### SI 699 001 WN 2020

Jump to Today

### **Basic Information**

SI699: Mastery User Experience Research and Design Instructor: Dr. Robin N. Brewer, <a href="mailto:rnbrew@umich.edu">rnbrew@umich.edu</a>

Course Time and Location: Thursdays, 1-4pm in 2185 North Quad

Office Hours: Wednesdays - 11am-12pm in 4372 North Quad, schedule an appointment via Google

<u>calendar (Links to an external site.)</u>, other times available upon request

Materials: No textbook is required for this class, however I recommend Universal Methods of

<u>Design (Links to an external site.)</u> by Martin and Hanington as a useful resource.

# **Mastery Courses**

Mastery courses are advanced one-semester courses that require students to demonstrate command of the key theories, methods, approaches, and capabilities required for entry into a specific class of information professions. Unlike other courses with significant faculty-led structure and scaffolding, mastery courses require you to demonstrate initiative and show that you can independently design, implement, evaluate, and complete a sizable project, with faculty primarily in the role of advisor and mentor. The goal is not to teach you technical or social science methods, but help you think out of the box, beyond what is familiar and comfortable. Successful completion of a mastery course implies a level of proficiency comparable to or exceeding a well-launched employee in a field.

### **Course Description**

This mastery course provides you the opportunity to develop and demonstrate mastery in User Experience (UX) research and design. This includes the application of design theories, concepts, and principles in order to:

- 1. Identify and articulate a meaningful user experience challenge or problem
- 2. Conduct UX research with appropriate methods to uncover user needs, document UX research results, and articulate user experience requirements
- 3. Develope, refine, prototype, and validate user experience design solutions, and
- 4. Effectively communicate with stakeholders.

You will have opportunities to integrate methods and theories about user experience design in this course by engaging in a whole process from identifying design issues to developing design solutions. You will work on a single project end-to-end during the semester. You will ideally work on a project in teams of 2–3 students. For the most part, you will choose and design projects from scratch, though projects for real-world clients will be allowed as long as you meet the course requirements.

There is no prescribed project topic. Instead, you identify a meaningful challenge or problem and scope it into a project. Some potential project domains are: accessibility, nutrition, fitness, health, work, education, collaboration, social life, entertainment, financial safety/planning, smart home, internet of things, safety, privacy, security, empathy, equity, diversity, inclusion. This is an intentionally broad mandate and you are encouraged to consider multiple potential audiences, perspectives, scales, technologies, and social implications before pursuing one specific project in-depth. We will brainstorm and develop topics in the first class. You are encouraged but not required to think about potential problems and challenges, or areas of interest in advance.

# **Course Objectives**

You will be expected to:

### RESEARCH + ANALYZE

- Understand, frame, and investigate a problem
- Conduct UX research with project-appropriate methods to understand the needs of primary and secondary users and stakeholders, beyond on-campus interviews/surveys, understanding the strengths and limitations of potential approaches
- Analyze collected data and present findings through established methods, such as affinity diagramming, personas, scenarios, user journeys, etc
- Assess and prioritize UX requirements based on UX research.

#### **DESIGN**

- Fully explore the solution space based on formative research from users (primary and secondary)
- Identify acceptable solutions, identify pros/cons of each solution, and iteratively refine the solution
- Describe core research and design processes used in UX
- Engage in constructive peer design critique
- Clearly and concisely articulate your approach to design and user experience design
- Formulate and communicate a research-supported narrative that defends your design decision

#### **IMPLEMENT**

- Implement prototypes with tools common in design including but not limited to Photoshop, Illustrator, Arduino, 3D printing, Proto.io, HTML, CSS, Sketch, Axure.
- Justify and be able to defend your research process, design process, and implementation choices COMMUNICATE
  - Complete and document a professional, portfolio-quality project using recognized experience design methods
  - Effectively visualize and present design solutions and concepts in a clear and concise manner with appropriate audiovisual methods
  - Articulate recommendations and next steps for full implementation of your solution.

### **Assessments and Grading**

In graduate school, grading is (or ought to be) a secondary motivation. I hope you are motivated not by the hope of getting an "A" but because you want to cultivate your skills as a designer and researcher and you recognize this class provides you opportunities to do precisely that. I will use grading to provide feedback that helps you improve your work rather than summative feedback (feedback that tells you how you did). In alignment with the iterative thought process, your group can request up to three re-assessments on milestones throughout the semester. To do so, send an email to the instructor to notify a regrade is being initiated, resubmit the assignment on Canvas, add a note to the submission detailing what has changed. All regrade requests and changes must be submitted within one week of the posted grade.

Your grade for this course will be out of 100 points and will be determined based on:

- Milestones (70 points)
  - o MS0: Project pitches (2 points)
  - o MS1: Project goals + motivation (8 points)
  - o MS2: Research plan + materials (10 points)
  - o MS3: Analysis + findings (10 points)
  - o MS4: Design requirements (5 points)
  - o MS5: Initial design concept + rationale (5 points)
  - o MS6: Low-fidelity prototype evaluation (4 points)
  - o MS7: Final design concept + rationale (5 points)

- o MS8: Poster (1 point)
- o MS9: Video (5 points)
- o MS10: Final presentation (10 points)
- o MS11: Team peer grading (5 points)
- Final project report (15 points)
- Skillshare (5 points)
- Class attendance and participation (10 points)

#### How to Succeed

User experience research and design is a risky business. Not all projects succeed. Sometimesthey go down blind alleys, struggle to find a compelling problem definition, underestimate the difficulty of a particular problem, or discover that a simple, best solution for a chosen problem already exists. Because there are circumstances beyond your control and understandable miscalculations, I will be looking at a number of criteria to assess your performance on the project. While specific milestones may name more specific, narrow criteria, in general I will be looking for evidence of the following throughout all your efforts:

- Mastery of the methods covered during your time at UMSI
- Your ability to derive insight from the methods
- Your ability to derive insight and inspiration from existing research and your research findings
- Creativity of your proposed solution(s)
- Thoroughness and thoughtfulness of your solutions
- Persuasiveness of your communicative materials (presentations, web content, demos)
- Integration of insights, inspiration, empathy, and creativity
- Effective planning and prioritization
- Your ability to identify, learn from, and correct your mistakes
- Do your best, trust in you and your team (if applicable), and have fun

#### Attendance

Your group activities and class participation grade both rely on you being in class (remotely or in-person). You are responsible for finding out what you missed in class by referring to the syllabus and to your classmates.

#### **Timeliness and late policies**

Timeliness is critical in professional settings. Managers and clients don't like to pay for work that's turned in late, and they aren't interested in hearing about why something is late. Start early and manage your projects so that you have plenty of time at the end to deal with unexpected surprises. Also, many of our in-class assignments involve getting instructor and peer feedback. For this reason, you must finish assigned work on time. Your grade on assignments and the semester project will decline one full grade for each day it is late, unless I explicitly approve the delay in advance.

Additionally, I expect everyone to conduct themselves in a professional manner during class. That includes showing up to class on time; late arrivals distract everyone. It also means treating others with respect, even if you disagree with them.

### Accommodations

For anyone needing an accommodation to make the class work better for your needs, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way the course is usually taught may be modified to facilitate your participation and progress.

As soon as you make me aware of your needs, we can work with the Services for Students with Disabilities (SSD) office at the beginning of the semester, if necessary, to help determine appropriate academic accommodations. SSD (734-763-3000; <a href="http://ssd.umich.edu">http://ssd.umich.edu</a> (Links to an external site.)) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated as such.

If you need to miss class due to observing a religious holiday, please contact me at least one week in advance by email to discuss any make-up assignments.

Feeling overwhelmed, depressed, and/or in need of support? There is help for that. You can contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and https://caps.umich.edu/ during and after hours, on weekends and holidays, or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (734) 764-8320 and

<u>https://www.uhs.umich.edu/mentalhealthsvcs (Links to an external site.)</u>, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources (Links to an external site.).

For a listing of other mental health resources available on and off campus, visit: http://umich.edu/~mhealth/ (Links to an external site.)

### **Academic Integrity**

Unless otherwise specified in an assignment all submitted work must be your own, original work, or in the case of group assignments, original work of your group. Any excerpts, statements, or phrases from the work of others must be clearly identified as a quotation, and a proper citation provided. Any violation of the School's policy on Academic and Professional Integrity (stated in the Master's and Doctoral Student Handbooks) will result in serious penalties, which might range from failing an assignment, to failing a course, to being expelled from the program. Violations of academic and professional integrity will be reported to UMSI Student Affairs. Consequences impacting assignment or course grades are determined by the faculty instructor; additional sanctions may be imposed by the assistant dean for academic and student affairs.

### **Course Schedule**

Week	Topic/goals	Do Before Class	Assignments
1 1/9	Course overview + ideation		MS0: Project pitches (due 1/14)
2 1/16	Project pitches + team formation	Add pitches to slides	MS1: Project goals/motivation (due 1/21)
3 1/23	Research plan + recruitment materials	Draft research plan + recruitment materials  Read Choosing the Right UX Research  Method (Links to an external site.) and When to Use Which User-Experience Research  Methods (Links to an external site.) (20 UX  Methods in Brief)	MS2: Research plan + materials (due 1/28)
4 1/30	UX research update  Guest lecture: Dr. Osarieme Omokaro, Google	Draft UX research progress, challenges, questions for class	
5 2/6	UX research update	Draft UX research findings	MS3: Analysis + Findings (due 2/11)
6 2/13	Design in practice	Draft design requirements	MS4: Design requirements (due 2/18) Skillshare sign-up (due 2/18)
7 2/20	Design proposals + low fidelity prototypes	Draft initial design concept + rationale	Skillshare #1  MS5: Initial design concept + rationale

