INLS718 SYLLABUS

USER INTERFACE DESIGN

PREREQUISITES

INLS 582, Systems Analysis; or permission of instructor

OVERVIEW

This course will introduce basic principles relevant to the design of the human interface to computer-mediated information systems. The major topics to be discussed include the characteristics of information system users, the characteristics of tasks supported by information systems, the interface design process, and methods for evaluating an interface design.

### RATIONALE AND RELATIONSHIP TO THE CURRENT CURRICULUM

This course is designed to prepare students to participate in the design of information system interfaces. Its content is dependent on prior knowledge gained in Systems Analysis (INLS 582), which focuses on analyzing and designing the functions that systems perform, and is complementary to Database I (INLS 623), which focuses on organizing the data provided by information systems. INLS 718 will also introduce students to the methods used in the evaluation of system interfaces. This course is a prerequisite for INLS 818, Seminar in Human-Computer Interaction.

READINGS

THIS CLASS HAS TWO TEXTBOOKS

REQUIRED

THE FIRST IS AN EXCELLENT TEXTBOOK DESCRIBED AS COMPREHENSIVE AND PRACTICAL, SHOWING BOTH THEORY AND ITS APPLICATION.
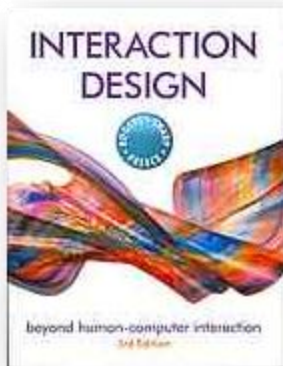
Sharp, H., Rogers, Y., & Preece, J. (2011). Interaction design: Beyond human-computer interaction. Chichester: John Wiley.

THE SECOND IS A CROSS-DISCIPLINARY REFERENCE OF DESIGN, PAIRING CLEAR EXPLANATIONS OF DESIGN CONCEPTS WITH VISUAL EXAMPLES OF THE CONCEPTS APPLIED IN PRACTICE.

Lidwell, W., Holden, K., Butler, J., & Elam, K. (2010). Universal principles of design: 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design. Beverly, Mass: Rockport Publishers.

We will use selected principles from this book as preparatory readings for each class session, but as the book includes 125 principles and we have 29 sessions, we won't necessarily cover each one in depth. I do think you need to have this book in your professional collection, though, and that is why it is a required text.

EVALUATION – ASSIGNMENTS & GRADING

ASSIGNMENTS 01-04:
DESIGN AND IMPLEMENTATION OF AN INTERFACE PROTOTYPE

This series of assignments involves designing a prototype of an interface for an information system and developing a description of that interface.

THE DESIGN PROCESS INVOLVES

- identifying and describing the intended users of the system (Assignment 01),
- identifying and describing the essence of the task to be supported by the system (Assignment 02),
- and making justifiable decisions about the design (Assignment 03).

THE DESCRIPTION OF THE INTERFACE INCLUDES

- graphical overview of the system and a prototype of the interface (Assignment 04).
- For assignment 04, documentation of the interface includes
    - user description,
    - task description,
    - and your rationale for the design decisions made

Each of the assignments will be due in draft form as we cover the necessary background material in class, so that you can have feedback while you're working on the overall project. These drafts will be due on particular dates, but the grade will not be assigned until all the portions of the project are complete (i.e., your work on a particular assignment may be revised prior to the grade being assigned).

For those who are working in teams, each team member will receive the same grade on the project. The evaluation criteria for these projects will emphasize the quality and justification of your design decisions. They also include the quality (clarity, appropriateness for users/tasks) of the design itself and the quality (specificity, completeness) of the user and task analyses. Throughout your documentation, strive for clarity.

ASSIGNMENTS 5 & 6: EVALUATION

Interface design and evaluation go hand in hand. Thus, this course will provide an opportunity for you to participate in two types of evaluation assignments:

- a usability inspection of a design developed by one of your classmates
- and the planning of a usability test of your own design

CLASS PARTICIPATION

Class participation is encouraged and expected. Each student is expected to participate actively in both the class blog and in face-to-face class discussions. These forms of class participation will be evaluated in terms of their contribution to the class's learning opportunities, and will account for 15% of the course grade.

GRADING

THE TABLE BELOW SHOWS THE STANDARD FOR GRADING USED IN THIS CLASS.

To be explicit, when averaging grades for the semester, we will round off to two decimal places. The resultant number must equal the lower number in a grade range to reach the minimum necessary to get that letter grade. A 94.99 is a P, a 95.00 is an H, for example.

Grad	Undergrad	Points	What it means
H	A	95 >	Mastery of course content at the highest level of attainment that can reasonably be expected
P		80-94	A totally acceptable performance …
	A- B+ B B-	92-94 87-91 83-86 80-82	… demonstrating an adequate level of attainment
L		60-79	A marginal performance in the required exercises …
	C+ C C- D+ D	77-79 73-76 70-72 67-69 60-66	… demonstrating a minimal passing level
F	F	< 60	For whatever reasons, an unacceptable performance

HONOR CODE

Faculty and students at the University of North Carolina at Chapel Hill adhere to their Code of Student Conduct. Accordingly, you all should recognize that most software applications available in the computer lab are copyrighted and cannot be copied.

We can learn much from each other and we will do that. I expect each of you to help each other.

We'll discuss what we expect in terms of cooperative, collaborative, shared work and the honor code.

THE CODE OF STUDENT CONDUCT

Honor Code

It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and support the enforcement of the Honor Code, which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student or academic personnel acting in an official capacity.

Campus Code

It shall be the further responsibility of every student to abide by the Campus Code; namely, to conduct oneself so as not to impair significantly the welfare or the educational opportunities of others in the University community.

The system rests on several central tenets:

- the university community, including faculty and students, share a commitment to the pursuit of truth, and the dissemination of knowledge to succeeding generations of citizens devoted to the high ideals of personal honor and respect for the rights of others

- these goals can only be achieved in a setting in which intellectual honesty and personal integrity are highly valued; other individuals are trusted, respected, and fairly treated; and the responsibility for articulating and maintaining high standards is widely shared

- both students and faculty must play active roles in fostering a culture in which honor is prized and acting to remedy violations of community norms relating to academic misconduct, injuries to members of the University community, and conduct that adversely affect University operations and resources

The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution.

- your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for the most significant Carolina tradition

- your reward is in the practice of these principles

Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code.

- you are encouraged to work together with your fellow students and to share knowledge and learning

- however, academic dishonesty in any form is unacceptable, because any breach in academic integrity, however small, strikes destructively at the University's life and work

DIVERSITY

WHAT THIS FACULTY STANDS FOR

In support of the University's diversity goals and the mission of the School of Information and Library Science, SILS embraces diversity as an ethical and societal value.

We broadly define diversity to include race, gender, national origin, ethnicity, religion, social class, age, sexual orientation and physical and learning ability.

As an academic community committed to preparing our graduates to be leaders in an increasingly multicultural and global society we strive to:

- Ensure inclusive leadership, policies and practices;
- Integrate diversity into the curriculum and research;
- Foster a mutually respectful intellectual environment in which diverse opinions are valued;
- Recruit traditionally underrepresented groups of students, faculty and staff; and
- Participate in outreach to underserved groups in the State.

The statement represents a commitment of resources to the development and maintenance of an academic environment that is open, representative, reflective and committed to the concepts of equity and fairness.