SYST469-003 (3 credits) – Human-Computer Interaction
Science Technology I 212
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* (3rd edition.). Wiley & Sons, 2011.

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

Mid-term Exam	30%
Class Project	30%
Final Exam	30% (only on material after the mid-term)
Homework	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.

Exams: The exams will cover material presented in the text and class. The exams are closed book and closed notes; laptops and other electronic devices 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. Review notes will be provided approximately a week and a half before each exam.

Class Project: Students will work in self-formed groups of two or three (of their choosing) to complete a class project. The project is an evaluation of two existing interactive products based on data obtained from participants (also known as subjects, or users) during a field study that each 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 your

report for grading unless you do. Projects are graded on the process you used to arrive at a finding / conclusion.

Homework: Students are expected to submit all homework assignments via Blackboard before the beginning of class; late homework will not be accepted. Students start out with 10 points for homework. For each assignment not submitted on time one point will be deducted from the homework grade.

Course completion: Students will complete all requirements (mid-term exam, final exam, class project). An incomplete requirement will result in an IN (incomplete) final grade unless you contact 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: GMU is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

Disabilities: If you are a student with a disability and you need academic accommodations, please contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS. http://ods.gmu.edu

Communicating with students: Students must activate their GMU e-mail accounts to receive important University information, including messages related to this class. Be sure to check your e-mail on a regular basis as I frequently use e-mail to communicate with you.

Course Materials: Lectures, readings, and related materials will be posted on Blackboard. Blackboard also will be used for homework submissions, and the posting of grades except for your final grade.

Other Useful Campus Resources:

- Writing Center: A114 Robinson Hall; (703) 993-1200; http://writingcenter.gmu.edu/
- University Libraries: "Ask a Librarian", http://library.gmu.edu/mudge/IM/IMRef.html
- Counseling And Psychological Services (CAPS): (703) 993-2380; http://caps.gmu.edu/
- University Policies: The University Catalog, http://catalog.gmu.edu/, is the central resource for university policies affecting student, faculty, and staff conduct in university affairs.

Schedule:

Week 1	(***8/31***)	What is Interaction Design? (Ch. 1)
Week 2	(***9/7***)	Data Analysis, Interpretation and Presentation (Ch. 8) & Understanding and Conceptualizing Interaction (Ch. 2)
Week 3	(***9/14***)	Understanding and Conceptualizing Interaction (Ch. 2) – continued & Interfaces (Ch. 6)
Week 4	(***9/21***)	Cognitive Aspects (Ch. 3)
Week 5	(***9/28***)	***NO CLASS due to instructor conflict***
Week 6	(***10/5***)	Establishing Requirements (Ch. 10)
Week 7	(***10/12***)	Design, Prototyping and Construction (Ch. 11)
Week 8	(***10/19***)	Mid-term Exam (covering chapters 1, 8, 2, 6, 3, 10, 11)
Week 9	(***10/26***)	Introducing Evaluation (Ch. 12)
Week 10	(***11/2***)	An Evaluation Framework (Ch. 13)
Week 11	(***11/9***)	Evaluation Studies: From Controlled to Natural Settings (Ch. 14)
Week 12	(***11/16***)	Data Gathering (Ch. 7)
	(***11/23***)	***NO CLASS – Thanksgiving recess***
Week 13	(***11/30***)	Evaluation: Inspections, Analytics, and Models (Ch. 15)
Week 14	(***12/7***)	The Process of Interaction Design (Ch 9)
Week 15	(***12/14***)	Final Exam (only on material after the mid-term – chapters 12, 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. It is expected that you abide completely with the provisions of the Honor Code provided herein. Signing also acknowledges that you have received a copy of the syllabus.

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: _____