubleshooting common web development issues.
- 3. Think critically about issues in digital humanities, particularly the implications of collecting and presenting information on the internet

## A Note on Privacy and the Web

You will create websites in this course. These sites, by default, will be publicly accessible online; they will enter the "web" that is the web. This is great! But it also comes with additional responsibilities. Be mindful about the material you share (e.g. do not republish in-copyright material) and be particularly cautious about any personally identifiable information you put online (your own and especially others').

See NYU's FERPA guidelines for additional information. If you have concerns about privacy or public access to your site, please contact me to discuss accommodations.

## **Version Control**

This agenda will be updated over the course of the semester. The most recent version can be found at dhweb-s25.divya-mehra.com.

## **Class Topics**

Week 1: "What Is Internet, Anyway?"

Week 2: Elements, Tags, and the Hierarchy of HTML

Week 3: Visual Display — Everything Is a Box

Week 4: Visual Display — Typography and Color

Week 5: Visual Display — Architecture and Layout

Week 6: Responsive Design and Accessibility

Week 7: Media

Week 8: Listening for Events
Week 9: Loops & Functionality

Week 10: Project Presentations & Proposals

Week 11: Special Topic: Frameworks

Week 12: Special Topic: Libraries

Week 13: Work Session

Week 14: Final Presentations

Week 15: Final Presentations

## **Attendance Policy**

You are expected to attend all class sessions. Excused absences are only allowed for special circumstances such as emergencies or illness. Notify me in advance if an excused absence is necessary. Each unexcused absence will deduct 5% from your final grade. If you have three or more unexcused absences, you risk failing the course.

Be on time to class. If you are more than fifteen minutes late, or if you leave early (without speaking to me), it will count as an unexcused absence.

#### **Late Work Policy**

Contact me if you in advance if you anticipate having any difficulties meeting a due date so that we can find a suitable accommodation. Late assignment submissions will receive a 5% grade reduction per day.

#### **Course Format**

This course will meet in-person. This time will be spent on lectures, technical sessions, class discussions, and project development. Assignments will be in the form of iterative exercises, readings, and project development.

#### Statement on Accessibility

Please feel welcome to make suggestions to me about ways in which this class could become more accessible to you. Academic accommodations are available for students with documented disabilities. Please contact the <u>Moses Center for Accessibility and Inclusive Culture</u> at 212-998-4980 for further information.

## **Statement on Counseling and Wellness**

Your health and safety are a priority. If you experience any mental health issues during this course, we encourage you to utilize the support services of the 24/7 NYU Wellness Exchange at 212-443-9999. Also, all students who may require an academic accommodation due to a qualified disability, physical or mental, please register with the Moses Center 212-998-4980. Please let your instructor know if you need help connecting to these resources.

#### Statement on Title IX

NYU is dedicated to providing its students with a learning environment that is rigorous, respectful, supportive, and nurturing so that they can engage in the free exchange of ideas and commit themselves fully to the study of their discipline. We are committed to enforcing University policies prohibiting all forms of sexual or gender-based bullying, discrimination, harassment, and violence. Detailed information regarding these policies and the resources that are available to students through NYU's Title IX office.

### **Academic Integrity**

Students are expected to comply with the <u>University's Academic Integrity Policy</u>. In particular, you must produce original work in this course. If you borrow from another's work, in letter or in spirit, you should cite them. For your code, if you use or adapt someone else's code, you must include attribution as an inline comment in the code.

## Grading

Attendance and participation: 15%

Exercises: 20% Project 1: 20% Project 2: 20% Final: 25%

# **Project 1: Digital Translation**

Take an existing written work (literature, a story, an academic paper, a poem), and reinterpret it for the screen.

#### **Project 2: Visual Collection**

Create a visual collection, paying close attention to layout, linking, and relationships between your collection elements.

#### **Final Project**

- (1) Expand on Project 1 or 2 in a significant manner, detailing the changes you've made.
- (2) Design and develop a project of your own liking in conversation with your learnings from the first half of the semester.

### Agenda

Below are the discussion and technical topics covered during each class. We will also have readings and exercises (to be completed between classes). These can be found on the website agenda page and will be updated weekly.

## Week 1: "What Is Internet, Anyway?"

Topics: A brief history of the internet, archives, and introduction to gestalt principles Technical Tutorial: Software set up

### Week 2: Elements, Tags, and the Hierarchy of HTML

Topics: Gestalt principles and hierarchy, organization, and relationships

Technical Tutorial: HTML

### Week 3: Visual Display — Everything Is a Box

Topics: Introduction to web design language

Technical Tutorial: CSS (Syntax, Sizing, and the Box Model)

## Week 4: Visual Display — Typography and Color

Topics: Typographic principles and color theory

Technical Tutorial: CSS (Web Typography, HEX Codes), Figma

## Week 5: Visual Display — Architecture and Layout

Topics: Composition & grids

Technical Tutorial: CSS (Display and Position)

#### Week 6: Responsive Design and Accessibility

Topics: Mobile-first, responsiveness and adaptability, WCAG standards

Technical Tutorial: Media Queries

### Week 7: Media

Topics: Digital asset management, SVGs, Pixels

Technical Tutorial: Image and Video Files

# **Week 8: Listening for Events**

Topics: Interactivity

Technical Tutorial: JavaScript (Variables, Arrays, Events)

# Week 9: Loops & Functionality

Topics: Modularity (DRY: Don't Repeat Yourself)
Technical Tutorial: JavaScript (Loops, Functions)

## Week 10: Project Presentations & Proposals

Week 11: Special Topic: CMS & Frameworks

Topics: N/A

Technical Tutorial: Dependent on student interests. Possible overviews: Jekyll, Svelte,

React, WordPress, Webflow, Wix, Omeka

Week 12: Special Topic: Libraries

Topics: N/A

Technical Tutorial: Dependent on student interests. Possible overviews: D3, Mapbox,

Leaflet, Timeline

Week 13: Work Session

**Week 14: Final Presentations** 

**Week 15: Final Presentations**