

# School of Computer Science

# CIS\*4300

### **Human Computer Interaction**

Course Code:	Course Title:			Date of Offering:
CIS*4300	Human Computer Interaction		Fall 2016	
Instructor:		Office:	Reynolds 211	
Dr. Michael Wirth		Email:	mwirth@uoguelpl	n.ca

## Synopsis:

Human Computer Interaction is "design for human use". Computers are a ubiquitous part of many interactions in our lives, from the mundane use of everyday appliances, to "smart" household devices, and mobile devices. HCI is concerned with optimising the interaction between machines and their human users. This course explores the design, evolution, and evaluation of human-machine interfaces. Class lectures will involve studying methods for interface design and evaluation including requirements gathering, usability heuristics, usability studies, information visualization, and prototyping. This is a hands-on course designed around active lecture sessions supported by weekly workshops.

Class Information: 2.30-4.20pm Tues; Workshop 2.30-4.20pm Thurs

## Reference Texts (not required):

- Usable Usability, E.Reiss, John Wiley & Sons (2012)
- Universal Principles of Design, W.Lidwell, K.Holden, J.Butler, Rockport Publishers (2003)
- Universal Methods of Design, B.Hanington, B.Martin, Rockport Publishers (2012)
- Rocket Surgery Made Easy, S.Krug, New Riders (2010)
- Don't Make Me Think (Revisited), S.Krug, New Riders (2014)

### Method of Evaluation:

Course Work	Due Date	Weight	
Everyday objects	October 4th	20%	
Usability (i) critique	October 24th	30%	
Usability (ii) redesign	November 7th	15%	
Group design project	December 2nd	35%	

#### Website:

The course has a *Courselink* site which is used for accessing all course content, lectures, assignments, case studies, lab information, assignment submission etc.

## Learning Outcomes:

By the end of this course, students will be able to:

- Explain the basics of human and computational abilities and limitations.
- Identify basic theories, tools and techniques in HCI.
- Explain the fundamental aspects of designing and evaluating interfaces.
- Practice a variety of simple methods for evaluating the quality of a user interface.
- Apply appropriate HCI techniques to design systems that are usable by people.

### **ACADEMIC INTEGRITY**

The University of Guelph is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards, and must abide by the applicable policies (see Section VIII of the Undergraduate Calendar on "Academic Misconduct"). For educational purposes, instructors impose conditions on assignments that may limit students' permission to collaborate with others or to utilize external sources (including, but not limited to, software, data, images, text, etc.). Any permitted utilization must be done with proper references. Instructors may use automated tools to detect possible cases of plagiarism. Work that shows significant unnatural similarity or that appears to be copied from unacknowledged sources, will be investigated as potential academic misconduct. "Aiding and abetting" is also a punishable offense, and students must be careful not to help others commit offenses by giving our their files or allowing others to access their computer accounts. Consider yourself warned.

## ACCEPTABLE USE POLICY

Please read the complete policy which can be found on the web page: http://www.uoguelph.ca/web/aupg/

## THE GRADING SYSTEM

During the term, your marks will be accumulated out of 100%, as indicated in the "Method of Evaluation" table. At the end of the semester, you will be assigned a letter grade. The mapping from term mark (out of 100%) and final letter grade will be consistent with university guidelines. Students are referred to the University of Guelph policy on "Grades" found in Section VIII of the Undergraduate Calendar.

## **ASSIGNMENTS**

There are four assignments for this class. To receive full grades, these assignments must represent your own personal efforts (unless they are stated as being group/team, or projects).

SUBMISSION: Assignments must be handed in by 11:55pm of the day in which it is due, although there is a 48-hour grace period, in which no penalty will accrue. Every day after this will incur a 1% penalty. EXTENSIONS: Any reasonable request for an extension will be considered. A class-wide extension to the due date of an assignment/project will be made if there is a conflict with work in another class, or other mitigating circumstances.

REGRADING POLICY: Assignments will be regraded up until seven (7) days from when the mark is released. It is your responsibility to check that the marks are correct and to notify me of any errors or missing marks.

**NOTE**: Let's face it, you have to assume that technology will fail you at some point. Computers crash, transfers time out, flash drives become corrupt. The list goes on and on. These are not considered emergencies. They are part of the normal process of work. An issue you may have with technology is no excuse for late work. Protect yourself by managing your time and <u>backing up your work</u>.

### **WORKSHOPS**

Workshops are on each week on Thursday afternoon at 2.30pm. They will generally consist of some fun interaction exercises, and discussions. The last week of labs, and last week of lectures will be focused on presentations for the group project.