University of Maryland – College Park
College of Information Studies

INST 702 Advanced Usability Testing
Spring 2019

Instructor: Vera T. Rhoads

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Skype: Progled
Twitter: @vtrhoads

Office hours: By appointment, and immediately before and after class sessions
For the team sessions we will use zoom https://zoom.us/j/5557427054

Course Hours: Tuesdays 6:00 – 8.45 pm in HBK 1115
January 29, 2019 – May 14, 2019

Course Description:
Examine theories, issues, and emerging trends in Usability Testing. This course will examine
the nature of usability, usability testing and introduce students to the methods of user-centered
systems design as practiced by usability professionals. The class will combine theoretical
analyses with direct and extensive practical exercises. It will address usability testing methods --
how to design and implement them both for desktop and mobile sites. Students will learn the
complex process of facilitating usability testing and how to synthesize usability test data into an
actionable report.

You will learn how usability fits in a project management lifecycle alike Agile and about sprint
releases and how usability relates to DevOps.

You will learn the usability skills needed to work in a variety of companies and organizations –
small, large, technology focused, government and a start up (expand on this)

Course Objectives:

At the end of this course, students will be able to:
● Identify major historical, current and emerging trends in usability
● Understand the basic principles of usability testing – how to set up, conduct and report on
  the results of a usability test
● Develop a plan for a usability test
● Conduct a hands on usability test
● Deliver an actionable report summarizing the results of a usability test

Format of the class:

Lectures, small group discussions and exercises, online work and quizzes in ELMS, student presentations, guest lecturer presentations, final student research projects

Required readings:


Sauro, Jeff (2018) Benchmarking the User Experience


Please note that there are additional required articles for each session identified in the course schedule below.

Recommended Reading:


Sauro, Jeff and James Lewis (2016) Excel and R Companion to the 2nd Edition of Quantifying the User Experience, Elsevier

There is also a list on Amazon listmania with the recommended list of readings – http://www.amazon.com/lm/RKXIO8U77GQDZ/ref=cm_lmn_pthnk_view?ie=UTF8&lm_bb=

Or you can search by my name or the name of the class. “INFM 702”

Students are encouraged to contribute with their suggestions to the recommended reading list as well.

Required Usability Testing Software:

Morae or UserZoom or other usability software can be used. The University has a signed agreement with UserZoom. Passwords, instructions and training will be provided.

Student Requirements/Methods of Evaluation:
Course Requirements:

Both, regular attendance and active participation are expected. **All assignments are to be submitted in complete form and on time.** Any delay in submission of assignments will affect the grading. Since the course is taught in seminar style, student participation is mandatory. Students will be asked to make oral presentations as required in the course.

Grading:
The grade will be assigned based on the completion of course projects and class participation in the following manner:

- Class Attendance, Discussion and Participation – 10%
- Required Readings, Online Quizzes – 20%
- Leading a Current Topics Discussion – 10%
- Peer Evaluations – 10%
- Final Class Project – Usability Test – 50%

(distributed
(10% proposal, 10% tasks, 15% Presentation, 15% final report)

Academic integrity:
The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information, please visit [http://www.shc.umd.edu](http://www.shc.umd.edu).

Leading Current Topics Discussions:
Each student will be required to lead one **15 min discussion on current usability topics.** The topics must current and relevant. The discussion will introduce the topic and the pros and cons of the innovation or discuss relevant aspects.

Quizzes:
There will be two online quizzes.

Peer Evaluations:
Peer Evaluations for your team and for you will be required.
Final Project Requirements:

The final project for class INST 702 focuses on applying the methods examined through course readings and course discussion to a real life usability test.

Each student will develop and conduct a specific usability test using industry standard software (Morae, UserZoom or other). A proposal for the study will be required. The usability test will include a proposal, a test script, developed usability tasks, facilitator script.

These tests can be conducted as a group project.

The results of the study will be presented into an actionable report.
IRB CITI training is required prior to starting the project.

Final Project Requirements

WHAT:
All students in the Advanced Usability Class will create the plan for and actually execute a usability study from the very beginning through the tests with users to the actionable report presented to the client.

Students will be given an opportunity to work on a real life project with actual clients.

The final project for the class INST 702 focuses on applying the materials examined through course readings and course discussion to a real life usability test.

Each student will develop and conduct a specific usability test using industry standard software (Morae, UserZoom, other tools, paper prototyping, and audio/video recording).
A proposal for the study – idea submission - will be required. The usability test will include a test script, developed usability tasks, and a facilitator/ moderator script. The results of the study will be presented into an actionable report.

WHO:
Students are expected to work in teams of about 3-4 people. Teams larger than that are harder to coordinate and manage. If circumstances and unique topics require it, students can work individually.

HOW:
Applying principles and strategies discussed in the class.
When?

Idea Submission Due: February 26, 2019  
Usability Study Proposal: March 5, 2019  
Test Plan Due: March 26, 2019  
Tasks Due: March 26, 2019  
All Plans Approved: April 2, 2019  
Usability Study Testing  
Preliminary Results: April 9, 2019  
Deadline for final submission: May 14, 9  
Team Presentations will be on: May 7, 2019 and May 14, 2019

Idea Submission Requirements: Due: February 26, 2019

This is brief one page that describes the following:

- What the student/group of students intends to study- name of the system, url, type of the problem studied

  “I intend to study the ability to use Bank of America on a mobile device” This can be further detailed – especially focusing on depositing checks

- Types of users who would be needed for the specific usability study

- Type of usability methods most effective for the selected topic – remote usability, mobile testing, task based usability

- Any challenges that you foresee with the study completion within the prescribed timeframes?
Questions or further direction needed to take the idea to an executed study – for example – how do I recruit a specific type of user? Should I choose to focus on this aspect or another aspect?

Tips:

Please choose something that you personally find interesting

Select a topic that have some experience or knowledge of (if you have the interest you can acquire the knowledge)

Think about how easy/ difficult it will be to recruit potential users for the usability tests

Report Requirements:
The report will feature a one page executive summary, a discussion of the findings, analysis and results, plus actionable recommendations for improvement. The appendix will include write ups of the usability sessions.

Presentation Requirements: Final Presentation:
A 20 minute presentation will be given to the class at the end of the semester.
The presentation needs to address the following:

- Topic of the usability study
- Detailed analysis of the users – ideally in a user matrix
- Tasks
- Findings and analysis
- Limitations of the study and further research possibilities

