

# CS 352 Introduction to Usability Engineering

Credits: 4

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*This syllabus and schedule are subject to change in the event of extenuating circumstances.*

## Course Description

Basic principles of usability engineering methods for the design and evaluation of software systems. Includes the study of human-machine interactions, user interface characteristics and design strategies, software evaluation methods, and related guidelines and standards.

**Prerequisites :** CS 151 with C or better or CS 161 with C or better or ENGR 103 with C or better or CS 295 with C or better or ECE 151 with C or better  
**Equivalent to:** CS 252

## Technical Assistance

If you experience any errors or problems while in your online course, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the [IS Service Desk](#) online.

## Learning Resources

This course does not have a required textbook. Reading assignments will be provided in the form of lectures, articles online through OSU’s library, and other online resources.

# Course Learning Outcomes

At the completion of this course, students will be able to:

1. Describe the human-centered design process and usability engineering process and their roles in system design and development.
2. Discuss usability design guidelines, their foundations, assumptions, advantages, and weaknesses.
3. Describe the basics of ethical research with human participants.
4. Design a user interface based on an analysis of human needs and prepare a prototype system via state-of-the-art design tools.
5. Assess user interfaces using different usability engineering techniques.
6. Make a final report that justifies design decisions.
7. Create a research portfolio to market themselves as a UX Researcher.

# Course Content and Schedule

Week	Topics	Due Wed	Due Fri
1	HCI / IxD, UXR, Usability	Syllabus Quiz	IRB Training Brainstorm a UX project idea Discussion 1
2	Design Processes & UX Research	Project Kick Off Quiz 1	Project Scope
3	Exploratory User Research		Figma
4	Personas, Scenarios, Design Principles	Quiz 2	Research & Insights
5	Initial Design, Concepts, Paper Prototypes	Quiz 3 Initial Design Post	Initial Design Replies
6	Expert Reviews, Empirical Evaluations	Initial Designs & Concepts	Prototype & Evaluation Plan

7	Interactive Prototyping	Quiz 4	Prototype Evaluation
		Heuristic Evaluation	
8	User Experience, Emotional Design, Accessibility	Improved Prototype Post	Prototype Replies
9	A UX Researcher Career	Quiz 5	
10	UX Stakeholder Presentation		
Final	Final Prototype (DUE WEDNESDAY)		

## Grading Policies

### Letter Grade Floors/Ceilings

Grade	Percent Floor
A	90
A-	88
B+	85
B	80
B-	78
C+	75
C	70
C-	68
D+	65
D	60
D-	58
F	0

### Distribution of Points by Assessment

Assessment	Weight
Group Project Assignments	20
Individual Assignments	35
Quizzes	25
Discussions	10
Final Project	10
Total Points:	100

## Course Policies

### Student Conduct

Allowed :)	NOT allowed >:(
Showing your work with an instructor or TA, or sharing report drafts with your discussion group.	Giving your work to a (current or future) student so they can copy it.
Discussing strategies and concepts with classmates.	Submitting someone else's work as your own or claiming their work as yours.
Submitting incomplete Assignments before the deadline with a note saying you are going to resubmit.	Asking for an extension after missing the deadline for an Assignment (except in unavoidable emergencies).
Asking too many questions by email, in Teams, or on the class message board.	Not understanding what you need to do, not asking for help, and then asking what you can do after it's too late.
Disagreeing with someone on the message board.	Name-calling, stalking, or counter-productive comments.
Discussing the assigned reading or quiz questions in Teams, on	Sharing the quiz questions or answers publicly or outside of a class

Ed Discussion, or in your Canvas discussion group.	communication medium.
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### Late Work Policy

**You must submit all assignments before the due date. We do not accept submissions if the deadline is missed. If you do not submit before the due date, you will receive no credit.**

However, we do have a "revision grace period" policy for the assignments. If you (or your group) are unable to fulfill an assignment or project step to your satisfaction before the due date--for any reason--you may notify the TA (via a Canvas comment along with the original on-time submission) that you plan to submit a revision. You may then submit a revision **within 2 days. Discussion posts, quizzes and the final project are not eligible for late revisions.**

If you **1)** submit a partial fulfillment of the requirements before the due date, **2)** notify the TA when you submit your first attempt, and then **3)** resubmit a revised version of your work within 3 days, your grade will reflect your final submission only without incurring penalties. If you do not resubmit within 3 days, your grade will reflect your original (potentially incomplete) submission.

Exceptions may be made at the instructor’s discretion for documented emergencies e.g. hospitalization, or extraordinary extenuating circumstances.

### Discussion Participation

Students are expected to participate in all graded discussions. While there is great flexibility in online courses, this is not a self-paced course. Discussions are due on Fridays, however you will benefit more from them if you make your first post early in the week.

### Proctored Exams

There will be no exams in this course.

### Incompletes

Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, usually everything but the final paper). If you are having any difficulty that might prevent you from completing the coursework, please don’t wait until the end of the term; let me know right away.

### Guidelines for a Productive and Effective Online Classroom

Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university’s regulations regarding civility. Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

### Expectations for Student Conduct

Student conduct is governed by the university’s policies, as explained in the Student Conduct Code (<https://beav.es/codeofconduct>) . Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

## Communication and Where to Go for Help

**Hannah Scott** (instructor): [scothann@oregonstate.edu](mailto:scothann@oregonstate.edu)

Office hours on Teams: By appointment. Feel free to message me on Teams without an appointment; I'm generally very active and will usually get back to you within a few business hours.

