

# INFO 6150 Web Design and User Experience Engineering FALL 2024

#### **Course Information**

Course Title: Web Design and User Experience Engineering

Course Number: INFO 6150 Term and Year: Fall 2024

Credit Hour: 4 CRN: 18763

Course Format: In Person every Monday 6:00 – 9:00 PM Arlington Room 1524

#### **Instructor Information**

Full Name: Yuze Chen

Email Address: yuz.chen@northeastern.edu

Office Hours: Saturdays 2-3 pm ET and by appointment

#### **Instructor Biography**

Yuze is an experienced software engineer with in-depth knowledge in full-stack web development and cloud deployment. His teaching focuses on the front-end and back-end web development, as well as the deployment of the web application to the cloud services.

### **Teaching Assistant Information**

Full Name: N/A Email Address:N/A Office Hours:N/A

#### **Course Prerequisites**

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, students will be able to:

- Build a basic static web application with required information using HTML5. Follow the industry best practices including responsive design and accessibility.
- Organize the layout of the front-end web application using CSS.
- Build an interactive front-end web application using JavaScript.
- Write a front-end web application using React framework.
- Use distributed version control systems such as Git to commit individual work, and share codes in a team setting.
- Use Agile methodology such as Kanban and Scrum to manage or participate in the modern software application process.

## Required Tools and Course Textbooks.

No textbook needed. Students are expected to have a developer-grade laptop with stable Internet connection. Software such as VS Code should be supported.

## Course Schedule/Topics Covered.

Note: The following schedule is only used as a reference and subject to change at any time. The exact assignment due dates are posted on Canvas and Canvas is the only source of truth.

Week	Date	In Class Topic	Assignment Due before Lecture
1	9/9	Web Architecture	N/A
2	9/16	Planning & Design	HW 1, HW 2
3	9/23	HTML	HW 3
4	9/30	CSS, Git, TailwindCSS Intro	HW 4, Quiz 1
5	10/7	JavaScript Intro	HW 5, Quiz 2
6	10/14	JavaScript Advanced	HW 6, Midterm Milestone 1
7	10/21	JavaScript Functions, array, set, map	Midterm Milestone 2
8	10/28	Quiz 3 (in-class), React Intro	Midterm Milestone 3, HW 7
9	11/4	React Design Process	Midterm Milestone 4
10	11/11	React Rendering, State, Hooks	Final Milestone 1
11	11/18	React Router, API. Final Milestone 4 (in-class)	HW 8, Final Milestone 2-3
12	11/25	Quiz 4 (in-class), Flexbox spacing, TailwindCSS deep-dive, Final Milestone 6-7 (in-class)	HW 9
13	12/2	Cookie, Testing, Final Milestone 8 (in-class)	
14	12/9	Presentation (Final Milestone 9-10)	

# **Assignment Grading**

- Participation: 5%
  - Attendance is required for all lectures in order to participate in the in-class discussions and group activities
  - For each missed attendance without prior authorization from the lecturer, 1% will be deducted.
  - 3 or more absences results in automatic F per MGEN policy. Please carefully review the Attendance/Late Work Policy below.

Quizzes: 20%Homework: 35%Midterm Project: 20%Final Project: 20%

# **Grading Scale**

	87-89.9% B+	77-79.9% C+	
95-100% A	84-86.9% B	74-76.9% C	
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.

- Late submissions include but not limited to these scenarios
  - Forgot to share your private Github repository with the instructor's Github account before the deadline.

- Finished the code on Github before the deadline but failed to submit the link to your repo on Canvas.
- Up to 3 days late: Deduct 10% of Total possible grade of that assignment
- 3-7 days late: Deduct 30% of Total possible grade of that assignment
- More than 7 days late: Deduct 50 % of Total possible grade of that assignment

## **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 https://drc.sites.northeastern.edu.

# **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: <a href="https://library.northeastern.edu">Northeastern.edu</a>
Northeastern.edu

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Description: <a href="https://library.northeastern.

## 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 <a href="https://www.northeastern.edu/ouec">https://www.northeastern.edu/ouec</a> for a complete list of reporting options and resources both on- and off-campus.