### INSC 590: Usability and User Experience

**Instructor:** Dr. Vandana Singh ([vandana@utk.edu](mailto:vandana@utk.edu))

**Fall 2018 Syllabus –**

- **Tue/Th – 4:45 pm to 6:00 pm via Zoom**

<table>
<thead>
<tr>
<th>Week</th>
<th>Session</th>
<th>Topic</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/23</td>
<td>Introductions, Syllabus, Class Overview</td>
<td></td>
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<tr>
<td>2</td>
<td>8/28</td>
<td>Introduction to User Experience and Usability Concept</td>
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<td></td>
<td>8/30</td>
<td>Elements of User Experience</td>
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<td>3</td>
<td>9/4</td>
<td>Process of User Centered Design</td>
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<td></td>
<td>9/6</td>
<td>In-Class Activity</td>
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<td>4</td>
<td>9/11</td>
<td>Understanding the User in User Experience – Why and How?</td>
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<td></td>
<td>9/13</td>
<td>Requirements Gathering – Card Sorting, Focus Groups</td>
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<tr>
<td>5</td>
<td>9/18</td>
<td>Wireframing</td>
<td>Assignment 1</td>
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<tr>
<td></td>
<td>9/20</td>
<td>Personas, Scenarios, Moodboards</td>
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<td>6</td>
<td>9/25</td>
<td>Storyboards, User Stories and User Flows</td>
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<td></td>
<td>9/27</td>
<td>In-Class Activity</td>
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<td>7</td>
<td>10/2</td>
<td>Interaction Design Fundamentals</td>
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<td>10/4</td>
<td>Fall Break</td>
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<tr>
<td>8</td>
<td>10/9</td>
<td>Sketching and Prototyping</td>
<td>Assignment 2</td>
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<tr>
<td></td>
<td>10/11</td>
<td>Sketching and Prototyping Tools</td>
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<tr>
<td>9</td>
<td>10/16</td>
<td>Methods – Which, When &amp; Why</td>
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<tr>
<td>Date</td>
<td>Topic</td>
<td>Assignment</td>
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<tr>
<td>10/18</td>
<td>Methods - Walkthroughs – Heuristic, Cognitive, ethnographic field studies</td>
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<td>10/23</td>
<td>Methods - A/B Testing, Multivariate Testing</td>
<td>Assignment 3</td>
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<td>10/25</td>
<td>Tools - Morae, eye-tracking plug-ins</td>
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<td>10/30</td>
<td>Planning and Conducting a Usability Test</td>
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<td>11/1</td>
<td>User Testing Analytics, Telemetrics</td>
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<td>11/6</td>
<td>Reporting UX Results</td>
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**Case Studies and Overview of the Complete Process of UX and Usability**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>11/8</td>
<td>Case Study 1</td>
</tr>
<tr>
<td>11/13</td>
<td>Making Software Work!</td>
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<tr>
<td>11/15</td>
<td>In-Class Activity – Feedback on Assignment 4</td>
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<tr>
<td>11/20</td>
<td>Case Study 2</td>
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<tr>
<td>11/22</td>
<td>Thanksgiving Holiday</td>
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<tr>
<td>11/27</td>
<td>Career in User Experience or Usability</td>
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<tr>
<td>11/29</td>
<td>Guest Lecture</td>
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<tr>
<td>12/4</td>
<td>Final Presentation</td>
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**Class Time:** Tuesday and Thursday 4:45 pm to 6:00 pm  
**Class Location:** Online Zoom Sessions – Link in Canvas Site

**Office Hours:** By email: vandana@utk.edu

**Course Objectives**

INSC 590 Usability and User Experience is designed to provide hands-on practice in all the key areas of user experience and usability, including gathering user requirements, modeling user requirements, prototyping and usability testing. At the end of the semester, based upon your personal experiences and the class readings, lectures discussions and assignments, you will be able to:

- Demonstrate knowledge of the concepts and terminology of usability analysis and user experience.
Discuss and use multiple tools used in the process of user requirement gathering, 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 and develop 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/](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/](https://oit.utk.edu/teachingtools/online/). This page also provides links to other information about the system.

**Grades**

Grades are based on individual assignments (55%), group assignments (20%), Learning Summary (5%), In-Class Activities (10%) and Participation (10%).

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>Due Dates (Mid-night)</th>
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<tbody>
<tr>
<td>Assignment 1 – User Requirements</td>
<td>10</td>
<td>9/18/18</td>
</tr>
<tr>
<td>Assignment 2 – Personas and Scenarios</td>
<td>15</td>
<td>10/9/18</td>
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<tr>
<td>Assignment 3 – Prototyping</td>
<td>15</td>
<td>10/23/18</td>
</tr>
<tr>
<td>Assignment 4 – Usability Test Plan</td>
<td>15</td>
<td>11/8/18</td>
</tr>
<tr>
<td>Assignment 5 – Usability Test Results</td>
<td>20</td>
<td>12/4/18</td>
</tr>
<tr>
<td>Learning Summary</td>
<td>5</td>
<td>12/5/18</td>
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<tr>
<td>In-Class Activities</td>
<td>10</td>
<td></td>
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<tr>
<td>Participation</td>
<td>10</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
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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 590 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 Collaborate session if you are using a Mobile App to attend the class.
Final grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Score (%)</th>
<th>Semantics</th>
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<tbody>
<tr>
<td>A</td>
<td>91-100</td>
<td>Superior performance.</td>
</tr>
<tr>
<td>B+</td>
<td>85-90</td>
<td>Better than satisfactory performance.</td>
</tr>
<tr>
<td>B</td>
<td>79-84</td>
<td>Satisfactory performance.</td>
</tr>
<tr>
<td>C+</td>
<td>.75-.78</td>
<td>Less than satisfactory performance.</td>
</tr>
<tr>
<td>C</td>
<td>70-74</td>
<td>Performance well below the standard expected of graduate students.</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
<td>Clearly unsatisfactory performance; cannot be used to satisfy degree requirements.</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
<td>Extremely unsatisfactory performance; cannot be used to satisfy degree requirements.</td>
</tr>
<tr>
<td>I</td>
<td>N/A</td>
<td>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 &quot;I&quot; will not be give to enable a student to do additional work to raise a deficient grade. All incompletes must be removed within one year.</td>
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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