## COMM 3165 Evaluation & Usability Testing

School of Communication | Autumn 2025 | Section 28047

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**

How do we decide whether a website, app, game, or other technology is well designed or not? How can we gather data from users to help us evaluate designs? How do we best communicate the results of our evaluations to inform (and convince) designers and stakeholders to address the problems we've found?

The goal of this class is to help you develop the skills you need to evaluate interactive communication systems, diagnose shortcomings in design, and persuasively suggest improvements to a variety of audiences. One of the primary tools for evaluating these systems is offered by a scientific approach based on quantitative and qualitative research. In this class you will learn to use a variety of research methods to inform your conclusions about what users need and whether a system is well designed.

We will cover some basics that you might learn about in any research methods class—having a foundation in social science methodology is vital to being a good interactive technology evaluator. However, the majority of the class will be spent examining methodologies that are unique to evaluation and usability testing.

The class is designed to complement <u>COMM 3545</u>: <u>Human-Computer Interaction & User Experience (HCI & UX)</u>, which provides an introduction to HCI and UX design principles and <u>COMM 4511</u>: <u>User-Centered Communication Design</u>, 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:

- 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).

#### Course materials

**Textbook.** Sharp, H., Rogers, Y., and Preece, J. (2015). <u>Interaction Design: Beyond Human-Computer Interaction</u>. (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	15%		
Assignments	15%		
Exam	25%		
Final project	15%		
Final presentation	10%		
Lab participation and performance	20%		

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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., team participation). If your absence is due to religious observance, OSU policy handles this differently (see OSU policy below).

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 penalty (-25% penalty after class begins then -2% for each additional hour that passes). Please note, this penalty differs from the late assignment submission penalty (see Lateness policy below for details).

## **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 and users (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 explicitly covered in class lectures. The exam may include multiple choice, matching, fill in the blank, and/or short answer questions. The exam is comprehensive. The exam is open notes/book but no technology is allowed (i.e., physical materials are permitted but not digital materials/Al/internet access).

## **My 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.

## My 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 assignments 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 (Submission Integrity)**

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.

## **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.

#### 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).

## 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 <a href="https://ocio.osu.edu/help/hours">https://ocio.osu.edu/help/hours</a>, 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 <u>free of charge</u>. To install, please visit <a href="https://osuitsm.service-now.com/selfservice/kb\_view.do?sysparm\_article=kb04733">https://osuitsm.service-now.com/selfservice/kb\_view.do?sysparm\_article=kb04733</a>

#### Carmen

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

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 <u>Carmen accessibility for more</u>.

### **Carmen Zoom**

Office hours will be held through Ohio State's conferencing platform, Carmen Zoom.

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: <a href="http://ocio.osu.edu/selfservice">http://ocio.osu.edu/selfservice</a>

**Phone:** 614-688-HELP (4357)

Email: 8help@osu.edu

**TDD:** 614-688-8743

## **OSU Policies**

# **Students with Special Needs:**

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 ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at <a href="mailto:slds@osu.edu">slds@osu.edu</a>; 614-292-3307; or <a href="mailto:slds@osu.edu">slds.osu.edu</a>.

## **Religious Accommodations:**

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are

required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the <u>Civil Rights Compliance Office</u>. (Policy: <u>Religious Holidays</u>, <u>Holy Days and Observances</u>)

## Generative AI (e.g., ChatGPT) Policy

OSU approves the use of Adobe, Google (Gemini), and Microsoft (Copilot) AI tools (see official policies here).

Ohio State does NOT have a contract with OpenAI for use of the ChatGPT chatbot; however, ChatGPT, DALL-E, and Whipser technology can be accessed through the Azure Open AI Service, but I don't recommend using it.

Regardless, you have access to the some premium products via your OSU login credentials.

"All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use "unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment" unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students — undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor."

### 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 Civil Rights Compliance Office:

Online reporting form at civlrights.osu.edu

Call 614-247-5838 or TTY 614-688-8605

Or Email civilrights@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: <a href="http://advising.osu.edu/welcome.shtml">http://advising.osu.edu/welcome.shtml</a>

### **Student Services**

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

### **Copyright Disclaimer**

The 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.

#### 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 <a href="http://titleix.osu.edu">http://titleix.osu.edu</a> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

#### **Mental Health Statement:**

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 are or someone you know is 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 <a href="mailto:ccs.osu.edu">ccs.osu.edu</a> or calling 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.

If you are thinking of harming yourself or need a safe, non-judgmental place to talk, or if you are worried about someone else and need advice about what to do, 24 hour emergency help is also available through the Suicide Prevention Hotline (Columbus: 614-221-5445 / National: 800-273-8255); or text (4hope to 741741); or at suicidepreventionlifeline.org

### **Intellectual Diversity:**

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them

develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

# **Course Schedule**

Week	Day	Date	Topics	Readings	Activities & Deadlines
1	Tue	08/26	Course Introduction	Syllabus	
	Thur	08/28	Data gathering for design	Sharp p. 259-268, Sections 8.1-8.3	
2	Mon	09/01	No Class Labor Day		
	Tue	09/02	Interviews 1	Sharp p. 268-278, Section 8.4	
	Thur	09/04	Interviews 2	None	
3	Mon	09/08	Interviews		
	Tue	09/09	Observations 1	Sharp p. 287-298, Section 8.6-8.6.2	
	Thur	09/11	Observations 2	Sharp p. 300-305, Section 8.7	Assignment 1 Due Friday (9/12) before 11:59PM

4	Mon	09/15	Final Project Research Questions		
	Tue	09/16	Grounded Theory	Sharp p. 549-567, Sections 16.1-16.2	
	Thur	09/18	Questionnaires & Surveys	Sharp p. 278-286, Section 8.5	
	Mon	09/22	Observations		
5	Tue	09/23	Questionnaires & Surveys 2	Dillman p. 113-126	
	Thur	09/25	Focus Groups	Krueger p. 53-69	
	Mon	09/29	Survey		
6	Tue	09/30	Evaluation & Usability Testing	Sharp p. 495-520 Sharp p. 523-533, Sections 15.1-15.2.3	
	Thur	10/02	Experiments	Sharp p. 533-536 & Wimmer & Domminick p. 231- 253	
	Mon	10/06	Experiments		
7	Tue	10/07	Psychophysiology	Park, "Psychology as a tool"	
	Thur	10/09	Inspections: Heuristic Evaluations & Cognitive Walkthroughs	Sharp p. 549-567, Sections 16.1-16.2	Assignment 2 Due Friday (10/10) before 11:59PM

	Mon	10/13	Method Selection and Study Design		
8	Tue	10/14	Project Workday		
	Thur	10/16	Autumn Break – No Class		
	Mon	10/20	Method Selection and Study Design		
9	Tue	10/21	Quantitative data analysis 1: Levels of measurement, reliability, validity	Wimmer & Domminick p. 52-54, 58-63	
	Thur	10/23	Quantitative data analysis 2: Distribution, central tendency, dispersion	Wimmer & Domminick p. 256- 268 (distributions and summary stats)	
	Mon	10/27	Study design & data collection		
10	Tue	10/28	Quantitative data analysis 3: Reliability & Relationships	Sharp p. 307-320, Sections 9.1-9.3 & Creswell p. 194-204	
	Thur	10/30	Quantitative data analysis 4: Group differences 1	Wimmer & Domminick p. 271- 274 (sample distribution), 267-296 (Chi), & 298-310 (parametric)	

11	Mon	11/03	Data collection & analysis		
	Tue	11/04	Quantitative data analysis 5: Group differences 2	Sharp p. 320-326 & 329-341, Sections 9.4- 9.5	
	Thur	11/06	Quantitative data analysis Catch-up day		Assignment 3 Due Friday (11/7) before 11:59PM
	Mon	11/10	Data collection & analysis		
12	Tue	11/11	No Class Veteran's Day		
	Thur	11/13	TBA – Guest Lecture		
	Mon	11/17	Exam (open notes, no technology)		Exam
13	Tue	11/18	Presenting your research visually and textually	Sharp p. 342-346, Section 9.7	
	Thur	11/20	Final Project workshop	None	
	Mon	11/24	Final Project workshop		
14	Tue	11/25	Support for Final Project		Final Project Due before 11:59PM
	Thur	11/27	No Class Thanksgiving & Indigenous Peoples' Day		

15	Mon	12/01	Final presentation workshop		
	Tue	12/02	Final presentation workshop		
	Thur	12/04	Final presentations workshop		
16	Mon	12/04	Final presentations		Presentation Slides Due before class starts
	Tue	12/08	Final presentations	Last day of class	

Finals week is 12/12 – 12/18. There is <u>no</u> final exam for this class.