



## INSC 586 – Usability Testing and Evaluation

Fall 2019

University of Tennessee, Knoxville

**Meeting Time and Place:** Thursday, 5:05 pm to 6:20 pm,

Zoom <https://tennessee.zoom.us/j/930798084>

### FACULTY CONTACT INFORMATION

Instructor: Vandana Singh Avasty, PhD, <https://infosci.utk.edu/vandana/>

Office Hours: By appointment. Email me at [vandana@utk.edu](mailto:vandana@utk.edu) to schedule appointments.

Office Phone: 865-974-2785 Address: 1345 Circle Park Dr., St. 453, Communications Bldg.

### Course Description

Comprehensive overview of theory and practice of usability evaluation. Assessing information systems from a user-centered design perspective using methods including usability testing, heuristic evaluation, web analytics, eye tracking and interaction modeling. Focus on usability testing and its various techniques including Think Aloud protocol, performance testing, face-to-face testing and remote testing.

### Course Outcomes

At the end of the semester, based upon students' personal experiences, class reading material, lectures, discussions and assignments, students will be able to:

- Demonstrate knowledge of the concepts and terminology of usability evaluation and user centered design.
- Discuss and use multiple tools used in the process of prototyping and usability testing
- Plan and conduct formative and summative usability evaluation of web-based applications on computer interfaces, tablets and smartphones
- Effectively report the findings of usability testing and recommend improvements to product usability; and
- Use feedback from usability evaluations to iteratively design interfaces to information systems.

### Required Materials

#### Readings

There is no specific textbook for this course. Instead, readings will be assigned each week. Most will be available via the WWW, the UT library Web site, or the course Canvas site under the heading "Modules". Readings for each week will be given in advance and it will be the responsibility of the student to complete the readings and contribute to the class discussions based on the readings.

## Computing Requirements

Canvas - The syllabus and other course-related information is available on Canvas at <https://utk.instructure.com/>. This system provides support for asynchronous communications for the course. You will need your NetID and password to access the materials. System and browser recommendations can be found at <https://oit.utk.edu/teachingtools/online/>. This page also provides links to other information about the system.

## LECTURE SCHEDULE AND TOPICS

Date	Lecture Topic	Activity Topic	Assignment
Aug 22	Course Overview	Introductions	
Aug 29	User Experience and Usability	Bad Design Examples	
Sep 5	User Centered Design	UCD Process	
Sept 12	Understanding the User	Card Sorting	User Research Plan
Sept 19	Personas and Scenarios / User Stories	Persona Exercise	
Sep 26	Sketching and Prototyping	Prototyping Exercise	
Oct 3	Usability Methods – Which, When, why?	Usability Test	
Oct 10	Methods - Walkthroughs – Heuristic, Cognitive, ethnographic field studies	Heuristic Evaluation	Persona Scenario
Oct 17	<b>Fall Break No Class</b>		
Oct 24	Methods - A/B Testing, Multivariate Testing	Usability Test Task	
Oct 31	Tools - Morae, eye-tracking plug-ins	Case Study 1	
Nov 7	Planning and Conducting a Usability Test	Morae Exercise	Usability Test Plan
Nov 14	User Testing Analytics, Reporting Results	Case Study 2	
Nov 21	Career in Usability	Reflection	
Nov 28	<b>Thanksgiving Holiday No Class</b>		
Dec 3	Usability Test Report Due		

## **Grades**

Grades are based on individual assignments, after class activities and reflection.

<b>Assignment</b>	<b>Total Points</b>	<b>Due Date</b>	<b>Program Outcome</b>
User Research Plan	20 points	September 10	
Persona and Scenario	20 points	October 12	
User Testing Plan	20 points	November 7	
User Testing Report	22 points	December 3	
Participation	13 points	Entire Semester	
Reflection	5 points	December 3	

Policy on late submission of assignments and projects: **A minimum of 5% will be deducted from your grade for each 24 hour period your submission is late. The assignments will not be graded after one week of due date.** Please contact me prior to any assignment or project due date (as far in advance as possible) in order to negotiate adjustments due to an emergency.

Your presence and participation is vital to the success of this class: attendance and class participation are expected and do affect the "participation and attendance" portion of your final grade. If an absence is unavoidable, please e-mail me before the absence, if at all possible. Class participation includes contributing during class discussions — sharing your thoughts and experiences about information technologies — and monitoring and posting to the asynchronous discussion boards. The quality of your contributions is more important than the quantity of contributions.

