HCIN 5100F: Fundamentals of HCI Design and Evaluation Masters in Human-Computer Interaction Carleton University, Ottawa, Canada Course Outline Fall 2023

Instructor:

Elizabeth Stobert Email Address: elizabeth.stobert@carleton.ca Office Location: HP 5127 Office Hours: Available by appointment. Primary method of contact: Email

Meetings:

Term: Fall 2023 Times: 8:35–11:25 AM Thursdays, September 7 – December 7 (Class cancelled October 26 for Fall break) Room: Please check Carleton Central

Course Objective:

Students completing this course should gain a deep understanding of the psychological research relating to cognition and design, as well as how to design and conduct user studies.

Topics:

Main topics will include:

- Human perception
- Cognitive psychology
- Personality psychology
- Developmental psychology
- Social psychology
- Distributed cognition
- Affective computing
- Human error
- User study design

- Usability evaluation methods
- Ethical considerations in HCI research

Assessment:

Assessment will be based on work including: in-class presentation and discussion of papers from the literature; a prototyping assignment, a literature survey of a relevant area; and a user study project evaluating the design of a piece of software.

Paper presentation and discussion: 20% Literature survey (due Oct 19): 35% User study project (due Dec 14): 45%

The majority of class meetings will be discussion-based. We will cover 2–3 readings from the literature per week, and one student will be responsible for leading the discussion of each reading. Students are expected to read all papers, and take turns leading discussions. The grade for paper presentation and discussion will be based on student presentations and discussion of assigned readings.

Late Submission Policy:

Late assignments will be accepted with a deduction of one grade-level per day (e.g. an excellent assignment submitted two days late would receive a maximum grade of A-).

Online Resources:

There will be no set textbook. Instead, papers from the literature and online resources will be made available as appropriate.

All course papers and other resources will be available online through Brightspace. Use your Carleton ID and password to log into http://brightspace.carleton.ca.

Illness-related Policies:

Although there is no longer a formal policy regarding COVID-19 or other illness, I would like to acknowledge that COVID (and other viruses) continue to circulate in the community, and that the extent to which this affects or concerns everyone may not be equal. In our class, I ask that we extend our respect for other people's risk capacity to those who are the most risk-conscious. The classroom is a community, and our first priority is that everyone is able to learn in an environment that feels safe to them.

If you have any symptoms at all, please do not come to class. Alternative methods for joining class will be provided. If you are recovering, please wear a mask.

University Policies:

For more information on academic accommodation, please contact the departmental administrator or visit: https://students.carleton.ca/course-outline

- **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.
- **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 Faculty of Graduate and Postdoctoral Affairs.
- 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.
- Use of LLMs: The assessment activities in this course were designed to be completed by an individual working alone. Unless it is explicitly stated otherwise, the use of any will be considered academic misconduct. This includes, but is not limited to, chatbots (e.g., ChatGPT, Google Bard, Bing Chart), research assistants (e.g., Elicit), and image generators (e.g., Stable Diffusion, Dall-E), etc. An exception to the above rule is made for automated grammar and punctuation checking tools (such as Grammarly).

Academic Accommodation

For more information on academic accommodation, please contact the departmental administrator or visit: https://students.carleton.ca/course-outline

- Pregnancy obligation: Please contact your instructor with any requests 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: https://carleton.ca/equity/wp-content/uploads/ Student-Guide-to-Academic-Accommodation.pdf
- Religious obligation: Please contact your instructor with any requests 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: https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

- Academic Accommodations for Students with Disabilities: If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC 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 your instructor as soon as possible to ensure accommodation arrangements are made. https://carleton.ca/pmc
- Survivors of Sexual Violence: As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and is survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: https://carleton.ca/sexual-violence-support
- Accommodation for Student Activities: Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/ senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf