**COMM 3165 Evaluation and Usability Testing**
Spring 2019 – Last updated 1/7/2019

| | |
|---|---|
| Instructor: | Dr. R. Kelly Garrett |
| | 3131 Derby Hall |
| | email: garrett.258@osu.edu |
| | ***Please include "Comm3165" in the subject line*** |
| | |
| **Lecture:** | Journalism 224 |
| | T/H 11:10a – 12:30pm |
| | |
| **Laboratory Section:** | Journalism 224 |
| **(required)** | M 3:00 – 4:50pm |
| | |
| Office Hours: | Tuesdays 4-5pm + by appointment |

<u>**Rationale and Objectives:**</u>
How do we decide whether an interactive communication system is well designed or not? What kinds of data can we collect to help us make this assessment? And how do we communicate the results of evaluations and usability tests to corporate managers and system designers in ways that help them to accept the conclusions and address the problems identified?

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.

*Specific Learning Objectives:*

Students who successfully complete this course will:

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

**Required Text:**

Sharp, H., Rogers, Y., and Preece, J. (2015). Interactive Design:  Beyond Human-Computer Interaction. (4th edition) West Sussex: John Wiley & Sons, Ltd.

All other required readings are available on CARMEN.

**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.

**Policies and Expectations:**

**Class communication**: I will post class updates, extra credit opportunities, and/or additional materials as announcements on Carmen and/or to your OSU email. Please check Carmen and read your email regularly (at least 2-3 times per week) because you are responsible for this information, just as you are responsible for information in class.

**Participation is required.** While sickness and unexpected emergencies arise from time to time, *regular* absence will hurt your grade. I routinely evaluate participation via in-class activities. **If you are absent on a day when there is an in-class activity, you will not receive credit for it.** It is not possible to make up missed in-class work, but everyone can miss up to four activities without penalty. I also encourage you to bring your textbook to class, so that you can consult it during appropriate in-class activities.

**Written Assignments**: Assignment due dates are listed in the tentative schedule, below.  All assignments must be turned in to Carmen by the start of class on the day the assignment is due unless otherwise noted. Short assignments are submitted using the Carmen text editor, though I encourage you to write your answers in a word processor to avoid spelling errors and the like. Final project materials can be submitted in the file format that best suits the assignment (e.g., Word files, PowerPoint files, Acrobat files). When there are paper formatting requirements for an assignment, they are described in the assignment description.

**Late Assignments**: It is your responsibility to confirm that your assignment has been successfully uploaded to Carmen. Anything submitted after that will be considered late. There will be a 15%

score deduction the first day an assignment is late and an additional 15% deduction on the second day. After the second day, I will no longer accept the assignment.

**Challenging a Grade**: I am always willing to discuss your grades with you, but I will not do so during class time. To challenge a grade, you must wait 24 hours after the assignment is returned and then email me to make an appointment *within one week* of the assignment being returned to you.  When we meet, you must present your concerns in writing and attach the graded paper, exam, or presentation.  Please note that a challenge may result in grades being raised or lowered.

**Technology:** There are a variety of class activities that require that you use a computer. You may use the labs' laptops or your own computer for these activities. This is, however, the only time that you may use these devices. When not engaged in one of these activities, all laptops should be closed. No digital note taking here, please. Furthermore, the **use of cellphones in the classroom is strictly prohibited**. This technology is distracting to you and to your peers. If I see a cellphone in your hand, I will ask you to leave.

**Classroom Civility**: We want to build a classroom climate that is comfortable for everyone. In a communication class, it is especially important that we (1) display respect for all members of the classroom, including the instructor and students; (2) pay attention to and participate in all class sessions and activities; (3) avoid unnecessary disruption during class time (e.g., having private conversations, reading the newspaper, doing work for other classes, etc.); and (4) avoid racist, sexist, homophobic, or other negative language that may unnecessarily exclude members of our campus and classroom. This is not an exhaustive list of behaviors; rather, they represent the minimal standards that help make the classroom a productive learning environment for all concerned.

**Punctuality**: Class begins on time every day so that all scheduled discussions and activities can be completed. You are expected to be punctual. If you are late for class on a student presentation day, do not enter the classroom while one of your peers is speaking or presenting. Please wait outside until there is a break between speeches or presentations.

