



CCT380H5S LEC0101

Human-Computer Interaction and Communication

Course Outline - Winter 2018

Class Location & Time	Fri, 11:00 AM - 01:00 PM CC 3160
Instructor	Hervé Saint-Louis
Office Location	
Office Hours	
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Course Description

The emphasis in this course will be on theoretical, methodological, and empirical issues in the study of Human-Computer Interaction. Intelligent interface designs, usability assessment, user modeling and the accessibility of the technology for the disabled are among the topics to be examined. Related behavioural investigations concerning the ease and efficiency of users' interactions with computerized environments will also be discussed. [24L, 12P]

Prerequisite: CCT109H5, CCT110H5 (SSc)

Distribution Requirement: SSc

It is your responsibility to ensure that the prerequisites for course have been met. Students without the prerequisites can be removed at any time. No waivers will be granted.

Goals and Learning Objectives

This course will introduce the theoretical and methodological principles of Human-Computer Interaction. Students will have an opportunity to learn about how humans interact with everyday technology, what are the human factors that affect the interactions, what are key principles in designing usable and user-friendly simulation and training systems, and how to evaluate such systems.

- Learn the foundations of how humans interact with technology and how technology supports human-to-human communication
- Learn what are the human factors of interacting with computing systems
- Learn what makes interactive systems user-friendly
- Learn about designing interactive systems that are usable
- Learn about designing digital technologies that mediate human communications
- Learn about evaluating interactive systems

Some of the personal skills that students are expected to develop in the course are:

- Ability to conduct independent research into a problem space

- Ability to envision and design user-centred interactive technologies
- Ability to collect and analyze data about human behaviours
- Ability to use statistical methods and tools to interpret data and provide evidence to support a hypothesis
- Ability to work in teams
- Ability to publicly present their argument and defend their proposal

Required Materials

Required:

- Interaction Design: Beyond Human - Computer Interaction (either 3rd or 4th edition)
 - Authors: Yvonne Rogers, Helen Sharp, Jenny Preece
 - 3rd edition (Wiley (2011), ISBN: 978-0-470-66576-3)
 - 4th edition (Wiley (2015), ISBN: 978-1-119-02075-2)

Recommended

- The Design of Everyday Things
 - Author: Don Norman
 - Publisher: Basic Books (several editions available)
 - ISBN: 978-0-465-05065-9

Optional

- Sketching User Experiences: Getting the Design Right and the Right Design
 - Author: Bill Buxton
 - Publisher: Elsevier / Morgan Kaufmann
 - ISBN: 978-0-123-74037-3

Optional

- Sketching User Experiences: The Workbook
 - Authors: Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt and Bill Buxton
 - Publisher: Elsevier / Morgan Kaufmann
 - ISBN: 978-0-123-81959-8

Assessment and Grading Policies

Type	Description	Due Date	Weight
Assignment	Brief project idea	2018-01-09	3%
Quiz	Quiz on human-computer interaction theory and ethics	2018-01-12	5%
Assignment	Team project proposal	2018-01-23	5%
Quiz	Quiz on storyboarding and iterative design	2018-01-26	5%
Assignment	Low fidelity prototype	2018-01-30	8%
Quiz	Quiz on usable security and privacy	2018-02-02	5%

Assignment	Usability report – medium fidelity prototype	2018-02-13	10%
Assignment	Initial version of high fidelity prototype	2018-02-27	10%
Lab	Interview and survey design workshop deliverable	2018-03-06	5%
Assignment	Team-based evaluation	2018-03-13	8%
Quiz	Practical quiz on user interface evaluation	2018-03-16	5%
Assignment	Individual assignment on user interface evaluation	2018-03-20	6%
Presentations	Team projects presentations	2018-03-27	5%
Assignment	Final project, including final usability evaluations and final updated design of hi-fi prototype	2018-04-06	15%
Quiz	Ongoing short illustration and design usability exercises		5%
Total			100%

You should receive at least one significant mark (15%) before the last day you can drop a course without academic penalty.

Requirements and Criteria

All assignments are team-based except the first assignment. However, where indicated as "oral presentation", each member of the team is required to individually present their contribution. The assignments are components of a course-long design project, each representing an incremental iteration of the steps required to propose and validate a new interactive application. The theme of the project (and sub-component assignments) is "**Usable Security and Privacy**". Specific requirements for each assignment and for the final project will be announced in class and through Blackboard's announcement system, and adjusted for the particularities of each project. However, all projects must design a software user interface that is aligned with the given project theme.

