



THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number - ACS-3816-001 / ACS-3916-001

Course Name – Human Computer Interaction

Instructor Information

Instructor: Prof. Sergio G. Camorlinga

Office: 3D29

E-mail: s.camorlinga@uwinnipeg.ca

Office Hours: Th: 16:00 pm - 17:00 p.m.
or by email appointment

Class Meeting Time: Tu,Th: 10:00 am- 11:15 am **Room No:** 3D04

Course Web Page: <https://courses.acs.uwinnipeg.ca/3916-001>

Instructor's Home Page: www.acs.uwinnipeg.ca/scamorlinga

Important Dates

First Class:

Thu Jan 5, 2017

Reading Week (No classes)

Feb 19-25, 2017

Midterm Exam:

Thu Feb 16, 2017 (in class hours)

Final Withdrawal Date w/o academic penalty: Wed Mar 1, 2017

(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)

Last Class:

Tue April 4, 2017

Final Exam:

Mon Apr 10, 2017 @ 1:30 pm – 4:30 pm

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-centered 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

- Assignments: 5%
 - There will be 4 assignments worth 1.25% each.
 - May include any or a combination of the following:
 - Theory, programming, design, analysis exercises
 - Due at the beginning of class on due dates.
 - No late assignment will be accepted, or under special circumstances accepted with 20% off for each late day.
 - Assignments should be hand in by due date on paper (no handwritten) unless email submission is requested. Handwritten assignments will not be accepted.
 - Multiple submissions are not permitted. Students may submit a partially completed assignment, and will receive credit for those attempted problems.
 - If electronic hand in is requested, students are responsible to review their assignments before submission to make sure the correct files are attached to the email.
- Paper Presentation: 5%
 - You will be required to study a current article related to the course and present in class its summary by using a PowerPoint presentation.
- Project: 20%
 - Due dates:
 - Project proposal: Tue Feb 14, 2017.
 - Final project submission: Wed March 29, 2017 noon.
- Midterm Exam: 20%
 - Closed-book in-class midterm exam.
- Final Exam: 50%
 - Closed-book final exam.

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 - 90%	B	70 - 74%	D	50 - 59%
A-	80 - 84%	C+	65 - 69%	F	below 50%

Exam Requirements

- Photo ID at exam is required.
- You are expected to write the test/exam on its given day.
- No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted.
- Simple calculators can be used though. Simple calculators are subjected to test and can be denied use at mid-term test and final examination times.
- Unless a medical certificate is provided, no accommodation is made for missed exams.

Email Communication

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course utilize a UofW email account to minimize the risk of filtering.

Services for Students with Disabilities

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 786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential
<http://www.uwinnipeg.ca/accessibility>

Students facing a charge of academic or non-academic misconduct may choose to contact the University of Winnipeg Students' Association (UWSA) where a student advocate will be available to answer any questions about the process, help with building a case, and ensuring students have access to support. For more information or to schedule an appointment, visit our website at www.theuwsa.ca/academic-advocacy or call 204-786-9780.

We ask that you please be respectful of the needs of classmates and instructors/professors by avoiding the use of unnecessary scented products while attending lectures. Exposure to scented products can trigger serious health reactions in persons with asthma, allergies, migraines or chemical sensitivities. Please consider using unscented necessary products and avoiding unnecessary products that are scented (e.g. perfume).

Misuse of Computer Facilities, Plagiarism, and Cheating

Academic dishonesty is a very serious offense and will be dealt with in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8 starting on page 27, in the 2016-2017 UW Academic Calendar (<http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>).

Required Text Book(s)/Reading List

Interaction Design: Beyond Human-Computer Interaction,
Preece, Rogers and Sharp,
Wiley 4th Edition, 2015
ISBN 978-1-119-02075-2 (printed)
ISBN 978-1-119-06601-9 (ebook)

Besides the information contained in the textbook, I may also discuss appropriate material and examples from other sources. Students are responsible for all material covered in the class.

Prerequisite and Restriction Information*

(This information can be found in the UW Academic Calendar)

- Prerequisites: A grade of at least C in ACS-2909(3) and ACS-2814(3) (or the former ACS-2914(3))
- Restrictions: Students cannot hold credit in ACS-3916(3) and ACS-3816(3)

Course Outline (Tentative)

The following topics will tentatively be covered:

1. General concepts of Interaction Design
 - Good and poor interaction design
 - Interaction design and HCI
 - Process of interaction design
 - Interaction design guidance and evaluation
2. Understanding and conceptualizing interaction
 - Understanding the problem space
 - Conceptualizing the design space
 - Theories, models and frameworks
3. Users and user interfaces
 - Understanding users
 - Paradigms for interfaces
 - Interface types
4. The process of interaction design
 - Consideration involved in interaction design
 - Practical issues in interaction design
 - Lifecycle models in interaction design

5. Identify needs and establish requirements
 - Identifying different kinds of requirements
 - Data gathering, analysis, interpretation and presentation
 - Task description and analysis

6. Design, prototyping and construction
 - Prototyping and construction
 - Conceptual design
 - Physical design
 - Using scenarios and prototypes in design
 - Tool support

7. Interface Evaluation
 - The why, what, where, and when of evaluation
 - Evaluation approaches and methods

Note that all topics listed may not be covered and may be offered in a slightly different time order.

Additional Course Related Information

1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.

2. Your uwinnipeg email address will normally be used for course related correspondence.

3. Please note that withdrawing before the VW date does not result in a fee refund.

4. Class make-up days are scheduled at the end of term for courses that conflict with holidays.