

# **DTX 495: Special Topics in Design Thinking**

## Intro to UX Theory and Tools

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### **Course Description**

Introduction to UX Theory and Tools is a foundational course aimed at providing students with an initial grasp of the theoretical principles fundamental to User Experience (UX) Design, along with practical hands-on training in essential UX tools. The curriculum delves into key concepts of UX, encompassing user psychology, interaction design, information architecture, and usability principles. Moreover, the course offers interactive sessions to familiarize students with popular UX design tools like Figma, with a focus on wireframing, prototyping, and collaboration functionalities. Through a blend of lectures, workshops, and project-based tasks, students will develop beginner-level proficiency in utilizing these tools to create and assess effective user interfaces. Upon completion, students will have acquired introductory knowledge and skills necessary to evaluate the usability of digital products and create functional prototypes. Students from all academic backgrounds are encouraged to enroll in this hands-on course, as no prior programming or design experience is required.

### **Learning Objectives**

- Understand the fundamental principles of User Experience (UX) Design and explore advanced concepts in user psychology, interaction design, information architecture, and usability.
- Apply Human-Centered Design principles and utilize UX tools such as Figma to create intuitive and visually aesthetic user interfaces that effectively meet user needs through wireframing and prototyping.

- Develop the ability to critically analyze and assess user interfaces by conducting usability and accessibility audits, thereby identifying user requirements and pain points to evaluate design effectiveness and user satisfaction.
- Collaborate effectively in a design environment, integrating diverse perspectives and skills to redesign an existing interface. This collaboration will culminate in a capstone project that demonstrates the application of UX principles and tools in designing a fully functional prototype.
- Gain hands-on design practice through continuous application of design tools and principles in class projects and assignments, refining skills in creating user-focused designs and responding dynamically to feedback and iterative testing.

### Prerequisites

No prior knowledge of interaction design or Figma experience required.

### Assignments/Exams

Type	Name	Points	Due Date
Assignment	Reverse-Designing Wireframes	30	9/5
Assignment	Mini Research Readout	30	9/12
Assignment	User flow and identifying user psychology	30	9/19
Assignment	Usability and Accessibility Evaluation	30	9/26
Assignment	Information Architecture	30	10/3
Assignment	Design System + Visual Design	30	10/10
Project	Milestone 1	50	9/20
Project	Milestone 2	50	10/4
Project	Final Presentation	200	10/15 -10/17
Reading	Quizzes (Best 5 of 6)	25	-
Extra Credit	End of class survey	2	-
<b>TOTAL</b>		<b>500 + 2</b>	

## Grading

Class Attendance/Participation	5%
Reading Discussion/Quiz	5%
Project Milestones	20%
Weekly assignments	30%
Final Project Presentation	40%
<b>Total</b>	<b>100%</b>

Letter grades will be assigned based on the percentage of total points earned for the course.

%	Grade
98-100	A+
94-97	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
60-63	D-
0-59	F

## Course Policies

- **Late and missing assignments:** Design is never perfect, and prototypes are iterative. Having said that, it is vital to have deliverables presented on-time. If you are unable to complete an assignment on time, please let the instructor know in advance. In cases of emergencies, please inform the instructor at your earliest convenience. If there is no communication from your end about a missing/late assignment, you will be given a 0.
- **Attendance and Participation:** Design is collaborative and requires active participation from everyone. Since this course is only 8 weeks, you are expected to attend every class session and participate in a manner that you are comfortable

with. Canvas discussions, in-class discussion, leading the project, and so on are all perfectly acceptable ways to show your class participation. Every unexcused absence will result in your grade lowered by a letter. (A becomes A- becomes B+ and so on). If you are going to be/were absent for any reason, inform your instructor as early as possible.

### **Contacting the Instructor**

The best way for students to reach me is via email. I will typically respond to student emails within 24 - 48 hours. You could also meet with me during my office hours if you have questions or concerns. I will hold office hours at a time convenient to the both of us. If you cannot make it during my office hours, please email me with your questions.

### **Use of Generative AI Tools**

For the purposes of this class, you may use ChatGPT/Gemini/Co-Pilot or any other LLM-based AI tools you wish. These are not a substitute for your work! They are merely a companion to help you get things done faster. You may not directly use results generated from these without proofreading for accuracy and relevance.

If you choose to use these tools, you must provide the prompt(s) and result(s) at the end of your assignment, or as a separate file. If you don't acknowledge the use of the tool, it will be considered academic dishonesty as mentioned below.

### **Equal Opportunity and Access**

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail a message to [disability@uiuc.edu](mailto:disability@uiuc.edu).

