



LMC6399 SYLLABUS

Discovery & Invention, Fall 2020 (3 Credits)

Meetings: Tuesday [Meet as a group] / Thursday [Meet in pairs] 3:30 pm - 4:45 pm

Instructor

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Email

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Office Hours & Location

Online, by appointment

What does “good design” mean for digital artifacts?

In order to answer this question in a rigorous way, you will need to adopt some sort of design research method. Such methods, which are the subject of this course, are innumerable. But they might be broadly characterized by the terms *discovery* and *invention*.

Design research can mean collecting evidence about the process of design through interviews. It can mean evaluating the use of design artifacts using direct observation. It can also mean using design as a mechanism for learning about your

own life experiences or those of others. Throughout the term, you will read about design research methods particularly suited to digital media and test them out for yourself.

We will begin with a brief introduction to design, then explore methods with fundamentally different assumptions: scientific, interpretive, reflexive, critical, and speculative, to name a few. Finally, we will wrap up with a discussion of social justice in design research.

There will be a number of assignments, which will be graded using a contract-system (see below). Each of you will lead us in the discussion of one reading sometime during the course of the term. Small-scale

design research projects will give you an opportunity to apply what you learn from those readings. Finally, the findings from your own research projects will provide the basis for a final research report in which you answer the question posed above: what does “good design” mean?

This course has no prerequisites, but is required for Master’s and PhD students in Digital Media.

OBJECTIVE

To lay a foundation for understanding design research methods as related to digital media.

COVID-19 Accommodations

The Fall 2020 version of this course is designed to be run remotely because of the risks related to meeting in person during the COVID-19 pandemic. To fully participate, you will need regular access to a high-speed internet connection. If that is not possible for you, please reach out to me so we can assess your situation. We must all acknowledge that this will not be a “normal” semester. And although we should strive to create a stimulating and rewarding learning environment, complications are bound to arise. Dealing with them will require flexibility and mutual trust. Please do not hesitate to contact me directly if there is anything else you would like to discuss before the beginning of the course or at some later point.

LEARNING OUTCOMES

- To understand the methodological foundations of design research
- To use the methods presented in this course to pose research questions,

collect evidence, and make claims about digital artifacts.

- To design and analyze digital artifacts with an awareness of history, respect and sensitivity to multiple and diverse audiences.
- To learn to write persuasively about digital artifacts for specific audiences.

ASSIGNMENTS

The purpose of assignments is to give you regular, repeated practice exercising the course goals. There are several types of assignments in this course: readings responses, exercises, and a final research report.

Reading Responses

Regular readings will structure the theoretical portion of the course. Each student should complete readings and prepare a short, written response (300-500 words). Your responses should address the following questions:

- What would you say is the main question or claim of the writing?
- What kind of evidence do the authors use to answer this question or support the claim? In your own words, describe an easily graspable example of this evidence.
- In plain language, describe the concrete activities the authors carried out in order to gather and analyze their evidence?
- Pose a question that you have about these activities and the evidence they produce.

Over the course of the semester, each student will be responsible for presenting one reading in greater depth. I will circulate

a signup sheet to determine the schedule of student presentations. Guidelines for presentations will be posted on Canvas.

All reading selections listed on the syllabus are tentative. Additional readings may be assigned as supporting material.

Research Exercises

In order to give you opportunities to practice the methods you are reading about, there will be multiple short research exercises throughout the term. Instructions will be provided for each.

Final Research Report

In this research report, you will use evidence from prior design research exercises throughout the term to address the question: what can we mean by “good design,” when we are analyzing or creating digital media artifacts?

Grading

Reading Responses and exercises will be graded according to a contract model. If you complete all parts of the assignment, you will get an A. Points will be deducted only if you are missing components of the assignment. Class participation is strongly encouraged, but not graded. The final research report will be given a numerical grade, following a rubric distributed with the assignment. Your final grade for the class will be calculated as follows:

50% Exercises

30% Reading Responses

20% Final Research Report

Deadlines

All assignments will include submission instructions and a due date. Late submissions will be penalized one letter grade (%10). All assignments (with the exception of the final research report) will be accepted up until the last day of class. Failure to complete a number of readings, exercises, or the final research report may be grounds for a failing grade.

CLASS REQUIREMENTS AND POLICIES

Attendance

Class will be held online. Students are expected to attend all sessions and actively participate in all classes.

Readings and Materials

Readings will be distributed electronically via Canvas. Check the “files” tab. Additional materials for assignments will be distributed with the instructions on Canvas. You will need your own laptop computer (Windows or Mac) as well as access to a strong network connection to participate in synchronous sessions.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit: <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>.

Plagiarism of any form will not be tolerated and will result in a failing grade for the course. This is not only the uncredited copying of text from another's work but also

copying ideas or code from other digital artifacts. However, adaptation of code samples (provided or found online) is not necessarily plagiarism, as long as it is appropriately credited. Having said that, students are encouraged to share and critique each other's work. You are allowed (and encouraged!) to work together with other students, but collaboration is only permitted when specified. On all other assignments, you are expected to complete and turn in your own work. Students may not submit work on another's behalf. Unauthorized use of any previous semester course materials is prohibited. Violating these terms will be considered a direct violation of academic policy and will be dealt with according to the GT Academic Honor Code.

