



Learning Outcomes

This course is an introduction to user experience and user-centered design methods in human-computer interaction (HCI). This course focuses on how HCI connects psychology, information systems, computer science, and human factors. Topics such as user needs, user behaviors, envisioning interfaces, and utilizing prototyping tools. This course emphasizes the importance of centering design around users, from initial field observations to summative usability testing. This course will introduce you to the user-centered design process, focusing on practical methods for approaching a design problem, including how to understand users, research, design for user experience and how to evaluate user interfaces. Also discussed are appropriate uses of storytelling, sketching, and communication of design ideas within a design team and to potential users. Assignments will culminate into a single, comprehensive portfolio project. There will also be individual assignments and exams to help you better understand the material.

After successfully completing this course you will be able to:

- Articulate important historical, current and emerging trends, critical issues (including accessibility), and theoretical underpinnings of User Experience design.
- Articulate and apply **major user experience research methods**, such as user interviews, surveys, contextual analysis, diary studies, storyboarding, experience design, persona development, task description, sketching, video scenarios, use cases, competitive analysis, and evaluations.
- Demonstrate the appropriate use of UX design artifacts such as flow diagrams, wire-framing, and paper prototypes.
- Apply data from UX evaluations to improve interfaces through an iterative and inclusive user-centered design process.
- Executing a design project from ideation to formative testing & iteration
- Experience presenting design results in oral and written forms

Required Resources

Course website: elms.umd.edu



The UX Book: Process and guidelines for ensuring a quality user experience
Hartson, R., & Pyla, P.S.
First edition (2012)
ISBN # 9780123852410

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Class Meets
TTH
9:30-10:45
PHY 4221

Office Hours
HBK 2117D
Thurs 11:00am-12:00pm
and by appointment

Prerequisites
PSYCH 100; INST201 or
INST301¹; INST 326

Course Communication
I will send time-sensitive information to students via ELMS announcements. Students may contact me via email to discuss questions, absences, or accommodations. Here is a link with helpful guidance on writing professional emails (ter.ps/email).

¹Must have completed or be currently enrolled in one of these courses

Campus Policies

It is our shared responsibility to know and abide by the University of Maryland's policies that relate to all courses, which include topics like:

- Academic integrity
- Student and instructor conduct
- Accessibility and accommodations
- Attendance and excused absences
- Grades and appeals
- Copyright and intellectual property

Please visit www.ugst.umd.edu/courserelatedpolicies.html for the Office of Undergraduate Studies' full list of campus-wide policies and follow up with me if you have questions.

Activities, Learning Assessments, & Expectations for Students

Before Class: You should complete all listed readings before class begins each day. Lectures will be brief and will cover course material, but you will only develop a deep enough understanding of the material for tests, assignments, projects, and discussion through completing the assigned reading. You are responsible for keeping up with readings in the book per the schedule given in the syllabus. You are responsible for setting your own reading pace to keep ahead enough to be prepared for class discussions and in-class assignments.

Attendance: I expect students to come to all class meetings unless there is a university-accepted reason. Please consider that much of the learning for the course occurs in class.

Class starts on time: Being late for class affects our learning experience. Have the materials you will need out and ready by the time class begins. **If you are more than 5 minutes late to class, you will receive 0 points for that day's in-class assignment.**

Absences: I follow the university policy on absences which is:

If you contact the Teaching Assistant before or immediately after class, you may make up in class assignments when you miss class for the following reasons:

- Religious observances
- Mandatory military obligation
- Illness of the student or illness of an immediate family member
- Participation in university activities at the request of university authorities
- Compelling circumstances beyond the student's control (e.g., death in the family, required court appearance)

Absences stemming from work duties other than military obligation (e.g., unexpected changes in shift assignments) and traffic/transit problems do not typically qualify for excused absence.

To receive academic accommodation for an excused absence, documentation must be provided in writing to the instructor.

- For medically necessitated absences: Students may, one time per course per semester, provide a self-signed excuse as documentation of an absence from a single class (e.g., lecture, recitation, or laboratory session). For all other medically necessitated absences, a course instructor may request that students provide documentation from a physician or the University Health Center to verify an absence.
- For all other absences students must provide verifiable documentation upon request (e.g., religious calendar, court summons, death announcement, etc.).

In Class Assignments: There will be in-class assignments that you will be expected to complete during the class period. These in-class assignments have been designed to contribute to your team's User-Centered Design projects. Everyone begins the course with full in-class participation credit, and I hope all of you will retain it to the end. However, deductions can be made from an individual's in-class participation credit for various reasons (e.g., being absent when your team needs you for an in-class assignment).

Team Project: You will work in teams on a semester-long User-Centered Design project. The in-class assignments will contribute to your team projects, and this will allow me to help with the progress of your team project and answer your questions.

Project Websites/Blogs: Each team needs to have an online space (of your choice) to upload the deliverable as a portfolio of your project (potentially for your future job seeking). It is recommended that you show your project websites/blogs to the class in your final team presentation.

Collaboration: You are expected to work collaboratively as teams throughout the course of the project, which spans the semester. Each assignment should be collaboratively envisioned, planned, implemented, and written up with every member contributing equally to each part. Each team member will **individually** submit a confidential Team Member Evaluation Form to report the relative effort/contribution of each person including yourself for each major project deliverable. Evaluations will be factored into your grade. **Receiving low scores from your team members for multiple project assignments affects your total project score.**

Team Presentation: You will be expected to present your User-Centered Design project results. The presentations should be 15 minutes in-class presentations (including 3-minute Q&A) highlighting your projects' goals, processes, procedures through the study, design outcomes, and evaluation results. You are to include your reflection on the successes and challenges throughout the procedures of your project. All students viewing the presentations will be expected to complete a feedback form

Individual Homework Assignments: There will be homework assignments that help with your learning in this course.

Exams: A **mid-term** and **final** exam will be administered to test your understanding of the concepts and skills in introduced in class and readings.

Late Assignments: All assignments must be submitted on ELMS. Assignments must be turned in by 11:59pm on the day they are due. The general policy in this class is that late assignments (both individual and team assignments) will be deducted 15% of its points after 11:59pm, and an additional 10% of its points each day they are late. Late assignments will be accepted according to this policy up to three days after the assignment due date. Assignments more than five days late will not be accepted. It is at the instructor's discretion to accept late work and assign late point deduction.

No Extra Credit Work: No extra credit work will be given on an individual basis.

Course-Specific Policies

No technology use unconnected to the course. Research shows that using technology detracts from the cooperative learning environment and does in fact interfere with learning and active participation. For more information watch: <http://youtu.be/WwPaw3Fx5Hk>

Make up exams will only be given for excused absences that are proven by relevant paperwork (e.g., a doctor's note). In such cases, make up times should be scheduled with the instructor.

Responding to Email. Please first email the Teaching Assistant with any questions. If you are not able to resolve your questions with their help, then contact me.

Showing Respect. As a part of building a collaborative learning environment, we show respect to all people and projects in class. For example, when you evaluate others' ideas or other teams' design, show your respect for their effort and design, and then provide your comments or suggestions in a way to help improve the interaction design.

Get Some Help!

You are expected to take personal responsibility for you own learning. This includes acknowledging when your performance does not match your goals and doing something about it. Everyone can benefit from some expert guidance on time management, note taking, and exam preparation, so I encourage you to visit <http://ter.ps/learn> and schedule an appointment with an academic coach. Sharpen your communication skills (and improve your grade) by visiting <http://ter.ps/writing> and schedule an appointment with the campus Writing Center. Finally, if you just need someone to talk to, visit <http://www.counseling.umd.edu>.

Everything is free because you have already paid for it, and **everyone needs help**... all you have to do is ask for it.

Grades

Your grade is determined by your performance on the learning assessments in the course and is assigned individually (not curved). If earning a particular grade is important to you, please speak with me at the beginning of the semester so that I can offer some helpful suggestions for achieving your goal.

All assessment scores will be posted on the course ELMS page. If you would like to review any of your grades or have questions, come to office hours or contact the TA (and then contact me if your issue was not resolved). Any formal grade disputes must be submitted in writing and within one week of receiving the grade.

Learning Assessments	#	Points Each	Category Weight
Homework (HW): out-of-class assignments submitted on ELMS	Varies	10	10%
In-class assignments	Varies	1	20%
Team project assignments	7	100	50%
Midterm Exam	1	100	10%
Final Exam	1	100	10%

Final letter grades are assigned based on the percentage of total assessment points earned. To be fair to everyone I establish clear standards and apply them consistently, so please understand that being close to a cutoff is not the same this as making the cut (89.99 \neq 90.00). It would be unethical to make exceptions for some and not others.

Final Grade Cutoffs					
+	97 - 100%	+	87 - 89.9%	+	77 - 79.9%
+	67 - 69.9%	A	93 - 96.9%	B	83 - 86.9%
C	73 - 76.9%	D	63 - 66.9%	F	<60.0%
-	90 - 93%	-	80 - 82.9%	-	70 - 72.9%
-	60 - 62.9%				

Course Schedule

UX = The UX Book (main book)

DUE BEFORE CLASS		DURING OUR CLASS MEETING	DUE AFTER CLASS
1 Tues	8/28	<p><i>Readings online through UMD Libraries</i></p> <p>The Design of Everyday Things by D.A. Norman, 2013: Ch. 1 (pp. 1-10) & Ch. 6 (pp. 217-236)</p>	<p>Led by Prof Weintrop</p> <p>Design Thinking and the User-Centered Design Process</p> <p>Design Portfolios</p> <p>Homework 1: Introduction</p>
2 Thur	8/30	<p>UX Ch. 1 sec. 1.1-1.3 (pp. 1- 23)</p>	<p>Led by Biswaksen Patnaik</p> <p>Introduction to UX</p> <p>Begin team and topic formation</p> <p>Homework 2: Design Analysis</p>
3 Tues	9/4	<p>UX Ch. 3 sec 3.2 (pp. 87 – 98)</p>	<p>Team and topic formation continued</p> <p>Design portfolios</p>
4 Thur	9/6	<p><i>See ELMS for readings:</i></p> <p>Participant observation field guide</p> <p>Informal Interviewing in Participant Observation</p> <p>Conducting an interview with empathy</p>	<p>In-class assignment: planning interviews and observations</p> <p>Homework 3: CITI Training Certificate</p>
5 Tues	9/11		<p>NO CLASS</p> <p>Use time to complete first couple observations and interviews</p> <p>Project 1 check-in</p>
6 Thur	9/13		<p>Contextual Inquiry</p> <p>Understanding disability and cultural norms</p>
7 Tues	9/18	<p>UX Ch. 4.1 – 4.3 (pp. 129-144), UX Ch. 4.4 (pp. 144-157)</p>	<p>Contextual Analysis</p> <p>Project 1: Contextual inquiry</p>
8 Thur	9/20		<p>Guest lecture (Kelsey Krach, Fearless)</p> <p>Contextual Analysis</p>
9 Tues	9/25		<p>Biswaksen Patnaik leads</p> <p>Contextual Analysis Workshop</p>
10 Thur	9/27	<p>UX Ch. 5 (pp. 161-180)</p>	<p>Extracting Interaction Design Requirements</p>

11 Tues	10/2		Guest Lecture: Design Thinking, Ideation, and Sketching	Project 2: Contextual analysis
12 Thur	10/4		Concept statement workshop	
13 Tues	10/9	UX Ch. 7 (pp. 251-298)	Design Thinking, Ideation, and Sketching	Project 3: Concept statement
14 Thur	10/11		MIDTERM	
15 Tues	10/16		Design Thinking, Ideation, and Sketching	
16 Thur	10/18	UX Ch. 8.1-8.3 (pp. 299-316)	Mental Models and Conceptual Design	
17 Tues	10/23		Mental Models and Conceptual Design	
18 Thur	10/25	UX Ch. 8.4-8.7 (pp. 316 – 332)	Design Production	Project 4: Design – Part 1
19 Tues	10/30	UX Ch. 9 (pp. 333-358)	Design Production	
20 Thur	11/1	UX Ch. 11 (pp. 391 – 426)	Prototyping	Project 4: Design – Part 2
21 Tues	11/6		Biswaksen Patnaik leads Prototyping workshop	
22 Thur	11/8		Prototyping and assistive technologies	
23 Tues	11/13	UX Ch. 12 (pp. 427 – 466)	Digital Prototyping & Wireframes Assistive Technology & User Interface Facilitators/Barriers	Project 5: Prototyping – Part 1
24 Thur	11/15	UX Ch. 12 (pp. 436 - 452) UX Ch 13 (pp. 467- 479)	UX Evaluation	
24 Tues	11/20		UX Evaluation	Project 5: Prototyping – Part 2
25 Thur	11/22		NO CLASS - THANKSGIVING	
26 Tues	11/27	UX Ch. 17 (pp. 593 – 610) Ch. 18 (pp. 611 – 618)	UX Evaluation and Accessibility Evaluation	Project 6: Evaluation
27 Thur	11/29		Presentation workshop	Homework 4: Reflection
28 Tues	12/4		Project Presentations 1	Project Assignment 7
29 Thur	12/6		Project Presentations 2	
30 Tues	12/11		Reading Day	
Thur	12/13		FINAL EXAM – Likely 8-10 AM	

Note: This is a tentative schedule, and subject to change as necessary – monitor the course ELMS page for current deadlines. In the unlikely event of a prolonged university closing, or an extended absence from the university, adjustments to the course schedule, deadlines, and assignments will be made based on the duration of the closing and the specific dates missed.