			(due 2/25)					
8	CLASS OPTIONAL							
2/27	Create a low fidelity prototype and update evaluative research plan with group Read 5 principles for more accurate user testing (Links to an external site.)							
9								
3/5	SPRING BREAK - NO CLASS							
10	CLASS CANCELLED							
3/12	Complete anonymous team Work on video of low-fidel							
11			MS6: Low-fidelity prototype evaluation					
3/19	Evaluative + remote research	Evaluate a low-fidelity prototype with users	Skillshare #2					
12	Narratives		Skillshare #3					
3/26		Draft poster design	MS7: Final design concept + rationale (due 3/31)					
13	Guest lecture: Dr. Haley	Class only from 1:45 - 3:00pm	MS8: Posters					
4/2	MacLeod, Facebook	Work on high-fidelity prototypes and posters	(presented 4/9)					
14	Videos	Poster Session	MS9: Project video (due 4/14)					
4/9	Ryan Wilcox - Meet in Duderstadt 1180 Teleconferencing Room	Watch Pocket Production series (Links to an external site.)	MS10: Final presentation (presented 4/16)					
15 4/16	Final presentations	Finish final presentation	MS11: Team peer grading (due 4/21)					
Final r	reports due: Monday 4/20							

## **Course Summary:**

**Date** Details

Tue Jan 14, 2020

Assignment Milestone 0: Project Pitches due by 11:59pm

Assignment Milestone 1: Project Goals and Motivation due by 11:59pm

Tue Jan 28, 2020

Assignment Milestone 2: Research Plan and Materials due by 11:59pm

Tue Feb 11, 2020

Assignment Milestone 3: Analysis + Findings due by 11:59pm

Tue Feb 18, 2020

Assignment Milestone 4: Design Requirements due by 11:59pm

Thu Feb 27, 2020

Assignment Milestone 5: Initial Design Concept + Rationale due by 11:59pm

Mon Mar 16, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Tue Mar 17, 2020

Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

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Wed Mar 18, 2020

Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

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Calendar Event	BlueJeans	Meeting:	SI699 -	Remote	Class	Option	1pm to 4pm
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Thu	Mar	10	20	20	١
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Assignment	Milestone 6: Low Fidelity Prototype Evaluation	due by 12:59pm
Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
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Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
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Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
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Fri Mar 20, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

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Mon Mar 23, 2020

Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

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Tue Mar 24, 2020			
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
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Wed Mar 25, 2020			
Wed Wai 23, 2020	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
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	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
Thu Mar 26, 2020			
2 2 20, 2020	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class

Option

Assignment Skillshare due by 11:59pm

1pm to 4pm

Fri Mar 27, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

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Calendar Event <u>BlueJeans Meeting: SI699 - Remote Class Option</u> 1pm to 4pm

Mon Mar 30, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Tue Mar 31, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Wed Apr 1, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

Thu Apr 2, 2020

Calendar Event BlueJeans Meeting: SI699 - Remote Class Option 1pm to 4pm

	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
Fri Apr 3, 2020		BlueJeans Meeting: SI699 - Remote Class Op BlueJeans Meeting: SI699 - Remote Class Op	
Mon Apr 6, 2020	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Op	tion 1pm to 4pm
Tue Apr 7, 2020	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Calendar Event	BlueJeans Meeting: SI699 - Remote Class Option	1pm to 4pm
	Assignment	<u>Milestone 7: Final Design Concept +</u> <u>Rationale</u>	due by 11:59pm
Thu Apr 9, 2020	Assignment M	ilestone 8: Poster due by 11:59pm	
Wed Apr 15, 2020	Assignment M	ilestone 9: Video due by 11:59pm	
Thu Apr 16, 2020	Assignment M	ilestone 10: Final Presentation due by 12pm	
Tue Apr 21, 2020	Assignment Fi	nal Project Report due by 11:59pm	
April 2020		Calendar	

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29 Previous month	30 Previous month Click to view event details	31 Previous month Click to view event details	1 Click to view event details	2 Click to view event details	3 Click to view event details	4
5	6 Click to view event details	7 Click to view event details	8 Today	9 Click to view event details	10	11
12	13	14	15 Click to view event details	16 Click to view event details	17	18
19	20	21 Click to view event details	22	23	24	25
26	27	28	29	30	1 Next month	2 Next month
3 Next month	4 Next month	5 Next month	6 Next month	7 Next month	8 Next month	9 Next month

Course assignments are not weighted.