Due dates and times

All paper submissions are due by 11:59am on the date indicated. Slides and other materials for the oral presentations are due by 10:00am on the date indicated (Note: slides and/or visual support materials are mandatory for the presentations).

Team projects

- Team projects will be carried out in teams of at least 2 and no more than 4 students.
- Students will be semi-randomly assigned to teams - students will have to review individual design ideas and CVs and identify (and justify!) a pool of a minimum of 5 and maximum of 10 preferred teammates. Students can indicate their preference for the exact team composition; however, note that the final team assignments are the decision of the instructor and the TA.
- Team members must draft and sign a contract that establishes roles, responsibilities, and team policies (a template will be provided)
- Each team will submit assignments as a group (one submission per team for each assignment). **IMPORTANT:** the cover page of each submission must detail the roles and contribution of each team member for that particular assignment. Also, each separate section of the submission must be drafted individually by each student, and their name should be clearly indicated at the beginning of the section (there could be more than one section authored by a student). **OPTIONAL:** it is recommended that the cover page of each assignment contains individual profile pictures of each team member.
- Each member of the team is expected to take an active part in each presentation. Also, for all presentation sessions the students must indicate their contribution to the presentation on the title or first slide.
- For all assignments beginning with A3, each team member must submit an individual and confidential peer-review form (details to be provided in class).
- Teams are required to recruit participants for their evaluation/testing sessions from among the students registered in CCT380 (except for when public observations are appropriate). **NOTE: Permission from the instructor is required before soliciting participants from outside the class! Failure to do so is considered an academic misconduct and will result in the student and/or the entire team receiving a failing grade for the course.**

Graded assignments (note these are subject to adjustments as project evolve, and may slightly differ from one team to another -

always check with the instructor and the TA):

- **Brief project ideation**
One-page paper submission. A paper outlining one brief but well-motivated idea for a design project, and a one-page team-based Curriculum Vitae highlighting the team's skills relevant to a design project.
- **Quiz on human-computer interaction theory and ethics**
This is an individual practical quiz where students must solve a logic problem by drawing from their knowledge of ethics and human-computer interaction.
- **Team project proposal**
For this assignment teams will be formed (see "team projects" for details). Teams will have to brainstorm and select a design idea (preferably but not necessarily based on one of the idea proposed by team members for A1). The team will then submit a paper outlining and motivating the proposed design idea by the team, and detailing in general terms what problem their design will solve, who the users are, and how will it work. Teams will also submit a "contract" that indicates each team member's roles and responsibilities within the team.
- **Quiz on storyboarding and iterative design**
This is an individual practical quiz asking students to quickly solve a design problem through iterative design and storyboarding through illustrations.
- **Low fidelity prototype**
The early-stage design of the proposed project (low-fidelity prototype, design sketch, or other form of early-stage design). The submission will consist of a paper describing the design and a link/zip/apk/other package containing the prototype if applicable (to be discussed with the instructor).
- **Quiz on usable security and privacy**
For this quiz, students work in pair with members of another team. While one student presents the low fidelity design, the other performs an evaluation on the security and privacy affordances of the design submitted. Then, students flip and perform the other task (presentation/evaluation).
- **Usability report - medium fidelity prototype**
A report and analysis of the first rounds of usability evaluations of the prototype or design, and a description of the updated prototype incorporating the results of the evaluations.
- **Initial version of high fidelity prototype**
Teams address concerns mentioned in their med-fi evaluations and create scenarios and personas of users interacting with their designs.
- **Interview and survey design workshop deliverable**
A field report and analysis of the user observations and requirements gathering activity.
- **Team-based evaluation**
A report and analysis of the first rounds of usability evaluations of the prototype or design, and a description of the updated prototype incorporating the results of the evaluations. Teams conduct usability evaluation sessions of their hi-fi prototype using scenario-, target-, and frame-based testing methods and report on their progress and activity throughout the tutorial time.
- **Practical quiz on user interface evaluation**
While one student presents the low fidelity design, the other performs an evaluation on the hi-fi design submitted. Then, students flip and perform the other task (presentation/evaluation).
- **Individual assignment on user interface evaluation**
Students conduct targeted, follow-up (second round) usability evaluation sessions using their hi-fi prototype.
- **Team-based Presentations**
Oral presentation of the revised design, implementation of the high-fidelity prototype, results of the usability evaluation, revised plan for concluding the evaluation and updating the design (if applicable/necessary). **Presentations may also be judged by an expert panel as part of a usability design competition.**
- **Final project**
Final project submission, including final usability evaluations and final updated design of high-fidelity prototype (must include a complete report of all designs, requirement gatherings, and intermediate prototype evaluations).

- **Ongoing short illustration and design usability exercises**
Short exercises completed in lectures requiring students to draw quick design solutions to problems, such as interfaces, icons, or representations of objects, or concepts. The exercises develop students' spatial and visual ability to tackle design problems while relying on logic.
- **NOTE: there is no marking rubric for any of the assignments in this course. This is a hands-on, experiential learning course, with a strong emphasis placed on student initiative and communication with the instructor with respect to charting a design and evaluation plan that is specific to each project. However, all written assignments are expected to have a cover page detailing which of the specific theoretical elements presented during lectures have been incorporated in that assignment and how.**

Non-graded submissions

- Some submissions are not graded - these are still mandatory. Submission of subsequent assignments will not be permitted until the preceding non-graded submission had been received (and thus consuming the available late credits).
- **NOTE: semi-confidential peer-review forms are mandatory for each team submission. Peer review forms are to be submitted individually by each team member and are meant to present a student's assessment of the performance and teamwork of their teammates. Failure to submit a peer review form for an assignment will result in forfeiting the "teamwork" marks that are allocated as part of the grading for that assignment.**

Teaching Methods

Class sessions are typically two-hour lectures weekly, with a mix of topic presentation and classroom and seminar-style discussions, guided research through bibliographic resources, and practical activities using the lab or personal computers. Students are expected to spend a significant amount of time devoted to reading and synthesizing materials and recommended reading prior to class. **Attendance to class, practical (tutorial), and office hours is essential!** A strong emphasis will be placed on initiative, critical thinking, teamwork, and project management skills.

Format

Each topic will be covered in approximately two weeks. Graded works consist of a mix of presentations, papers, reports, design sketches, and group projects. Additionally there are mandatory non-graded assignments and peer-review submissions. All presentations will be done during classroom and/or practical, at a date to be confirmed at least 2 weeks in advance. There will be no examination. The course topics will be presented in class, but active participation will be expected during all classes. The practical sessions (tutorials) will be reserved for in-depth discussions, student presentations, development/design activities, design critiques, and studio-based participation and user trials. Attendance and presentation of designs for critique during the practical is expected. **NOTE:** due to the creative nature of the projects, the schedule may require corrections through the term, with graded activities such as in-class presentations scheduled at any time during the 11am to 2pm interval.

In addition to receiving a grade, the final presentations on the last day of classes may also be judged by an expert panel in a design competition (pending availability and scheduling constraints). The details about the competition and about the prizes will be announced in class. **NOTE:** the results of the design competition are completely independent of the grade earned for the project and will not influence that grade or the overall course mark (the instructor and the TA are not part of the judging panel).

Teamwork:

Students are expected to work in teams - this emulates and prepares students for challenges faced in the workplace. This includes working together in person or making use of online collaborative tools (e.g. e-mail, Skype, Google Docs, etc.) Teams are required to share workloads equally and fairly -- their contributions will be marked both individually and as a team.

Peer-review forms are used to judge the fairness of teamwork. However, team members are encouraged to approach the instructor confidentially if they believe team members do not cooperate fairly. The instructor will take appropriate action, such as individual meetings with team members or group conflict resolution meetings.

Procedures and Rules

E-Culture Policy

Only student U of T email accounts should be used for course communication and all emails from students must include the course code in the subject line and should be signed with the full student name and student number.

Only student Utopmail accounts should be used for course communication and all emails from students must have CCT380 (no space) at the beginning of the subject line and should be signed with the full student name and student number. Emails lacking "CCT380" starting the subject line may not be responded to. Otherwise, you can normally expect a response within 48 hours. No

emails will be answered during the 12 hours before an assignment is due.

The course website located via the Portal (portal.utoronto.ca) is used to distribute course materials and lectures slides (generally after any given lecture), for announcements, and on-line forum discussions (related to this course). Students are required to monitor the portal announcements.