**Academic integrity policy**: Each student in this course is expected to demonstrate academic integrity and to abide by the *Code of Student Conduct* (http://studentaffairs.osu.edu/resource_csc.asp and see http://oaa.osu.edu/coamtensuggestions.html). *Academic misconduct* includes, but is not limited to, (1) plagiarism (using others' work without citing/crediting them), (2) fabricating information or citations, (3) facilitating acts of dishonesty by others, (4) having unauthorized possession of past exam questions, (5) submitting work previously submitted to another course or work of another person, (6) tampering with the academic work of other students, and (7) cheating on quizzes/exams. Academic misconduct on any assignment will result minimally in receiving a zero on that assignment and may also lead to further disciplinary action. **Penalty for violation of the *Code of Student Conduct* can also be extended to include failure of the course and University disciplinary action.**  It is your responsibility to be aware of the rules of academic dishonesty—ignorance is not a defense. ***When in doubt, talk to me.***

**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 Requirements:**

**Course readings are essential to full participation.** Doing the readings and reflecting on what you've read is required for this class. My lectures, our discussions, and the in-class activities all take this for granted. To ensure that you have done the reading before class, **most class sessions will include a graded assessment (typically a quiz) designed to check your understanding of the day's reading.** Quizzes cannot be made up, but I will drop your four lowest scores.

**Assignments.** The class also requires you to complete a series of out-of-class assignments. There are a total of five individual assignments, one group project, and an in-class presentation. A detailed summary of the requirements for each assignment can be found on Carmen. **As stated above, unless otherwise noted, assignments must be submitted to Carmen before the start of class on the day the assignment is due.**

**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.

**Lab participation.** Lab sections provide an opportunity to practice using skills and concepts introduced during the lecture. Lab time will also be essential to the successful completion of the final project.

**Extra Credit:**

Extra credit is available for participation in the Communication Research Experience Program (C-REP). More information about how to earn credit via C-REP is available in the *Student Guidelines for the Communication Research Experience Program*, which can be downloaded from the School of Communication's website. Note that directions referring to Comm 1100 and 1101 do not apply to this class. Instead, you can earn one point of extra credit for each hour of research experience, for a maximum of three points.

**Grading**

| | |
|---|---|
| In-class reading assessments | 10% |
| In-class activities | 10% |
| Assignments | 15% |
| Exam | 25% |
| Final project | 15% |
| Final presentation | 10% |
| Lab participation and performance | 15% |
| Extra Credit via C-REP | Up to 3% |

**Additional Resources:**

**Columbus Web Group** (http://www.meetup.com/Columbus-Web-Group/). If you are serious about a profession in ID/IXD/UXD/HCI/etc, talking to design professional is a must. Columbus is home to several groups, including this one. The Columbus Web Group hosts periodic Meet Ups, it sponsors a mentorship program geared toward students, *and* it is co-organized by an OSU SoC alum, Sean Doran. Check it out.

**Interaction Design Associations of Central Ohio**. IXDA is a global professional association (https://ixda.org/), and we are fortunate to have an active regional chapter right here in Columbus  (https://www.meetup.com/Columbus-IxDA-Group/). The group sponsors numerous regular monthly events—I've heard great things about Chat n' Pancakes; it serves as a clearinghouse for news about the field; and the national group's website features a job board that lists jobs in Columbus, and across the country.

**Student Academic Services** (http://advising.osu.edu/). 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.

**Walter E. Dennis Learning Center** (http://dennislearningcenter.osu.edu/). This is a free service available to all OSU students, and it has a proven track record of helping students succeed in college. Need a new study strategy? Better time management skills? This is the place to go.

**The Writing Center** (http://cstw.osu.edu/writing-center). This may be the last time in your life that you have easily accessible, free help available for your writing skills—use it. Being a good writer will give you an advantage in every walk of life, and if you are a Communication major, it is expected. The Center works with writers on any assignment or writing project at any stage of the writing process (brainstorming, thesis development, revising, etc.). Several types of sessions are available, including 25-minute walk-in appointments as well as online and in-person consulting. Please see the web page for more information.

**Strunk & White's** *The Elements of Style*. If you are uncertain of what constitutes good writing, this classic book is very straightforward and extremely helpful. The advice and direction it offers apply to writing in all fields.

**<u>Accessibility accommodations for students with disabilities</u>**

**The University strives to make all learning experiences as accessible as possible. 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.  You are also welcome to register with Student Life Disability Services to establish reasonable accommodations.  After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.**

## Tentative Course Schedule

Readings marked with an * are available on Carmen.

| Date | Topic | Readings | Assignment |
|------|-------|----------|------------|
| T 1/8 | Course Introduction, Syllabus | | |
| H 1/10 | Data gathering for design | Sections 7.1 – 7.3<br>(pp. 226 – 233) | |
| M 1/14 | LAB | Final project topic ideas and groups | |
| T 1/15 | Interviews | Section 7.4<br>(pp. 233 – 243) | |
| H 1/17 | Focus groups | Krueger pp. 53-69 | Assignment 1<br>Due |
| M 1/21 | NO LAB | MLK Day | |
| T 1/22 | Questionnaires & Surveys | Section 7.5<br>(pp. 244 – 251) | |
| H 1/24 | | *Dillman et al. pp. 113-126 | |
| M 1/28 | LAB | Select final project topic | |
| T 1/29 | Observations | Section 7.6, but skip 7.6.3<br>(pp. 252 – 262) | |
| H 1/31 | | Section 7.7<br>(269-273) | Assignment 2<br>Due |
| M 2/4 | LAB | Set project goals | |
| T 2/5 | Data gathering for evaluation | All of Chapter 13<br>(pp. 452 – 472) | |
| H 2/7 | Usability testing | Sections 14.1 – 14.2.3<br>(pp. 474 – 484) | |
| M 2/11 | LAB | Identify methods options | |
| T 2/12 | Experiments | Section 14.3 (pp. 484 – 488)<br>*Wimmer & Dominick pp. 231-253 | |
| H 2/14 | Field studies<br>(and wrap up prior topics) | Section 14.4<br>(pp. 488 – 496) | Assignment 3<br>Due |
| M 2/18 | LAB | Select method and start design | |
| T 2/19 | Psychophysiology | *Park, "Psychophysiology as a tool…" | |
| H 2/21 | Quantitative data analysis:<br>Levels of measurement, reliability,<br>validity | *Wimmer & Dominick<br>pp. 52-54; 58-63 | |
| M 2/25 | LAB | Feedback on research design | |

| Date | Topic | Readings | Assignment |
|------|-------|----------|------------|
| T 2/26 | Quantitative data analysis: Distribution, central tendency, dispersion | *Wimmer & Dominick pp. 256-268 (distributions and summary statistics) | |
| H 2/28 | Quantitative data analysis: Telling stories with numbers | Sections 8.1 – 8.3 (pp. 275 – 291) | Assignment 4 Due |
| M 3/4 | LAB | Feedback on research design | |
| T 3/5 | Quantitative data analysis: Testing relationships based on samples | *Wimmer & Dominick pp. 271-274 (sample distribution) 294-296 (Chi);298-310 (parametric) | |
| H 3/7 | EXAM | | |
| 3/11-15 | SPRING BREAK | No class | |
| M 3/18 | LAB | Support for projects in the field | |
| T 3/19 | Qualitative data analysis and grounded theory | Sections 8.4 and 8.6.1 (pp. 291 – 299; 303 – 308) | |
| H 3/21 | | *Creswell pp. 194 – 204 | Assignment 5 Due |
| M 3/25 | LAB | Support for data analysis | |
| T 3/26 | Inspections: Heuristic evaluations | Sections 15.1, 15.2, and 15.4 (pp. 500 – 514, 518-521) | |
| H 3/28 | Inspections: Cognitive walkthroughs | Cognitive walkthrough readings (see links on Carmen) | |
| M 4/1 | LAB | Support for data analysis | |
| T 4/2 | Analytics and predictive models | Sections 7.6.3 and 15.3 (pp. 263 – 269, 514 – 518) | |
| H 4/4 | Google Analytics | Google Analytics for Beginners (see Carmen for a list of videos and demos) | |
| M 4/8 | LAB | Last day to finish data collection | |
| T 4/9 | Planning final presentations & report | Review requirement for assignments | |
| H 4/11 | Project work day | | |
| M 4/15 | LAB | Support for project presentation & report | |
| T 4/16 | Evaluation Presentations | | Slides due |
| H 4/18 | Evaluation Presentations | | |
| M 4/22 | NO LAB | | Final Assignment Due @ 11:59pm |