

# Syllabus

## CS 4352: HUMAN-COMPUTER INTERACTION 1 SUMMER 2023

### PROFESSOR CONTACT INFORMATION

<b>Name</b>	Erika Orrick
<b>Phone</b>	214-766-2556
<b>Email</b>	<a href="mailto:erika.orrick@utdallas.edu">erika.orrick@utdallas.edu</a> (I am easiest to reach on Teams or WhatsApp, however)
<b>Office Hours</b>	Catch me in class to set up a time or send me a message so we can set up a time.

### COURSE INFORMATION

#### Course Modality

This course is offered only in person. We will be meeting Tuesdays and Thursdays from 8:30 am–1:00 pm.

#### Course Description

Broad overview of how human-computer interaction (HCI) informs the user-centered design (UCD) process. Practical experience in the core methods of user experience design and research throughout the product development cycle.

#### Student Learning Objectives/Outcomes

After completing this course, students should have accomplished the following course objectives:

1. Describe the basic user-centered design (UCD) process and how HCI, UCD, UX, usability, and other common industry terms relate.
2. Describe various types of UX research and the appropriate situation for each.
3. Describe and perform UX analysis and synthesis tasks.
4. Describe and apply relevant HCI theories and principles to design activities.
5. Evaluate and use appropriate tools to perform UX design tasks.
6. Describe and perform UX evaluation tasks.
7. Create HCI design deliverables that can be used to communicate to project stakeholders.

### INTRODUCTION

Human-Computer Interaction 1 is built around a semester-long group project designed to expose you to the basic end-to-end user experience research and design process. Because of the time available in a university semester, you will learn the overall lifecycle and basic processes from which

most other design and research tools in use today are derived. The course is broken into topical modules that teach you this information as you need it for the project. By the time the semester is over, you will have been exposed to the entire lifecycle. Whether you go on to a career as in user experience, software engineering, or some other aspect of product or service development, you should take away from this class an understanding of why and how to keep the user present in the final design.

## HOW TO BE SUCCESSFUL IN THIS COURSE

Things to keep in mind:

- Read all information posted on eLearning, including announcements and assignment updates, etc. I try to provide information in more than one format to ensure you are aware of it, but eLearning is canonical.
- Take the initiative to solve your own problems. Make sure you've read the information I've provided before reaching out to me. UX requires self-reliance, brainstorming with peers, and thinking outside the box. That being said, if your question is still unanswered, reach out to me. There are a number of ways to do so listed on eLearning under the About/Contact Prof. Orrick page.
- Even though UX is more than making things "pretty," everything you turn in should still be clean, use good visual hierarchy, and be as free of spelling and grammar errors as is reasonable. We'll talk more about this near the beginning of the semester.
- Pay attention to the submission requirements. I ask for specific file formats on each assignment for a reason. And put your name(s) on the actual assignment document(s) you turn in. Do not rely on eLearning to tell me who you are. These are both big pet peeves of mine.

## COURSE DELIVERY

### eLearning (Blackboard)

While this course is delivered in person, we will be relying on [eLearning](#) for course information and assignment submission, which must be accessed using your UT Dallas NetID account. You are responsible for being aware of any updates or announcements posted there.

For more details on eLearning-specific tools, please visit the [Student eLearning Tutorials](#) webpage for video demonstrations. If you have any questions about how something on eLearning works *and* you have already tried to find the answer using the resources provided, then make sure you ask me. I don't want your grade adversely affected by technology shortcomings.

## Other Communication

I use Teams as a complement to eLearning. Feel free to reach out to me on Teams and I will get back to you as soon as I can. I generally will get back to you more quickly on Teams than email. I will also send time-sensitive announcements on Teams, so be sure to set your notifications for Teams appropriately if you would like to be notified when I post announcements there.

Please note that class correspondence will only be answered if it comes from your official UT Dallas email or your Teams account. No exceptions. Student emails will be answered within two working days under normal circumstances.

## TEXTBOOKS AND MATERIALS

### Required Books

Hartson, R, and Pyla. P. *The UX Book: Agile UX design for a quality user experience*. 2nd ed. Morgan Kaufman.

This book is available to rent as an ebook through Amazon if you do not wish to carry a textbook overseas with you. Please avoid using the first edition that is available through McDermott library since it is missing a considerable amount of information. (The authors call the second edition a rewrite, not just an update.)

Johnson, J. *Designing with the Mind in Mind*, 3rd ed. Morgan Kaufman.

If you are not in a position to purchase this text, the 2nd edition is available online through the McDermott Library, but is missing a section here and there (as well as a full chapter at the end). I'll provide the missing chapter if needed.

### Recommended Books

Norman, D. *The Design of Everyday Things (Revised and Expanded Edition)*. Basic Books.

I recommend anyone interested in HCI/UX read this book and keep it on their shelf. It is considered one of THE books in the field. It is unfortunately not available online through the library, but it's worth the purchase. I will be recommending chapters throughout the semester.

There are a couple of other textbooks I may pull readings from throughout the semester, but these will be available for reading online through the library so there is no need to purchase.

## TECHNICAL REQUIREMENTS

You will need to bring a laptop or tablet to class with you each day as we will be relying on these heavily for in-class work.

At a minimum, you must have access to the following:

- A modern web browser such as Chrome, Edge, Firefox.
- A word processor and/or presentation software such as Microsoft Word and PowerPoint.
- The ability to capture your screen and/or a camera (cell phone camera is fine).
- A camera plus microphone and speakers or a headset for seminar sessions (computer or phone).
- Figma.com for prototyping. Information about setting up an educational account is provided on eLearning.

All students have access to Microsoft 365 through the university's site license. See [Resources for Students](#) for more information.

