CIS 4930/5100: Human-Computer Interaction

Section 4953/8947

Spring 2010

CSE 220, MWF 7th period **Professor:** Benjamin Lok **Office:** CSE Room E342 lok@cise.ufl.edu (Put HCI in the subject) **TA:** Shayan Javed (sjaved@ufl.edu)	**Office Hours:** • **Wednesday 8th period** • **Friday 8th period** • **By appointment (email)**

Course Description:

A study of the major topics in human-computer interaction, including interface design (principles, theories), software tools, virtual environments, interactive devices, collaboration, and visualization.

What is this course, and who is it for?

This course is directed towards senior undergraduate students and graduate students who wish to learn the **basic concepts** and **current research** into the design and creation of computer interfaces. The course involves three core components:
- Lectures – core HCI topics will be presented and discussed
- Research paper reading – cutting-edge HCI research conference and journal publications will be read and discussed in-class.
- Creation and Evaluation of an interface – each student will also 1) create their own interface and 2) evaluate their interface

Upon completion of this course, students will be able to understand and be able to evaluate the criteria used in developing interfaces.

Prerequisites: COP 3530 Data Structures

Texts:
Recommended: **Designing the User Interface 5th Edition**, Ben Shneiderman and Catherine Plaisant.

Tentative List of Topics:

1. *Interface Basics*
2. *Design guidelines, principles and theory*
3. *Evaluating Interface Designs*
4. *Software Tools*
5. *Virtual Environments, and 3D Interaction*
6. *Classic topics: Menu, Forms, and Dialogs*
7. *Natural Languages*
8. *Interaction Devices*

Grading:

- 15% Project #1 (user study)
- 20% Project #2 (create new interface)
- 25% Project #3 (evaluate new interface)
- 20% midterm paper
- 20% quizzes/assignments/class participation

NO FINAL EXAM!!

Basic Workload:

Weekly: class lectures, readings outside of class, n-class quizzes on readings

Semester:
January: students will conduct a study that compares simple interfaces for a web-based task.
February: students will identify a task that would be enhanced through an improved interface.
Students will identify a client for this interface.
March: Students will create a new interface (involving a combination of coding, creation, etc.)
April: students will evaluate the new interface

The course requires an average to above average time commitment.

Equipment and Facilities:
You **can** work on these projects at home, using any development environment (Windows, Linux, Mac) and use any programming language.

Class Policy

Honor Code & Collaboration:

Working together is encouraged, but I urge all students to please use *intelligent* discretion. High level questions, syntax topics, and algorithms can be discussed. Not allowed in this course include the following: 1) plagiarism (misrepresenting others ideas as your own, can be fixed with simple citation), 2) copying code, and 3) work offensive to others.

Students have the responsibility to know and follow the requirements of the UF CODE OF STUDENT ACADEMIC INTEGRITY. **This code forbids cheating, fabrication, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty.** The code will be strictly enforced and is binding on the students. Grade and academic evaluation in this course includes a judgment that the student's work is free from academic dishonesty of any type; and grades of this course, therefore, should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UF. The penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all the cases, the course grade is reduced to "F". Copies of the code may be obtained from the Dean of Students Office. Students are expected to report cases of academic dishonesty to the course instructor immediately.

Email – Course information will be disseminated through email. Please check your email at least once a day to keep up to date on any last minute course information. The **official** email address for

the course is your UF account email. If you do not routinely check it, it is **your** obligation to have it forwarded to whatever email account you do regularly check. Failure to read an important announcement sent to your mosaic email address is **NOT** an excuse for ignoring it.

Assignments: A late penalty of -10% for each day late will be assessed. After 3 days, you will receive a 0. Only under EXTREME circumstances will tests be given other than the time listed on the syllabus.

Critical: All requests for extreme circumstances must be requested in writing BEFORE the due date

Tardiness: Please be considerate of your instructor and fellow students by being on time to class.

Attendance: Attendance is not required and will not be graded. If you are sick, please contact me, and we will work out a way for you to catch up.

Incompletes: Incompletes will be granted for only the most extreme circumstances, e.g. medical or family reasons. To be considered for an incomplete, the student *must* 1) let the professor know at least 1 month in advance that they are seeking an incomplete, and 2) provide documentation to support the request.

Suggestions for success:

- Ask questions. If you are uncomfortable with asking in front of the class, please talk to me after class or during office hours.
- Have fun and experiment. Go all out. Who knows what you'll make, discover, or explore!
- Aim to have your final project be a paper you could publish

The final project requires each student to identify a interface problem or application that requires a new approach to solving the problem. This is not a course filled with mathematical equations and memorization of formulas. Instead this will involve reading research papers, critical thinking, and creating your own interfaces.

If you have **any** questions about how prepared you are, please feel free to see me at anytime! We can discuss whether this class is a good fit for you.

Course Webpage: http://www.cise.ufl.edu/~lok/teaching/hci-s10

Teaching Style – Questions are encouraged. Interaction is encouraged (but not required). **Critical thinking is stressed. I want you to learn how to ANALYZE, SYNTHESIZE, and JUDGE ideas.**

Ex. Create a virtual character that would enable someone who is technophobic to access email.

KNOWING, COMPREHENDING, and APPLYING basic information does not constitute complete mastery. Ex. Write the equation for Fitt's law.

Students with Disabilities – Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation."

Miscellany – To reduce distraction to your fellow classmates, please:
1. turn off all cell phone ringers

2. do not read the newspaper or browse the web during class

Multiple and/or willful disregard will lead to an escalating penalties from emails to verbal chats to a deduction in the class participation grade will be assessed. For those who require counseling services, please contact the Student Mental Health Center (2-1171).