



# User Experience Design and Testing CSYE 7280-04, CSYE 7280-06

## FALL 2024

### Course Information

Course Title: User Experience Design and Testing  
Course Number: CSYE 7280-04, CSYE 7280-06  
Term and Year: Fall 2024  
Credit Hour: 4  
CRN: CRN 16429, 16597  
Course Format: Livecast

### Instructor Information

Full Name: Peter McKeown  
Email Address: p.mckeown@northeastern.edu  
Office Hours: Saturday 12:30pm PST and on demand

### Instructor Biograph

Peter McKeown is a seasoned design professional with over 20 years of experience across graphic design, marketing, UX design, and product design. His diverse career includes freelancing, running a marketing company, and working in both small agencies and major tech firms. Currently, Peter is a product designer at Meta, focusing on the technical aspects of advertising products. His experience spans both management and individual contributor roles

### Teaching Assistant Information

Full Name: Srishti Ahirwar, Vidhi Patel, Qianyi Xu  
Email Address: ahirwar.s@northeastern.edu, patel.vidhi3@northeastern.edu, xu.qianyi@northeastern.edu  
Office Hours:

- TA Group session: Wednesday 3-6 EST / 12-3PM PST
- Vidhi: Friday 4-7 PM EST / 1-4 PM PST
- Qianyi: Tuesday 6-9PM EST / 3-6PM PST
- Srishti: Monday 3-6 PM EST / 12-3PM PST

### Course Prerequisites

None

### Course Description

In just the last few years, customer expectations for high quality, easy-to-use products have risen sharply, and poorly designed, poorly built products simply won't be tolerated. In this course, students will learn

tools and techniques that will help them understand good design, understand their customers needs and desires, and design solutions that are helpful, efficient, and delightful to use.

In modern businesses, it is understood that all disciplines will contribute to planning and building easy to use products, that solve real user pain points. Through two hands-on projects, we'll apply user centered design techniques to understand our users, use design and prototyping tools to build mockups and prototypes, then test our solutions to validate our direction. We'll also present our work in a way that will highlight the value for both customers and the business.

### Course Learning Outcomes

By the end of the course students will:

- Understand the importance of basic design principles like layout, spacing, color, font usage, and accessibility.
- Have a clear understanding of modern product design process, tools, and techniques.
- Learn how their work, as engineers, entrepreneurs, or product designers will contribute to defining strong strategic direction for businesses.
- Learn Design Sprint, a popular technique used widely in technology companies today to solve complex problems quickly and efficiently.
- Complete two end-to-end design projects, including usability testing, that will be presented in a product design portfolio format.
- Be armed with valuable user centered, problem solving techniques that can be applied immediately in any business setting.

### Required Tools and Course Textbooks.

Figma design software is required for all students. A free version is available to students with a NE email address. We use Slack for chat, in addition to other channels.

There are no required reading materials but some suggestions:

- **Strongly suggested:** Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days  
By Jake Knapp, John Zeratsky
- Recommended: Lean UX: Designing Great Products with Agile Teams  
By Jeff Gothelf and Josh Seiden
- Recommended: The User Experience Team of One: A Research and Design Survival Guide  
By Leah Buley

### Course Schedule/Topics Covered.

Week	Date	In Class Topic	Assignment Due
1	09/04	Introductions, course outline, setting up tools	Weekly homework due EOD Friday before class
2	09/11	Introduction to UX Portfolio and Design Theory. Project 1 topics introduced	Weekly homework due EOD Friday before class
3	09/18	A deeper dive on sketching, wireframes, prototyping	Weekly homework due EOD Friday before class
4	09/25	Exercises to build empathy	Weekly homework due

			EOD Friday before class
5	10/2	Interviewing and moving from understand to explore	Weekly homework due EOD Friday before class
6	10/9	Guest speaker Heather Torrico — introduction to usability testing theory, tools and techniques. Sketching to solve user problems	Weekly homework due EOD Friday before class
7	10/16	Wireframing, prototyping, usability testing planning	Weekly homework due EOD Friday before class
8	10/23	Running usability tests, analyzing results	Weekly homework due EOD Friday before class
9	10/30	<b>Project 1 presentations: present work to class, share process in portfolio format and showcase finished app</b>	<b>Assignments are due at 9:30am PST on day of class</b>
10	11/6	A deeper dive into Figma techniques. Design sprint: overview, pick Project 2 topic, form groups, begin ideating	Weekly homework due EOD Friday before class
11	11/13	Design sprint: sketch and decide	Weekly homework due EOD Friday before class
12	11/20	Design sprint: working session	Weekly homework due EOD Friday before class
13	11/27	Thanksgiving week	
14	12/4	Design sprint: usability testing	Weekly homework due EOD Friday before class
15	12/11	<b>Project 2 presentations: present work to class, share process in portfolio format and showcase finished app</b>	<b>Assignments are due at 9:30am PST on day of class</b>

### Assignment Grading

Grades are based primarily on two major projects and presentation of them to the class. Weekly homework makes up the third component of grades. Projects are graded on a rubric that includes Figma execution, App design, portfolio design, craft. A more detailed breakdown will be provided in class.

- Project 1 comprises 30% of grade.
- Project 2 comprises 50% of grade.
- Weekly homework comprises 20% of grade.

Project 2 is weighted more heavily because we are still learning tools and techniques when we deliver project 1. Homework is often a deciding factor in how well a student performs and failure to deliver homework on time can have a major impact on overall grade

### Grading Scale

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

## 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](mailto: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 <https://neu.evaluationkit.com>. 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 <http://www.northeastern.edu/osccr/academic-integrity-policy/> to access the full academic integrity policy.

### **MGEN Student Feedback**

Students who would like to provide the MGEN unit with anonymous feedback on this particular course, Teaching Assistants, Instructional Assistants, professors, or to provide general feedback regarding their program, may do so using this survey: [https://neu.co1.qualtrics.com/jfe/form/SV\\_cTIAbH7ZRaaw0Ki](https://neu.co1.qualtrics.com/jfe/form/SV_cTIAbH7ZRaaw0Ki)

### **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 <https://www.northeastern.edu/uahcs>.

### **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 <https://library.northeastern.edu>  
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](mailto: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 <https://its.northeastern.edu>

Email: [help@northeastern.edu](mailto: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 <http://www.northeastern.edu/oidi/> 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 <https://www.northeastern.edu/ouec> for a complete list of reporting options and resources both on- and off-campus.