THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-3916-051
Course Name: Human-Computer Interaction
Course Webpage: https://nexus.uwinnipeg.ca/d2l/le/content/58858/Home

Instructor Information

Instructor: Jeanette Bautista
Office: 3D25
E-mail: je.bautista@uwinnipeg.ca
Office Hours: Mondays   1:00 – 2:00 pm   room 3D25

Class meeting time: Tuesdays   6:00 – 9:00 pm   room 3D01

Important Dates

1. First Class: Tuesday, January 9, 2024
2. Midterm Exam: Tuesday, February 13, 2024
3. Reading Week (no classes):   February 18-24, 2024
4. Final Withdrawal Date w/o academic penalty*:   Friday, March 15, 2024
5. Last Class: Tuesday, April 2, 2024
6. Final Exam: TBD
7. University closures: Louis Riel Day   Monday, February 19, 2024
                           Good Friday   Friday, March 29, 2024

*A minimum of 20% of the work on which the final grade is based will be evaluated and available to the student before the voluntary withdrawal date.

Course Objectives / Learning Outcomes

This course covers the fundamentals and concepts of design, implementation, and evaluation of human-computer interfaces. Topics include human cognitive aspects; user-centred design; design goals and principles; interface and interaction types; prototyping and construction; and evaluation methods. The design concepts are demonstrated using an interface development tool. In order to make a balance between theory and practice, emphasis is placed on a course end project involving design, implementation and evaluation of the user interface for a specific application.

Evaluation Criteria

1. Assignments (15%)
   - Individual work
   - 2 assignments, equally weighted
   - May include any or a combination of the following:
     - Theory, design, prototyping, analysis exercises

2. Final Project (25%)
   - Group work (4-5 students per team)
     - Individual project marks will be based on the group mark, self-reports per deliverable, and peer evaluations at the end of the term
   - Due Dates:
     - Project Proposal: Week of February 6
     - Milestones 1&2: TBD
     - Final report/prototype: March 31
     - Presentation: April 2
     - Peer Evaluation: April 5

3. Midterm Test (20%)
   - During the regular class time (see Important Dates)

4. Final Exam (40%)
   - Cumulative

Submissions:
   - All work is to be submitted electronically via Nexus.
   - All prototypes must be submitted in the appropriate format, and all written work as PDF. Further details and submission procedure will be stated in each assignment.
   - Students are responsible for backing up and protecting their assignment work.
   - Assignments and project deliverables will be accepted up to 1 day late with a 20% penalty.
   - Further information and dates to be posted on the course website.

Prototyping software will be used for this course. Balsamiq and Figma will be introduced in assignments. Students may choose to use other tools for the course project with permission from the instructor.

Test / Exam Requirements

- Photo ID is required for the final exam.
- The use of computers, calculators, phones, or other electronic devices is not permitted during exams.
- Midterm and final exams are closed-book.

Students should contact the instructor as soon as possible if extenuating circumstances require missing a lab, assignment, test or examination. A medical certificate from a practicing physician may be required before any adjustments are considered.

Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact Accessibility Services (AS) at 204-786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential.
https://www.uwinnipeg.ca/accessibility-services.

Students may choose not to attend classes or write examinations on holy days of their religion, but they must notify their instructors at least two weeks in advance. Instructors will then provide opportunity for students to make up work examinations without penalty. A list of religious holidays can be found in the 2019-20 Undergraduate Academic Calendar online at http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf

Final Letter Grade Assignment

Historically, numerical percentages have been converted to letter grades using the following scale. However, instructors can deviate from these values based on pedagogical nuances of a particular class, and final grades are subject to approval by the Department Review Committee.

A+	90 – 100%	B+	75 – 79%	C	60 – 64%
A	85 – 89 %	B	70 – 74%	D	50 – 59%
A-	80 – 84%	C+	65 – 69%	F	below 50%

Required Textbook / Reading List

- *Interaction Design: Beyond Human-Computer Interaction*, Preece, Rogers and Sharp, Wiley 5th Edition 2019 **(optional)**
     o ISBN 978-1-119-54725-9 (print)
     o ISBN 978-1-119-54730-3 (ebook)
- Additional readings and material that are not covered by the textbook will be provided by the instructor
- Class Notes will be available on Nexus

Prerequisite Information

- Prerequisites: A grade of at least C in ACS-2909(3) and ACS-2814(3) (or the former ACS2914(3))
- Restrictions: Students cannot hold credit in ACS-3916(3) and ACS-3816(3)

Regulations, Policies, and Academic Integrity

Students are encouraged to familiarize themselves with the Academic Regulations and Policies found in the University Academic Calendar at:
https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf
Particular attention should be given to subsections 8 (Student Discipline), 9 (Senate Appeals) and 10 (Grade Appeals).

Avoiding Academic Misconduct: Academic dishonesty is a very serious offense and will be dealt in accordance with the University's policies.

Detailed information can be found at the following:

- Academic Misconduct Policy and Procedures:
  https://www.uwinnipeg.ca/policies/docs/policies/academic-misconduct-policy.pdf and
  https://www.uwinnipeg.ca/policies/docs/procedures/academic-misconduct-procedures.pdf
- About Academic Integrity and Misconduct, Resources and FAQs:
  https://library.uwinnipeg.ca/use-the-library/help-with-research/academic-integrity.html

Uploading essays and other assignments to essay vendor or trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their own work) involves "aiding and abetting" plagiarism. Students who do this can be charged with Academic Misconduct.

Academic Integrity and AI Text-generating Tools: Students must follow principles of academic integrity (e.g., honesty, respect, fairness, and responsibility) in their use of material obtained through AI text-generating tools (e.g., ChatGPT, Bing, Notion AI). If an instructor prohibits the use of AI tools in a course, students may face an allegation of academic misconduct if using them to do assignments. If AI tools are permitted, students must cite them. According to the MLA (https://style.mla.org/citing-generative-ai/), writers should
- cite a generative AI tool whenever you paraphrase, quote, or incorporate into your own work any content (whether text, image, data, or other) that was created by it
- acknowledge all functional uses of the tool (like editing your prose or translating words) in a note, your text, or another suitable location
- take care to vet the secondary sources it cites

If students are not sure whether or not they can use AI tools, they should ask their professors.

Non-academic misconduct: Students are expected to conduct themselves in a respectful manner on campus and in the learning environment irrespective of platform being used. Behaviour, communication, or acts that are inconsistent with a number of UW policies could be considered "non-academic" misconduct. More detailed information can be found here:

- Respectful Working and Learning Environment Policy
  https://www.uwinnipeg.ca/respect/respect-policy.html,
- Acceptable Use of Information Technology Policy

- https://www.uwinnipeg.ca/policies/docs/policies/acceptable-use-of-information-technology-policy.pdf
- Non-Academic Misconduct Policy and Procedures: https://www.uwinnipeg.ca/policies/docs/policies/student-non-academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/policies/docs/procedures/student-non-academic-misconduct-procedures.pdf

Copyright and Intellectual Property: Course materials are the property of the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides—irrespective of format. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also seek prior permission of the instructor/presenter before, for example, photographing, recording, or taking screenshots of slides, presentations, lectures, and notes on the board. Students found to be in violation of an instructor's intellectual property rights could face serious consequences pursuant to the Academic Misconduct or Non-Academic Misconduct Policy; such consequences could possibly involve legal sanction under the Copyright Policy: https://copyright.uwinnipeg.ca/basics/copyright-policy.html

Privacy

Students have rights in relation of the collecting of personal data the University of Winnipeg
- Student Privacy: https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html
- Zoom Privacy: https://www.uwinnipeg.ca/privacy/zoom-privacy-notice.html

Class Cancellation, Correspondence with Students and Withdrawing from Course

When it is necessary to cancel a class due to exceptional circumstances, the course instructor will make every effort to inform students via uwinnipeg email and Nexus.

Students are reminded that they have a responsibility to regularly check their uwinnipeg e-mail addresses to ensure timely receipt of correspondence from the University and/or the course instructor*.*

Please let course instructor know if you plan on withdrawing from the course. Note that withdrawing before the VW date does not necessarily result in a fee refund.

Topics to be covered (tentative)

1. Introduction to HCI
2. The process of Interaction Design
3. Conceptualizing Interaction

4. Cognitive Aspects
5. Data Gathering
6. Data analysis, Interpretation, and Presentation
7. Discovering requirements
8. Design, Prototyping, and Construction
9. Evaluation
10. Visual Design
11. Social Interaction
12. Special Topics in HCI (time permitting)

Note: A permitted or necessary change in mode of delivery may require adjustments to important aspects of course outlines, like class schedule and the number, nature, and weighting of assignments and/or exams.