To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class are asked to see the instructor as soon as possible.

If you need accommodations for any sort of disability, please contact me.

## **Wellness**

Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns above, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do – for yourself and for those who care about you.

Counseling Center (217) 333-3704

McKinley Health Center (217) 333-2700

National Suicide Prevention Lifeline (800) 273-8255

Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

Anonymous Suicide Incident Referral Form:

<http://www.counselingcenter.illinois.edu/counseling/counseling-center-policies/suicide-intervention-policy>

## **Academic Integrity**

Expectations of Students: It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Students have been given notice of this Part by virtue of its publication. Regardless of whether a student has actually read this Part, a student is charged with knowledge of it. Ignorance is not a defense.

Academic dishonesty will result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: <https://studentcode.illinois.edu/>. Please note, you are responsible for reading this policy.

## **Emergency Planning**

Plan for emergency situations by reviewing the important material found at <http://police.illinois.edu/emergency-preparedness/>. The more prepared you are, the safer you will be.

## Tentative Schedule

Week	Topics
01	<p><b>Topic(s):</b></p> <ul style="list-style-type: none"> <li>● Introduction to the course, overview of syllabus</li> <li>● User Interface Design vs User Experience Design</li> <li>● Human-Centered Design</li> <li>● Figma 101: Introduction to Figma</li> </ul> <p><b>Readings (To be completed before class):</b></p> <ul style="list-style-type: none"> <li>- Create an account on with your @illinois.edu email on <a href="https://www.figma.com">Figma.com</a></li> </ul> <p><b>Assignment Due:</b></p> <ul style="list-style-type: none"> <li>- None</li> </ul>
02	<p><b>Topic(s):</b></p> <ul style="list-style-type: none"> <li>● Deep dive into UX design</li> <li>● User Research Techniques <ul style="list-style-type: none"> <li>○ Interviews</li> <li>○ Contextual Inquiry</li> <li>○ Ethnography</li> <li>○ Personas</li> <li>○ Insights and How Might We questions</li> </ul> </li> </ul> <p><b>Readings (To be completed before class):</b></p> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <p><b>Assignment Due:</b></p> <ul style="list-style-type: none"> <li>- Building wireframes</li> </ul>
03	<p><b>Topic(s):</b></p> <ul style="list-style-type: none"> <li>● User Psychology <ul style="list-style-type: none"> <li>○ Laws of UX</li> <li>○ How to identify principles used in experiences</li> </ul> </li> <li>● Usability Engineering <ul style="list-style-type: none"> <li>○ Usability Heuristics</li> <li>○ How to conduct tests</li> <li>○ Test environment</li> </ul> </li> </ul> <p><b>Readings (To be completed before class):</b></p> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <p><b>Assignment(s):</b></p>

	- Mini Research Readout
04	<b>Topic(s):</b> <ul style="list-style-type: none"> <li>• Web Accessibility Standards</li> <li>• Performing a usability and accessibility evaluation</li> </ul> <b>Readings (To be completed before class):</b> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <b>Assignment(s):</b> <ul style="list-style-type: none"> <li>- Psychology assignment</li> </ul>
05	<b>Topic(s):</b> <ul style="list-style-type: none"> <li>• Information Architecture</li> <li>• Prototyping in Figma</li> </ul> <b>Readings (To be completed before class):</b> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <b>Assignment(s):</b> <ul style="list-style-type: none"> <li>- Usability and accessibility evaluation</li> </ul>
06	<b>Topic(s):</b> <ul style="list-style-type: none"> <li>• Basics of Interface Design</li> </ul> <b>Readings (To be completed before class):</b> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <b>Assignment(s):</b> <ul style="list-style-type: none"> <li>- Information Architecture</li> </ul>
07	<b>Topic(s):</b> <ul style="list-style-type: none"> <li>• UX Portfolio best practices</li> <li>• How to write case studies</li> <li>• Storytelling: Presenting UX work</li> <li>• Practice time to work on project</li> </ul> <b>Readings (To be completed before class):</b> <ul style="list-style-type: none"> <li>- Check Canvas Modules</li> </ul> <b>Assignment(s):</b> <ul style="list-style-type: none"> <li>- Design system and visual design</li> </ul>
08	<b>Topic(s):</b> Ethics in UX*  <b>Final Project Presentations</b>

	<b>Assignment(s):</b> <ul style="list-style-type: none"><li>- <b>**SUBMIT YOUR SLIDE DECKS BEFORE 2PM ON PRESENTATION DAY**</b></li></ul>
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\* Tentative