Read the assigned materials prior to the class for which they are assigned, and be prepared to refer to passages or issues of interest to you during our discussions. Ensure your class participation by responding on Canvas to the readings, and responding to others' postings. If you have questions about the class, please review the "Questions About Class / General Discussion" discussion board and post any new questions.

Please post your questions first to the class discussion boards located on the Canvas system at <https://utk.instructure.com/>.unless the question is of a confidential nature (e.g., grades). Sharing your questions is helpful because (1) other people may have the same or similar questions and (2) you may get a faster or better response from other people in the class. I will be reading the discussion boards almost daily.

When you send me an email please make sure you are using your **UTK email and write INSC 586 in the subject line**. If you use a non utk email id, there is a high chance that it will be filtered to my spam folder and hence be missed. If you do not receive a response from me within 48 hours, *please resend* the email.

## **Use of Mobile Apps – Class Policy**

Use of Mobile Apps for Canvas should be limited to checking the content posted on the class site including announcements, grades and discussion board posts. Use of Cellphone Mobile Apps for Zoom to attend classes is prohibited. **The instructor reserves the right to ask you to logout from the Zoom session if you are using a Mobile App to attend the class.**

Final grades will be assigned as follows:

Letter	Score (%)	Semantics
A	91-100	Superior performance.
B+	85-90	Better than satisfactory performance.
B	79-84	Satisfactory performance.
C+	75-78	Less than satisfactory performance.
C	70-74	Performance well below the standard expected of graduate students.
D	60-69	Clearly unsatisfactory performance; cannot be used to satisfy degree requirements.
F	0-59	Extremely unsatisfactory performance; cannot be used to satisfy degree requirements.
I	N/A	A temporary grade indicating that the student has performed satisfactorily in the course, but, due to unforeseen circumstances, has been unable to finish all requirements. An "I" will not be given to enable a student to do additional work to raise a deficient grade. All incompletes must be removed within one year

#### **CCI Diversity Statement (College of Communication and Information Bylaws, Section II-C)**

The College of Communication and Information recognizes that a college diverse in its people, curricula, scholarship, research, and creative activities expands opportunities for intellectual inquiry and engagement, helps students develop critical thinking skills, and prepares students for social and civic responsibilities. All members of the College benefit from diversity and the quality of learning, research, scholarship and creative activities is enhanced by a climate of inclusion, understanding and appreciation of differences and the full range of human experience. As a result, the College is committed to diversity and equal opportunity and it recognizes that it must represent the diversity inherent in American society. The College is acutely aware that diversity and fairness are foundations that unite the College's faculty, staff, students, and the larger communication and information community (see <http://www.cci.utk.edu/diversity-statement> for CCI's full Diversity Statement).

#### **Disability Statement:**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Disability Services at 865-974-6087 in 2227 Dunford Hall to coordinate reasonable accommodations for students with documented disabilities.  
<http://ods.utk.edu/faculty/students.php>

## **Academic Integrity**

University of Tennessee Policy: "The responsibility for learning is an individual matter. Study, preparation and presentation should involve at all times the student's own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that all work presented be the student's own work, not only on tests, but in themes, papers, homework, and class presentation. There is a clear distinction between learning new ideas and presenting them as facts or as answers, and presenting them as one's own ideas. It is part of the learning process to incorporate the thoughts or ideas of others into one's own mind and presentations with the purpose of learning and enlarging on personal boundaries of knowledge." (Hilltopics: Student Handbook, 2006-2007, p. 40. Available at

<http://web.utk.edu/~homepage/hilltopics/HILLTOPICS2006-07.pdf>). "The University expects that all academic work will provide an honest reflection of the knowledge and abilities of both students and faculty. Cheating, plagiarism, fabrication of data, providing unauthorized help, and other acts of academic dishonesty are abhorrent to the purposes for which the University exists. In support of its commitment to academic integrity, the University has adopted an Honor Statement (see page 11)." (Hilltopics: Student Handbook, 2006-2007, p. 41. Available at <http://web.utk.edu/~homepage/hilltopics/HILLTOPICS2006-07.pdf>).

*The instructor reserves the right to change the syllabus as and when required.*