

**Usability Testing for Survey Research**  
**1 credit/2 ECTS**  
**Winter 2017/2018**  
**Section 1**

**Instructor(s)**

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**Short Course Description**

This course introduces the concepts of usability and usability testing and why they are needed for survey research. The course provides a theoretical model for understanding the respondent-survey interaction and then provides practical methods for incorporating iterative user-centered design and testing into the survey development process. The course provides techniques and examples for designing, planning, conducting and analyzing usability studies on web or mobile surveys.

**Course and Learning Objectives**

By the end of the course, students will...

- understand what usability and usability testing are and how to apply usability testing to survey research
- learn about moderating techniques, such as the think-aloud protocol and verbal probing
- learn when to test, where to test (lab vs. field vs. remote) and who to test with (type and number of participants)
- be able to plan for usability testing (develop protocol guide, determine test metrics, consider hardware/software)
- learn what to test: conceptual testing, paper prototypes, wireframes
- understand how to collect, record, and analyze usability data

**Prerequisites**

Students are expected to be familiar with questionnaire design. Experience with cognitive testing is a plus, but not a requirement.

**Class Structure and Course Concept**

This is an online course, using a flipped classroom design. It covers the same material and content as an on-site course but runs differently. In this course, you

are responsible for watching video-recorded lectures and reading the required literature for each unit and then “attending” mandatory weekly one-hour online meetings where students have the chance to discuss the materials from a unit with the instructor. Just like in an on-site course, homework will be assigned and graded, and there will be a final exam at the end of the course.

Although this is an online course where students have more freedom in when they engage with the course materials, students are expected to spend the same amount of time overall on all activities in the course – including preparatory activities (readings, studying), in-class-activities (watching videos, participating in online meetings), and follow-up activities (working on assignments and exams) – as in an on-site course. As a rule of thumb, for each credit offered by a course, students can expect to spend one hour per week on in-class activities and two hours per week on out-of-class activities over the span of a full 12-week term. This is a 1-credit course that runs for 4 weeks. Hence, the total average workload is about 12 hours per week.

## Mandatory Weekly Online Meetings

Wednesday, 4 pm (CET)/10 am (EST), starting February 7, 2018

Meetings will be held online through Zoom. Follow the link to the meeting sessions on the course website on <http://jpsmonline.umd.edu/>. If video participation via Internet is not possible, arrangements can be made for students to dial in and join the meetings via telephone.

In preparation for the weekly online meetings, students are expected to watch the lecture videos and read the assigned literature before the start of the meeting. In addition, students are encouraged to post questions about the materials covered in the videos and readings of the week in the “Place to post your questions” forum before the meetings (deadline for posting questions is Tuesday, 6 pm (EST)/ 12 pm (CET)).

Students have the opportunity to use the Zoom meeting room set up for this course to connect with peers outside the scheduled weekly online meetings (e.g., for study groups). Students are encouraged to post the times that they will be using the room to the course website forum to avoid scheduling conflicts. Students are not required to use Zoom and can use other online meeting platforms, such as Google Hangout or Skype.

## Grading

Grading will be based on:

- Participation in discussion during the weekly online meetings (10% of

- grade)
- Weekly online exercises reviewing specific aspects of the material covered (60% of grade)
- A final open-book online exam (30% of grade)

Dates of when assignments will be due are indicated in the syllabus. Extensions will be granted sparingly and are at the instructors' discretion.

### **Technical Equipment Needs**

The learning experience in this course will mainly rely on the online interaction between the students and the instructors during the weekly online meetings. Therefore we encourage all students in this course to use a web camera and a headset. Decent quality headsets and web cams are available for less than \$20 each. We ask students to refrain from using built-in web cams and speakers on their desktops or laptops. We know from our experience in previous online courses that this will reduce the quality of video and audio transmission and therefore will decrease the overall learning experience for all students in the course. In addition, we suggest that students use a wire connection (LAN), if available, when connecting to the online meetings. Wireless connections (WLAN) are usually less stable and might be dropped.

### **Long Course Description**

Usability testing in survey research allows in-depth evaluation of how respondents and interviewers interact with questionnaires, particularly web and mobile surveys. A respondent may understand the survey question and response options but may be unable to select their answer accurately on the small screen of a smartphone. Although there is a growing body of literature on best practices for web surveys and mobile devices, not all design guidelines work equally well for all surveys and all survey populations. In addition, it is clear that the capabilities of computerized surveys are constantly emerging. Examples are the use of images, videos, maps and GPS, interactive features, and mobile devices. As a result, it is critical for researchers to have the necessary tools to evaluate, test, and modify surveys to incorporate user-centered design in an iterative method as part of the survey pretesting process.

