

Spring 2017

Syllabus (subject to change)

INSC 588: Human-Computer Interaction

Class Meetings: Thursdays, 6:30-9:10 P.M. Meetings: Virtual via Zoom

Professor Dania Bilal, Instructor Office Hours: By Appointment

Email: dania@utk.edu (best choice for contact)

Voice Mail: (865) 974-3689

Web page: http://scholar.cci.utk.edu/dania-bilal
DE Support: Janelle Cleaves (janlclea@vols.utk.edu)

451 Communications

Building

1345 Circle Drive, # 446 Knoxville, TN37996-0341 SIS Office: 865.974.2148

COURSE DESCRIPTION

Catalog Description: This course is an introduction to the field of human-computer interaction with a focus on the design and evaluation of the interfaces to information systems. Students will be introduced to the topics of interaction design, describing user competencies, defining user requirements, user interface design and evaluating interaction success. In addition, they will gain hands-on experience with user interviewing and user interface design specification and test construction.

STUDENT OUTCOMES

Students who complete this course will be capable of demonstrating awareness, knowledge, and/or understanding of:

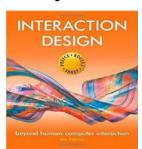
- 1. concepts, theories, heuristics, principles and rules employed for designing system interfaces;
- 2. theories and principles for evaluating the user experience;
- 3. research methods for setting up and carrying out studies of user interaction with interfaces;
- evaluating system interfaces using appropriate evaluation/usability methods;
 and
- 5. selecting and using appropriate software and tools for product development and/or for capturing user interaction.

Course Design

The course adopts an active learning approach. Students are required to complete all required readings, attend all class lectures, complete graded activities and assignments, and participate in all class activities, including instructor-led and student-led discussions, and small-group and individual activities. Besides lectures, there will be demos, field experiences, hands-on activities, as well as individual and group work. Guest speakers may be invited.

All <u>required readings</u> are listed in the **Course Schedule**. Optional readings are also provided. While not required, you may find it helpful to consult these optional readings when completing select assignments. Additional readings outside of the textbook are shown in the **Selected Readings List** on the **Course Schedule** in Canvas.

REQUIRED TEXTS:



Rogers, Yvonne, Helen Sharp, and Jenny Preece. 2015.

Interaction Design: Beyond Human -- Computer Interaction. 4th
edition. Hoboken, NJ: John Wiley & Sons, LTD.
ISBN---13:978---1119020752.

RECOMMENDED TEXTS

Tullis, Tom and Bill Albert. 2013. *Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics*. Boston, MA: Morgan Kaufmann Publishers.

Norman, Donald A. 2013. *The Design of Everyday Things: Revised and Expanded Edition.* New York, NY: Basic Books.

COMMUNICATION

I will communicate with you through your UTK email address. If you prefer to use another address, consult the <u>OIT Helpdesk</u> to obtain directions for forwarding your UTK mail to your preferred address if you don't wish to check both accounts.

COMPUTING REQUIREMENTS

You must have adequate computing skills, including but not limited to use of word processing, Web browsers, e-mail, listservs, Canvas, and Zoom software. You must learn how to submit your assignments using Canvas. The Office of Information Technology (OIT) provides training classes in using varied technologies for students at no charge (advance registration is required).

You must obtain a UT email account and subscribe to the SIS student listserv. In addition, you must have the PowerPoint Reader or the regular PowerPoint software installed on your computer in order to download the lecture notes from Canvas.