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important these requirements on the [Getting Started with eLearning](#) webpage.

## ASSIGNMENTS OVERVIEW

More information about all assignments, including due dates, is available on eLearning.

### Participation

This grade consists of assignments designed to encourage discussion and thought around user experience, to practice what you have learned, or otherwise contribute to the successful running of the course. This includes quizzes, surveys, discussion boards, etc.

*A special note about discussion boards:* yes, you are going to do a lot of “find something poorly designed” and “find something well-designed” throughout the semester. There is method to the madness, however. One of the most important things to develop as an UX/HCI practitioner is a keen eye for design and how it affects humans. The discussion board assignments are created to get practice.

*Quizzes:* There will be a couple of short quizzes to test your understanding of the information in the preceding topics. These will generally be multiple-choice, matching, etc. Quizzes are open book, open note, but not open classmate. You have up to two attempts, only the last one submitted counts (not the higher one). Honorlock/Lockdown browser are not required.

## Semester Project

The main focus of this class is a semester-long group project. You will be working in groups of 4. Some time will be given to work on the project during class where you can work directly with me, but you will be expected to find time to meet with your group and work outside of class to complete each part.

## ACADEMIC CALENDAR

This course is composed of several topics and is designed to take you the entire semester to complete. Pay attention to due dates and don't wait until the last minute.

*This schedule is tentative and will be updated with more specifics as we get closer to summer.*

	DATE	TOPIC(S)	ASSIGNMENTS
1	Tue May 30	Joint course kickoff and intro to HCI/UX	Interest survey GUI Bloopers
2	Thu Jun 1	Project planning User research	Figma signup Project plan
3	Tue Jun 6	Analysis and synthesis	DB 1 User/task frequency matrix Persona and/or task analysis
4	Thu Jun 8	Guest lecture and Design and analytical evaluation	Heuristic evaluation
5	Tue Jun 13	Prototyping	DB 2 Testable interactive prototype
6	Thu Jun 15	Evaluation	Usability test plan
7	Tue Jun 20	Analyzing evaluation research and creating client deliverables and reports	DB3
8	Thu Jun 22	Site visit (am) Portfolios and project work time	Portfolio case study
9	Tue Jun 27	Other topics (TBD)	DB 4
10	Wed, Jun 28	Joint course project workshop	
11	Thu Jun 29	Joint course project presentations	Client deliverable Self/peer evaluations

## GRADING POLICY

Grades will be based on the total number of points across the course, weighted by assignment type.

Assignments and exams will be scored as follows:

- 60% participation

- 40% semester project

Standard grading scale applies, though if we find that our assignments and exams were unusually difficult, we may relax these criteria.

▪ A+	97 or above	▪ C+	77-79
▪ A	94-97	▪ C	74-76
▪ A-	90-93	▪ C-	70-73
▪ B+	87-89	▪ D+	67-69
▪ B	84-86	▪ D	63-66
▪ B-	80-83	▪ D-	60-63
		▪ F	59 or below

## COURSE & INSTRUCTOR POLICIES

LATE WORK will be penalized 10% off the total possible score (not the score received) for each day late. After 3 days, it will not be accepted without a valid university-approved excuse.

FOLLOW THE SUBMISSION GUIDELINES. You must include your NAME(S) on your actual assignment documents and follow all submission guidelines listed in assignment instructions. There is generally a reason for the guidelines I post. Submission guidelines are listed with each assignment and are part of the rubric grading. You will have unlimited opportunities to submit most assignments in case you initially submit an incorrect format. Only the last one will be graded.

## CLASS PARTICIPATION

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures. Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

## CLASS ATTENDANCE

You are expected to attend all in person classes, read assigned material, perform assignments, and contribute to the course. Although I expect you to attend all classes, you may miss one class without explanation or penalty. Additional absences will be reflected in your Communication Competency grade. Absences are also likely to adversely affect your grades in additional ways, as low-impact assignments conducted in class cannot be made up outside of class. Just as in a business, I encourage you to let me know in advance if you know when you are going to miss class and explain

your absence if you have missed a class for which you did not give advanced notice. More than three unexcused absences could result in failure of the course. Out of respect for your fellow class members and your instructor, you are expected to be on time for class. Each set of three tardy arrivals is treated as one absence.

## **ASSIGNMENT SUBMISSIONS**

All assignments that are to be submitted through eLearning must be submitted via eLearning for credit. (Submitting assignments via e-mail is only acceptable if there is a problem with the eLearning system. Otherwise, submission of assignments by any other method for work that is assigned to be submitted through eLearning, will not be accepted and will result in a grade of zero.) Assignments should be submitted in the format described in the assignment.

## **CLASS RECORDINGS**

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student Accessibility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student Accessibility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

## **CLASS MATERIALS**

The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class or uploaded to other

online environments except to implement an approved Office of Student Accessibility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

## **ACADEMIC SUPPORT RESOURCES**

The information contained in the following link lists the University's academic support resources for all students.

Please go to the [Academic Support Resources](#) webpage for these policies.

## **SERVER UNAVAILABILITY OR OTHER TECHNICAL DIFFICULTIES**

The university is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time-sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online [eLearning Help Desk](#). The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The [eLearning Support Center](#) includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

## **COMET CREED**

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

*“As a Comet, I pledge honesty, integrity, and service in all that I do.”*

## **UT DALLAS SYLLABUS POLICIES AND PROCEDURES**

The information contained in the following link constitutes the university's policies and procedures segment of the course syllabus.

Please go to the [UT Dallas Syllabus Policies](#) webpage for these policies.

*The descriptions and timelines contained in this syllabus are  
subject to change at the discretion of the professor.*