COMP 3008 – Human Computer Interaction
Winter 2020
School of Computer Science, Carleton
University Course Outline

Course description

Fundamentals of the underlying theories, design principles, development and evaluation practices of human-computer interaction (HCI). Topics may include: theories of interaction, user interface frameworks, desktop, web, mobile, and immersive applications, usability inspection and testing methods, and qualitative and quantitative approaches to HCI research.

Class Schedule

Classroom location: Azrieli Theatre 101
Class times: Tuesday and Thursday, 2:35 pm - 3:55 pm
(January 6th - April 7th)

Winter Break: February 17th – 21st
Course website: https://culearn.carleton.ca

Instructor

Name: Sana Maqsood
Email: sana.maqsood@carleton.ca
Office: Herzberg 5270
Office hours: Thursday 12:00 – 1:30pm

Teaching Assistants

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Office Hours</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniela Napoli</td>
<td><a href="mailto:danielanapoli@cmail.carleton.ca">danielanapoli@cmail.carleton.ca</a></td>
<td>Monday, 12:00 - 1:30pm</td>
<td>HP4125</td>
</tr>
<tr>
<td>Fiona Westin</td>
<td><a href="mailto:FionaWestin@cmail.carleton.ca">FionaWestin@cmail.carleton.ca</a></td>
<td>Friday, 2:00 – 3:30pm</td>
<td>HP4125</td>
</tr>
<tr>
<td>Aniqa Binte Alam</td>
<td><a href="mailto:AniqaBinteAlam@cmail.carleton.ca">AniqaBinteAlam@cmail.carleton.ca</a></td>
<td>Friday, 9:00 – 10:30am</td>
<td>HP4125</td>
</tr>
<tr>
<td>Mohamed Al Kassm</td>
<td><a href="mailto:NazAlKassm@cmail.carleton.ca">NazAlKassm@cmail.carleton.ca</a></td>
<td>Wednesday 11:30 – 1:00pm</td>
<td>HP4125</td>
</tr>
<tr>
<td>Khadija Baig</td>
<td><a href="mailto:KhadijaBaig@cmail.carleton.ca">KhadijaBaig@cmail.carleton.ca</a></td>
<td>Tuesday, 12:00 – 1:30pm</td>
<td>HP4125</td>
</tr>
</tbody>
</table>
Resources

Textbook: Interaction Design: Beyond Human-Computer Interaction (5th edition). Yvonne Rogers, Helen Sharp, and Jenny Preece. Wiley Publishing, 2019 (4th and 3rd edition is mostly acceptable as well). This will be the main resource for the course: readings will be assigned regularly, and knowledge from the readings will be assumed in assessment. Please ensure that you obtain the 5th edition (with a green cover), 4th edition (orange cover), or the 3rd edition (with a white cover), and not the earlier 2nd (blue cover) or 1st (purple cover) editions.

The book can be purchased from the Carleton University Bookstore, and from online retailers, such as Amazon. The 3rd edition is available online via the library (see link on our cuLearn page) but access can be unreliable and is limited to a small number of students at a time.

If you purchase an ACM student membership ($19.99 USD), you will receive access to the 4th edition of the book for the duration of your membership (1-year). Details about this option can be found on the ACM website: https://www.acm.org/membership/membership-options

Other references: Additional material will be provided on cuLearn throughout the term.

Evaluation

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>20%</td>
<td>Friday Feb 14th, 5pm</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>20%</td>
<td>Thursday Feb 27th, in class</td>
</tr>
<tr>
<td>Project 2</td>
<td>20%</td>
<td>Tuesday Apr 7th, 5pm</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
<td>Exam period</td>
</tr>
</tbody>
</table>

Projects: Projects will be done in groups of at least 4 people. Students are responsible for organizing their teams. Teams do not have to remain the same for both projects. Please use the forum on cuLearn to form teams, and contact the instructor or Teaching Assistants if assistance is required. Teaching assistants will be available during office hours to provide intermediate feedback and advice as you work on your projects. Projects will be submitted through cuLearn. Projects handed in late will be penalized by a deduction of 10 marks (out of a possible 100) per 24-hour period, or part thereof.
Project extension: A flexible deadline extension of 48-hours will be available to each team. A team may use it for one 48-hour extension on either Project 1 or 2, or split it between the two. Details will be provided in class. Once the 48-hours are used up, projects handed in late will be penalized by a deduction of 10 marks (out of a possible 100) per 24 hour period, or part thereof. Since project specifications are posted well in advance of their due dates, illness does not excuse a student from completing their part of the project. No provision is made for missed projects, and no extra credit assignments will be available.