IMPORTANT: Email should be used only for brief administrative communications and not for receiving extensive guidance for completing the assignments. Minor, specific clarifications related to an assignment or follow-ups of in-person discussions will be answered. For all other assignment-related questions please use the available in-person time (class, tutorial, and office hours).

It is your responsibility to read your U of T email on a regular basis. This will ensure that you receive important information from your instructors and the university.

Learning Technology

Submission of assignments, unless otherwise stated, should be submitted via the Portal (portal.utoronto.ca). Students are responsible for ensuring their submission is made on time and that they allow sufficient time for uploading and completing all required forms on the Portal before the submission is due.

Some assignments may require the use of specialized software packages. Most of such software is available for use in the CCT computer labs - students should consult with the instructor on the use and appropriateness of such software. However, students may be required to install specialized software on their own computers.

Policy on in-class technology use

Students are expected to use technology such as personal laptops during some classroom activities. This is not a requirement, but a strong recommendation. Students may at times work collaboratively and will be asked to share laptops if classroom desktop computers are not available.

Using personal technologies (laptops, cell phones, tablets, etc.) is encouraged if it supports the classroom activities. The use of such technologies for any other use is tolerated as long as it is not disruptive of students' learning - such decisions are at the discretion of the instructor on a case-by-case basis.

Late Penalties

You are expected to complete assignments on time. There will be a penalty for lateness of 10% deducted per day and work that is not handed in one week after the due date will not be accepted.

Special Consideration Requests - Missed Tests and Extensions on Assignments

In the past, students completed a hard copy of a "Special Consideration Request" (SCR) form and would bring it in to the ICCIT office. This process is now completed online. Please review the ICCIT special consideration request policy here and follow the procedures:

<http://www.utm.utoronto.ca/iccit/students/special-consideration-request>

Re-marking Pieces of Term Work

General

A student who believes that his or her written term work has been unfairly marked may ask the person who marked the work for re-evaluation. Students have up to one month from the date of return of an item of term work or from the date the mark was made available to inquire about the mark and file for an appeal. For example, should the work be returned or the mark be made available on March 3rd, the student has until April 3rd to inquire in writing and start the re-marking process. Instructors must acknowledge receipt of a student request for re-marking within **3-working days**, and decisions should be provided in a timely fashion.

If an academic misconduct case is in progress for the piece of term work in question, a student may not appeal until the matter is resolved.

Details

Regrade requests for term work worth less than 20% of the final mark may be submitted to the person who marked the work for re-evaluation. The student must submit (1) the original piece of work and (2) a written explanation detailing why they believe the work was unfairly/incorrectly marked. If the student is not satisfied with this re-evaluation, he or she may appeal to the instructor in charge of the course if the work was not marked by the instructor (e.g., was marked by a TA). In these instances where the instructor was not the one who marked the work, the student must now submit to the instructor (1) the original piece of work, (2) the written reasons as to why he or she believes the work was unfairly/incorrectly marked, and (3) communications from the original marker as to why no change in mark was made. If a re-marking is granted by an instructor, the student must accept the resulting mark as the new mark, whether it goes up or down or remains the same. Continuing with the remark or the appeal means

the student accepts this condition. Instructors and TAs should ensure all communication with the student is in writing (e.g. follow-up email) and keep a copy for later reference.

Only term work worth at least 20% of the course mark may be appealed beyond the instructor. Such appeals must first follow the same guidelines as those mentioned directly above for work worth less than 20%. To escalate an appeal beyond the instructor, the student must submit to the [department](#) (1) all previous communications between the student, original marker, and the instructor (2) the detailed reason(s) documenting why the mark for the work was inappropriate and (3) the original piece of work. If the department believes that re-marking is justified, the department shall select an independent reader. The student must agree in writing to be bound by the results of the re-reading process or abandon the appeal. Again, the student must accept that the mark resulting from the appeal may be higher or lower or the same as the original mark. Where possible, the independent reader should be given a clean, anonymous copy of the work. Without knowing the original assigned mark, the reader shall determine a mark for the work. The marking of the work should be considered within the context of the course of instruction for which it was submitted. If the new mark differs substantially from the original mark, the department shall determine a final mark taking into account both available marks.

The final level of appeal is to the [Dean's Office](#). Appeals must already have been considered at the two previous levels (Instructor followed by Department), with the decision reviewed by the head of the academic unit, before they will be considered by the Dean's Office. **Appeals must be submitted in writing, and include all previous correspondence, as soon as possible after the student receives the final response from the academic unit, but no later than one month after.** Appeals to the Dean's Office about the marking of term work will be reviewed to ensure that appropriate procedures have been followed in earlier appeals, that the student has been treated fairly, and that the standards applied have been consistent with those applied to other students doing the assignment. Any mark resulting from such an appeal will become the new mark, whether it is higher or lower or the same as the previous one. This process applies only to term work; appeals for re-reads of final examinations are handled directly by the Office of the Registrar.

Issues Pertaining to Term Work and Instructional Activities

Issues arising within a course that concern the pedagogical relationship of the instructor and the student, such as essays, term work, term tests, grading practices, or conduct of instructors, fall within the authority of the department. Students are entitled to seek resolution of these issues, either orally or in writing to the course instructor and, if needed, the [ICCIT Director](#) for resolution.

Following a response from the [ICCIT Director](#), students may submit an appeal, in writing, to the [Vice-Principal, Academic and Dean](#).

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids.
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. You are instructed to read the following for more information: <http://www.utm.utoronto.ca/academic-integrity/office-dean-academic-integrity> and <http://academicintegrity.utoronto.ca/>.

Expectations for Conduct in the Academic Setting

Students agree that by taking this course, they agree to adhere to the [ICCIT Expectations for Conduct in the Academic Setting](https://www.utm.utoronto.ca/iccit/students/policies-procedures/code-conduct) set out at <https://www.utm.utoronto.ca/iccit/students/policies-procedures/code-conduct>.

Copyright in Instructional Settings

If a student wishes to tape-record, photograph, video-record or otherwise reproduce lecture presentations, course notes or other similar materials provided by instructors, he or she must obtain the instructor's written consent beforehand. Otherwise all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

For more information on copyright and the University of Toronto, please visit <https://onereach.library.utoronto.ca/copyright/copyright>.

Equity Statement

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at edo.utm@utoronto.ca or the University of Toronto Mississauga Students' Union Vice President Equity at vpequity@utmsu.ca. <http://www.utm.utoronto.ca/equity-diversity/>

Religious Observance

Information about the University's Policy on Scheduling of Classes and Examinations and Other Accommodations for Religious Observances is at <http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/guidelines/religiousobservances.htm>

U of T Mississauga students are required to declare their absence from a class, for any reason, through their [ACORN](#) accounts in order to receive academic accommodation for any course work such as missed tests, late assignments, and final examinations. Absences include those due to illness, death in the family, religious accommodation or other circumstances beyond their control.

In addition, students must also follow the absence policies of the department and the instructor, which may require additional documentation.

Other Resources

AccessAbility

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code, including those who have a physical, sensory, or learning disability, mental health condition, acquired brain injury, or chronic health condition, be it visible or hidden.

If you have a disability or health consideration that may require accommodations, please approach the AccessAbility Resource Centre as soon as possible. The AccessAbility staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

To register with AccessAbility*, please call the centre at 905-569-4699 or e-mail access.utm@utoronto.ca. <http://www.utm.utoronto.ca/access/>

**Students attending Sheridan-based courses with accommodation needs must register with the AccessAbility Resources Centre at UTM and the Accessible Learning Services at Sheridan College. For assistance at Sheridan, please contact Accessible Learning Services at 905-845-9430, ext. 2530 or trafalgar.als@sheridancollege.ca. For more information, please visit: <https://www.sheridancollege.ca/life-at-sheridan/student-services/accessible-learning-services.aspx>.*

Robert Gillespie Academic Skills Centre

The centre offers wide-ranging support to help students identify and develop the academic skills they need for success in their studies, including: understanding learning styles; essay and report writing; time management; lecture-listening; note-taking; and studying for tests and exams.

<http://www.utm.utoronto.ca/asc>

UTM Library (Hazel McCallion Academic Learning Centre)

The UTM library provides access to a vast collection of online and print resources to faculty, staff, and students. Various services are available to students, including borrowing, interlibrary loans, online references, research help, laptop loans and the RBC Learning Commons.

