# Course Syllabus

Jump to Today



# Course Description

User-centered design results in robust solutions that successfully address real human problems. In this course, students will learn about methods and principles of user-centered design to explore a problem space and the people within that space, identifying users' needs, system constraints and requirements, and ultimately designing solutions that incorporate all those components. Designs will be iterated from initial concepts to really valuable solutions by gathering feedback and usability testing prototypes with users throughout the course. The course project will culminate with the development of a robust design that addresses the identified problem. Final project presentations will take place at the end of the course.

All lectures will be condensed at the beginning of the course (Weeks 1-3; during which time, we will meet Tuesdays, Wednesdays, and Thursdays); the rest of the term will be comprised of critique sessions in the tutorials (Weeks 4-13; during which time, we will meet Wednesdays). This course has no final exam.

#### In summary:

The 3-week intensive period comprises a total of 9 classes of (three 2-hour long classes per week) for which students are required to:

- read the readings prior to class (homework)
- watch the recorded lecture prior to class (homework)
- attend the in-person class to do practice through hands-on ungraded activities (class time)
- complete graded guizzes in class (class time)

The remaining 9 weeks will comprise of a total of 9 studio sessions (one 2-hour long session per week) for which students are required to:

- complete studio assignments prior to class (homework)
- attend the studio session and participate (class time)
- complete post-studio assignments (homework)

Attendance and participation to class are mandatory. Note that the in-person classes and the studio sessions will <u>not</u> be recorded. The reason is that active participation to the synchronous component of the course is essential to the learning of the course material. Watching recordings of others' experience completing activities is not effective. To succeed in this course, it is expected that you can commit to attending the synchronous classes and tutorials, and are ready to actively engage in the hands-on activities, quizzes and discussions synchronously, during class time.

# Learning Objectives

This course is designed to provide students with the foundations necessary for understanding and applying user-centered design to address real-world problems. The learning objectives are:

- 1. to practice research methods for understanding user needs and practices.
- 2. to interpret raw data and create design artifacts (e.g., personas, scenarios).
- 3. to brainstorm, sketch and design prototypes that solve real user problems.
- 4. to evaluate prototypes (one's and others') for usability, learnability, and usefulness.
- 5. to work in multidisciplinary design teams.

### Class Times and Locations

Lectures: from Jan. 10, 2022 until Jan. 30, 2022 (Zoom passcode: ucd)

- Tuesday 4:00 PM 6:00 PM EST on Zoom (https://utoronto.zoom.us/j/81401562866)
- Wednesday 4:00 PM 6:00 PM EST on Zoom (https://utoronto.zoom.us/j/81401562866)
- Thursday 4:00 PM 6:00 PM EST on Zoom (https://utoronto.zoom.us/j/81401562866)

**Studios**: from Jan. 31, 2022 until April 8, 2022

Wednesday 4:00 PM - 6:00 PM EST See the page on <u>Studio Divisions</u>

#### Office Hours:

from Jan. 10 - Jan. 30: By appointment. Please use this form to request a meeting (https://forms.gle/rA9HCCvoQuuGpU7GA).

from Jan. 31 onwards: Time and location TBD

# **™** Prerequisites

CSC300H1 provides useful background for work in CSC318H1, so if you plan to take CSC300H1 then you should do it before CSC318H1. No required background, but any of the following is an asset: Graphic design / image manipulation; Technical writing; Research and literature review experience; Development, especially mobile or web; Psychology or human cognition.

## **Evaluation**

Students will be evaluated according to <u>University Assessment and Grading Practices Policy</u>. (<a href="https://governingcouncil.utoronto.ca/secretariat/policies/grading-practices-policy-university-assessment-and-january-26-2012">https://governingcouncil.utoronto.ca/secretariat/policies/grading-practices-policy-university-assessment-and-january-26-2012</a>). The table below shows the weight of each assessment.

#### 50% Individual work

Quizzes, during lectures 1-9 (22%)

Critiques, for studios 1-4, 6 & 7 (24%)

Studio 5 participation (3%)

A0-Individual: short-bio (1%)

#### 50% Group work

A0-Group: group information (1%)

A1: Formative study (10%)

A2: Design concepts and prototypes (10%)

A3: Summative evaluation (10%)

A4: Final presentation (5%)

In-studio group presentations (14%)

**Individual in-class quizzes:** There will be graded individual quizzes and assignments for every single lecture (during synchronous lecture time), worth 22% of your final grade. Each quizz weights the same. We will drop the lowest quizz grade, i.e. out of the 9 guizzes, only the 8 best will be accounted for.