Other Requirements

- Students must have an adequate level of computing skills, including but not limited to use of Microsoft Office suite or equivalent, web searching, using search engines effectively, searching online databases including finding full text articles sending and receiving email using appropriate email etiquettes, subscribing to listservs including SIS listserv, as well as using Zoom and Canvas.
- Students must have and use a UTK email account.
- Students must have access to a PowerPoint Reader, PowerPoint, Prezi or equivalent to download lecture notes.
- Students must have computers that are equipped with microphones. Please
 test your computer audio by running the Zoom Audio Wizard before attending
 each class session. This will help sync the computer audio in Zoom and ensure
 a quality audio on both sides during class. Students may need to use
 headphones to receive a better sound quality.
- Students who attend class using a wireless network should ensure that the
 network has the highest transmission quality. They should also be close to the
 network's router to capture good audio and video signals and overcome
 possible screen freezing problems.
- Students must attend class in a quiet area with no background noise (e.g., TV, music, pitch sounds).
- Students may need to close all computer windows to obtain a good and immediate screen display of lecture slides or to view the apps that are screen shared in class.
- Students should use hard-wired computers, if the wireless connection is weak.
- Students must not attend class on their mobile devices while driving. Those who do, however, are responsible for any issues or problems they may experience.

CLASS ATTENDANCE POLICY

It is assumed that each student be present and speak in class. Missing classes or failing to participate will lower your grade; frequent constructive participation will raise the grade.

Regular attendance is required and necessary. A substantial portion of your grade will be based on in-class work and participation (5%). Unexplained absences will affect your grade. Contact me as soon as possible if you cannot attend class. If you will be absent from class, you must:

- Inform me in advance or as soon as possible after class
- Submit any work due from the missed class period
- Listen to class recording
- Obtain notes, handouts, etc. from Canvas
- Check with classmates for notes, announcements, etc.

Acceptable reasons for absence from class include:

- Illness,
- Serious family emergencies
- Special curricular or job requirements (e.g., judging trips, field trips, professional conferences),
- Military obligation,
- Severe weather conditions
- Religious holidays
- Participation in official university activities such as music performances, athletic competition or debate
- Obligations for court imposed legal obligations (i.e., jury duty, subpoena)

Missing more than one class meeting for reasons other than those listed above will have a negative impact on your course participation grade such as a reduced credit of 5 points that will be deducted from the total grade.

COURSE DELIVERY

The course is delivered live via Zoom and asynchronously using Canvas for supporting materials and interactions.

COLLABORATIVE WORK

Students are encouraged to use Google Docs, Google Hangouts, or equivalent applications to work collaboratively on assigned projects or activities outside of the classroom. Students may create their own user groups to work collaboratively outside of the classroom using Google+, Yahoo Groups, or other social media of interest to them.

EXPECTATIONS

Students are responsible for identifying libraries/information agencies/professional groups to complete field-based projects and activities. Most of these will require collecting data from people in real-world situations. HCl is about designing and testing interfaces from user perspectives to learn about the user experience (UX). Therefore, **students who are unable to meet this expectation should drop the course.**

Students who miss a class are responsible for obtaining class notes and other materials related to the course. They should replay the missed class recorded session and do the class activities on their own, as applicable. Missing class without providing a legitimate excuse will result in a reduced credit of 5 points each time.

Students must submit class activities (projects, assignments, discussions, etc.) on time. Each past due activity will incur a reduced credit of five points.

Students unfamiliar with research methods should consult the course readings and work on their own to gain as much knowledge as possible to learn how various methods are employed in HCI.

SUBMISSION OF ASSIGNMENTS

All assigned class activities must be submitted in Canvas by 11:59 p.m. on the due date indicated in the Course Schedule. Name and save your assignment as follows:

Name: LastnameFirstinitial-588-assignmentX

Example: BilaID-588-assignment1

- All submissions should be in Word or equivalent with file extension .doc or .docx.
- Please Do not use RTF or PDF or HTML any other file format for saving your assignment
- document. Assignments that do not bear .doc or .docx will be rejected.
- Paginate your assignment
- Include your name on the assignment first page on the top left corner.

Assignments without names on the first page will be rejected.

 Assignment documents that do not open on my computer due to file format and those that are not in line with the submission guidelines will be rejected.

TROUBLINGSHOOTING

If you experience connectivity problems, please contact OIT at 865. 974,9900 or complete a help form online at http://remedy.utk.edu/contact. Note that OIT office is not open 24/7; therefore, plan to connect to Zoom at least 30 minutes before class time. You may also contact Janelle Cleaves, the DE support specialist for this course. Janelle's email is on the first page of this syllabus.

LECTURE NOTES

Most lecture notes will be posted on Canvas in advance of each class meeting. **Please note that faculty members are not obliged to post lecture notes at all.** It is up to the faculty member to share these notes with the students. The notes will not substitute for the textbook or required readings.

CLASS ENGAGEMENT AND INTERACTION RULES

You are highly encouraged to participate in class by sharing constructive ideas and related experiences, engaging in class discussion and collaborating with peers to solve certain problems or simulate situations. Make sure that when you participate in class, you do not take up time from other classmates so that they can also contribute their ideas.

Five percent (5%) of the total grade is assigned for constructive, active class participation throughout the semester.

INCLEMENT WEATHER

"The chancellor (or appointed representative) may officially close or suspend selected activities of the university because of extreme weather conditions. When a decision to close is made, information is distributed to the campus community, shared with local media, and posted on the front page at http://utk.edu. (Hilltopics, p. 55)(http://hilltopics.utk.edu/files/Hilltopics%202015-16.pdf). SIS will cancel classes when UT is closed. Please check the SIS student listsery (UTKSIS-L@LISTSERV.UTK.EDU) for messages about closing.

DISABILITIES THAT CONSTRAIN LEARNING

Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services (ODS) at 865.974.6087 in 100 Dunford Hall to document their eligibility for services. ODS will work with students and faculty to coordinate reasonable accommodations for students with documented disabilities.

CIVILITY

Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Civility enhances academic freedom and integrity, and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other's well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. Affirming the value of each member of the university community, the campus asks that all its members adhere to the principles of civility and community adopted by the campus: http://civility.utk.edu/

CCI DIVERSITY STATEMENT

"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." http://www.cci.utk.edu/diversity-statement

ACADEMIC INTEGRITY

Students should be familiar and maintain their *Academic Integrity* described in http://hilltopics.utk.edu/files/Hilltopics%202015-16.pdf, p. 15 as: "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 the student present his or her own work in all academic projects, including tests, papers, homework, and class presentation. When incorporating the work of other scholars and writers into a project, the student must accurately cite the source of that work."

Students should abide by the *Honor Statement* described in the same Hilltopics, p. 73:

"An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity."

PLAGIARISM

Plagiarism in any of its several forms is intolerable, and attention to matters of documentation in <u>all</u> written work is expected and required. Inadvertence, alleged lack of understanding, or avowed ignorance of the various types of plagiarism are not acceptable excuses.

Specific examples of plagiarism are:

- 1. Copying without proper documentation (quotation marks and a citation) written or spoken words, phrases, or sentences from any source;
- 2. Summarizing without proper documentation (usually a citation) ideas from another source (unless such information is recognized as common knowledge);
- 3. Borrowing facts, statistics, graphs, pictorial representations, or phrases without acknowledging the source (unless such information is recognized as common knowledge);
- 4. Collaborating on a graded assignment without the instructor's approval;
- 5. Submitting work, either in whole or in part, created by a professional service and used without attribution (e.g., paper, speech, bibliography, or photograph).

Students who may be unsure of the nature of plagiarism should consult the instructor or a guide for writing research reports. (Additional resources are available at http://www.lib.utk.edu/instruction/plagiarism.)

Infractions of academic integrity are penalized according to the severity of the infraction but **may include a course grade of "F."**

ASSIGNMENTS AND GRADING

Student work is assigned a grade based on quality of thought and writing style, thoroughness of research and of references, appropriateness of length, and originality. Only exceptional work will receive an "A" grade. Papers that are received after the due date will be assigned a lower grade than would otherwise be received. All sources must be cited, quotations must be in quotation marks and attributed correctly. Not doing so constitutes plagiarism.

DUE DATES AND LATE ASSIGNMENTS

Assignments should be submitted to the "assignments" area of Canvas and are due (officially) at 11:59 p.m. EST on the due date listed on the syllabus. I will download the submissions from Canvas early the next morning. I will ONLY download assignments from Canvas ONCE. Therefore, if your assignment is not ready by the deadline, I will not grade it and you will receive a zero point.

- You must send me an email informing me that your assignment will be late. **Not doing** so will result in a one-point deduction for each day I don't hear from you.
- When it's ready, you must submit it to me via email, as an attachment
- One point will be deducted for each 24-hour hour period the assignment is not turned in.

INCOMPLETES

Based on adopted University of Tennessee-Knoxville and SIS policy, a grade of *I* (Incomplete) is reserved for emergencies that prevent the student from completing the course on time. Incompletes are granted only under "the most unusual of circumstances" and solely at the discretion of the instructor. Plan your semester's course of study carefully to insure sufficient time to complete the required work.

For students who simply "disappear" without contacting the instructor and without completing the required form, an "F" is submitted.

Assigning Grades

Please note that I do not assign letter grades for individual assignments, but will mark your paper with my comments and provide a point score based on the possible points earned for that assignment. If you'd like to compute a letter grade based on the score provided, divide your score by the total points possible for the assignment and refer to the scale on pp. 5-6 of the syllabus for the corresponding letter grade. For example, if you earned 23/25 points on an assignment, your percentage grade would be 92. Your final grade will be based on total points earned/total possible points over the course of the semester.

WORK EVALUATION

Semester grades will be assigned according to the following scale:

A	93≤	(4 quality points per semester hour) superior performance.		
A-	90-	(3.7 quality points per semester credit hour) intermediate grade performance.		
	92.75			
B+	88-	(3.5 quality points per semester hour) better than satisfactory performance.		
	89.75			
В	83-	(3 quality points per semester hour) satisfactory performance.		
	87.75			

B-	80-	(2.7 quality points per semester credit hour) intermediate grade performance.			
	82.75				
C+	78-	(2.5 quality points per semester hour) less than satisfactory performance.			
	79.75				
C	70-	(2 quality points per semester hour) performance well below the standard			
	77.75	expected of graduate students.			
D	60-	(1 quality point per semester hour) clearly unsatisfactory performance and			
	69.75	cannot be used to satisfy degree requirements.			
F	59.75≥	(no quality points) extremely unsatisfactory performance and cannot be used			
		to satisfy degree requirements.			
I		(no quality points) 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 is not given to enable a			
		student to do additional work to raise a deficient grade. The instructor, in			
		consultation with the student, decides the terms for the removal of the I,			
		including the time limit for removal. If the I is not removed within one			
		calendar year, the grade will be changed to an F. The course will not be			
		counted in the cumulative grade point average until a final grade is assigned.			
		No student may graduate with an I on the record.			

GRADING

Graded class activities will be returned within two to three weeks. Please review the graded activity even if you have received a high grade as there may be insightful comments or additional thoughts you should consider.

You have **one week** from the time I have notified you via email about posting the grade in Blackboard to request a review of the grade. I will do my best to address your request within one week of the request. In case of travel or emergency I will notify you of the delay in reviewing the grade.

The overall evaluation of submitted activities includes, but is not limited to the following: quality of writing, organization, formatting, as well as the amount of analysis and synthesis, demonstration of critical thinking skills, adherence to guidelines, and submission on time.

COURSE EVALUATION

You will be invited to evaluate the course at the end of the term. Please participate in this valuable process. I also invite your comments throughout the course and read all comments, suggestions, and recommendations.

COURSE ACTIVITIES

ASSIGNMENT #	Түре	Торіс	VALUE
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Assignment 1	COLLABORATIVE	OBSERVING USER INTERACTION	20%
Assignment 2	COLLABORATIVE	DEVELOPING PERSONA	20%
Assignment 3	INDIVIDUAL	UX TOOLS for INTERFACE DESIGN & PROTOTYPING	15%
Quiz	TAKE HOME	Course topics	15%
Теам ргојест	COLLABORATIVE	USABILITY ASSESSMENT	20%
CLASS PRESENTATIONS OF TEAM PROJECT	COLLABORATIVE	VARIES	5%
Readings; constructive class	INDIVIDUAL	Wholecourse	5%
PARTICIPATION;			
COMMUNICATION WITH			
INSTRUCTOR; ETC.			

