

NYU Tandon School of Engineering, Department of Computer Science and Engineering

CS-GY 9223 - User Experience Research & Behavior

Instructor: Professor Raymond Lutzky, Ph.D., ral463@nyu.edu

Course Prerequisites

There are no prerequisites for this course. Experience creating and/or participating in the design and dissemination of information, production of interactive experiences, and/or software will be helpful.

Course Description

This course will prepare students to undertake research on user experience, digital audiences, customers, viewers and others with whom an organization seeks to communicate or build a user experience through technology. Digital data have profoundly reshaped how organizations mine and interpret user information and insightful data, so the course introduces new techniques and tools for developing user experience insights, as well as traditional qualitative and quantitative research methods. Students will gain a holistic understanding of user experience research.

Course Learning Outcomes

- Traditional user experience research methods used in computer science for developing user experience insights -- including observational research, interviews, surveys, and experiments
- Emerging research techniques that build on data-driven insights from analytics tools
- Best practices for combining insights from digital techniques with social media research methods
- Limitations, opportunities and ethics of research with users and about users' experiences
- By the end of this course students will be able to initiate or manage basic user research projects that rely on traditional and emerging social research methods, collect data by using freely available data collection tools and instruments, develop prescriptive recommendations, based on data, to address UX design needs, and critically address ethical concerns surrounding user research.

Course Structure

Each week on Thursday, a new user experience research topic will be presented by the instructor along with accompanying learning materials (all class meetings are virtual/asynchronous, there is no regular time for this class). Students will have assignments due throughout the term accompanied by quizzes. Live virtual study sessions may be conducted at the discretion of the instructor, and all announcements/updates will be made via NYU Classes.

Readings

Please obtain this excellent social and behavioral research book, all other materials will be provided by the instructor:

- Bit by Bit: Social Research in the Digital Age by Matthew Salganik (Princeton University Press) ([available online here](#))

We will also be reading selections from these excellent books, which you may enjoy reading in their entirety:

- Persuasive Technology: Using Computers to Change What We Think and Do by BJ Fogg (Stanford University Press) ([available online here](#))
- Designing the User Interface: Strategies for Effective Human-Computer Interaction by Ben Shneiderman, Catherine Plaisant, et al. (Pearson)
- The Design of Everyday Things by Donald Norman (Basic Books) ([available online here](#))

Course Grading

Quizzes: **300** (10 X 30 points)

Discussions: **250** (5 x 50 points)

Assignments: **300** points (variable)

Research Proposal **150** points

TOTAL = 1,000 course points

Course Policies

- Academic misconduct of any kind will not be tolerated and may result in an automatic “F” grade. See NYU policy below (when in doubt please ask the instructor via email).
- Professor will attempt to respond to student inquiries as received, usually within 24 hours.
- Student assignments are due on the date listed in NYU Brightspace.
- Student quizzes are due on the date listed and will not be accepted after the due date.
- Students are strongly encouraged to complete all readings and fully engage with the materials.
- One optional extra credit assignment will be available. No additional extra credit will be awarded.

Course Schedule (subject to change)

This course schedule is structured to introduce new modules every Thursday virtually.

All assignments/readings are due on the date indicated below by 11:59 pm New York time.

Module	Date (Thursday)	Topic	Reading Due on this Date
1	September 2	Welcome and Course Introduction	Review the syllabus/obtain required textbook/access
2	September 9	Research and Methods to Understand Audiences	Salganik Chapter 1 https://www.bitbybitbook.com/en/1st-ed/introduction/
3	September 16	Ethics in User Experience Research	Salganik, Chapter 6, p. 281-314 (through Section 6.6.2) https://t.co/DVZKQFXdPx through section 6.6.2
4	September 23	Observational Research	Salganik, Chapter 2, Observing Behavior, pp. 13 ~ 41 (through 2.3.10) https://t.co/2BCfWYJ58u (through 2.3.10)

5	September 30	Social Network Behaviors	Read: "Analyzing social media networks with NodeXL: Insights from a connected world," Hansen, Shneiderman & Smith. Analyzing Social Media Networks
6	October 7	Sentiment Analysis and Digital Rhetoric	"Sentiment Analysis and Opinion Mining," Bing Liu, Chapter 1 https://drive.google.com/file/d/1-vmwODUgOLESDkVw6E22qS593Cb1Mgnm/view?usp=sharing "Digital Rhetoric," James Zappen, Technical Communication Quarterly https://drive.google.com/file/d/1EcHH52OK8xW9m6KlqN_Y9Bn-SnC3ziti/view?usp=sharing
7	October 14	Affordances and Behavior	Norman Chapter 4 Book available at NYU Libraries https://bobcat.library.nyu.edu/permalink/f/ci13eu/nyu_aleph005878745
8	October 21	Designing Experiments	Salganik Chapter 4 (Running Experiments, pp. 147 ~ 174 , through 4.4.3) https://t.co/iXi56YM3dA
9	October 28	Survey Research	Salganik, Chapter 3: Asking Questions (Textbook pp. 85 ~ 106; through 3.4) https://t.co/R9KTeRN87S
10	November 4	Understanding User Behavior	Salganik, Chapter 2, Observing Behavior, pp. 41-62 https://t.co/2BCfWYJ58u
11	November 11	Fundamentals of Usability Testing	"Designing the User Interface," Shneiderman et al. Chapter 5 https://drive.google.com/file/d/1YCpK4Aoy9OnzcmXUh2Cf6fI6U5p4xe3H/view?usp=sharing
12	November 18	Conducting Interviews	Salganik, Chapter 3: Asking Questions (Textbook pp. 107 ~ 141) https://t.co/R9KTeRN87S
	November 25	THANKSGIVING RECESS	*****

13	December 2	Prototypes for Research	Salganik Chapter 7 “The Future” https://www.bitbybitbook.com/en/1st-ed/the-future/
14	December 9	Behavior and Persuasion	Fogg Chapters 1, 2, 9 Book available at NYU Libraries https://bobcat.library.nyu.edu/permalink/f/ci13eu/nyu_aleph004464850

Final Grade Calculation

Final course letter grades will be determined accordingly:

Letter Grade Points	
A	94-100 or above
A-	90-93
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	60-66
F	59 and below

Moses Center Statement of Disability

If you are a student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities (CSD) at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 3rd floor.

NYU School of Engineering Policies and Procedures on Academic Misconduct

A. Introduction: The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness, and students at the School of Engineering are expected to exhibit those qualities in their academic work. It is through the process of submitting their own work and receiving honest feedback on that work that students may progress academically. Any act of academic dishonesty is seen as an attack upon the School and will not be tolerated. Furthermore, those who breach the School's rules on academic integrity will be sanctioned under this Policy. Students are responsible for familiarizing themselves with the School's Policy on Academic Misconduct.

B. Definition: Academic dishonesty may include misrepresentation, deception, dishonesty, or any act of falsification committed by a student to influence a grade or other academic evaluation. Academic dishonesty also includes intentionally damaging the academic work of others or assisting other students in acts of dishonesty. Common examples of academically dishonest behavior include, but are not limited to, the following:

1. Cheating: intentionally using or attempting to use unauthorized notes, books, electronic media, or electronic communications in an exam; talking with fellow students or looking at another person's work during an exam; submitting work prepared in advance for an in-class examination; having someone take an exam for you or taking an exam for someone else; violating other rules governing the administration of examinations.
2. Fabrication: including but not limited to, falsifying experimental data and/or citations.
3. Plagiarism: intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise; failure to attribute direct quotations, paraphrases, or borrowed facts or information.
4. Unauthorized collaboration: working together on work that was meant to be done individually.

5. Duplicating work: presenting for grading the same work for more than one project or in more than one class, unless express and prior permission has been received from the course instructor(s) or research adviser involved.
6. Forgery: altering any academic document, including, but not limited to, academic records, admissions materials, or medical excuses.

About the Instructor

Professor Ray Lutzky joined the NYU Tandon faculty in 2015 and has taught courses in the Department of Computer Science & Engineering and in the Department of Technology, Culture & Society. He received his Ph.D. from Rensselaer Polytechnic Institute, where his research focused on human computer interaction and usability. Dr. Lutzky also holds an M.S. in public relations from Syracuse University and an M.S. in digital audience strategy at Arizona State University.