**Critique**: Each tutorial will be used as a critique session (i.e., studio), where every group presents their weekly progress to the rest of the class and receive feedback. Each week, students will be assigned 2 teams for whom they have to provide written critiques. Critique write-ups are due 24 hours after each studio. Individual critiques are worth 24% of your final grade. Studio 5 and 8 will *not* have a critique write-up assignment due.

**Group assignments A0-A4**: Group assignments are worth 36% of your final grade. A summary report of who did what for the assignments is requested for each group assignment. The highest mark any member of the same group can receive is the grade given to the submitted assignment. Every members' mark will be adjusted based on their contribution to that assignment.

**A0-Individual**: All students must complete a short-bio form to help the group formation process. The A0-Individual assignment is worth 1% of your final grade.

**In-studio group presentations:** Each tutorial will be used as a critique session (i.e., studio), where every group presents their weekly progress to the rest of the class and receive feedback. All of the groups have to present in every studio to receive feedback from the audience. Group presentations in class are worth 14% of your final grade.

## Course Policies

#### ★ Absence and Missed Academic Work

Valid reasons for missing an assessment include: illness; injury; or other relevant personal issues. Per the University's guidelines, a *Verification of Illness* (also known as a "doctor's note") is temporarily not required. Students who are absent from academic participation for any reason (e.g., COVID, cold, flu and other illness or injury, family situation) and who require consideration for missed academic work should however report their absence through the online absence declaration.

The declaration is available on <a href="ACORN"><u>ACORN</u></a> (<a href="https://acorn.utoronto.ca/"><u>https://acorn.utoronto.ca/</u></a>) under the Profile and Settings menu. Students should also advise their instructor of their absence, and send the official declaration to their instructor. Visit <a href="COVID-19 Information for University of Toronto Students">COVID-19 Information for University of Toronto Students</a>
(<a href="https://www.viceprovoststudents.utoronto.ca/covid-19/#AIIStudents">https://www.viceprovoststudents.utoronto.ca/covid-19/#AIIStudents</a>) page on the Vice-Provost, Students website for information on this and other frequently asked questions.

IMPORTANT: Absence declaration must be done on the day of the missed deadline/test at the latest, or immediately after (i.e. the day after) if circumstances don't allow to do it the day of the absence.

If an assignment due date is missed, and a declaration of absence is submitted timely, then your assignment will not be subject to a late penalty and appropriate accommodations will be applied.

Other reasons for missing an assignment due date, without documentation, will require prior approval by your instructor. If prior approval is not received and an assessment is not submitted on time then your assessment will be subject to a late penalty (see **Late Penalty** policy).

## ★ Late Penalty

All assignments are to be submitted on the due date. On-time submissions are graded as normal. Late submissions will incur a penalty:

- Submissions < 24 hours late incur a 10% penalty.
- Submissions < 48 hours late incur a 30% penalty.
- Submissions more than 48 hours late earn 0%.

## **★** Marking Concerns

Any requests to have your work remarked must contain a written justification for consideration to the course instructors using the <u>remark request form</u> (<a href="https://forms.gle/Fy7rcud3MrnUzL5JA">https://forms.gle/Fy7rcud3MrnUzL5JA</a>). Remarking requests should be made within one week of receiving your graded work. Re-evaluation appeals are at the discretion of the instructors. Note that adjustments in marks will be rare and could equally result in a lowering or raising of the mark. If a re-revaluation is completed by the instructors, the student must accept the resulting mark as the new mark, whether it goes up or down or remains the same. When appealing a re-evaluation decision, the student accepts this condition.

## ★ Getting Help

This term you will have the option to use Piazza for class discussion. If you decide not to use Piazza it will not disadvantage you in any way, and will not affect official University outcomes (e.g., grades and learning opportunities). If you choose not to opt-into Piazza then you can ask questions or discuss course material with the instructor or TAs during office hours.

