

## **CSCI 3002: Foundations of Human-Computer Interaction - Fall 2018**

Syllabus Version 1.0 (August 28, 2018)

<https://cuboulder.instructure.com/courses/22672>

### **Lecture**

Meeting Time: Tue/Thu, 5:00-6:15 pm

Location: Fleming 157

### **Recitations**

□ CSCI-3002-201: Fri 10:00-10:50, Fleming 154

□ CSCI-3002-202: Fri 11:00-11:50, KOBL 300

### **Instructor**

Ellen Yi-Luen Do, Professor

ATLAS Institute & Department of Computer Science

Email: [ellen.do@colorado.edu](mailto:ellen.do@colorado.edu)

Office hours: TBD and by email appointments

### **Teaching assistant**

Abigail Zimmermann-Niefield

[Abigail.Zimmermannniefield@colorado.edu](mailto:Abigail.Zimmermannniefield@colorado.edu)

Office hours: TBA

### **Overview of the Course**

The purpose of this course is to learn about, explore, and practice methods for conducting user-centered research, design, and user evaluation. You will learn about user-centered design practices by actually doing them, reflecting on how things went, and (in most cases) practicing them several more times. You will learn about a variety of techniques for working with users, and will apply them in the context of real-world design projects.

### **Learning Objectives**

Upon the successful completion of this course, you will be able to:

1. Generate, discuss, and evaluate ideas for designing new interactive systems;
2. Conduct user research in order to understand users' needs, abilities, challenges, and other attributes, in context;
3. Develop and refine ideas through brainstorming, sketching, storyboarding, and creating low-fidelity, mid-, and high-fidelity prototypes;
4. Evaluate prototypes through user testing and heuristic evaluation methods, and analyze the resulting data;
5. Compare and contrast design, prototyping, user testing, and analysis methods in order to determine the right method for the problem you are trying to solve;
6. Develop universally accessible technologies that address individuals with a wide range of needs and abilities.

## Required Materials

The following materials are required:

1. Official CU email address (all class correspondence must go through this address)
2. There is no required textbook for the class. Required readings will be posted on the web site.
3. Accounts to the web services on [Google Drive](#), [Github](#), and [Figma](#)

You will also be expected to acquire and bring the following materials to class for in-class activities:

4. Pencils & pens for sketching
5. Loose leaf blank paper (or a notebook with removable pages)
6. Sticky notes
7. Colored pencils or pens for multi-color sketches
8. A laptop computing device (any operating system is fine)

## Class Communication

We will use [the Canvas page](#) as the center of communication for this course. To contact the teaching staff, you may send messages on Canvas, email, or visit during office hours. Note that any email correspondence related to the class should be sent from a colorado.edu email address.

## Assignments and Grading

This course consists of a combination of in-class and out-of-class assignments. These assignments are designed primarily to give you experience in conducting user-centered design research, giving and receiving peer feedback, and generating and evaluating new ideas for designing interactive systems.

**Grading expectations.** In contrast to some CS classes, many elements of this class are graded based both on the successful completion of the work as well as the amount of care and effort put into the work. Assignments that you turn in should show evidence of careful thought, iteration on your initial ideas (*i.e.*, not turning in first drafts), and should be thoughtfully written and presented. For example, if a student turns in an assignment that "checks all the boxes" of the assignment description, but is poorly thought out or presented in a sloppy way, that student should not expect a perfect grade on that assignment. Whenever possible I will provide rubrics describing my expectations for each assignment.

**Grading scheme.** Many of the assignments will follow a (check minus, check, check plus) grading scheme. This grading scheme considers both the quality of the outcome and the amount of iteration and polish demonstrated in the work, while providing extra points for assignments that show particular attention to detail in addressing the design problem. The grading scheme is as follows:

1. *Check Minus (7/10 points):* Assignment is complete, but is missing some component specified in the assignment, or work seems rushed or like a first draft.
2. *Check (9/10 points):* The majority of "good" assignments will receive this grade. The assignment is complete, and shows thoughtful application of the skills learned in class. This project shows some thought and iteration - this is not your first idea or attempt. Sketches are cleaned up and easy to read.
3. *Check Plus (10/10 points):* These assignments are not only complete, but demonstrate high quality work. These are submissions that go beyond the bare minimum assignment (e.g., including additional users in your study, including more ideas, or extensively iterating on and polishing your designs), and demonstrate a commitment to creating good solutions to design challenges, rather than just OK solutions.

