

COMM 3165 Evaluation & Usability Testing

School of Communication | Autumn 2024 | Section 34720

Lecture: Tues & Thurs 12:45 PM - 2:05 PM | Journalism 224

Lab: Mon 2:15 PM - 4:05 PM | Journalism 224

In-Person Instruction

Instructor: Dr. Nicholas Matthews

- **Email:** Matthews.345@osu.edu (Please include COMM3165 in subject line)
- **Office:** 3062 Derby Hall
- **Office hours:** TBA

Course description

In this course, we will learn how to detect usability and user experience problems in common tech, design possible solutions, and evaluate the quality of your solutions.

The problems can be big (e.g., glaring accessibility issues) or small (e.g., bad placement of buttons). The tech can be virtual (e.g., an app) or physical (e.g., a microwave). Solutions can take any form--limited only by your creativity. You will learn and apply social scientific techniques to measure the impact of your solutions (e.g., surveys, experiments, interviews, etc.). You will leverage statistical software to help you visualize data and conduct basic analyses.

The goal of the class is to help you gain practical experience as a UX Researcher by designing and executing a complete UX case study.

The class is designed to complement [COMM 3545: Human-Computer Interaction & User Experience \(HCI & UX\)](#), which provides an introduction to HCI and UX design principles and [COMM 4511: User-Centered Communication Design](#), which provides an introduction to UXd (i.e., the design of websites and mobile applications from a UX perspective).

Course learning goals and outcomes

Students who successfully complete this course will be able to:

1. Have skills in quantitative and qualitative methods of evaluating interactive technologies
2. Have an understanding of measurement instruments commonly used in evaluation and usability testing
3. Be able to communicate usability testing and evaluation results to a variety of audiences
4. Have a basic understanding of what it means to work in evaluation and usability testing
5. Have materials that can be used (with modest revision) in a design portfolio

Mode of delivery

This course will be presented face-to-face (i.e., in-person).

Required materials

Textbook. Sharp, H., Rogers, Y., and Preece, J. (2019). [Interaction Design: Beyond Human-Computer Interaction](#). (5th edition) West Sussex: John Wiley & Sons, Ltd.

PDFs. I will provide PDFs of additional readings in the files section of Carmen.

Grading Plan

Category	Percentage of final grade
In-class activities	10%
Assignments	25%
Exam	25%
Final project	15%
Final presentation	10%
Lab participation and performance	15%

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Grading policy & scale

I use the standard OSU grading scale. I do not round/bump grades. If this course is required for you to graduate or to avoid academic probation/expulsion, I expect you to perform at your best to avoid an undesirable outcome. Be proactive. Be professional.

	B+ 87.00-89.99%	C+ 77.00-79.99%	D+ 67.00-69.99%
A 93.00-100%	B 83.00-86.99%	C 73.00-76.99%	D 60.00-66.99%
A- 90.00-92.99%	B- 80.00-82.99%	C- 70.00-72.99%	F 0-59.99%

Course Requirements

Readings

The readings form the foundation for the course. They have far more detail than I cover in lecture that will be critical in helping you form a complete understanding of the topics.

Individual Assignments

You will complete 3 smaller assignments this semester. Some will contribute to your final project. Others will simply challenge you on core proficiencies. Each assignment will have a rubric. You will submit your work via Carmen. You can submit these past the deadline if needed (see lateness policy).

Activities & Lab Participation

(Almost) Everyday we will do group-based activities in class and during lab. If you are not present in class when there is an activity, you will not receive credit for it. However, I will excuse missed activities if you email me before class begins to let me know that you need to miss class. I excuse absences due to illness, emergency, and university-recognized activities (e.g., sports, religious observance, etc.). I do not require documentation to excuse an absence. If you email me after class begins, you may still earn an excused absence, but I will apply a lateness penalty (-25% penalty after class begins then -2% for each additional hour that passes).