Be sure to read <u>Piazza's Privacy Policy</u> (<a href="https://piazza.com/legal/privacy">https://piazza.com/legal/terms</a>) and <u>Terms of Use</u> (<a href="https://piazza.com/legal/terms">https://piazza.com/legal/terms</a>) carefully. Take time to understand and be comfortable with what they say. They provide for substantial sharing and disclosure of your personal information held by Piazza, which affects your privacy. If you decide to participate in Piazza, only provide content that you are comfortable sharing under the terms of the Privacy Policy and Terms of Use.

To sign up for the discussion forum click on the link: <u>piazza.com/utoronto.ca/winter2022/csc318</u> (http://piazza.com/utoronto.ca/winter2021/sta313h1)

You can also visit your instructor during office hours.

Questions about course material or organization sent by e-mail will not be answered. Direct communication via the course email should only be used for emergencies or personal matters (see **Communicating with the Professor** policy).

## **★** Communicating with the Professor

Questions about course material or organization, such as,

- Is it appropriate to use this observation/analysis method?
- · Can we recruit participants through social media?
- What is the due date?

can be posted on the <u>discussion forums</u> <u>(http://piazza.com/utoronto.ca/winter2022/csc318)</u>. Questions can be posted anonymously (so that the author is anonymous to other students but not to the instructors), if desired.

If your communication is private, such as, "I missed the test because I was ill", then contact your instructor (see Missed Work Policy).

- Always use the course email\_csc318-2022-01@cs.toronto.edu\_to ensure that your message reaches out the instructor and/or TA's.
- Always use your UofT email address (i.e. @cs.toronto.edu or @utoronto.ca).
- Always include your full name, and UTORId in your communication by email.
- Allow up to 72 business hours for a reply.

#### Emails sent to addresses other than the course email will not be answered.

#### Emails sent from addresses other than a UofT official email address will not be answered.

## **★** Academic Integrity

You are responsible for knowing the content of the <u>University of Toronto's Code of Behaviour on Academic Matters</u> (<a href="http://www.governingcouncil.utoronto.ca/policies/behaveac.htm">(http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</a>).

As a general rule, we encourage you to discuss course material with each other and ask others for advice. However, it is not permitted to share complete solutions or to directly share code for anything that is to be handed in. When an assignment is required to be completed as a team, you may share solutions and code with other members of your team, but not with another team in the class. For example, "For question 2.1 what R function did you use?" is a fair question; "Please show me your R code for question 2.1" is not.

If you have any questions about what is or is not permitted in this course, please do not hesitate to contact the instructor using the course email: csc318-2022-01@cs.toronto.edu.

## ★ Accessibility Needs

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting <a href="http://www.studentlife.utoronto.ca/as/new-registration">http://www.studentlife.utoronto.ca/as/new-registration</a>

<u>(http://www.studentlife.utoronto.ca/as/new-registration)</u>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of cultural and religious traditions. On my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (such as a test or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

## ★Photographs, Audio & Video Recordings, and Copyright

Reproduction and/or sharing of course materials is prohibited. Course materials include lecture slides, video recordings, course notes, assignments, data and documents provided by the instructors. All such reproduction or dissemination is an infringement of copyright and is prohibited. Tape-recording, photographing, screen capturing, video-recording or otherwise reproducing lecture presentations, course notes or other similar materials provided by instructors is also prohibited. See the University of Toronto <a href="Maintenancements-Academic Integrity">Academic Integrity</a> (<a href="https://www.academicintegrity.utoronto.ca/smart-strategies/recording-lectures/">https://www.academicintegrity.utoronto.ca/smart-strategies/recording-lectures/</a>).

# Your Responsibilities

## ★ Engage in the Course Material

The course is designed to actively engage you in the course material. We hope you'll find the methods of user-centered design interesting, challenging, and fun. In order for classroom sessions and tutorials to be effective, prepare by learning about the week's concepts through completing the mandatory lecture videos and readings, and engage in the activities during synchronous class.

## **★** Announcements and Resources

Lectures videos and slides, readings, and assignments will be posted on Quercus. It is your responsibility to check the Quercus course website regularly for updates. Announcements will be posted on Quercus & sent as emails through Quercus (provided that you configured your Quercus to receive an email notification when announcements are posted). It is your responsibility to check Quercus & your email regularly for incidental communication and updates about the course.

