IS 117 – Introduction to Website Development

Course Information

Item	Details
Section / CRN	003 / 93747
Semester	Fall 2025
Credits	3
Delivery Mode	Face-to-Face
Days / Times	Monday & Wednesday, 11:30 AM – 12:50 PM
Location	CKB 320
Special Note	Students must bring their own device for this section

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Instructor Information

Item	Details
Instructor	Keith Williams
Office	GITC 3410
Email	kwilliam@njit.edu *(Discord preferred)*

Course Description

This course discusses the concepts and skills required to plan, design, and build websites. It will be taught in a lab to ensure hands-on experience with each of these tasks. The course begins with an overview of web technologies. Students learn to plan websites, which includes determining the business and end-user requirements for the site. Design includes learning to develop mockups of how the site will look and how people will use it. The major tools for building websites will be industry-standard HTML and CSS to describe web page content and flexibly format the content. The course features substantial hands-on projects comprising websites of several interlinked pages and images, enabling students to thoroughly learn the course's important concepts and skills.

Prerequisites: None

Course Materials

- Instructor-provided resources
- Canvas: canvas.njit.edu
- Students must bring their own device

Course Technologies

- HTML, CSS, and basic JavaScript
- Git and GitHub
- Visual Studio Code or WebStorm
- Linux basics
- Docker
- Web design tools (Figma or Adobe XD)

Course Concepts

- Web Development Fundamentals
- Responsive Web Design
- Version Control with Git/GitHub
- Web Design Principles and UI/UX Basics
- Linux Command Line Basics
- Introduction to Containerization with Docker
- Web Application Architecture (overview)
- Web Security Basics

Learning Outcomes

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

1. Create a visual design mockup for a multi-page website demonstrating UI/UX principles.
2. Develop a multi-page website using HTML, CSS, and JavaScript with appropriate structure, typography, and color.
3. Explain core web technologies, including cookies and user tracking.
4. Apply version control concepts using Git and GitHub.
5. Use basic Linux command line operations.
6. Understand containerization and use Docker for web development tasks.

Course Format

- Face-to-face class sessions with lectures, hands-on exercises, and projects
- Additional communication via Slack (not Canvas Messages)
- Projects and resources posted on Canvas

Tentative Weekly Outline

Week	Topics
1	Course intro, web technologies overview, HTML basics
2	HTML structure, linking pages, accessibility
3	CSS fundamentals, typography, colors, box model
4	Responsive design, Flexbox/Grid
5	Web design principles, UI/UX basics, mockups with Figma/Adobe XD
6	Intro to JavaScript for interactivity
7	Git and GitHub workflows
8	Midterm review and project checkpoint
9	Linux command line basics
10	Docker introduction and simple containerized workflow
11	Web application architecture overview
12	Security basics (cookies, HTTPS, tracking)

13	Group work and project build-out
14	Project presentations
15	Final review and exam

Grading

Component	Weight
Projects	50%
Homework	25%
Class Participation	25%

Grading Scale

- A: 90–100
- B+: 86–89
- B: 80–85
- C+: 76–79
- C: 70–75
- D: 60–69
- F: 0–59

Late Policy

- Homework late >2 days not accepted (unless documented).
- Projects lose 10% per day late; not accepted after 4 days without documentation.

Academic Integrity

The NJIT Honor Code will be strictly enforced.

- All assignments are considered “home mini-exams.”
- Copying from other students or online tutorials is prohibited.
- Collaboration requires proper documentation.
- All submitted work is checked for similarity.

Violations will be referred to the Dean of Students and may result in probation, dismissal, or an F in the course. See: NJIT Academic Integrity Code.

University Policy Statements

- **Disability Support Services (DSS):** Students requiring accommodations should contact DSS (Kupfrian Hall 201, dss@njit.edu).
- **Title IX:** NJIT faculty must report gender-based discrimination or harassment to the Title IX Coordinator. See: NJIT Title IX.
- **Emergency/Contingency Plan:** If in-person instruction is disrupted, the course will continue online via Canvas and Slack/WebEx.

Instructional Philosophy

The primary goal is to teach technical problem-solving and build student confidence.

- Isolate problems, read errors carefully, and use online resources effectively.
- Persist through challenges.
- Provide clear information when asking for help.
- Respect that the skills taught are difficult but valuable.
