IS 375 Discovering User Needs for UX

Class meets: Thursdays, 2:30-5:30pm  
Where: KUPF 202

Instructor: D. Yvette Wohn, Ph.D.  
Office: GITC 5100 Suite (Room 5112)  
Office Hours: Thursdays, 1-2:15 pm, or by appointment  
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Course Description
How do you make a new product or service? How do you anticipate someone’s needs before they do? How do you understand how people interact with products?

It’s all about the understanding the customer. In this course, we take a deep dive into qualitative user experience (UX) research. UX research is the process of understanding why and how people use products and services. This course will teach you a set of research tools to understand user needs, investigate the user experience, and derive design recommendations.

We will cover techniques like ethnography, conducting focus groups, interviewing, and analyzing qualitative data. We will be talking with user experience researchers in industry and academia. This practical, hands-on course will give you an insight into the psychology of user behavior and lay the foundation for students who are pursuing careers designing, evaluating, or marketing products for people.

Learning Goals / Outcomes

• Understand why research is important and how it fits into Information Systems design and development  
• Understand ethics of human subjects research  
• Discover and formulate UX problems  
• Apply qualitative UX research methods, such as ethnography, interviews, & focus groups  
• Analyze qualitative data  
• Communicate results through reports and presentations

Evaluation
Class participation (10 points): 10%  
Assignments (3 x 20= 60 points): 60%  
Final project (30 points): 30%  
Extra credit (2 points max): 2%
Grading
90 – 102 points : A
85 – 89 points : B+
80 – 84 points : B
75 – 79 points : C+
70 – 74 points : C
65 – 69 points : D
Under 65 points : F

Classroom Participation (10 points)

- Do readings BEFORE class. Readings will be posted on Moodle.
- Engage in discussions with the rest of the class

Assignments (60 points)

- Assignments are to be done outside of class hours.
- You will have three individual assignments, each are worth 20 points. Each assignment will consist of performing the research and writing a summary report of the results.
  - Times New Roman, 12 point
  - Single Space
  - No title page
  - Write first and last name at top
  - 3 to 5 pages. More is not better, will not read after 5th page. The page count does not include additional materials, such as interview protocol or notes
  - You must submit notes/ transcriptions as proof
- Details of assignments and requirements will be further explained in class
- IRB training is mandatory and is not counted as an assignment.

Final Project (30 points)

Group projects are difficult to coordinate and execute, but are extremely important because knowing how to communicate and collaborate in small groups is a key skill required in any professional setting. In the group project, your group will be able to choose from several pre-designated topics, then investigate the topic using at least one of the methodologies.

- Presentation (10)+ Paper (20) + Peer evaluation (adjustment)
- The group work presentations should be 20 min. They should give a high-level overview of the project, data collection, and results.
- The written report should have all the details. It should be clear how the team worked together.
- Peer evaluation is a report (template will be provided) about each individual’s contributions. If your teammates identify you as having a low contribution, you will have points deducted (up to 10 points). If your teammates identify you as a stellar contributor, you will gain extra points.
15 Week Breakdown (Schedule is subject to change)

**Week 1:** Course overview & Understanding people. What is user experience (UX) research, why you should care, the difference between quantitative and qualitative research. The ethics of human subject research

  Assignment: IRB training (submit certificate)

**Week 2:** The power of observation: Introduction to ethnography / identifying user needs.

**Week 3:** Ethnography (continued). Analyzing results, presentations

  *Assignment 1 Ethnography Paper*

**Week 4:** Interviewing (Semi-structured) Developing a protocol

**Week 5:** Conducting actual interviews (in-class exercise)

  *Assignment 2 Part 1: Interview Transcripts*

**Week 6:** Interviewing (Data analysis): talking about themes

**Week 7:** Interviewing (Data analysis)- matrices and coding, writing results

  *Assignment 2 Part 2: Paper*

**Week 8:** Diary studies Part 1

**Week 9:** Focus Groups

**Week 10:** Focus Groups, sample focus group

**Week 11:** Focus Groups

**Week 12:** Group projects

**Week 13:** Diary studies Part 2

  *Assignment 3 Diary Study Paper*

**Week 14-15:** Group project presentations

  *Final project: paper*

Student outcomes address listed in ABET Criterion 3:
The course will enable students to attain
- An ability to function effectively on teams to accomplish a common goal
- An ability to communicate effectively with a range of audiences both oral and written modes.
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to evaluate a computer-based system, process, component, or program to meet desired needs

Course Communication
Before you decide to send an email inquiry, check the syllabus. You are most likely to find answers there. Please begin the subject line of any course e-mail with “IS375.” Appropriate e-mail will be replied to within 24 hours to 48 hours Monday through Friday. Emails should have proper salutations and signatures. Do not use Moodle to send course-related messages.

Course announcements will be made in class, via Moodle, and email. It is your responsibility to check your email and Moodle on a regular basis; at least twice a week and the day before class.

Past Due Assignments
All assignments must be turned in complete and on-time. Specific deadlines for each assignment will be announced in class and via Moodle. No excuses for late assignments, including technical issues, will be accepted. Every day late will be deducted 50 points.

Extra Credit Opportunities
There will be a few extra credit opportunities for research participation in addition to those for excellent class participation. The extra credit points will be added to the basic student score in final grading. There are no guarantees for extra credit and it is each student’s responsibility to be aware of and take advantage of such opportunities. While specific point values will be announced for each extra credit opportunity, in general each 30 minutes of participation in an extra credit event that you can accomplish at home will earn you 5 points. After the final exam there will be no further opportunities for extra credit or to otherwise improve your grade.

Academic Honesty
Students take full responsibility for maintaining the integrity of scholarship, grades, and professional standards. Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including forum posts and in-class presentations, without assistance from any source.

The approved “University Code on Academic Integrity” is currently in effect for all courses. Should a student fail a course due to a violation of academic integrity, they will be assigned the grade of “XF” rather than the “F” and this designation will remain permanently on their transcript. All students are encouraged to look over the University Code on Academic Integrity and understand this document. Students are expected to uphold the integrity of this institution by
reporting any violation of academic integrity to the Office of the Dean of Students. The identity of the student filing the report will be kept anonymous.

NJIT will continue to educate top tier students that are academically sound and are self-disciplined to uphold expected standards of professional integrity. Academic dishonesty will not be tolerated at this institution.

**Student Disability Services**
If you have, or believe that you may have, a physical, medical, psychological, or learning disability that may require accommodations, please contact Student Disability Services and inform the instructor. Information on the self-identification, documentation and accommodation process can be found on the webpage at: [http://www.njit.edu/counseling/services/disabilities.php](http://www.njit.edu/counseling/services/disabilities.php).

**Technical Help**
The IST Helpdesk is the central hub for all computing technologies at NJIT.
1. Call 973-596-2900. Monday - Friday 8 am - 7 pm.
2. Go to Student Mall Room 48. Monday - Friday 8 am - 7 pm

In addition to the Helpdesk, NJIT has a number of resources available to help you learn/use Moodle. Please be aware of the following: