CS 5317 Human-Computer Interaction

Fall 2009 Syllabus

Schedule: 1:30-2:50 p.m., Tuesdays and Thursdays, in Room 321

Instructor: David Novick

Office Hours: By appointment (contact Bea Tarango, btarango@utep.edu, 747-5480, to schedule)

Overview: This course is a graduate-level introduction to models and methods of human-computer interaction, including: HCI theory; interface development methods, such as user-centered design, prototyping, and participatory design; evaluation and testing techniques, such as heuristic evaluation, the cognitive walkthrough, and usability testing; user-interface programming; and ethical and societal issues.

Text: Human Computer Interaction (3rd Edition), by Alan Dix, Janet Finlay, Gregory Abowd, and Russell Beale, Prentice Hall, 2004.

Course Outcomes

Upon successful completion of this course, students will be able to…

1. Knowledge and Comprehension

Explain the elements and applications of

- Key psychological models of human computer interaction
- Elements from which user interfaces are constructed
- The development process for user interfaces
- Participatory design
- Analytical and empirical methods of evaluation of user interfaces

2. Application and Analysis

Apply skills of

- Contextual inquiry and participatory design
- Task analysis
- Prototyping
- Analytical methods of evaluation: heuristic evaluation and cognitive walkthrough
- Empirical methods of evaluation: usability testing

3. Synthesis and Evaluation

- Contrast the effectiveness of and know when to use different prototyping methods
- Contrast the effectiveness of and know when to apply different evaluation methods
- Evaluate the effectiveness of participatory design

Standards of Conduct

You are expected to conduct yourself in a professional and courteous manner, as prescribed by the UTEP Standards of Conduct. Graded work, such as homework and tests, is to be completed independently and should be unmistakably your own work, although you may discuss your project with other students in a general way. You may not represent as your own work material that is transcribed or copied from another person, book, or any other source, e.g., a Web page. The instructor is required to—and will—report academic dishonesty and any other violation of the Standards of Conduct to the Dean of Students.

Disabilities

If you feel that you may have a disability that requires accommodation, contact the Disabled Student Services Office at 747-5184, go to Room 106E Union, or email dss@utep.edu

Assignments

Reading and homework assignments will be handed out or announced in class. If you miss a class, it is your responsibility to find out what you missed. You should expect to spend at least seven hours per week outside of class on reading and homework.

Grading

Your semester grade will be based on a combination of in-class presentations and participation, reviews of software engineering projects, two midterm exams, and a term paper. The final exam will consist of presentations of the term papers. The approximate percentages are as follows:

- 40% Class presentations and participation (This part of the grade may be based in part on how well the class demonstrates comprehension of covered material on the midterms.)
- 10% Reviews of software engineering projects
- 30% Two midterms
- 20% Term paper