Course Schedule

Date	Topic
2018-01-05	<p><i>WEEK 1 - Course Introduction and Overview</i></p> <p>Introduction to HCI. Overview of design thinking and designing interactive systems.</p> <p>Readings:</p> <p>Grudin, Jonathan. 2012. "A Moving Target: The Evolution of Human-Computer Interaction." In <i>The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies, and Emerging Applications</i>, edited by Julie A. Jacko, xxvii-lxi. CRC Press: Boca Raton.</p> <p><i>Interaction Design: Beyond Human</i> (Chapter 1)</p> <p>Tutorial:</p> <p>Team creation and project brainstorming (with deliverable due following Tuesday at 12:pm).</p>
2018-01-12	<p><i>WEEK 2 - Theoretical foundation of HCI; Ethics</i></p> <p>Psychological and physiological principles of HCI; human factors of interacting with computers, media, and technology.</p> <p>Readings:</p> <p>Dourish, Paul. <i>Where The Action Is: The Foundations of Embodied Interaction</i>. Cambridge: MIT Press, 2001. Chapter One.</p> <p>Hassenzahl, Marc, and Noam Tractinsky. "User experience - a research agenda." <i>Behaviour and Information Technology</i> 25, no. 2 (March-April 2006): 91-97.</p> <p>Kirlik, A. (2010). A Human-tech Research Agenda and Approach. In <i>Human-tech: ethical and scientific foundations</i>. Chapter 3, pp. 21-52.</p> <p><i>Interaction Design: Beyond Human</i> (Chapter 2)</p> <p>Tutorial:</p> <p>Tutorial discussion about research ethics. (with quiz on human-computer interaction theory and ethics).</p>
2018-01-19	<p><i>WEEK 3 - Designing Products</i></p> <p>Ethics with human participants.</p> <p>Readings:</p> <p>Luchs, M. G. (2016). A Brief Introduction to Design Thinking. In <i>Design Thinking: new product development essentials from the PDMA</i>. Chapter 1, pp. 1-11.</p> <p>Norman, Don. <i>The Design of Everyday Things: Revised and Expanded Edition</i>. New York: Basic Books, 2013.</p> <p>Notes about Norman's The Design of Everyday Things: "American Socrates" - http://tatwork.blogspot.ca/2008/10/notes-on-normans-design-of-everyday.html</p> <p>Tutorial:</p> <p>Team project formulation (with deliverable due following Tuesday at 12:pm).</p>

2018-01-26	<p><i>WEEK 4 - Storyboards of iterative design</i></p> <p>Readings:</p> <p>Hervé Saint-Louis - Storyboards Workshop iSchool 2014 http://toondoctor.com/storyboardworkshopischool.html</p> <p>Michael Haarala/Scott McCloud - Transition and Gutters https://understandingcomics177.wordpress.com/about/1-2/2-2/</p> <p>Tutorial:</p> <p>Low definition prototypes and wireframing (with quiz on storyboarding and iterative design/with deliverable due following Tuesday at 12:pm).</p>
2018-02-02	<p><i>WEEK 5 - Usable security and privacy</i></p> <p>Readings:</p> <p>Ackerman, Mark S., and Scott D. Mainwaring. 2005. "Privacy Issues and Human-Computer Interaction." In <i>Security and Usability: Designing Secure Systems that People Can Use</i>, edited by Lorrie Faith Cranor and Simson Garfinkel, 381-399. Sebastapol: O'Reilly.</p> <p>Adams, Anne, and Martina Angela Sasse. 1999. "Users Are Not the Enemy." <i>Communications of the ACM</i> 42 (12): 40-46.</p> <p>Cavoukian, Ann, and Marc Chanliau. "Privacy and Security by Design: A Convergence of Paradigms." In <i>Privacy by Design: From Rhetoric to Reality</i>, edited by Ann Cavoukian, 209-225. Toronto: Information and Privacy Commissioner of Ontario, 2012.</p> <p>Tutorial:</p> <p>Applying Privacy-by-Design workshop (with usable security and privacy quiz).</p>
2018-02-09	<p><i>WEEK 6 - Designing interfaces; Accessibility design</i></p> <p>Principles of designing interactive systems; Usability; User-centered design; Inclusive design.</p> <p>Readings:</p> <p><i>Interaction Design: Beyond Human</i> (Chapter 3-6)</p> <p>Tutorial:</p> <p>Medium fidelity prototypes workshop (with deliverable due following Tuesday at 12:pm).</p>