Accommodations for Students with Disabilities

If you are a student with learning needs that requires special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

It is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and

the student body. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek.

Debate, Diversity, and Respect

In this class, we will present and discuss a diversity of perspectives. Although you may not always agree with others' perspectives, you are expected to be respectful of others' values and beliefs. Repeated inappropriate or abusive comments and/or behavior will be addressed accordingly. If you feel that your perspectives are being ignored or slighted, or you in anyway feel uncomfortable in the classroom, please contact me immediately.

The Communication Center

The Communication Center is located in Clough Commons, Suite 447. It is an excellent resource for any student (undergraduate or graduate) who wants help with a communication-related paper. With the pandemic underway, the communication center is continually revising its practices. For information on making an appointment please visit <http://communicationcenter.gatech.edu/content/makeappointment>. If you need assistance with the appointment system, you can call 404-385-3612. All services are free and confidential.

ASSIGNMENTS

E1 = Exercise 1 - Write an Evocative Object Memoir

E2 = Exercise 2 - Redesign the Silent Game

E3 = Exercise 3 - Interview a Designer

E4 = Exercise 4 - Make a Gift for a Designer

E5 = Exercise 5 - Critique a Design

E6 = Exercise 6 - Design a Workshop

R1 - R9 = Reading Responses

F = Final Research Report based on findings from one of the exercises

SCHEDULE

DATE	DAY / THEME	READINGS	ASSIGNMENTS
Week 1 Introduction to Design Research			
August 18	Tuesday [Meet as a group]	Syllabus	
August 20	Thursday [Meet as a group]	Papert, Seymour. "Gears from My Childhood"	E1 Assigned
Week 2 What is Design?			
August 25	Tuesday [Meet as a group]		Play "The Silent Game" using Mecabricks E2 Assigned
August 27	Thursday [Meet in pairs]	John Habraken, et. al. <i>Concept Design Games, Book One</i>	E1 Due Discussion
Week 3 What is Design Research?			
September 1	Tuesday [Meet as a group]	Buchanan. 2001. "Design Research and the New Learning."	R1 Due

Week 7		Design Research: Critical Strategies	
September 29	Tuesday [Meet as a group]	Bardzell, Jeffrey, and Shaowen Bardzell. 2013. "What is Critical about Critical Design?" Ratto, Matt. 2011. "Critical Making: Conceptual and material studies in technology and social life."	R5 Due
October 1	Thursday [Meet in pairs]		E4 Due E5 Assigned
Week 8		Design Research: Feminist and Reflective Strategies	
October 6	Tuesday [Meet as a group]	D'Ignazio Catherine and Lauren Klein. 2020. <i>Data Feminism</i> (excerpt). Sengers, P., Boehner, K., David, S., & Kaye, J. J. 2005 "Reflective Design."	R6 Due
October 8	Thursday [Meet in pairs]		Discussion
Week 9		Design Research: Postcolonial and Anti-Racist Strategies	
October 13	Tuesday [Meet as a group]	Smith, Linda Tuhiwai. 1999. <i>Decolonizing methodologies: Research and indigenous peoples</i> (excerpt) Benjamin, Ruha. 2019. <i>Race after Technology</i> (excerpt)	R7 Due
October 15	Thursday [Meet in pairs]		E5 Due E6 Assigned
Week 10		Design Research: Participatory Strategies	
October 20	Tuesday [Meet as a group]	Ehn, Pelle. "Participation in Design Things."	R8 Due

		Rosner, Daniela K., Saba Kawas, Wenqi Li, Nicole Tilly, and Yi-Chen Sung. 2016. "Out of Time, Out of Place: Reflections on Design Workshops as a Research Method"	
October 22	Thursday [Meet in pairs]		Discussion
Week 11	Design Research: Social Justice Strategies		
October 27	Tuesday [Meet as a group]	JafariNaimi, Nassim. 2018. "Doing Justice to Stories"	R9 Due
		Costanza-Chock, Sasha. 2020. <i>Design Justice</i> . (excerpts)	
October 29	Thursday [Meet in pairs]		E6 Due F Assigned
Week 12	Individual Meetings		
November 3	Tuesday	NO CLASS - Please Vote	
November 5	Thursday [Meet in pairs]		Guest: David Ribes
Week 13	Final Research Report Proposals		
November 10	Tuesday [TBD]		F Group Feedback
November 12	Thursday [TBD]		Guest: Chris LeDantec
Week 14	Final Research Report Presentations		
November 17	Tuesday [Meet as a group]		F Presentations
November 19	Thursday [Meet as a group]		Guest: Nassim Parvin

Week 15

**Course
Reflection**

November
24

Tuesday
[Meet as a group]

Discussion/
Evaluations
