## **Course Description: Human-Computer Interaction**

(SYST 469-001; Spring 2008)

Instructor: Jack Laveson, Ph.D. CPE CHFP
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**Text**: J. Preece, Y. Rogers, & H. Sharp. *Interaction Design: Beyond Human-Computer Interaction* (2<sup>nd</sup> 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 35% Class Project 25% Final Exam 40%

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 pairs (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 knowledge learned from class 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. Three-person teams might be acceptable if the project is adequately large in scope or if students need teammates.

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## SYLLABUS:

## Human-Computer Interaction (SYST 469-001)

Week	1	What is interaction design? (Ch. 1)
Week	2	Understanding and conceptualizing interaction (Ch. 2)
Week	3	Understanding users (Ch. 3)
Week	4	The process of interaction design (Ch. 9)
Week	5	Identifying needs and establishing requirements (Ch. 10)
Week	6	Prototyping (Ch. 11) and Introducing Evaluation (Ch. 12)
Week	7	Evaluation Framework (Ch. 13) & Review for midterm exam
Week	8	Spring Break
Week	9	Mid-Term Exam
Week	10	Mid-Term Review and Introducing Evaluation (Ch. 12)
Week	11	Usability testing and field studies (Ch. 14)
Week	12	Data Gathering (Ch. 7)
Week	13	Analytical Evaluation (Ch. 15 up to page 706)
Week	14	Student Presentations
Week	15	Student Presentations and Review for Final Exam
Week	16	Final Exam (only on material after the mid-term)