



Extended Course Description

This course is an introduction to user experience, user-centered design and user interface implementation 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, with an emphasis on incorporating people in the design process from initial field observations to summative usability testing are discussed. 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 user-centered design process.

Learning Outcomes

After successfully completing this course you will be able to:

- Articulate important historical, current and emerging trends, critical issues, 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, and competitive analysis.
- 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 and interactive design through an iterative design process.

Required Resources

Course website: elms.umd.edu



Hartson, R., and Pyla, P. (2012). *The UX Book: Process and Guidelines for Ensuring a Quality User Experience*. Elsevier/Morgan Kaufmann.

NOTE: A second edition was just published in December 2018, but we are going to be using the FIRST edition, not the second edition.

Class Information

Teacher

Dr. Rachael Bradley
Montgomery
rlb@umd.edu

Class Meets

Online, Asynchronous

Office Hours

Friday 8:00-9:00 online
or by Appt.

Teaching Assistant

Christine Pisarczyk
christinepisarczyk@gmail.com

Office Hours

Monday 4:50-5:50 in HBK
and by Appt. Please email to confirm.

Prerequisites

PSYCH 100; INST201 or INST301¹; INST 326

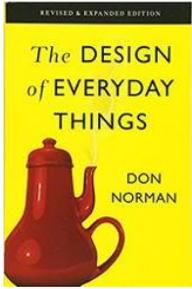
Course Communication

I will send time-sensitive information to students via ELMS announcements. Please ask questions about class content and assignments using the discussion forums on ELMS. Please contact me via email to discuss absences, accommodations, or other personal matters.

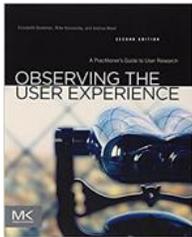
Helpful guidance on writing professional emails: ([ter.ps/email](mailto:ter.ps@email)).

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

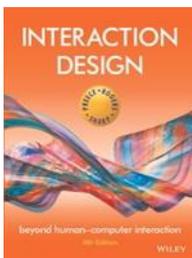
Recommended Resources



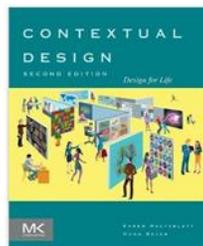
The Design of Everyday Things: Revised and Expanded Edition
Norman, D.A. 2013
Available online through UMD library



Observing the User Experience
Goodman, E., Kuniavsky, M., & Moed, A.
Second Edition (2012)
Available online through UMD library



Interaction Design: Beyond human-computer interaction
Preece, J., Sharp, H., & Rogers, Y.
Fourth Edition (2015)
Available in print through UMD library



Contextual Design, Second Edition: Design for Life
(Interactive Technologies)
Holtzblatt, K. & Beyer, H.
Second Edition (2017)
Available online through UMD library

Other Readings: Other relevant readings will come from journals, trade publications, newspapers, conference proceedings, etc. as helpful. Additional assigned readings will be available through our class ELMS/Canvas site. All journal articles are also accessible through UMD Libraries. At any point in the semester, please do not hesitate to contact us if you have any trouble locating or accessing assigned readings.

Campus Policies

As a student, you have the responsibility to be familiar with and uphold the Code of Academic Integrity and the Code of Conduct. You also have the responsibility to notify your course instructors in a timely fashion regarding academic accommodations related to absences and accessibility, as indicated below.

As a student, you have the right to know the expectations set by University Policy. The University of Maryland values the diversity of its student body and is committed to providing a classroom atmosphere that encourages the equitable participation of all students.

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

While class is asynchronous and online, I expect that you complete and turn in all the activities and assignments for each week by the due date given. You are responsible for setting your own pace and contacting me if you are having difficulties **before** an assignment/activity is late.

Readings and Lectures:

- Complete all listed readings and post to the discussion forums.
- Lectures will be brief and will cover key points in the course material, but you'll only develop a deep enough understanding of the material for tests, assignments, projects, and discussion by completing the assigned readings. You are responsible for keeping up with readings per the schedule in the syllabus.

Weekly Posting and "Class" Activities:

- Because we do not meet each week, I gauge your progress through your postings. Sometimes these are discussions and sometimes these are activities. All are graded and contribute to a significant portion of your grade. You are expected to complete them each week as they prepare you for upcoming work and build on one another.

Team Project:

- You will work in teams of 3-4 students on a semester-long User-Centered Design project. Your group will be assigned at the beginning of the semester. This will be your group for the rest of the semester.
- For group activities, you are responsible for scheduling time to work with your group during the week. Each student is expected to meaningfully contribute and grading includes feedback from your peers.
- The project will involve defining your User-Centered Design goals, researching user experience to gather data, extracting design requirements, developing design prototypes, and evaluating design prototypes.
- Once the user experience research is complete, you will be required to organize the UX research data and prepare them for further analysis, requirement extraction, design, and evaluation. During the semester, the in-class assignments will contribute to or practice for your team projects, and this will allow me to help with the progress of your team project and answer your questions.

Project Websites/Blogs

- In addition to your project assignments, your 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). Your assignments will be presented using this website.

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.

Team Presentation:

- You will be expected to present your User-Centered Design project results. The presentations should be a 10 minute video 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 post feedback, based on their knowledge of user-centered design gained throughout the semester, offering their opinion about the strengths and weaknesses of the projects.

Exams:

- A mid-term exam will be administered to test your understanding of the concepts and skills in UCD introduced in class and readings.
- A final exam will be administered to test your understanding of the concepts and skills introduced throughout the course in class and readings.

Course-Specific Policies

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 three days late will not be accepted. It is at the instructor's discretion to accept late work and assign late point deduction. Because the assignments of this course accumulate for the final project, it is crucial to follow the assignment schedule.

No Extra Credit Work: Students sometimes ask for some extra credit work in an attempt to bring up grades. However, extra credit work will not be given on an individual basis.

Get Some Help!

Taking personal responsibility for your own learning means acknowledging when your performance does not match your goals and doing something about it. I hope you will come talk to me so that I can help you find the right approach to success in this course, and I encourage you to visit tutoring.umd.edu to learn more about the wide range of campus resources available to you. In particular, everyone can use some help sharpen their communication skills (and improving their grade) by visiting ter.ps/writing and schedule an appointment with the campus Writing Center. You should also know there are a wide range of resources to support you with whatever you might need (see go.umd.edu/assistance), and if you just need someone to talk to, visit counseling.umd.edu or [one of the many other resources on campus](#).



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

Names/Pronouns and Self Identifications

The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering inclusive and equitable classroom environments. I invite you, if you wish, to tell us how you want to be referred to both in terms of your name and your pronouns (he/him, she/her, they/them, etc.). The pronouns someone indicates are not necessarily indicative of their gender identity. Visit trans.umd.edu to learn more.

Additionally, how you identify in terms of your gender, race, class, sexuality, religion, and dis/ability, among all aspects of your identity, is your choice whether to disclose (e.g., should it come up in classroom conversation about our experiences and perspectives) and should be self-identified, not presumed or imposed. I will do my best to address and refer to all students accordingly, and I ask you to do the same for all of your fellow Terps.

Grades

Grades are not given, but earned. 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 (including the exams), or have questions about how something was scored, please email me to schedule a time for us to meet in my office.

Late work will not be accepted for course credit so please plan to have it submitted well before the scheduled deadline. I am happy to discuss any of your grades with you, and if I have made a mistake I will immediately correct it. Any formal grade disputes must be submitted in writing and within one week of receiving the grade.

Learning Assessments	#	Points Each	Category Total	Category Weight
Readings, Discussion and Classwork	31	2-10	200	40%
Team Project	21	5-100	500	50%
Exams	2	100	200	10%
Total:			900	100%

Final letter grades are assigned based on the percentage of total assessment points within each category multiplied by the category weight. I round to the second decimal point. To be fair to everyone I have to establish clear

standards and apply them consistently, so please understand that being close to a cutoff is not the same as making the cut (89.99 \neq 90.00). It would be unethical to make exceptions for some and not others.

