Course Syllabus: IS 448 Usability & Measuring UX

Semester: Spring 2024 Section 102: Thursdays 6:00 - 8:50 PM at CKB 219

Instructor: Keita Ohshiro. You can call me Keita, not Professor xxx :) Office: Guttenberg Information Technology Center 3902C E-Mail: <u>keita.ohshiro@njit.edu</u> Office Hours:

- Monday 1:15 PM 2:15 PM
- Tuesday 2:45 PM 3:45 PM
- Thursday 2:45 PM 3:45 PM
- Or by appointment

General Information

Course Description

This course introduces students to the world of Quantitative User Experience (UX) and Usability Research. We cover foundational concepts underlying quantitative UX/usability research such as statistics, data visualization, design and execution of usability tests, analysis and communication of results, etc. In this class, students not only learn theory in lectures, but also apply the knowledge gained in lectures by actually conducting usability tests in the field. By combining knowledge and practice, students will gain experience in the process of usability and measuring UX.

Prerequisites: Statistics GUR (MATH 105, MATH 120, MATH 225, MATH 244, MATH 279, MATH 305, MATH 333, IE 331, ECE 321 or MNET 315).

Course Objectives

By the end of this course, students will be able to:

- Understand key concepts of usability and UX
- Understand statistics about usability and UX
- Design and execute quantitative usability studies
- Utilize statistical methods to measure, evaluate, and interpret usability and UX
- Communicate the statistical results through reports and presentations

Textbook and Readings

Textbooks are not required. Readings will be posted on Canvas.

Tools

Excel (Tableau, if we have time)

Grading and Assignments

Grading Policy

The class will be graded on a 100-point scale. (Also, see Grading Legend)

A	B+	B	C+	C	D	F
Superior	Excellent	Very Good	Good	Acceptable	Minimum	Inadequate
> 90	85 - 90	80 - 84	75 - 79	70 - 74	65 - 69	

Point Distribution

Final grades will tentatively be assigned as follows. There may be slight modifications, depending on issues that arise during the semester. Details on each will be explained on Canvas and in class.

- 5% Reflection
- 30% Individual assignments
- 20% In-class quizzes
- 30% Group project
 - 10% Midterm milestone
 - 20% Final
- 15% Individual contribution to the group project

Excellent participation demonstrated by preparation for discussion and thoughtful contributions can have the effect of additional points. Likewise, poor participation demonstrated by a consistent lack of preparation for discussion and little or no thoughtful contributions can have the effect of deduction of points. Also, I might make slight adjustments and/or curve the grade as needed.

Late submissions

If an assignment is submitted late, one-third of the total points will be deducted per day. For example, if an assignment is due by 6:00 pm and you submit it after 6:00 p.m. but before 6:00 pm the following day, 25% of the total points will be deducted (50% on the second day, 75% on the third day, and 100% after that). I strongly encourage you to submit your assignments on time, even if you feel they are not yet ready or perfect.

(And, I still strongly encourage you to submit the assignments, no matter how late they are. I cannot promise, but there may be a remedy. I will try to take your effort into consideration, though I cannot guarantee to what extent).

Attendance Policy

Students are expected to attend every class on time. If you miss 3 class sessions, you will automatically be deducted a letter grade. If you miss 5 class sessions, you will automatically fail the course. Students who arrive later than 10 minutes after the class starts will be marked late and 3 latenesses count as 1 absence. For your absence verification, please see the Student Absence Verification section below.

Academic Integrity

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: <u>NJIT Academic Integrity Code</u>.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.

Topic Outline

(Subject to modification)

Week	Topics	
1 (1/18)	Syllabus overview Self-introduction Intro to UX and usability	
2 (1/25)	Quantitative research and research ethics Usability testing	
3 (2/1)	Descriptive statistics and data visualization	
4 (2/8)	Descriptive statistics and data visualization	
5 (2/15)	Inferential statistics	
6 (2/22)	Inferential statistics	
7 (2/29)	(Buffer)	
8 (3/7)	Midterm milestone	

9 (3/14)	Spring Recess - No Class			
10 (3/21)	Inferential statistics			
11 (3/28)	More about data visualization and statistics			
12 (4/4)	How can you give a good presentation How can you write a good documen			
13 (4/11)	(Buffer)			
14 (4/18)	(Buffer)			
15 (4/25)	Casual group project presentation			
Final Exam (5/3-9)	Group project presentation and documentation submission due.			

<u>Others</u>

Student Absence Verification

Students who miss class due to bereavement, medical concerns (including students who test positive for COVID-19), military activity, legal obligations, or university-sponsored events must provide the Office of the Dean of Students (DOS) with official and verifiable documentation related to the absences within 14 days.

Once the absence has been verified, the DOS will communicate on your behalf to your professor(s). Please note that our office only verifies documentation and it is at the discretion of your professor(s) or their department's policy to provide any accommodation. It is the student's responsibility to follow up with the professor(s). Students who select an option (bereavement, medical concerns, etc.) that does not match the presenting concern and supporting documentation will be rejected.

For more information, please see <u>https://www.njit.edu/dos/student-absence-verification</u>.

Center for Counseling and Psychological Services

C-CAPS provides free counseling for full-time students. For more information, see <u>https://www.njit.edu/counseling/</u>.

Getting Technical Help

The <u>IST Service Desk</u> is the central hub for all information related to computing technologies at NJIT. This includes being the first point of contact for those with computing questions or problems.

Accessibility

If you are in need of accommodations due to a disability, please contact Scott Janz, Associate Director of the Office of Accessibility Resources & Services (OARS), Fenster Hall Room 260 to discuss your specific needs. A Letter of Accommodation Eligibility from the OARS authorizing your accommodations will be required.

Feedback

I will solicit (anonymous) feedback from students throughout the course through anonymous surveys in Canvas, but if you have pressing or specific issues, please do not hesitate to let me know if any aspect of our course or class community can be improved.