Course Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Session #</th>
<th>Topics</th>
<th>Assigned Readings</th>
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<tbody>
<tr>
<td>January 29, 2019</td>
<td>1</td>
<td><strong>Overview of the class</strong></td>
<td>Introductions</td>
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<tr>
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<td></td>
<td>Introductions</td>
<td>Chapter 1- Handbook of Usability Testing</td>
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<td>Review of Syllabus</td>
<td>Nielsen on Usability -</td>
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<td>Class Expectations/ Policies/ Grading</td>
<td><a href="http://www.nngroup.com/articles/usability-101-introduction-to-usability/">http://www.nngroup.com/articles/usability-101-introduction-to-usability/</a></td>
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<tr>
<td></td>
<td></td>
<td>Basic Concepts and Definitions - Approaching the users</td>
<td><a href="http://alistapart.com/article/usability-testing-demystified">http://alistapart.com/article/usability-testing-demystified</a> -- a lot of this is already in their book</td>
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<td>Date</td>
<td>Session</td>
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<td>Resources</td>
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<td>February 05, 2019</td>
<td>2</td>
<td><strong>Value of Usability</strong>&lt;br&gt;<strong>Usability Methods</strong>&lt;br&gt;<strong>Types of Usability tests</strong>&lt;br&gt;<strong>Comparison Studies vs A/B Testing Environments - labs</strong>&lt;br&gt;<strong>Field Studies</strong>&lt;br&gt;<strong>Remote Testing</strong></td>
<td>Chapters 1-7 – <em>Rocket Surgery Book</em>&lt;br&gt;&quot;Seven Myths of Usability ROI&quot;&lt;br&gt;<a href="http://www.baychi.org/calendar/20031014/">http://www.baychi.org/calendar/20031014/</a>&lt;br&gt;Two measures that will justify any design change&lt;br&gt;<a href="http://www.userfocus.co.uk/articles/usability_ro_i.html">http://www.userfocus.co.uk/articles/usability_ro_i.html</a>&lt;br&gt;eCommerce ROI: Why Usability ALWAYS Beats Advertising -&lt;br&gt;<a href="http://www.usefulusability.com/ecommerce-roi-why-usability-always-beats-advertising/">http://www.usefulusability.com/ecommerce-roi-why-usability-always-beats-advertising/</a> &quot;&lt;br&gt;CITI website [<a href="http://www.citiprogram.org">www.citiprogram.org</a>] with Single Sign On. This means that you will be able to use your UMD credentials to log on. Folks without UMD credentials will still be able to access their accounts without issue <a href="mailto:irb@umd.edu">irb@umd.edu</a> or x54212.&lt;br&gt;Chapters 1 and 2 – <em>Benchmarking the User Experience</em></td>
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<td>February 19, 2019</td>
<td>4</td>
<td><strong>Writing the Usability StudyScripts</strong>&lt;br&gt;<strong>The anatomy of a usability test</strong>&lt;br&gt;<strong>Assignments - quizzes to be completed in Canvas</strong>&lt;br&gt;<strong>Tasks</strong>&lt;br&gt;<strong>Tasks Creation</strong></td>
<td>Watch Steve Krug in action&lt;br&gt;<a href="http://info.usertesting.com/OnDemandWebinarMay2013SteveKrugSignup.html?gclid=CMP1_J1vbkCFepZ7Aod5W0Alw">http://info.usertesting.com/OnDemandWebinarMay2013SteveKrugSignup.html?gclid=CMP1_J1vbkCFepZ7Aod5W0Alw</a>&lt;br&gt;Chapter 7 – Benchmarking the User Experience&lt;br&gt;Chapters 2 and 3 – <em>Handbook of Usability Testing</em></td>
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<td>Date</td>
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<td>Topic</td>
<td>Chapters/Handbook</td>
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| February 26, 2019 | 5   | Cognitive and Usability  
Project Lifecycles – Agile methodologies  
Usability Testing Equipment and Software  
Actual Demonstrations  
Types of companies  
Industry Guest Speaker | Chapters 4 and 5 Handbook of Usability Testing |
| March 05, 2019    | 6   | Types of companies  
Guest Speaker  
Usability testing for AI, VR, AR  
IoT and drones  
Usability and PET  
Augmented Reality and Usability | Chapters 6, 7 and 8- Handbook of Usability Testing  
Industry Guest Speaker – Usability of VR and AR systems |
| March 12, 2019    | 7   | Mobile Usability  
Usability Testing is a very advanced technical company | Chapter 9 - Handbook of Usability Testing |
|                   |     | Spring Break                                                        |                                                        |
| March 26, 2019    | 8   | Universal Usability – Accessibility  
Guest Speaker | Chapters 10 and 11 - Handbook of Usability Testing  
Introduction to Web Accessibility - http://www.w3.org/WAI/intro/accessibility.php |
<p>| April 2, 2019     | 9   | Designing a Usability Test and selling usability | Chapters 13 - Handbook of Usability Testing |</p>
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<td>Audience and Recruiting</td>
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<td>Facilitation and Moderation</td>
<td>Chapters 14 - Handbook of Usability Testing</td>
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<td>April 23, 2019</td>
<td>12</td>
<td>Usability Data Analysis &amp; Reporting</td>
<td>Chapters 12 - Handbook of Usability Testing</td>
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<td>Reporting</td>
<td>Chapter 12 – Observing the User Experience – reporting your results – the anatomy of a benchmark report</td>
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<td><a href="http://www.humanfactors.com/PETposter.asp">www.humanfactors.com/PETposter.asp</a></td>
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<td>Demonstration on wearable technology</td>
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<td>May 7, 2019</td>
<td>14</td>
<td>Putting it all together</td>
<td>Work on your final presentations</td>
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<td>Staying current in the professional</td>
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<td>May 14, 2019</td>
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<td>Review of the class</td>
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*Syllabus is subject to change to keep it as current and as relevant as possible.*