# Course Summary:

Date	Details	Due
Tue Jan 11, 2022	L1: Design Thinking & Course Introduction (https://q.utoronto.ca/calendar? event_id=487786&include_contexts=course_250510)	4pm to 6pm
	Quiz #1: Design Thinking (https://q.utoronto.ca/courses/250510/assignments/771154)	due by 6pm
Wed Jan 12, 2022	L2: User Research  (https://q.utoronto.ca/calendar?  event id=487792&include contexts=course 250510)	4pm to 6pm
	Quiz #2: User Research (https://q.utoronto.ca/courses/250510/assignments/771155)	due by 6pm
Thu Jan 13, 2022	L3: Observations (https://q.utoronto.ca/calendar? event_id=487798&include_contexts=course_250510)	4pm to 6pm
	Quiz #3: Observations (https://q.utoronto.ca/courses/250510/assignments/771156)	due by 6pm
Mon Jan 17, 2022	A0-INDIV: Short Bio (https://q.utoronto.ca/courses/250510/assignments/770694)	due by 6pm
Tue Jan 18, 2022	L4: Interviews &  Questionnaires  (https://q.utoronto.ca/calendar?  event_id=487794&include_contexts=course_250510)	4pm to 6pm
	Quiz #4: Interviews & Questionnaires (https://q.utoronto.ca/courses/250510/assignments/771157)	due by 6pm
Wed Jan 19, 2022	L5: Job Stories & Experience  Maps (https://q.utoronto.ca/calendar?  event id=487793&include contexts=course 250510)	4pm to 6pm

Date	Details	Due
	Quiz #5: Job Stories &  Experience Maps  (https://q.utoronto.ca/courses/250510/assignments/775018)	due by 6:30pm
Thu Jan 20, 2022	L6: Brainstorm, Ideation, and Sketching User Experience (https://q.utoronto.ca/calendar? event_id=487802&include_contexts=course_250510)	4pm to 6pm
	Quiz #6: Brainstorm, ideation, and sketching user experience (https://q.utoronto.ca/courses/250510/assignments/775020)	due by 6:30pm
Tue Jan 25, 2022	L7: Paper Prototyping and Think-Alouds (https://q.utoronto.ca/calendar? event_id=487799&include_contexts=course_250510)	4pm to 6pm
	Quiz #7: Paper Prototyping &  Think Aloud  (https://q.utoronto.ca/courses/250510/assignments/775021)	due by 6:30pm
Wed Jan 26, 2022	L8: Heuristic Evaluation / Cognitive Walkthrough (https://q.utoronto.ca/calendar? event_id=487795&include_contexts=course_250510)	4pm to 6pm
	A0-GROUP: Group Information (https://q.utoronto.ca/courses/250510/assignments/770693)	due by 4pm
	Quiz #8: Heuristic Evaluation &  Cognitive Walkthrough  (https://q.utoronto.ca/courses/250510/assignments/775022)	due by 6:30pm
Thu Jan 27, 2022	L9: High-Fidelity Prototyping & Usability Testing (https://q.utoronto.ca/calendar? event_id=487796&include_contexts=course_250510)	4pm to 6pm
	Quiz #9: High-Fidelity  Prototyping & Usability Evaluation  (https://q.utoronto.ca/courses/250510/assignments/775024)	due by 6:30pm