Midterm & final exam: The midterm and final exams are closed-book: no materials or online resources will be permitted. For both exams, the format will be discussed in class. In order to pass the course, students must obtain a passing grade on the final exam.

Missed midterm: If you are unable to attend the midterm due to illness, you will need to provide a Carleton University Medical Certificate (http://carleton.ca/registrar/wp-content/uploads/med_cert.pdf) that has been completed and signed by a physician. There will be no make-up midterm but the weight of the midterm for students who receive accommodations will be moved to the final exam. In this case, the final exam will be worth 60% of your final grade.

Content

A course schedule, readings, and additional content will be provided on cuLearn. Readings will be assigned regularly, and knowledge from the readings will be assumed in assessment.

Human-computer interaction (HCI) is the study of principles and methods for effective design, prototyping, development, and evaluation of user interfaces. The course will introduce the theory and practice of developing user interfaces.

Topics may include requirements gathering, task and goal-centered development, prototyping, user interface tools, design principles, usability testing, expert evaluations, cognitive models, quantitative and qualitative analysis for assessing the effectiveness of interfaces. Special application areas of HCI will be covered later in the course as time permits (e.g., usable security, information visualization, accessibility, serious games).

Attendance

Course notes will be made available, but these will only contain the outlines for the lectures. The midterm and final exams will cover all the material presented during the lectures, in
the class discussions, and assigned readings. Students are expected to attend all lectures in order to pass the course.

**Collaboration Policy**

Collaboration on the assignments is allowed within your own team only. Posting solutions on discussion boards before the due date and time is prohibited. Collaboration, communication with anyone other than the proctors, or cheating during the midterm or final exam is strictly prohibited. **All cases of plagiarism or cheating will be pursued through official university channels.**

**Undergraduate Academic Advisor**

The Undergraduate Advisor for the School of Computer Science is available in Room 5302C HP, by telephone at 520-2600, ext. 4364 or by email at undergraduate_advisor@scs.carleton.ca. The undergraduate advisor can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisor will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and the Writing Tutorial Services.

**Science Student Success Center (SSSC)**

The Science Student Success Center is a central advising unit for students in Science courses. It helps students achieve their goals by providing access to resources, workshops and activities that enhance their academic and study skills, and them make key connections with peers. Mentors can help you customize an individual study plan which includes weekly and semester work or study schedules, and also help when you need information on developing a new study strategy, obtaining summer job opportunities, or clarifying ideas and concepts to better understand and cope with new course content. Drop by the Science Student Success Center at 1152 Herzberg Laboratories or visit at [https://sssc.carleton.ca](https://sssc.carleton.ca).

---

**University Policies**

**Student Academic Integrity Policy**

Every student should be familiar with the Carleton University student academic integrity
policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

Minimum penalties (starting January 6th, 2020):

• First offence, first-year students (< 4.0 credits completed): No credit for assignment/activity in question, or a final grade reduction of one full letter grade (e.g., A- becomes B-, if reduction results in an F, so be it), whichever penalty is more severe. First offence (everyone else): F in the course
• Second offence: One-year suspension from program
• Third offence: Expulsion from the University

Note: these are minimum penalties. More-severe penalties will be applied in cases of egregious offences (e.g., a first-year student accessing CULearn from their phone during an exam will be given an F in the course; bribing a faculty member for a better grade would be grounds for suspension, etc.)

Failure to inform yourself of the expectations regarding academic integrity is not a valid excuse for violations of the policy. When in doubt, Ask your instructor.

Plagiarism

As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science.

Unauthorized Co-operation or Collaboration

Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.
Academic Accommodations for Students with Disabilities

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable) at https://carleton.ca/pmc/students-registered-with-pmc/important-dates-and-deadlines

Religious or Other Obligation

Write to the instructor with any request for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: http://www2.carleton.ca/equity

Medical Certificate

The following is a link to the official medical certificate accepted by Carleton University for the deferral of final examinations or assignments in undergraduate courses. To access the form, please go to http://www.carleton.ca/registrar/forms