Final Grade Cutoffs									
+	97.00%	+	87.00%	+	77.00%	+	67.00%		
A	94.00%	B	84.00%	C	74.00%	D	64.00%	F	<60.0%
-	90.00%	-	80.00%	-	70.00%	-	60.00%		

Course Schedule

DATE	TOPIC	READINGS (A WEEKLY POST IS REQUIRED ON THE READINGS)	ASSIGNMENTS
Week 1 8/26-9/1	Course Introduction and the Design of Everyday Things	Design of Everyday Things Ch. 1, pp. 1-25 Ch. 6, pp. 217-236 The UX Book Ch. 1, pp. 1-25	<ul style="list-style-type: none"> • Introduction Post • Skills and Interest Survey • Course Journal Setup • Topic Brainstorming
Week 2 9/2-9/8	The UX Process Lifecycle Template	Observing the User Experience Ch. 6, pp. 95-139 The UX Book Ch. 2, pp. 47-60 Ch. 3, pp. 96-98	<ul style="list-style-type: none"> • Design Analysis • Challenge Statement Exercise • Project Assignment 1
Week 3 9/9-9/15	Contextual Inquiry and Analysis: Ways to Know Your Users Better	The UX Book Ch. 3, pp. 87- 128	<ul style="list-style-type: none"> • CITI Training Certificate • Interview Practice • Project Observation Planning
Week 4 9/16-9/22	Contextual Inquiry and Analysis Things to Learn from the Context	The UX Book Ch. 4, pp. 129-160	<ul style="list-style-type: none"> • Course Journal Reflection on Observations • Affinity Diagram Exercise • Contextual Inquiry
Week 5 9/23-9/29	Extracting Interaction Design Requirements	The UX Book Ch. 5, pp. 161-180	<ul style="list-style-type: none"> • Design Requirements Exercise • Context Analysis
Week 6 9/30-10/6	Design Thinking, Personas, Ideation, and Sketching	The UX Book Ch. 7, pp. 251-298	<ul style="list-style-type: none"> • Personas Exercise • Midterm Course Evaluation • Project Assignment 2
Week 7 10/7-10/13	Midterms and Accessibility	Select Readings/Videos in Elms	<ul style="list-style-type: none"> • Midterm Study Guide • Requirements
Week 8 10/14-10/20	Mental Models and Conceptual Designs	The UX Book Ch. 8, pp. 299-332	<ul style="list-style-type: none"> • Journal reflection • Design Halls of Fame/Shame • Team Work Discussion • Personas

Week 9 10/21- 10/27	Storyboards and Wireframes	The UX Book Ch. 9, pp. 333-358	<ul style="list-style-type: none"> • Wireframes • Project Assignment 3:1 • Sketches and Scenarios
Week 10 10/28-11/3	Paper and 3D Prototyping	The UX Book Ch.11, pp. 391-426 Paper Prototyping by Snyder, Carolyn Chapters 4 and 9.	<ul style="list-style-type: none"> • Paper Prototype Usability Test • Project Assignment 3:2 • Paper Prototyping
Week 11 11/4-11/10	Wizard of Oz Prototyping	Select Readings/Videos in Elms	<ul style="list-style-type: none"> • Journal reflection • Project Assignment 4:1
Week 12 11/11- 11/17	UX Evaluations	The UX Book Ch.12, pp. 427-466	<ul style="list-style-type: none"> • Heuristic Evaluation • Project Assignment 4:2 • Digital Prototype
Week 13 11/18- 11/24	Field Studies	Select Readings/Videos in Elms	<ul style="list-style-type: none"> • Final Course Evaluation • UX Evaluation Plans • Project Assignment 5
Week 14 11/25- 11/29	Break	Happy Thanksgiving	Rest
Week 15 12/2-12/6	Presentations and Exam Review	None	<ul style="list-style-type: none"> • Final Exam Review Discussion • Project Assignment 6
Week 16 12/9-12/13			Final Exam

Note: This is a tentative schedule, and subject to change as necessary – monitor the course ELMS page for updated content and 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.