

**Course Description: Human-Computer Interaction**  
(SYST 469-001; Fall 2012)

**Instructor:** Professor Leonard Adelman  
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Office Hours: Thursdays, 3:30 - 4:10 (or by appointment)  
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**Teaching Assistant:** Ms. Rachana Rao  
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Office: Engineering Bldg., Room #2216  
Office Hours: Thursdays, 2:00 – 4:00

**Text:** Y. Rogers, H. Sharp, & J. Preece. *Interaction Design: Beyond Human-Computer Interaction* (3<sup>rd</sup> edition.). Wiley & Sons, 2011.

**Prerequisites:** IT 108 (or IT 206) 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 and efficiency. (*Systems engineering majors can not take this course for credit toward their major. They need to take SYST 470.*)

**Student Evaluation Criteria**

Three (3) Exams	75% (25% each)
Class Project	25%

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 probably will 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 their 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 product usability. (Failure to use statistical analysis will result in a loss of at least two letter grades on the project grade.) Each team will make a 10-minute presentation describing their project. You should discuss your project 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. Students who present on November 29th will receive 2 additional points. So, a high A presentation could be worth 27 instead of 25 points, which could easily be the difference between a B+ or A- in the course. I will give date priority to students who need additional points.

I will take class attendance around the mid-point of every class, including exam days. Good attendance will be worth extra-credit points.

## SYLLABUS: Human-Computer Interaction (SYST 469-001, Fall 2012)

- Week 1 (8/30) What is Interaction Design? (Ch. 1)
- Week 2 (9/6) Understanding and Conceptualizing Interaction (Ch. 2)
- Week 3 (9/13) Cognitive Aspects (Ch. 3)
- Week 4 (9/20) The Process of Interaction Design (Ch. 9) & Review for Exam #1
- Week 5 (9/27) **Exam # 1 at 4:30** (to 5:50) and Establishing Requirements (Ch. 10)
- Week 6 (10/4) Go over Exam #1 and Requirements cont. (Ch. 10)
- Week 7 (10/11) Introducing Evaluation (Ch. 12) & Evaluation Framework (Ch. 13)
- Week 8 (10/18) Remainder of Ch. 13; Evaluation Studies (Ch. 14); & Review for Exam #2
- Week 9 (10/25) **Exam #2 at 4:30** (to 5:50) & Studies cont. (rest of Ch. 14, not on Exam #2)
- Week 10 (11/1) Go Over Exam #2 and Data Gathering (Ch. 7)
- Week 11 (11/8) Data Gathering (Ch. 7 cont.) & Analytical Evaluation (Ch. 15 up to page 521)
- Week 12 (11/15) Design, Prototyping, and Construction (Ch. 11)
- Week 13 (11/22) No Class: Thanksgiving Day
- Week 14 (11/29) Student Presentations
- Week 15 (12/6) Student Presentations and Review for Final Exam
- Week 16 (12/13, from 4:30 to 6:30) **Final Exam**

### Additional Information

- GMU is an Honor Code university
- Emails will be sent to your GMU email address
- Office of Disability Services: 703-993-2472 (<http://ods.gmu.edu>)
- Counseling & Psychological Services: 703-993-2380 (<http://caps.gmu.edu>)
- Writing Center: A114 Robinson Hall, 993-1200 (<http://writingcenter.gmu.edu>)
- University Libraries: <http://library.gmu.edu/mudge/IM/IMRef.html>