Date	Details	Due
Wed Feb 2, 2022	S0: Group Presentation (https://q.utoronto.ca/courses/250510/assignments/770722)	due by 3pm
	S0: Project Ideas (https://q.utoronto.ca/calendar? event_id=487797&include_contexts=course_250510)	4pm to 6pm
Fri Feb 4, 2022	S0: Critiques (https://q.utoronto.ca/courses/250510/assignments/770721)	due by 6pm
Wed Feb 9, 2022	S1: Group Presentation (https://q.utoronto.ca/courses/250510/assignments/770724)	due by 3pm
	S1: Formative Study Design, Instruments, and Protocols (https://q.utoronto.ca/calendar? event_id=487800&include_contexts=course_250510)	4pm to 6pm
Fri Feb 11, 2022	S1: Critiques (https://q.utoronto.ca/courses/250510/assignments/770723)	due by 6pm
Wed Feb 16, 2022	S2: Group Presentation  (https://q.utoronto.ca/courses/250510/assignments/770726)	due by 3pm
	S2: Data Collection and Analysis Planning (https://q.utoronto.ca/calendar? event_id=487801&include_contexts=course_250510)	4pm to 6pm
Fri Feb 18, 2022	S2: Critiques (https://q.utoronto.ca/courses/250510/assignments/770725)	due by 6pm
Wed Mar 2, 2022	S3: Group Presentation  (https://q.utoronto.ca/courses/250510/assignments/770728)	due by 3pm
	S4: High-Level Design Concepts and Design Walkthroughs (https://q.utoronto.ca/calendar? event_id=487788&include_contexts=course_250510)	4pm to 6pm

Date	Details	Du
	A1: Anonymous Peer Review Form (https://q.utoronto.ca/courses/250510/assignments/770695)	due by 4pr
Fri Mar 4, 2022	A1: Formative Studies (https://q.utoronto.ca/courses/250510/assignments/770696)	due by 4pr
	S3: Critiques (https://q.utoronto.ca/courses/250510/assignments/770727)	due by 6pr
Wed Mar 9, 2022	S4: Group Presentation (https://q.utoronto.ca/courses/250510/assignments/770730)	due by 3pr
Fri Mar 11, 2022	S4: Critiques (https://q.utoronto.ca/courses/250510/assignments/770729)	due by 6pi
	S5: Evaluation Materials (https://q.utoronto.ca/courses/250510/assignments/770732)	due by 3pi
Wed Mar 16, 2022	S5: Expert Evaluation of Low- Fidelity Prototypes (https://q.utoronto.ca/calendar? event_id=487789&include_contexts=course_250510)	4pm to 6p
	S5: Participation & Peer- Review Form (https://q.utoronto.ca/courses/250510/assignments/770731)	due by 11:59p
Fri Mar 18, 2022	A2: Anonymous Peer Review  Form  (https://q.utoronto.ca/courses/250510/assignments/770697)	due by 11:59p
	A2: Design Concepts and  Prototypes  (https://q.utoronto.ca/courses/250510/assignments/770698)	due by 11:59pi
Wed Mar 23, 2022	S6: Group Presentation (https://q.utoronto.ca/courses/250510/assignments/770734)	due by 3p

Date	Details	Due
	S6: High-Fidelity Prototype, Summative Study Design, Instruments, and Protocols (https://q.utoronto.ca/calendar? event_id=487803&include_contexts=course_250510)	4pm to 6pm
Fri Mar 25, 2022	S6: Critiques (https://q.utoronto.ca/courses/250510/assignments/770733)	due by 6pm
	S7: Group Presentation (https://q.utoronto.ca/courses/250510/assignments/770736)	due by 3pm
Wed Mar 30, 2022	S7: Study Results, Expected Revisions to the Design (https://q.utoronto.ca/calendar? event_id=487790&include_contexts=course_250510)	4pm to 6pm
	S3: Analysis Results, Design Requirements, and Job Stories (https://q.utoronto.ca/calendar? event_id=487787&include_contexts=course_250510)	5pm to 7pm
Fri Apr 1, 2022	S7: Critiques (https://q.utoronto.ca/courses/250510/assignments/770735)	due by 6pm
	A3: Anonymous Peer Review Form (https://q.utoronto.ca/courses/250510/assignments/770699)	due by 11:59pm
Mon Apr 4, 2022	A3: High-Fidelity Prototype and Summative Evaluation (https://q.utoronto.ca/courses/250510/assignments/770700)	due by 11:59pm
Wed Apr 6, 2022	S8: Project Presentations (https://q.utoronto.ca/calendar? event_id=487791&include_contexts=course_250510)	4pm to 6pm
Fri Apr 8, 2022	A4: Anonymous Peer Review Form (https://q.utoronto.ca/courses/250510/assignments/770701)	due by 11:59pm

Date Details Due

A4: Presentation and Demo of High-Fidelity Prototype

due by 11:59pm

(https://q.utoronto.ca/courses/250510/assignments/770702)