GLIS 626: Usability Analysis and Assessment (3 credits)
Prof. Karyn Moffatt

DISCLAIMER: This syllabus is provided for informational use only. Content and assignments may change before the start of the course and may differ between course sections. Students enrolled in this course are to retrieve the official version from the McGill course management site.

Course Description
This course will introduce you to the principles and techniques for evaluating interactive computer-based information systems. Models and characteristics of human users will be examined with respect to how they pertain to usability and user experience. Methods and techniques for task analysis, user testing, analytic evaluation, and performance modeling will be examined and practiced through hands-on activities and assignments.

Learning outcomes
By the end of the course, you should be able to:

- Describe models and characteristics of human users and how they pertain to usability
- Critique and analyze existing interfaces, based on their adherence to usability principles and concepts
- Match usability methods to appropriate contexts and scenarios for their application, comparing and contrasting their strengths and weaknesses
- Carry out a usability evaluation, including planning and executing a test plan, and analyzing and reporting the results

Instructional method
Lectures, class & small group discussions, and in-class activities. A multi-stage group project and a number of individual homework assignments will enable you to put into practice knowledge learned in class.

Required text
Rogers, Sharp, & Preece. (2011). Interaction Design: Beyond Human-Computer Interaction. 3rd ed. Chichester, UK: John Wiley.

Topics

Week 1	How & why interfaces fail, principles of good and bad design
Week 2	Visibility, mapping, feedback, constraints, metaphors, and affordances
Week 3	Conceptual models, interface metaphors, and interaction types
Week 4	Models of cognition, individual mental models, distributed cognition
Week 5	Analytic evaluation: Cognitive walkthrough and heuristic evaluation
Week 6	The role and timing of user evaluation
Week 7	Usability testing
Week 8	Human abilities and perceptual limitations
Week 9	Modeling user interaction
Week 10	Data analysis and interpretation
Week 11	Future directions in interface design
Week 12	Project presentations & class wrap-up

Assignments and Evaluation

Your final course grade will be based on individual assignments and a group usability evaluation project.

Assignment	Date Out	Due Date	Weight
Individual Assignments (50% total)			
1: Mental Models			10%
2: Cognitive Walkthrough			10%
3: Cognitive Walkthrough II			10%
4: Usability Study			20%
Group Project (45% total)			
1: Test Plan			10%
2: Preliminary Results			10%
3: Final Report & Recommendations			20%
4: Presentation			5%
Peer evaluation			5%
		Total	**100%**

You are expected to prepare for class discussions and participate in class.
No extensions, delays, or late assignments will be accepted unless a physician's certificate is provided.

Individual Assignments (Four (4) assignments worth 50% overall)

A number of individual assignments will give you practice with the specific methods covered in this course. These must be completed independently. Detailed descriptions and instructions will be posted on the with sufficient time for completion. **All assignments are due at the start of class (by 8:35am) on their designated due date.** .

Group Project (45% of final grade; distributed across 5 milestones)

You will complete the project in teams of 3–4 members. The project will consist of a number of milestones, full descriptions of which will be posted on the course website. Each component must be conducted and submitted as a group and will be **due in my mailbox by 4pm on the due date.**

Peer Evaluation (worth 5% of the final grade)

At the end of term, you are asked to submit a peer evaluation for each of your project teammates. On the last day of lecture (December 3, 2012) you should email me with a grade out of 5 along with a short (1 paragraph) justification for each teammate. These evaluations will be averaged to calculate the peer evaluation grade (worth 5%). You should include a grade and justification for yourself, though your own score will not contribute to your average.

In assessing your teammate performance, you should consider the following factors:

- Amount of effort
- Quality of work and intellectual contribution
- Cooperation, professionalism, and dependability
- Overall contribution to the project