# Rice University Department of Psychology

# PSYC 480/640: Usability Assessment Spring 2015

T-Th 9:25-10:40 SH 562

Dr. Philip Kortum 488 Sewall Hall pkortum@rice.edu 713-348-4813

Office Hours Tuesday 2:00-3:00 or by appointment

#### **Required Texts:**

Rubin, J., & Chisnell, D. (2008). *Handbook of usability testing: how to plan, design, and conduct effective tests*. John Wiley & Sons.

Albert, W., & Tullis, T. (2013). *Measuring the user experience: collecting, analyzing, and presenting usability metrics.* Morgan Kaufman.

Other assigned readings will be posted on Owlspace.

## Learning Outcomes: At the end of this course, students will:

- 1) Be versed in the metrics used to assess usability in the laboratory and the field
- 2) Be able to perform expert (non-user-based) usability evaluations on systems
- 3) Be able to construct a valid usability testing plan, including participant recruitment
- 4) Be able to perform full-scale user based usability assessment in the lab and field
- 5) Be able to report the results of all assessments using industry standard methods
- 6) Have a clear understanding of methods used in special usability assessments for medical devices, web services and persons with disabilities

Lecture	Week	Торіс	Readings
1	1/13	What is Usability? Introduction, Class logistics, and motivations for the course	Rubin, 1, 2, 3
2	1/15	Dangers and myths of usability.  Team formation	Tullis, 1 OS: Scott OS: Molich OS:Greenberg
3	1/20	Project introduction at OEDK	
4	1/22	Usability Metrics: ISO 9241-11	Tullis, 4, 8 OS: ISO9241
5	1/27	Usability Metrics: Issue Based	Tullis, 5
6	1/29	Defining your user	Rubin, 7
7	2/3	Non-User assessment methods: Heuristics	OS: Nielsen
8	2/5	Exercise: Heuristic of your device	
9	2/10	Non-user assessment methods: Cognitive walk through	OS: Warton OS: Spencer
10	2/12	Exercise: CWT of your device	

11	2/17	Usability Testing Plan	Rubin, 5
12	2/19	Test environments Lab tour Presentations begin	Rubin, 6
13	2/24	Testing tools: logging tools and surveys	Tullis, 6
14	2/26	Running a standard protocol In class observation	Rubin, 8,9 OS: Rosenbaum OS: Dray
15	3/3	No class - Spring Break	
16	3/5	No class - Spring Break	
17	3/10	Alternate protocols: Think aloud and Co-discovery In class observation	OS: Boren
18	3/12	Participant debrief	Rubin, 10
19	3/17	EXAM 1	
20	3/19	Testing day	
21	3/24	Case studies	
22	3/26	Reporting your results	Rubin, 12 OS: NIST CIF
23	3/31	Special usability topic: Usability through web analytics	Tullis, 9
24	4/2	No class – Midterm Recess	
25	4/7	Special topics: Usability through card sorts	Tullis, 9
26	4/9	Special cases: Medical usability, mobile usability, remote usability	
27	4/14	Special populations: users with disabilities	Rubin, 13
28	4/16	Presentations	
29	4/21	Presentations	
30	4/23	Presentations	

**Examinations**: There will be one mid-term exam, but no final. The mid-term will be closed book/closed note and may cover any of the material assigned up to that point. This includes material from any of the assigned readings, my lecture notes, Lab tours, Lab exercises and presentations that other students have given.

Case study Presentations: Each student will be required to give one 10 minute presentation during the course of the semester on an applied usability paper/case study. You will select a paper from the academic literature that describes a usability assessment of a product or service. Your presentation will focus on the methods used, and your assessment of the results. Were the methods correctly applied? Are there weaknesses in the experiment? Are the results generalizable? Was the information from the test valuable in fielding the product? No report is required for this presentation, but you must supply me with a copy of the presentation material after the talk. Presentation topics are due on 2/5. Presentations begin on 2/19.

**Project presentations:** Each team will be required to give a 15 minute presentation detailing the results of their usability assessments, with 5-10 minutes for questions and discussion. These will be given to the teams that designed the products and Senior OEDK staff involved in the design. This is a presentation to your client, so *business attire is required*. A rubric will be posted on Owlspace. Time is an element in the presentation score.

**Participation:** A good deal of this class will entail open discussions of human factors issues of medical human factors, as well as discussions of student presentations and lab exercises. Active, thoughtful participation is expected from every student

#### **Evaluation:**

Heuristic evaluation report	10%
Cognitive Walkthrough report	10%
Test plan	15%
Case study presentation	5%
Mid-term exam	25%
Project presentation	10%
Project report	25%

#### Disabilities:

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

## **Honor System Policy:**

As with all endeavors at Rice, you are expected to adhere to the Honor Code and follow the guidelines given in the Honor System Handbook. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <a href="http://honor.rice.edu/honor-system-handbook/">http://honor.rice.edu/honor-system-handbook/</a>. Exams are given under the honor system. There is no make-up for exams, presentations or in class assignments except for urgent medical situations or pre-approved circumstances of an exceptional nature. Students are encouraged to bring any concerns involving academic integrity to the attention of the instructor.

This syllabus is only a guide for the course and is subject to change with advanced notice.