Course Description: Human-Computer Interaction (SYST 469-001; Fall 2009)

Instructor: Bill Killam, MA CHFP Phone # 703-729-0998 (O) 703-626-6318 (M) Office Hours: (by appointment) E-Mail Address: <u>bkillam@user-centereddesign.com</u>

Text: J. Preece, Y. Rogers, & H. Sharp. *Interaction Design: Beyond Human-Computer Interaction* (2nd edition.). Wiley & Sons, 2007.

Prerequisites: IT 108 and IT/STAT 250

This course will cover the principals of human-computer interaction: including information processing design, cognitive models, ergonomics, and design metaphors. Students will learn to evaluate interface design in terms of effectiveness, efficiency, and cost. (*Systems engineering majors can not take this course for credit toward their major. They need to take SYST* 470.)

Student Evaluation Criteria

| Midterm Exam | 30% |
|---------------|-----|
| Class Project | 30% |
| Homework | 10% |
| Final Exam | 30% |

I use the full grading scale, including pluses and minuses. The exams will cover material presented in the text and class. The exams are closed-book and closed-notes. The exam questions will probably be short-answer in format. There will be a review period the session before the exams. Laptops can not be used to take the exams.

Students will work in groups (of their choosing) to complete the class project. The project needs to be an evaluation of two or more existing interactive products. The projects need to be guided by user requirements and usability goals and use statistical analyses to determine if there are significant differences in the usability of the products. Each team will make a 15-minute presentation describing their project. You should discuss you presentation topic with me to make sure it is acceptable.

All students must abide by the GMU Honor Code. Each student is required to sign and return an Honor Code pledge at the beginning of this course. The last page of this syllabus contains the code. I will review the Honor Code including a discussion of when student collaboration is allowed or not allowed.

SYLLABUS: Human-Computer Interaction (SYST 469-002) Innovation Hall 204 Tuesday 7:20PM -10:00PM

- Week 11-SeptWhat is interaction design? (Ch. 1)
- Week 28-SeptUnderstanding and Conceptualizing Interaction (Ch. 2) &
Interfaces & Interaction (Ch. 6)
- Week 3 15-Sept Intro. Evaluation (Ch. 12) & Evaluation framework (Ch. 13)
- Week 4 22-Sept Analytical Evaluation (Ch. 15)
- Week 5 29-Sept Usability testing and field studies (Ch. 14)
- Week 6 6-Oct Data Analysis, Interpretation & Presentation (Ch 8)
- Week 7 13-Oct No Class
- Week 8 20-Oct Mid-Term Exam
- Week 9 27-Oct The Process of Interaction Design (Ch. 9)
- Week 10 3-Nov Data Gathering (Ch. 7)
- Week 11 10-Nov Understanding users (Ch. 3)
- Week 13 17-Nov Identifying Needs and Establishing Requirements (Ch. 10)
- Week 14 24-Nov Design, Prototyping, and Construction (Ch. 11)
- Week 15 1-Dec Student Presentations
- Week 16 8-Dec Student Presentations and Review for Final Exam
- Week 17 15-Dec Final Exam (only on material after the mid-term)

Please read the following GMU Honor Code and sign at that the end that you have read it. It is expected that you abide completely with the provisions provided herein:

Honor Code

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University, and with the desire for greater academic and personal achievement, we, the members of George Mason University, have set forth the following code of honor.

I. The Honor Committee

The Honor Committee is a group of students elected from the student body whose primary and indispensable duty is to instill the concept and spirit of the Honor Code within the student body. The secondary function of this group is to sit as a hearing committee on all alleged violations of the code.

II. Extent of the Honor Code

The Honor Code of George Mason University deals specifically with cheating and attempted cheating, plagiarism, lying, and stealing.

A. Cheating encompasses the following:

1. The willful giving or receiving of an unauthorized, unfair, dishonest, or unscrupulous advantage in academic work over other students

2. The above may be accomplished by any means whatsoever, including but not limited to the following: fraud; duress; deception; theft; trick; talking; signs; gestures; copying from another student; and the unauthorized use of study aids, memoranda, books, data, or other information

3. Attempted cheating

B. Plagiarism encompasses the following:

1. Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment

2. Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment

C. Lying encompasses the following:

The willful and knowledgeable telling of an untruth, as well as any form of deceit, attempted deceit, or fraud in an oral or written statement relating to academic work. This includes but is not limited to the following:

1. Lying to administration and faculty members

2. Falsifying any university document by mutilation, addition, or deletion

3. Lying to Honor Committee members and counsels during investigation and hearing. This may constitute a second charge, with the committee members who acted as judges during that specific hearing acting as accusers

D. Stealing encompasses the following:

Taking or appropriating without the permission to do so, and with the intent to keep or to make use of wrongfully, property belonging to any member of the George Mason University community or any property located on the university campus. This includes misuse of university computer resources (see the Responsible Use of Computing Policy section in the "General Policies" chapter). This section is relevant only to academic work and related materials.

Students must report all alleged violations to the Honor Committee. Any student who has knowledge of, but does not report, a violation may be accused of lying under the Honor Code.

I have read the above GMU Honor Code and agree to abide by its provisions:

| Signature: | Date: | _ Date: |
|------------|-------|---------|
| 0 | | |

Print Name: