



**COURSE OUTLINE**

1. **Course:** CPSC 481, Human-Computer Interaction I - Fall 2019

Lecture 01: MWF 10:00 - 10:50 in ST 141

Instructor	Email	Phone	Office	Hours
Lorans Alabood	lorans.alabood@ucalgary.ca	NA	ICT 552	Please use You-Can_book me page: https://loransalabood.youcanbook.me

**Course Site:**

All course content will be available on D2L: CPSC 481 L01-(Fall 2019)-Human-Computer Interaction I

(We are working on creating a website for CPSC 481, however, we are still waiting for the approval from the IT department)

**Note:** Students must use their U of C account for all course correspondence.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

**Prerequisite(s):**

One of Software Engineering 300, 301 or Data Science 311.

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Assignment(s)	10%	
Participation	5%	
Midterm exam	15%	In-class 18. Oct. 2019
Team project	40%	
Final exam	30%	

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
<b>Minimum % Required</b>	95 %	90 %	85 %	80%	75%	70 %	65 %	60%	55%	50 %	45 %

This course has a registrar scheduled final exam.

4. **Missed Components Of Term Work:**

In the event that a student misses the midterm or any course work due to illness, supporting documentation, such as a medical note or a statutory declaration will be required (see [Section M.1](#); for more information regarding the use of statutory declaration/medical notes, see [FAQ](#)). Absences must be reported within 48 hrs.

The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in [Section 3.6](#). It is the student's responsibility to familiarize themselves with these regulations. See also [Section E.3](#) of the University Calendar.

## 5. **Scheduled Out-of-Class Activities:**

There are no scheduled out of class activities for this course.

## 6. **Course Materials:**

Recommended Textbook(s):

Antti Oulasvirta, Per Ola Kristensson, Xiaojun Bi, *Computational Interaction*: Oxford University Press .  
Donald A. Norman, *The Design of Everyday Things*: Basic Books; Basic Pbk ed. edition (Sept. 19 2002).  
Jianlong Zhou's, Fang Chen, *Human and Machine Learning*: Springer; 1st ed. 2018 edition (June 8, 2018).  
Phil Turner, *A Psychology of User Experience*: Springer; 1st ed. 2017 edition (December 4, 2017).  
Interaction Design Foundation, *The Encyclopedia of Human-Computer Interaction*: Interaction Design Foundation.  
Ellen Lupton, *Graphic Design Thinking: Beyond Brainstorming*: Princeton Architectural Press.  
IDEO.org, *The Field Guide to Human-Centered Design*: IDEO.org / Design Kit (1750).  
Alex W. White, *The Elements of Graphic Design*: Allworth; Second edition (March 15 2011).  
Jesse James Garrett, *The Elements of User Experience: User-Centered Design for the Web and Beyond*: New Riders; 2 edition (Dec 16 2010).  
Brian Still, Kate Crane , *Fundamentals of User-Centered Design: A Practical Approach*: CRC Press; 1 edition (Dec 17 2016).  
Russ Unger, Carolyn Chandler , *A Project Guide to UX Design: For user experience designers in the field or in the making (2nd Edition)*: New Riders; 2 edition (March 9 2012).  
Jeffrey Rubin, Dana Chisnell, Jared Spool, *Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests*: Wiley; 2 edition (May 12 2008).  
Thomas Tullis, William Albert, *Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics*: Morgan Kaufmann; 2 edition (July 17, 2013).

Books recommendation:

All the books listed above are ONLY recommended for students to read. Students are not expected to read all these books however, it is recommended to buy or visit the library and borrow one of these books and read. The Design of Everyday Things is one of the most popular books in the field. However, The Encyclopedia of Human-Computer Interaction written by a group of authors in the Interaction Design Foundation is one of the richest sources of information in the field of in HCI. The entire content is provided online with free access. I highly recommend all students to visit the foundation website and explore the foundation's publications. Graphic design is a big part of user interface design. CPSC students are not expected to be good graphic designers however, it is important for CPSC students to differentiate between good and bad designs. Part of developing the skill is to understand the graphic designs elements. The Elements of Graphic Design is a good and easy material for students to understand the principles of graphic design. User-centered design is an essential topic in HCI. It is recommended that student explore a book like The Elements of User Experience. Finally, Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests book is a recommended read for all students who are interested in usability testing.

## 7. **Examination Policy:**

No aids are allowed on tests or examinations.

Students should also read the Calendar, [Section G](#), on Examinations.

## 8. **Approved Mandatory And Optional Course Supplemental Fees:**

There are no mandatory or optional course supplemental fees for this course.

## 9. **Writing Across The Curriculum Statement:**

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

## 10. **Human Studies Statement:**

Students will not participate as subjects or researchers in human studies.

See also [Section E.5](#) of the University Calendar.

## 11. **Reappraisal Of Grades:**

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the

grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **10 business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall immediately submit the Reappraisal of Graded Term work form to the department in which the course is offered. The department will arrange for a re-assessment of the work if, and only if, the student has sufficient academic grounds. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

## 12. Other Important Information For Students:

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. **SU Wellness Center:** The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see [www.ucalgary.ca/wellnesscentre](http://www.ucalgary.ca/wellnesscentre) or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The University of Calgary is committed to fostering a safe, productive learning environment. The Sexual Violence Policy (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>) is a fundamental element in creating and sustaining a safer campus environment for all community members. We understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email ([svsa@ucalgary.ca](mailto:svsa@ucalgary.ca)) or phone at [403-220-2208](tel:403-220-2208).
- d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples.**
- e. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- f. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of Undergraduate Affairs of the Department of Computer Science, Nathaly Verwaal by email [nmverwaa@ucalgary.ca](mailto:nmverwaa@ucalgary.ca) or phone 403-220-8485. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- g. **Safewalk:** Campus Security will escort individuals day or night (See the [Campus Safewalk](#) website). Call [403-220-5333](tel:403-220-5333) for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- h. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information,

see [Legal Services](#) website.

- i. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](#) Email: [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca). SU Faculty Rep., Phone: [403-220-3913](#) Email: [sciencerep@su.ucalgary.ca](mailto:sciencerep@su.ucalgary.ca). [Student Ombudsman](#), Email: [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca).
- j. **Internet and Electronic Device Information:** Unless instructed otherwise, cell phones should be turned off during class. All communication with other individuals via laptop, tablet, smart phone or other device is prohibited during class unless specifically permitted by the instructor. Students that violate this policy may be asked to leave the classroom. Repeated violations may result in a charge of misconduct.
- k. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.
- l. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

#### Course Outcomes:

- Explain and reason with core concepts from human-computer interaction, design, psychology and cognitive science- such as affordances, signifiers, and “Recognition vs. Recall” - and describe existing interfaces based on these principles.
- Understand and apply specific user-centered design methods (for user research, ideation, prototyping and evaluation) to design problems and situations (e.g. task and goal centered system design, IDEO Method Cards).
- Generate design ideas grounded in user research, and rationalize the connection from a design concept back to observations of people’s real-world behavior.
- Prototype user interfaces using low-level (e.g., paper prototyping, pictives, storyboarding), mid-level (e.g., wire framing) and high-fidelity techniques (e.g., C#).
- Constructively evaluate and critique interfaces (e.g., via usability walkthroughs and design heuristics), identifying effective design elements, design weaknesses that require revision, and opportunities for improvement.
- Demonstrate design communication skills to present user research and design concepts to elicit criticism and feedback — including hand sketching, prototyping, personas, scenarios, as well as verbal, written, and video presentation.

Department Approval:

Electronically Approved

Date: 2019-08-27 09:09