At the end of the course, letter grades will be assigned via the following formula:

Range	Letter Grade
94 to 100	A
90 to 93.9	A-
87 to 89.9	B+
83 to 86.9	B
80 to 82.9	B-
77 to 79.9	C+
73 to 76.9	C
70 to 72.9	C-
67 to 69.9	D+
63 to 66.9	D
60 to 62.9	D-
0 to 59.9	F

**Expectation of work.** This is a 4-credit course, and students are expected to work approximately 6 - 12 hours per week outside of class. Note that not every week will involve the same workload. Whenever possible, I will provide assignments early so that students can manage their time effectively. If you feel that you are working significantly more than the expected amount of time each week, please come talk to me during office hours.

**Late assignments.** All assignments are due by the date and time specified in the assignment. Because of the extensive work required to accommodate late assignments, no late assignments will be accepted without prior permission of the instructor.

**Citing sources.** Much of the work we do in this class involves drawing from other resources (tutorials, pre-made wireframes or mockups, images, open source projects, etc.). It is important that you cite all external sources you use in your assignments and provide links back to them. If your assignments are missing citations to work, you may receive a failing grade for the assignment.

**Late adds.** Students who join the class will be given one week after their first date of attendance to complete any assignments that were due before they joined.

### Grading breakdown

Your grade in the course will be based on the following components:

- ☐ **In-class design activities (15%).** During the recitation section, we will work on some activity in class. These are graded assignments; each week you will turn in a report on your in-class assignment via Canvas; these are typically due at 11:59pm on Sunday. These activities will often require working with a partner. If you must miss a class meeting, you will be expected to make up any missed in-class activities.
- ☐ **Group Project (40%).** There will be a slightly larger class assignment due approximately every two weeks. These assignments will build upon and integrate the ideas covered in class, and give you opportunities to practice your skills on real-world projects. These assignments will be completed in a group.
- ☐ **Solo Assignments (20%).** There will be several assignments that must be completed alone outside of class.

- **In-Class Quizzes (20%).** Throughout the semester, there will be three in-class quizzes that will evaluate your overall knowledge of the course material. Dates for these, and topics covered, will be announced ahead of time.
- **Class participation (5%).** Some activities will take place during lecture meetings.
- **Extra credit.** There will be some opportunities for receiving extra credit, including presenting mini-presentations to the class, and for offering feedback on other students' projects. Details will be posted on Canvas.

## **Class Policies**

### **Using technology in class**

We will take advantage of available technology whenever possible to enrich our learning. However, technology use can also be a detriment to the classroom experience, not just for you but for other students around you. If I see that you are using technology to the detriment of the class meeting, I will ask you to stop. If the problem continues, I will ask you to leave class.

### **Missing class**

This is a "flipped class" -- much of the learning in this class will come through in-class group activities. These activities form a major portion of your grade. You will document your in-class work through write ups on Canvas. If you miss a class and the in-class activity, you are expected to make up that work.

### **Right to revise**

I reserve the right to revise the syllabus throughout the semester. In general, if I am considering making a change to an assignment or due date, I will discuss it with the class first. If I decide to make any changes to the syllabus or grading, each student will have the opportunity to opt in to the changes, or to opt out and follow the earlier version of the syllabus.

### **Academic accommodations**

This course complies with the university's policy on disability accommodations (see details below). *If you require any accommodations, please let me know as soon as possible so that we can adequately address your needs.*

## **University Statements**

### **Disability Accommodations**

If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at <mailto:dsinfo@colorado.edu>. If you have a temporary medical condition or injury, see the Temporary Injuries guidelines under the Quick Links at the Disability Services website and discuss your needs with your professor.

### **Religious Observances**

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance. In this class, please send me e-mail or visit me in office hours to notify me of such a situation at least one week in advance of the event so that we can make alternative arrangements. See the campus policy regarding religious observances for full details.

**Classroom Behavior**

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the student code.

**Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation**

The University of Colorado Boulder (CU Boulder) is committed to maintaining a positive learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU's Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulder's Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the OIEC website.

**Honor Code**

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy of the institution. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at [honorcode.colorado.edu](http://honorcode.colorado.edu).