

**COMM 3165 Evaluation and Usability Testing**  
Spring 2015

- Lecture:** Journalism 216  
Tu/Th 11:10a – 12:30p
- Instructor:** Cody Cooper  
211 Journalism Building  
email: cooper.2115@osu.edu  
***Please include "Comm3165" in the subject line***
- Office Hours:** Tuesday 12:30 – 2:30 & by appointment
- Laboratory Section:** Journalism 224  
**(required)** M 12:10pm-2:00pm / M 2:15pm-4:05pm
- Instructor:** Matt Irwin  
3028 Derby Hall  
email: Irwin.191@osu.edu  
***Please include "Comm3165" in the subject line***
- Office Hours:** Tuesday and Thursday 9:50am – 10:50am

**Rationale and Objectives:**

How can one evaluate whether a digital communication system is effective? How do we test whether a system is user-friendly or not? And how does one communicate the results of evaluations and usability tests to corporate managers and system designers in ways that help them to accept your conclusions and inspire them to address the problems identified?

The goal of this class is to help you develop the necessary skills to evaluate existing 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 to evaluating via both quantitative and qualitative tests. You will be trained to use a variety of methods of evaluation to inform your conclusions about whether a system is designed well.

In this course, we will cover some of the basics that you may have learned about in other methods classes—having a foundation in social science methodology is vital to being a good communication-system evaluator. However, the majority of the class will be spent examining specific methodologies that are unique to usability testing.

### ***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 a basic understanding of the R statistical computing environment

### **Required Text:**

Sharp, H., Rogers, Y., and Preece, J. (2011). *Interaction Design: Beyond Human-Computer Interaction*. (3<sup>rd</sup> edition) West Sussex: John Wiley & Sons, Ltd.

Supplementary readings will be available on CARMEN.

### **Course Format:**

This course will use a variety of instructional techniques including lecturing, class discussions, in-class activities, and individual and group assignments as mechanisms for students to learn the course material.

### **Course Requirements:**

1. *Participation is required.* While sickness and unexpected emergencies will arise from time to time, you should expect that if you are regularly absent your grade will be negatively affected. Your participation will routinely be evaluated via in-class activities and assignments. **If you are absent on a day when there is an in-class activity or assignment, you will not receive credit for that activity or assignment.** It is not possible to make up in-class work out of class.
2. *Course readings are required.* Doing the readings and engaging with what you've read are a crucial part of preparing for this class. I recognize that these tasks take time, and want to make sure that your grade reflects the energy you put into them. To this end, **there will be several pop quizzes this semester.** Quizzes will be short, and all quiz material will come from the day's reading. Please bring a pen and paper that you are prepared to turn in to every class session.

3. *Assignments.* A substantial part of the workload for this class involves completing class assignments. There will be individual assignments, one group project and an in-class presentation. A more detailed summary of the requirements for each assignment will be distributed via Carmen throughout the semester.

**Assignments must be submitted via the CARMEN dropbox at the beginning of the class period the day the assignment is due unless otherwise noted.**

Assignment due dates are listed in the tentative schedule on this syllabus. 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.

4. *Exams.* You will have two exams in this course. Exams questions will be generated from the material covered in class lectures and textbook readings.

**The second exam is comprehensive, but focuses on material from the second half of the course** (the material we cover in class / readings after the first exam). It will occur during finals week after regular class periods are complete.

These exams may include multiple choice, matching, fill in the blank, problem solving, and/or short answer questions.

5. *Lab participation.* You are enrolled in a lab section associated with this class. The TA, Matt Irwin, leads the section. The lab will provide an opportunity to practice using skills and concepts introduced during the lecture. Throughout the semester you will also conduct some of the work required for the final group project.

#### **Classroom Technology Policy**

All smartphones, music players or any other technology that interferes with class must be put away and out of sight during class unless otherwise directed. Repeated violations of this policy will result in points deducted from your final grade. Laptops will initially be allowed, but if they become a distraction for the class they will not be permitted.

### **Extra Credit**

Extra credit will be made available throughout the semester. You can earn one point of extra credit for each hour of research experience, for a maximum of three percentage points.

### **Grading Procedures**

Lab participation and performance	15%
Reading quizzes & in-class participation	5%
Assignments	30%
Final assignment	15%
Final presentation	5%
Midterm exam	15%
Final exam	15%
<hr/>	
Extra Credit	Up to 3%

### **Additional Resources:**

I encourage you to explore these support resources:

- Walter E. Dennis Learning Center (<http://all.successcenter.ohio-state.edu/>). This is a free service available to all OSU students with a proven track record for helping students succeed in college.
- The Writing Center (<http://cstw.osu.edu/writingcenter>). 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.
- Strunk & White's *The Elements of Style* (available free online, see Carmen). If you are uncertain of what constitutes good writing, this classic book is very straightforward and extremely helpful. The advice and direction offered in this book applies to writing in all fields.

### **Academic Integrity**

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](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, consult your instructor before doing anything about which you are uncertain.***

#### Accommodations for Students with Disabilities

I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances. You can also contact the office for disability services at 292-3307 in room 150 Pomerene Hall to help coordinate reasonable accommodations (telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>).

### **Tentative Course Schedule (Spring 2015)**

<b>Date</b>	<b>Topics</b>	<b>Readings</b>	<b>Assignment</b>
Tu 1/13	Course Introduction, Syllabus, Introduction to Evaluation and Usability Testing		
Th 1/15	The 4 “W”s of evaluation, Evaluation approaches and methods	12.1 – 12.3.5 (pp. 433 – 443)	
Tu 1/20	Data gathering: Introduction	7.1 – 7.3.3 (pp. 222 – 228) Carmen: TBD	
Th 1/22	Data gathering: interviews	7.4 – 7.4.7 (pp. 228 – 238)	Assignment 1 Due
	Lab: first lab section meeting		
Tu 1/27	Data gathering: Questionnaires & Surveys	7.5 – 7.5.4; 7.7 – Summary (pp. 238 – 247)	
Th 1/29	Data gathering: Observations & Triangulation	7.6 – 7.6.2 (pp. 247-268)	
	Lab		
Tu 2/3	Usability testing	14.1 – 14.2.3 (pp. 476 – 487)	Assignment 2 Due
Th 2/5	Experiments	14.3 (pp. 487 – 489) CARMEN: Wimmer & Dominick pp. 231-253	
	Lab		
Tu 2/10	Psychophysiology	CARMEN: Park, B. (2009). Psychophysiology as a Tool for HCI Research TBD	
Th 2/12	Field studies	14.4 (pp. 490 – 502)	
	Lab		
Tu 2/17	Quantitative data analysis: Levels of measurement, reliability, validity	8.1 – 8.2.1 (pp. 269 – 273) CARMEN: Wimmer & Dominick pp. 52-54; 58-63	Final Project part 1 & 2 Due

Date	Topics	Readings	Assignment
Th 2/19	Quantitative data analysis: Distribution, central tendency, dispersion	CARMEN: Wimmer & Dominick pp. 256-268 (distributions and summary statistics)	
	Lab		
Tu 2/24	<b>MIDTERM EXAM</b>		
Th 2/26	Quantitative data analysis: Telling stories with numbers	8.3 (pp. 273 – 284) CARMEN: Vance (2009)	R practical 1 Due
	Lab		
Tu 3/3	Quantitative data analysis: Testing relationships based on samples; Exam review	CARMEN: Wimmer & Dominick pp. 271-274 (sample distribution) 294-296 (Chi);298-310 (parametric)	R practical 2 Due
Th 3/5	Qualitative data analysis	8.4 – 8.4.3 (pp. 285 – 293)	
	Lab		
Tu 3/10	Using theory to support data analysis; data analysis software	8.5 – 8.6 (pp. 293 – 311)	Assignment 3 Due
Th 3/12	Using an evaluation framework: DECIDE	13.1 – 13.2.6 (pp. 455 – 475)	
	Lab		
	No Class Spring Break		
Tu 3/24	Using an evaluation framework: DECIDE	13.1 – 13.2.6 (pp. 455 – 475)	
Th 3/26	Inspections: Heuristic evaluations and walkthroughs	15.1 – 15.2.4 (pp. 505 – 518)	Assignment 4 Due
	Lab		
Tu 3/31	Reflections on the profession:	8.7 (pp. 311 – 314), CARMEN: Travis (2007). A Business Case for Usability Testing; Howe (2009). 10 Tips on Communicating with a Difficult Client; Skim Job listings @ UXPA; 2011 UPA Salary Surveys	
Th 4/2	Analytics and predictive models	15.3 – 15.4.4 (pp. 518 – 530)	Final Project part 3 & 4 due
	Lab		
Tu 4/7	TBA	TBA	
Th 4/9	TBA	TBA	
	Lab		
Tu 4/14	Evaluation Presentations		Slides due
Th 4/16	Evaluation Presentations		
	Lab		
Tu 4/21	Course wrap-up		Final Project part 5 due
Th 4/26	Project work time ( <b>no lecture</b> )		
	<b>Lab: no class</b>		
	Last day of classes ( <b>no lecture</b> )		Final Assignment All components Due @ midnight
<b>5/4</b>	<b>FINAL EXAM</b>	<b>Note: the exam begins at 10am</b>	