Final Project & Presentation

The majority of the course centers around a final project that mimics a complete UX case study. First, you will pose a major question about technology (e.g., what are the biggest challenges for young teenagers who want to use Instagram to connect with their friends?). Then, you will collect qualitative data to better understand your topic (e.g., interviews). Next, you will develop a design solution that improves the technology somehow. Then, you will test the solution using a social scientific method of your choice (e.g., an experiment). Finally, you will compose a report and deliver a presentation about your problem, the qualitative insights you learned, your potential solution, and the observed effectiveness of your solution.

Exam

You will have a “midterm” for this course, though it will be well past the midpoint of the semester. Exam questions will be generated from the material covered in class lectures and textbook readings. The exam may include multiple choice, matching, fill in the blank, problem solving, and/or short answer questions. I will provide more information about the exam later in the semester.

Communication Policy

Please...

- **Do not use Canvas messages/mail.** Use Buckeye email instead. Canvas messages cannot be tracked and they erase previous messages in the email chain. As a result, Canvas messages cannot be used as evidence of communication attempts.
- **Do not send unprofessional messages.** Please include your course number, a salutation, and your full name along with a courteous message.
- **Do not send emails that require immediate attention.** Messages will be answered within 24 business hours of receipt on business days (Monday - Friday) during business hours (9am - 5pm). Be professional and plan ahead.
- **Do not send emails from a non-OSU email addresses.** Only messages from OSU accounts can be tracked. Non-OSU accounts are often identified as spam.

Course-Specific Policies

Deadlines. All deadlines are in Eastern Time (ET).

English. You forfeit all possible points for assignments not written/spoken in English.

Late work. You may submit essays late. Lateness penalties increase cumulatively. Submitting work 1 second after the deadline yields a -2% point penalty. For each additional hour after the deadline, you lose an additional -2%. This means that you may submit work (technically) up to 48 hours after the due date.

Unenrollment. OSU does not recognize unenrollment as a valid excuse for missing work. If you become unenrolled from the course for any reason, it is your responsibility to contact me and establish alternative means to submit work prior to the specified deadline. If you suspect that this policy will affect you, I recommend saving the syllabus or printing it out for reference.

Professionalism. You must ensure that the work you submit is correct and accessible. Submitting the wrong link, submitting to the wrong location, submitting files that are corrupt, the wrong version, the wrong format, missing components, the wrong file type, etc. is unprofessional. It is your responsibility to check the integrity of your work immediately following submission. If I cannot access your submission, you forfeit all points for your submission.

If your work is unprofessional, you may re-submit your work. If technical issues prevent you from re-submitting, you may email me your submission. If you email me work, the time that I receive your work will become the submission time used to evaluate lateness. After the deadline passes, you may re-submit work that you discover is unprofessional, but I will apply a lateness penalty to the final submission.

Artificial Intelligence (AI). You may use AI to help you understand topics, but not to replace your writing. If you use AI to inform your writing you must cite it like any other source, even if you merely paraphrase.

Please remember that AI hallucinates (i.e., it makes up content and sources), it references message boards and social media for answers, and anything you submit becomes owned by the company running the AI software. Given this, and because OSU considers the misuse of AI as academic misconduct, I encourage you to use it wisely.

As a final thing to consider, the more we use AI, the more pervasive and powerful it becomes. It may not seem problematic to use AI to speed up academic work, but it can make my job of evaluating your work difficult. Just imagine the opposite scenario: the professor who grades you using AI, the university who admits students using AI, or the employer who uses AI to decide whose resume to select. It can feel unfair and dehumanizing. Again, the more we use it, the more these scenarios become certainties. Tread carefully.

Technology issues. According to course requirements, you must have regular internet-connected access to a working computer with some form of data redundancy (e.g., One Drive). Remember that OSU's computer labs are available should you need them. Only system-level technological interruptions documented by OSU ([see this page](#)) excuse late or missing work.

If you experience a problem with OSU systems (e.g., email, Carmen, etc) not documented by OSU, you must raise a ticket with IT ([see this page](#)). If IT confirms your issue, we will recognize IT's confirmation as a valid excuse for missing work.

Grade appeals. You may send me an email to instigate a grade appeal within 1 week after the grade has been posted. An appeal is a formal process with explicit expectations. Appeals can result in an unchanged grade, a higher grade, or a lower grade. If you wish to appeal a grade, email me that you wish to appeal and then await further instructions.

Copyright disclaimer. The lectures and materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Course leave. If you become seriously ill or something happens to you that prevents you from participating in the course for an extended amount of time (e.g., mental illness or a friend's mental illness, taking care of an immediate family member, childbirth, etc.), you may apply for course leave. You must let the instructor know of your situation as soon as practical when you become aware of the need for leave to avoid point penalties (either the day you learn of the need or the next workday). Be proactive by letting us know asap if you think you need leave. We will not grant leave retroactively. Course leave is similar to OSU's Family and Medical Leave (FML) and has many of the

same rules ([see here for more information](#)). If you qualify for leave, we will allow you to make up missed work with the following point penalties:

- -0% for work due 6 days prior to notification
- -33% for work due 7-13 days prior to notification
- -66% for work due 14-20 days prior to notification
- -100% for work due > 20 days prior to notification

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

Tone and civility: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. The instructor and TA both work very hard to provide a positive learning experience. Please keep this in mind and remain civilized and respectful in your email and discussion board communications.

Citing your sources: When we have academic discussions, please cite your sources to back up what you say. (For the textbook or other course materials, please use APA style. For online sources, be sure to include a link).

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Course technology policies

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24x7.

Baseline technical skills necessary for online courses

Basic computer and web-browsing skills

Navigating Carmen

Necessary equipment

Computer: current Mac (OS X), PC (Windows 10+), or equivalent Linux desktop/laptop with high-speed internet connection

Web cam and microphone

Necessary software

To complete this class, you will need a computer that has a webcam and microphone, and that has reliable Internet access (minimum of about 5Mbps). Most, but not all, class work can be completed using a tablet. You will also find it helpful to have access to a word processor such as Google Docs, Microsoft Word or Apple Pages. Note, OSU students have access to Microsoft Office products free of charge. To install, please visit https://osuitsm.servicenow.com/selfservice/kb_view.do?sysparm_article=kb04733

Carmen

Carmen, Ohio State's Learning Management System, will be used to host materials and activities throughout this course. To access Carmen, visit carmen.osu.edu. Log in to Carmen using your name.# and password. If you have not setup a name.# and password, visit my.osu.edu.

Help guides on the use of Carmen can be found at <https://resourcecenter.odee.osu.edu/carmen>

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor. See [Carmen accessibility for more](#).

Carmen Zoom

Office hours will be held through Ohio State's conferencing platform, Carmen Zoom. A separate guide to accessing Carmen Zoom and our office hours is posted on the course Carmen page under Files.

Students may use the audio and video functions if a webcam and microphone are available. If not, there is still a chat function within Carmen Zoom for the student to live chat with the professor or TA in the virtual office hours room.

[Carmen Zoom help guide](#)

Turnitin

Students at The Ohio State University are accountable for the integrity of the work they submit. Therefore, you should be familiar with the guidelines provided by the [Committee on Academic Misconduct \(COAM\)](#) and [Section A of OSU's Code of Student Conduct](#) in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made Turnitin, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to Turnitin from Carmen. When grading your work, I will interpret the originality report, following [Section A of OSU's Code of Student Conduct](#) as appropriate. For more information about Turnitin, please see [the vendor's guide for students](#). Note that submitted final papers become part of the OSU database.

Self-Service and Chat support: <http://ocio.osu.edu/selfservice>

Phone: 614-688-HELP (4357)

Email: 8help@osu.edu

TDD: 614-688-8743

OSU Policies

Accessibility

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the [Safe and Healthy Buckeyes site](#) for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu

Student Academic Services

Arts and Sciences Advising and Academic Services' website provides support for student academic success. Information on advising issues such as tutoring, transfer credits, academic standing, and contact information for Arts and Sciences advisors can be obtained through this website. The site is: <http://advising.osu.edu/welcome.shtml>

Student Services

The Student Service Center assists with financial aid matters, tuition and fee payments. Please see their site at: <http://ssc.osu.edu>