2018-02-16	<p><i>WEEK 7 - Observation and ethnography; Human factors, ergonomics;</i></p> <p>Principles of designing interactive systems; Usability; User-centered design; Inclusive design.</p> <p>Readings:</p> <p>Chan, A. J., Islam, M. K., Rosewall, T., Jaffray, D. A., Easty, A. C., & Cafazzo, J. A. (2010). The use of human factors methods to identify and mitigate safety issues in radiation therapy. <i>Radiotherapy and Oncology</i>, 97(3), pp. 596-600.</p> <p>Hammersley, Martyn. 2010. Reproducing or constructing: some questions about transcription in social research. <i>Qualitative Research</i> 10 (5): 553-569.</p> <p><i>Interaction Design: Beyond Human</i> (Chapter 7)</p> <p>Tutorial:</p> <p>High fidelity prototyping (with deliverable due following Tuesday after the reading week at 12:pm).</p>
2018-02-23	<p><i>Reading week (NO CLASSES)</i></p>
2018-03-02	<p><i>WEEK 8 - Interviews and Surveys</i></p> <p>Interviews and focus groups, contextual inquiry. Surveys, questionnaires, diaries, case studies.</p> <p>Readings:</p> <p>Doody O, Noonan M (2013) Preparing and conducting interviews to collect data. <i>Nurse Researcher</i>. 20(5), pp. 28-32</p> <p>Talja, S. (1999). Analyzing qualitative interview data: The discourse analytic method. <i>Library & information science research</i>, 21(4), pp. 459-477</p> <p>Morgan, D. (2001). Focus Group Interviewing. In Jaber F. Gubrium, & James A. Holstein (Eds.), <i>Handbook of Interview Research</i>. (Chapter 7; pp. 141-160). Thousand Oaks, CA: SAGE Publications, Inc.</p> <p>Beyer, H., & Holtzblatt, K. (1997). Principles of Contextual Inquiry. In <i>Contextual Design: Defining Customer-Centered Systems</i>. Morgan</p> <p>Rieman, J. (1993). The Diary Study: A Workplace-oriented Research Tool to Guide Laboratory Efforts. In <i>Proceedings of the INTERACT '93 and CHI '93 conference on Human factors in computing systems</i>(CHI '93). New York, NY: ACM. pp. 321-326.</p> <p>Tutorial:</p> <p>Interview and survey design workshop (with deliverable due at the end of the tutorial).</p>

2018-03-09	<i>WEEK 9 - Heuristics evaluation and usability testing</i>
	Readings:
	Nielsen, Jakob. "Finding Usability Problems Through Heuristic Evaluation." <i>CHI'92</i> . AMC, 1992. 373-380.
	Nielsen, Jakob. <i>10 Usability Heuristics for User Interface Design</i> . January 1, 1995. http://www.nngroup.com/articles/ten-usability-heuristics/ (accessed January 27, 2015).
	-. <i>How to Conduct a Heuristic Evaluation</i> . January 1, 1995. http://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/ (accessed January 27, 2015).
	Nielsen, Jakob, and Rolf Molich. "Heuristic Evaluation of User Interfaces." <i>CHI '90 Proceedings</i> . AMC, 1990. 249-256.
	<i>Interaction Design: Beyond Human</i> (Chapter 13)
	Tutorial:
	Individual-based evaluation workshop (with quiz due at the end of the tutorial).
2018-03-16	<i>WEEK 10 - Experimental Research & Experimental Design</i>
	Readings:
	Cresswell, J. (2014). The Selection of a Research Approach. In <i>Research design: qualitative, quantitative and mixed methods approaches</i> . 4th edition. Sage Publications. Chapter 1, pp. 3-24. (any edition will do)
	<i>Interaction Design: Beyond Human</i> (Chapter 14)
	Tutorial:
	Team-based evaluation workshop (continues the following week).
2018-03-23	<i>WEEK 11 - Evaluating interactive systems</i>
	Three-hour-long evaluation of interactive student systems in class.
	Team-based evaluation workshop continues. (with deliverable due following Tuesday at 12:pm).
2018-04-04	<i>WEEK 12 - Students' projects presentations</i>
	Note: The last class has been rescheduled from Friday March 30, 2017 because of the Good Friday holiday.
	We will use the entire three-hours to present and review team projects.

Last Date to drop course from Academic Record and GPA is March 14, 2018.

Every attempt will be made to follow this syllabus, but its content are subject to change, according to the rules as outlined in the UTM Instructor's Handbook, section 3.2.2.