CITING SOURCES

I prefer APA style, but you may use your preferred standard style manual for citing sources.

COURSE SCHEDULE

See Canvas Class site.

The instructor reserves the right to revise, alter and/or amend this syllabus, as necessary. Students will be notified in writing and/or by email of any such revisions, alterations and/or amendments.



Spring 2017 Course Schedule

INSC 588: Human-Computer Interaction

Class Meetings: Thursdays, 6:30-9:10 P.M. Meetings: Virtual via Zoom

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Date	Topic	Readings & Other	Class dynamics
1/12	Course introduction	Peruse the Textbook's Introduction and Table of Contents Watch video. See Link in Canvas	Self-introductions Course introduction
1/19	Overview of HCI, concepts, user experience, interaction design Dr. Bilal is at ALISE Conference	Text, chap. 1	Discussions
1/26	Understanding and conceptualizing interaction Cognitive aspects	Text, chaps. 2 & 3	Discussions
2/2	Interfaces Assessing the user experience: Data gathering and methods	Text, chaps. 7 & 8	Discussion of readings
2/9	Assessing the user experience: Data gathering and methods (cont'd.) Data analysis & interpretation	Text, chap. 7& 8	Discussions Submit Assignment 1
2/16	Social interaction Tools for social interaction	Text, chap. 4	Discussions
2/23	Emotional interaction Tools for capturing emotions	Text, chap. 5	Discussions
3/2	Process of interaction design	Text, chaps 9 & 10.	Discussions

	Establishing requirements		Submit Assignment 2
3/10	Designing interfaces Design tools Dr. Bilal may be at CHIIR 2017	Text, chaps. 11 & 12 Guest Speaker TBA	Discussions
3/13- 17	Conference Spring break		
3/23	Designing interfaces Design tools Evaluation methods	Text, chaps. 11, 12 Text, chap. 13 & 14	Discussions Quiz
3/30	Evaluation methods (cont'd.)	Text, chap. 14	Discussions
4/6	Evaluation methods (cont'd.)	Text, chap. 15	Discussions Submit Assignment 3
4/13	User perspectives research/studies	See Studies of Users' Interaction (Readings List)	Discussions
4/20	Class presentations	None	Submit team project presentation slides
4/27	Class presentations	None	Submit team project presentation slides

Final team project is due on May 2, 2017 by 5 p.m.

Selected Readings List (This list will be updated throughout the semester)

<u>http://Uxmag.com</u> (peruse latest issues). A good source to keep up-to-date.

Buckley, Chase. 2016. The future is near: 13 design predictions for 2017. http://uxmag.com/articles/the-future-is-near-13-design-predictions-for-2017 Article No :1609 | April 27, 2016

The Top UX Predictions for 2016. http://uxmag.com/articles/the-top-ux-predictions-for-2016

Studies of Users' Interaction

<u>http://uxmag.com/topics/contextual-user-studies</u> (a number of studies of children, teens, and adults).

Bilal, Dania and Jacek Gwizdka. 2016. Children's eye fixations on Google search results. https://www.asist.org/files/meetings/am16/proceedings/submissions/posters/9poster.pdf

Breeze, James. 2014. Combining contextual inquiry with eye tracking. http://uxmag.com/articles/combining-contextual-inquiry-with-eye-tracking Guo, Frank. 2014. Leveraging eye tracking to create an engaging user experience. http://uxmag.com/articles/leveraging-eye-tracking-to-create-an-engaging-user-experience

Personas

Edeker, Kyra, and Jan Moorman. 2013. Love, hate, and empathy: Why we still need personas. *UX Magazine*, 963 (Feb. 21). http://uxmag.com/articles/love-hate-and-empathy-why-we-still-need-personas

Spool, Jared. 2007. Crappy personas vs. robust personas. http://www.uie.com/brainsparks/2007/11/14/crappy-personas-vs-robust-personas/

Contextual Inquiry

Holtzblatt, Karen. 2009. Don't ask your customer – use contextual inquiry. http://incontextdesign.com/articles/dont-ask-your-customer-article/

Note that the in*Context* site by Holtzblatt http://incontextdesign.com/ has lots of information about contextual inquiry and contextual design.

Cognitive Walkthrough

Wharton, Cathleen, John Rieman, Clayton Lewis, and Peter Polson. 1993-94. The Cognitive Walkthrough Method: A Practitioner's Guide. http://www.colorado.edu/ics/sites/default/files/attached-files/93-07.pdf

Evaluation Methods, Usability, Qualitative and Quantitative Studies

Bilal, Dania. 2014. Evaluating the ILS through Usability. In: *Library Automation: Core Concepts and Practical Systems Analysis*. 3rd. ed. Libraries Unlimited. Available as ebook through Hodges Library.

Krug, Steve. 2014. Don't Make Me Think: A Common Sense Approach to Web Usability. (Excerpt from Chapter 2). Highly recommended reading http://www.sensible.com/chapter.html

Usability Methods. http://www.usabilityfirst.com/usability-methods

Tullis, Tom and Bill Albert. 2008. Planning a usability study (based on the book, **Measuring the User Experience...**) Slide show. http://www2.engr.arizona.edu/~ece596c/lysecky/uploads/Main/Lec11.pdf

Tullis & albert's Book Companion has useful studies and other information. http://www.measuringux.com/index.htm

Tullis, Albert. 2009. Top ten myths about usability. http://www.measuringux.com/UsabilityMyths/index.htm

Morville, Peter. Ambient Findability. Excerpt. http://intertwingled.org/ambient-findability/

Morville, Peter. See Peter's website Archive on various topics. http://intertwingled.org/category/intertwingled/

Nielsen, J. Quantitative studies: How many users to test? http://www.useit.com/alertbox/quantitative_testing.html

Neilsen, J. How to recruit participants for usability studies? http://www.nngroup.com/reports/how-to-recruit-participants-usability-studies/

Neilsen, J. 10 Usabilitly heuristics for user interface design. http://www.nngroup.com/articles/ten-usability-heuristics/

Neilsen, J. Severity rating for usability problems. http://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/

Neilsen, Jakob. 2011. Mobile usability update. http://www.nngroup.com/articles/mobile-usability-update/

Writing Tasks for User Web Interaction

Bilal, Dania. 2002. Children's use of the Yahooligans! Web search engine. III. Cognitive and physical behaviors on fully self-generated search tasks. *Journal of the American Society for Information Science and Technology*, 53 (13), 1170–1183.

Broder, A. 2002. A taxonomy of web search. *SIGIR Forum*, 36(2), 2002. http://www.cis.upenn.edu/~nenkova/Courses/cis430/p3-broder.pdf

Wearable Technology

Norman, Don. 2013. The Paradox of wearable technologies. MIT Technology Review. https://www.technologyreview.com/s/517346/the-paradox-of-wearable-technologies/

Suggested Websites

http://www.useit.com (Jakob Nielsen's previous website)

http://www.nngroup.com (Jakob Nielsen's current website).

http://www.usability.gov

http://usabilityfirst.com

http://www.w3c.org

http://intertwingled.org/ambient-findability/

http://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems

(Severity Rating of Usability Problems)

Suggested Books

Norman, Don. *Emotional Design*. http://www.jnd.org/books.html

Krug, Steve. 2005. Don't Make Me Think: A Common Sense Approach to Web Usability.

(Excerpt from Chapter 2). Highly recommended reading. http://www.sensible.com/chapter.html

Morville, Peter. *Ambient Findability: What We Find Changes What We Become.* O'Reilly.

Tullis, Tom, and Bill Albert. 2013 or 2008. *Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics*. Boston, MA: Morgan Kaufmann Publishers.

UX Tools

See link in Canvas.

Suggested Videos

Leone, Alex. What is HCI? https://www.youtube.com/watch?v=KtvwustmEDI

More videos will be added.