Long Island University
Palmer School of Library and Information Science

LIS 707: Human-Computer Interaction
Spring 2010

Instructor: Qiping Zhang
                 Phone: 212-998-2683
                 Email: qiping.zhang@liu.edu (best way to reach me)
                 Room 707, Bobst Library

Lecture: Saturday 1:15-6:15 pm on 1/23, 1/30, 2/20, 2/27, 3/6, 3/13
                 Room PC1, Bobs Library, NYU

Office Hour: before or after class or by appointment

Course URL: blackboard.liu.edu

Course Description (Bulletin Description)
The course provides an overview of foundations, interaction design and evaluation techniques in HCI, a discipline concerned with understanding user needs, designing and evaluating an interactive system from a user-centered perspective. It covers the psychological and social aspects of users, the impact of user characteristics on design decisions, the user requirements, design approaches, usability evaluation methods, interface paradigms and architectures for user interface implementation. Focusing on library systems and services as examples for evaluation, students acquire practical skills in collecting patron/user needs, prototype design, and evaluating website/system. The course project will expose students to key skills (including usability testing, persona design, card sorting, heuristic evaluation, cognitive walkthrough, and more) necessary to understand and work in the exciting field of HCI.

Course Objectives
- To understand the underlying scientific theories of Human-Computer Interaction.
- To understand the human characteristics of computing and design principles in HCI.
- To apply basic HCI design principles to improve a website or an interactive system.
- To conduct a user needs analysis.
- To conduct a usability evaluation with various methods and techniques, including persona design, card sorting, think-aloud, usability testing, heuristic evaluation and cognitive walkthrough.

Course Outline

Lec	Date	Chapter	Topic	In-class Exercise	Due
1	1/23	1,2, 3	Introduction to HCI Understanding Users Design Principles	Conceptual Model	
2	1/30	7, 10	User Needs Analysis	Card Sorting Persona Design	Assignment 1 GP: site choice
3	2/20	6,9,11 4, 5	Interaction Design Social Computing	Storyboard	GP: user needs analysis
4	2/27	12-13, 15	Evaluation without Users	Cognitive Walkthrough Heuristic Evaluation	
5	3/6	14	Evaluation with Users	Usability Testing	GP: Inspection Report
6	3/13		Case Studies Future of HCI Group Presentation		Assignment 2 GP: Final Report

Textbook

Sharp H., Rogers, Y. & Preece, J., (2007) *Interaction Design: Beyond Human-Computer Interaction*, 2nd ed. John Wiley & Sons, ISBN: 978-0470018668. Call #: QA76.9.H85 P72 2007.

Note: There is also an excellent website associated with the text (www.id-book.com). Become familiar with this site and use it along with the textbook.)

Additional readings will be posted in Blackboard.

Course Requirements and Course Grade

In-class exercise (20%)

There are several in-class exercises. They will be given for you to work on by yourself or in your group during the class. They are expected to be finished and turned in during the class.

Group project (30%)

Each student will work with a group of 3-4 members on ONE group project. At the end of the course, each group will submit a report, and present the project to the class. The presentation and final report each counts 15% of your final grade. The project provides hands-on engagement with the topics of interaction design. It is *practitioner-oriented.* You will conduct a user needs analysis, and usability evaluation for a client.

Individual Assignment 1: Reflection of Bad HCI Design (20%)

Choose 3 examples of bad HCI design from your workplace or daily life. Attach pictures of the design. Explain why they are bad in terms of HCI design principles.

Individual Assignment 2: DECIDE analysis (20%)

Choose a 4-8 page paper from ACM digital library (e.g. annual SIGCHI conference proceedings and Journal of *TOCHI: Transactions on Computer Human-Interaction*). Use DECIDE framework to answer the following questions:
- What are the goals & focus of the study?
- What evaluation methods were used?
- What data were collected and how they were analyzed?
- What practical and ethical issues have been considered?
- What is the strength, weakness of the study?

Participation (10%)

It is important to read the materials before coming to the class. While in class, active participation is required. Your participation will be evaluated by your attendance and active class discussion.

State Education Department Requirement: 150 Hours

Lecture Time	30 hours
Required Readings	60 hours
Group project	30 hours
Assignments	30 hours

Policy
- Assignments and the final report are due at the beginning of class on the due day.
- Any paper that is late will be penalized one grade e.g an "A" will become a "B+". Exceptions will be granted only in cases of emergency.
- Students who must miss class for personal observance are advised to speak with their professors ahead of time to work out a suitable way to fulfill academic requirements.