

# INFO 6150 Web Design and User Experience Engineering Spring 2025

#### **Course Information**

Course Title: Web Design and User Experience Engineering

Course Number: INFO 6150 Term and Year: Spring 2025

Credit Hour: 4 CRN: 38493

Course Format: In person

#### **Instructor Information**

Full Name: Fernando Augusto López Plascencia (he/him) Email Address: f.lpezplascencia@northeastern.edu

Office Hours: TBD

#### **Instructor Biography**

Professor López Plascencia has worked for more than 20 years in web development in both the USA and Mexico. Currently a Staff Software Engineer at Lyft, specializing in front end. Enjoys teaching and mentoring. Through his work he aims to create connections, propel others to become the best versions of themselves, and build things that work well for people. Other interests include Japanese culture and media, geography and maps, and the visual arts. His personal website is fernandolopez.dev.

#### **Teaching Assistant Information**

Full Name: Vaishavi Anand Kulkarni

Email Address:kulkarni.vais@northeastern.edu

Office Hours:TBD

# **Course Prerequisites**

INFO 5100 (may be taken concurrently) with a minimum grade of B- or INFO 5100 (may be taken concurrently) with a minimum grade of B- or CSYE 6200 (may be taken concurrently) with a minimum grade of B-

#### **Course Description**

Exposes students to both conceptual and technical aspects of Web design. User experience design is the discipline of creating a useful and usable website or application that is easily navigated and meets the needs of both the site owner and its users. Covers Web standards and best practices. Studies the fundamental concepts, techniques, practices, work flows, and tools associated with the practice of user-

experience design in Web interfaces. Offers students an opportunity to learn the core principles of information architecture, usability, marketing hierarchy, and user experience for contextual, value-driven websites. Additional areas of focus include typography, color theory and composition, responsive design, CSS3 concepts, basic scripting, and JavaScript libraries to create functional, effective, and visually appealing websites.

### **Course Learning Outcomes**

At the end of this course, you should be able to:

- 1. Understand how the web platform works;
- 2. Understand and apply user experience and usability best practices in the context of the web platform;
- 3. Recognize areas of opportunity in terms of user experience in the web platform and suggest or apply improvements;
- 4. Understand how the software development cycle is done in different instances of front-end web development, as well as best practices;
- 5. Create simple, front-end-based web applications using APIs as interfaces with a backend;
- 6. Continue their formation in front-end technologies and practices independently, if desired.

# Required Tools and Course Textbooks.

No required text. Slides will be provided. The main literature is the Mozilla References and Guides at <a href="https://developer.mozilla.org/en-US/">https://developer.mozilla.org/en-US/</a>; other references will be posted per module in Canvas.

# Course Schedule/Topics Covered.

Week	Class Date	In Class Topic	Work Due	Final Project
				Milestone
1	01/10	Intro to the Web		
2	01/17	Requirements, User Experience, Info Architecture	Assignment 1	
3	01/24	Design Principles	Assignment 2;	
			Research Project 1	
4	01/31	CSS basics	Assignment 3	
5	02/07	CSS layouts		Final project discussed
6	02/14	Javascript basics	Assignment 4	
7	02/21	Midterm (no class this week)	Midterm; Research	
			Project 2	
8	02/28	Javascript forms and inputs		
9	03/07	SPRING BREAK – NO		
		CLASSES		
10	03/14	APIs	Assignment 5	Teams are
				set

11	03/21	Modern apps. Business modeling	Assignment 6	
12	03/28	React fundamentals	Assignment 7	
13	04/04	React advanced hooks. Typescript	Assignment 8; Research Project 3	
14	04/11	Usability and accessibility	Assignment 9	
15	04/18	Open book final	Bonus credit assignment	
16	04/25	Final project presentations		Final project due

# **Assignment Grading**

- Final project 35% (350 Canvas points)
- 9 assignments 25% (250 Canvas points)
  - o 2 assignment worth 2% (20 Canvas points)
  - o 7 assignments worth 3% each (30 Canvas points)
- Participation 10% (100 Canvas points)
  - Written research: 6% (60 Canvas points)
  - o Replies to research done by other students: 4% (40 Canvas points)
- Midterm Exam 15% (150 Canvas points)
- Final Exam 15% (150 Canvas points)

Each component will be tracked in Canvas.

There is an optional, bonus credit assignment worth up to 5% (50 Canvas points).

# **Grading Scale**

	87-89.9% B+	77-79.9% C+	
	84-86.9% B	74-76.9% C	
95-100% A			
90-94.9% A-	80-83.9%B-	70-73.9% C-	
			69.9% or below F

## **Attendance/Late Work Policy**

**Attendance Policy** 

Students registered in MGEN courses (INFO, CSYE, and DAMG) are allowed a maximum of 2 absences per course, with 3 or more absences resulting in an automatic 'F' for that course. Students are expected to inform their instructors of any absences in advance of the class; if a student is sick long-term or experiences a medical issue that prevents class attendance, it is strongly encouraged that they speak with their Academic Advisor (coe-mgen-gradadvising@northeastern.edu) to learn more about the Medical Leave of Absence. Should a student anticipate being unable to attend 3 or more classes, they should discuss their situation with their Academic Advisor to explore other types of leave in accordance with the University's academic and global entry expectations. International students should review the Office of Global Services webpage to understand their visa compliance requirements.

Teaching Assistants (TAs) or Instructional Assistants (IAs) will be present at each class to collect student attendance.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded.

# **End-of-Course Evaluation Surveys**

Your feedback regarding your educational experience in this class is particularly important to the College of Engineering. Your comments will make a difference in the future planning and presentation of our curriculum.

At the end of this course, please take the time to complete the evaluation survey at <a href="https://neu.evaluationkit.com">https://neu.evaluationkit.com</a>. Your survey responses are completely anonymous and confidential. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your Northeastern University Mail account notifying you when surveys are available.

# **Academic Integrity**

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind

according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to <a href="http://www.northeastern.edu/osccr/academic-integrity-policy/">http://www.northeastern.edu/osccr/academic-integrity-policy/</a> to access the full academic integrity policy.

#### **MGEN Student Feedback**

Students who would like to provide the MGEN unit with <u>anonymous</u> feedback on this particular course, Teaching Assistants, Instructional Assistants, professors, or to provide general feedback regarding their program, may do so using this survey: <a href="https://neu.co1.qualtrics.com/jfe/form/SV\_cTIAbH7ZRaaw0Ki">https://neu.co1.qualtrics.com/jfe/form/SV\_cTIAbH7ZRaaw0Ki</a>

### **University Health and Counseling Services**

As a student enrolled in this course, you are fully responsible for assignments, work, and course materials as outlined in this syllabus and in the classroom. Over the course of the semester if you experience any health issues, please contact UHCS.

For more information, visit <a href="https://www.northeastern.edu/uhcs">https://www.northeastern.edu/uhcs</a>.

#### **Student Accommodations**

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit <a href="https://drc.sites.northeastern.edu">https://drc.sites.northeastern.edu</a>.

# **Library Services**

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.

For more information and for education specific resources, visit <a href="https://library.northeastern.edu">https://library.northeastern.edu</a>
Network Campus Library Services: Northeastern University Library Global Campus Portals

#### 24/7 Canvas Technical Help

For immediate technical support for Canvas, call 617-373-4357 or email help@northeastern.edu

Canvas Student Resources: https://canvas.northeastern.edu/student-resources/

For assistance with my Northeastern e-mail, and basic technical support:

Visit ITS at <a href="https://its.northeastern.edu">https://its.northeastern.edu</a>

Email: help@northeastern.edu

ITS Customer Service Desk: 617-373-4357

# **Diversity and Inclusion**

Northeastern University is committed to equal opportunity, affirmative action, diversity, and social justice while building a climate of inclusion on and beyond campus. In the classroom, members of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration, and an awareness of global perspectives on social justice.

Please visit <a href="http://www.northeastern.edu/oidi/">http://www.northeastern.edu/oidi/</a> for complete information on Diversity and Inclusion

#### Title IX

Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.

Northeastern's Title IX Policy prohibits Prohibited Offenses, which are defined as sexual harassment, sexual assault, relationship or domestic violence, and stalking. The Title IX Policy applies to the entire community, including male, female, transgender students, faculty, and staff.

In case of an emergency, please call 911.

Please visit <u>https://www.northeastern.edu/ouec</u> for a complete list of reporting options and resources both on- and off-campus.