## Readings

**Primary readings will be from the following volume:**

Geisen, E., & Romano Bergstrom, J. (2017). *Usability Testing for Survey Research*. Waltham: Morgan Kaufmann. (available at <https://www.amazon.com/Usability-Testing-Survey-Research-Geisen/dp/0128036567>)

Additional required and recommended readings will be made available on the course website:

<http://jpsmonline.umd.edu/>

## Academic Conduct

Clear definitions of the forms of academic misconduct, including cheating and plagiarism, as well as information about disciplinary sanctions for academic misconduct may be found at

<http://www.graduate.umaryland.edu/policies/misconduct.html> (University of Maryland) and

[https://www.uni-mannheim.de/1/english/research/Good%20Research%20Practice/141119-Satzung%20wiss%20FV%20Senat\\_en.pdf](https://www.uni-mannheim.de/1/english/research/Good%20Research%20Practice/141119-Satzung%20wiss%20FV%20Senat_en.pdf) (University of Mannheim).

Knowledge of these rules is the responsibility of the student and ignorance of them does not excuse misconduct. The student is expected to be familiar with these guidelines before submitting any written work or taking any exams in this course. Lack of familiarity with these rules in no way constitutes an excuse for acts of misconduct. Charges of plagiarism and other forms of academic misconduct will be dealt with very seriously and may result in oral or written reprimands, a lower or failing grade on the assignment, a lower or failing grade for the course, suspension, and/or, in some cases, expulsion from the university.

## Accommodations for Students with Disabilities

In order to receive services, students at the University of Maryland must contact the Disability Support Services (DSS) office to register in person for services. Please call the office to set up an appointment to register with a DSS counselor. Contact the DSS office at 301.314.7682; <http://www.counseling.umd.edu/DSS/>.

Students at the University of Mannheim should contact the Commissioner and Counsellor for Disabled Students and Students with Chronic Illnesses at <http://www.uni->

[mannheim.de/studienbueros/english/counselling/disabled\\_persons\\_and\\_persons\\_with\\_chronic\\_illnesses/](http://mannheim.de/studienbueros/english/counselling/disabled_persons_and_persons_with_chronic_illnesses/).

## Course Evaluation

In an effort to improve the learning experience for students in our online courses, students will be invited to participate in an online course evaluation at the end of the course (in addition to the standard university evaluation survey). Participation is entirely voluntary and highly appreciated.

## Class Schedule

*Please note that assignments and dates are subject to change. Information (e.g., articles and assignments) posted to the course website supersedes the information noted here.*

### Unit 1: Introduction

Online meeting (Emily Geisen, Jennifer Romano-Bergstrom): Wednesday, February 7, 2018, 4 pm (CET)/10 am (EST)

Assignment 1 due:  
February 14, 2018, 4 pm (CET)/10 am (EST)

Video lecture (Emily Geisen, Jennifer Romano-Bergstrom): available online  
Wednesday, January 31, 2018

Readings:

From Textbook:

- Chapters 1 & 2

Recommended (optional):

- Couper (2000). Usability evaluation of computer-assisted survey instruments. *Social Science Computer Review*, 18(4), 384-396.

### Unit 2: Moderating Techniques

Online meeting (Emily Geisen, Jennifer Romano-Bergstrom): Wednesday, February 14, 2018, 4 pm (CET)/10 am (EST)

Assignment 2 due: February 21, 2018, 4 pm (CET)/10 am (EST)

Video lecture (Emily Geisen, Jennifer Romano-Bergstrom): available online  
Wednesday, February 7, 2018

Readings:

From Textbook:

- Chapters 6 & 7

### **Unit 3: Test Materials, Metrics, Equipment, Location**

Online meeting (Emily Geisen, Jennifer Romano-Bergstrom): Wednesday,  
February 21, 2018, 4 pm (CET)/10 am (EST)

Assignment 3 due: February 28, 2018, 4 pm (CET)/10 am (EST)

Video lecture (Emily Geisen, Jennifer Romano-Bergstrom): available online  
Wednesday, February 14, 2018

Readings:

From Textbook:

- Chapters 4 & 5

### **Unit 4: What to test / Analyzing Results**

Online meeting (Emily Geisen, Jennifer Romano-Bergstrom): Wednesday,  
February 28, 2018, 4 pm (CET)/10 am (EST)

Video lecture (Emily Geisen, Jennifer Romano-Bergstrom): available online  
Wednesday, February 21, 2018

Readings:

From Textbook:

- Chapters 3 & 8

### **Project/Homework/Final Exam**

A final open-book online exam

Due: March 7, 2018, 4 pm (CET)/10 am (EST)

**Note:** Student access to the course website will be revoked two weeks after the final exam.



	<b>Unit 1</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>Video available</b>	Wednesday, January 31, 2018	Wednesday, February 7, 2018	Wednesday, February 14, 2018	Wednesday, February 21, 2018
<b>Online meeting</b>	Wednesday, February 7, 2018, 4 pm (CET)/10 am (EST)	Wednesday, February 14, 2018, 4 pm (CET)/10 am (EST)	Wednesday, February 21, 2018, 4 pm (CET)/10 am (EST)	Wednesday, February 28, 2018, 4 pm (CET)/10 am (EST)
<b>Homework due</b>	Wednesday, February 14, 2018, 4 pm (CET)/10 am (EST)	Wednesday, February 21, 2018, 4 pm (CET)/10 am (EST)	Wednesday, February 28, 2018, 4 pm (CET)/10 am (EST)	
<b>Final exam due</b>				Wednesday, March 7, 2018, 4 pm (CET)/10 am (EST)