

**SYST469-003 (3 credits) – Human-Computer Interaction  
Engineering Building 1103**

**Wednesday, 7:20 PM – 10:00 PM**

**Instructor:** Jack Laveson, Ph.D. CPE CHFP

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Office Hours: By Appointment

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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 principles 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. At the end of the course, students will understand the basic concepts and principles of human-computer interaction, be able to recognize good and bad interaction designs, and be able to evaluate interactive products. (Students who receive credit for SYST 470 may not receive credit for this course.)

**Student Evaluation Criteria**

Midterm Exam	30%
Class Project	30%
Final Exam	30% (only on material after the mid-term)
Homework/ Attendance	10%

I use a full grading scale: A+ – 98-100; A – 94-97; A- – 90-93; B+ – 87-89; B – 83-86; B- – 80-82; C+ – 77-79; C – 73-76; C- – 70-72; D – 60-69; F – below 60.

The exams will cover material presented in the text and class. The exams are closed book and closed notes; laptops cannot be used. The exam questions are short-answer in format. A correct answer receives full credit, a partially correct answer receives half credit, and an incorrect or no answer receives zero credit. There will be a question & answer review period the session before the exams – students ask questions and I will answer them.

Students will work in self-formed groups of two (of their choosing) to complete a class project. The project is an evaluation of two or more existing interactive products based on data obtained from participants (also known as subjects, or users) during a field study that your group will conduct. (A field study is performed in an environment where the product is used.) The project is to be guided by user requirements and usability goals, and use knowledge learned from class to determine if there are differences in the usability of the products. You must discuss your project topic and methodology with me in advance of doing the project to make sure that it is feasible to do within a reasonable period of time; you will not be allowed to submit or present your project

unless you do. You may either submit your project in writing, or make a 10-15 minute oral presentation (during the last week of regular classes). Projects are assigned letter grades with the following numeric equivalents: A+ – 99; A – 95.5; A- – 91.5; B+ – 88; B – 84.5; B- – 81; C+ – 78; C – 74.5; C- – 71; D – 65.

Students will complete all requirements (mid-term exam, final exam, class project); a grade of zero will be assigned for any incomplete requirement unless the student contacts me to arrange for a make-up, or an alternative. Let me know as soon as possible if you have a special need as I am unable to help you once the final exam period starts.

**Honor Code:** All students must abide by the GMU Honor Code. Each student is required to sign and return an Honor Code pledge located on the last page of this syllabus. I will review the Honor Code including a discussion of when student collaboration is allowed or not allowed.

**Disabilities:** If you have a learning or physical difference that may affect your academic work, you will need to furnish appropriate documentation to the Disability Resource Center. If you qualify for accommodation, the DRC staff will give you a form detailing appropriate accommodations for submission to me.

**Communicating with students:** I will use GMU e-mail student accounts to communicate with you (in accordance with University policy) so be sure to check your e-mail on a regular basis.

#### **Schedule:**

Week 1	(9/1)	What is interaction design? (Ch. 1)
Week 2	(9/8)	<b><u>NO CLASS due to instructor conflict</u></b>
Week 3	(9/15)	What is interaction design? (Ch. 1 continued) & Understanding and conceptualizing interaction (Ch. 2)
Week 4	(9/22)	Understanding users (Ch. 3)
Week 5	(9/29)	Identifying needs and establishing requirements (Ch 10)
Week 6	(10/6)	Prototyping (Ch 11)
Week 7	(10/13)	Introducing evaluation (Ch. 12) & Review for Mid-Term Exam
Week 8	(10/20)	Mid-Term Exam (covering chapters 1, 2, 3, 10, 11, & 12)
Week 9	(10/27)	Evaluation framework (Ch. 13)
Week 10	(11/3)	Usability testing and field studies (Ch. 14)
Week 11	(11/10)	Data gathering (Ch. 7)
Week 12	(11/17)	Analytical evaluation (Ch. 15)
	(11/24)	<b><u>NO CLASS – Thanksgiving recess</u></b>
Week 13	(12/1)	The process of interaction design (Ch 9)
Week 14	(12/8)	Student presentations & Review for Final Exam
Week 15	(12/15)	Final Exam (only on material after the mid-term – chapters 13, 14, 7, 15, & 9)

**Please read the following GMU Honor Code and sign at that the end that you have read it; then return the signed copy to the instructor. Signing also acknowledges that you have received a copy of the syllabus. It is expected that you abide completely with the provisions of the Honor Code 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:** \_\_\_\_\_

**Print Name:** \_\_\_\_\_