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Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life’s Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling [614-292-5766](tel:614-292-5766). CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at [614-292-5766](tel:614-292-5766) and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

Course Schedule

Week	Day	Date	Topics	Readings	Activities & Deadlines
1	Tue	8/20	Course Introduction	Syllabus	
	Thur	8/22	Data gathering for design	Sharp p. 259-268, Sections 8.1-8.3	

2	Mon	8/26	Final project research questions		
	Tue	8/27	Interviews	Sharp p. 268-278, Section 8.4	Assignment 1 in-class exercise
	Thur	8/29	Focus Groups	Krueger p. 53-69	
3	Mon	9/2	No Class: Labor Day		No Class
	Tue	9/3	Questionnaires & Surveys 1	Sharp p. 278-286, Section 8.5	Assignment 2 in-class exercise
	Thur	9/5	Questionnaires & Surveys 2	Dillman p. 113-126	
4	Mon	9/9	Interviews & focus groups		
	Tue	9/11	Observations 1	Sharp p. 287-298, Section 8.6-8.6.2	
	Thur	9/12	Observations 2	Sharp p. 300-305, Section 8.7	Assignment 1 Due

5	Mon	9/16	Surveys		
	Tue	9/17	Evaluation & Usability Testing	Sharp p. 495-520 Sharp p. 523-533, Sections 15.1-15.2.3	
	Thur	9/19	Experiments	Sharp p. 533-536 & Wimmer & Domminick p. 231-253	
6	Mon	9/23	Observations		
	Tue	9/24	Psychophysiology	Park, "Psychology as a tool..."	
	Thur	9/26	Field studies and catch up	Sharp p. 536-544, Section 15.4	Assignment 2 Due
7	Mon	9/30	Experiments		
	Tue	10/1	Grounded Theory	Sharp p. 549-567, Sections 16.1-16.2	
	Thur	10/3	Inspections: Heuristic Evaluations & Cognitive Walkthroughs	Sharp p. 549-567, Sections 16.1-16.2	

8	Mon	10/7	Method Selection and Study Design		
	Tue	10/8	TBA		
	Thur	10/10	No Class - Autumn Break		No Class
9	Mon	10/14	Method Selection and Study Design		
	Tue	10/16	Quantitative data analysis 1: Levels of measurement, reliability, validity	Wimmer & Domminick p. 52-54, 58-63	
	Thur	10/17	Quantitative data analysis 2: Distribution, central tendency, dispersion	Wimmer & Domminick p. 256-268 (distributions and summary stats)	

10	Mon	10/21	Study design & data collection		
	Tue	10/22	Quantitative data analysis 3: Reliability & Group Differences	Sharp p. 307-320, Sections 9.1-9.3	
	Thur	10/24	Quantitative data analysis 4: Group differences	Wimmer & Domminick p. 271-274 (sample distribution), 267-296 (Chi), & 298-310 (parametric)	
11	Mon	10/28	Data collection & analysis		
	Tue	10/29	Quantitative data analysis 5: Group differences	Sharp p. 320-326 & 329-341, Sections 9.4- 9.5	
	Thur	10/31	Quantitative data analysis 6: Relationships	Creswell p. 194-204	
12	Mon	11/4	Data collection & analysis		Assignment 3 Due
	Tue	11/5	Presenting your research	Sharp p. 342-346, Section 9.7	
	Thur	11/7	Final project workshop		

13	Mon	11/11	Exam		Exam
	Tue	11/12	Final project workshop		
	Thur	11/14	Final project workshop		
14	Mon	11/18	Final project workshop		
	Tue	11/19	Final project workshop		
	Thur	11/21	No Class - NCA Conference		No Class Final Project Report due Friday (11/22) before 11:59PM
15	Mon	11/25	Presentation workshop		
	Tue	11/26	Presentation workshop		
	Thur	11/28	No Class - Thanksgiving Break		No Class
16	Mon	12/2	Final Presentations		Final Presentation Due
	Tue	12/3	Final Presentations	Last day of class	
There is no final exam for this class					