Please note that you are not responsible for keeping up with all communication channels. I will post any changes to assignments or necessary announcements on Canvas. We have a Teams workspace and Ed Discussions message board for your convenience, but you do not have to keep up with all activity on Teams/Ed Discussions.

- Bhavya Parikh | [parikhb@oregonstate.edu](mailto:parikhb@oregonstate.edu)
- Chimdi Chikezie | [chikezic@oregonstate.edu](mailto:chikezic@oregonstate.edu)
- Anju Mathew | [mathewa@oregonstate.edu](mailto:mathewa@oregonstate.edu)
- Leah Nicholson | [nicholea@oregonstate.edu](mailto:nicholea@oregonstate.edu)

Ed Discussions (a Q&A forum for help from the instructor and other students)

Teams (a forum for more informal interaction with other students, and also for office hours)

[Ecampus Student Resources](#)

## University Policies

## Statement Regarding Students with Disabilities

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

## Statement Regarding Religious Accommodation

Oregon State University is required to provide reasonable accommodations for employee and student sincerely held religious beliefs. It is incumbent on the student making the request to make the faculty member aware of the request as soon as possible prior to the need for the accommodation. See the [Religious Accommodation Process for Students](#).

## Accessibility of Course Materials

All materials used in this course are accessible. If you require accommodations please contact [Disability Access Services \(DAS\)](#).

Additionally, Canvas, the learning management system through which this course is offered, provides a [vendor statement](#) certifying how the platform is accessible to students with disabilities.

## Academic Integrity

Integrity is a character-driven commitment to honesty, doing what is right, and guiding others to do what is right. Oregon State University Ecampus students and faculty have a responsibility to act with integrity in all of our educational work, and that integrity enables this community of learners to interact in the spirit of trust, honesty, and fairness across the globe.

Academic misconduct, or violations of academic integrity, can fall into seven broad areas, including but not limited to: cheating; plagiarism; falsification; assisting; tampering; multiple submissions of work; and unauthorized recording and use.

It is important that you understand what student actions are defined as academic misconduct at Oregon State University. The OSU Libraries offer a [tutorial on academic misconduct](#), and you can also refer to the [OSU Student Code of Conduct](#) and [the Office of Student Conduct and Community Standard's website](#) for more information. More importantly, if you are unsure if something will violate our academic integrity policy, ask your professors, GTAs, academic advisors, or academic integrity officers.

## Ecampus Reach Out for Success

University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about [resources that assist with wellness and academic success](#).

Ecampus students are always encouraged to discuss issues that impact your academic success with the [Ecampus Success Team](#). Email [ecampus.success@oregonstate.edu](mailto:ecampus.success@oregonstate.edu) to identify strategies and resources that can support you in your educational goals.

## For mental health:

Learn about [counseling and psychological resources for Ecampus students](#). If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

## For financial hardship:

Any student whose academic performance is impacted due to financial stress or the inability to afford groceries, housing, and other necessities for any reason is urged to contact the Director of Care for support (541-737-8748).

## Code of Conduct

The Code of Student Conduct prohibits Academic Misconduct and defines it as:

Any action that misrepresents a student or group's work, knowledge, or achievement, provides a potential or actual inequitable advantage, or compromises the integrity of the educational process.

To support understanding of what can be included in this definition, the Code further classifies and describes examples of Academic Misconduct, including cheating, plagiarism, assisting and others. See the [Code of Student Conduct](#) for details.

You are expected to do your own work and demonstrate academic integrity in every aspect of this course. Familiarize yourself with the standards set forth in the OSU Code of Student Conduct Section 4.2. You must only access sources and resources authorized by the instructor. You may not show your work to any other current or future students without the instructor's authorization. Violations of these expectations or the Code of Student Conduct will be reported to the Office of Student Conduct and Community Standards. If there is any question about whether an act constitutes academic misconduct, it is your responsibility to seek clarification and approval from the instructor prior to acting.

## Tutoring and Writing Assistance

[NetTutor](#) is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time environment. They also have an online writing suite where tutors critique and return essays within 24 to 48 hours. Access NetTutor from within your Canvas class by clicking on the Tools button in your course menu.

The Oregon State [Online Writing Suite](#) is also available for students enrolled in Ecampus courses.

## TurnItIn

Your instructor may ask you to submit one or more of your writings to Turnitin, a plagiarism prevention service. Your assignment content will be checked for potential plagiarism against Internet sources, academic journal articles, and the papers of other OSU students, for common or borrowed content. Turnitin generates a report that highlights any potentially unoriginal text in your paper. The report may be submitted directly to your instructor or your instructor may elect to have you submit initial drafts through Turnitin, and you will receive the report allowing you the opportunity to make adjustments and ensure that all source material has been properly cited. Papers you submit through Turnitin for this or any class will be added to the OSU Turnitin database and may be checked against other OSU paper submissions. You will retain all rights to your written work. For further information, visit [Academic Integrity for Students: Turnitin – What is it?](#)

## Student Evaluation of Courses

The online Student Evaluation of Teaching system opens to students during the week before finals and closes the Monday following the end of finals. Students receive notifications, instructions, and the link through their ONID. They may also log into the system via Online Services. Course evaluation results are extremely important and used to help improve courses and the online learning experience for future students. Responses are anonymous (unless a student chooses to “sign” their comments, agreeing to relinquish anonymity) and unavailable to instructors until after grades have been posted. The results of scaled questions and signed comments go to both the instructor and their unit head/supervisor. Anonymous (unsigned) comments go to the instructor only.