# LMC 6399 Syllabus – Discovery and Invention

Fall 2023 3 Units

(Details of the syllabus subject to change; the version on Canvas will be the most up-to-date!)

# Course Information

### **Course Meeting**

Monday/Wednesday 2:00-3:15pm Skiles 346

Research Workshops online on MS Teams, selected Fridays

#### **Instructors:**

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# Drop-In ("Office") Hours

- Link on canvas
- Can also use Friday workshop times for additional Q&A

## **Course Description**

What makes research creative? In this class, we will explore a number of research methods that can be characterized as creative. Such methods might be broadly defined by the terms "discovery" and "invention".

Creative research can mean collecting evidence about the creative process through interviews. It can mean evaluating the creative use of artifacts using direct observation. It can also mean using creative practice as a mechanism for learning about your own life experiences or those of others. Throughout the term, you will read about creative research methods particularly suited to digital media and test them out for yourself.

We will begin with a brief introduction to different ways of understanding the world, and then explore methods in 4 different modules: interviews and observations; using design; authorial design methods; and approaching cultural and social justice issues in creative research. Each of you will lead us in the discussion of one reading sometime during the course of the term. Small-scale research projects will give you an opportunity to apply what you learn from those readings.

Finally, the findings from these research projects will provide the basis for a final research report and a final project. You will have two options for the final project: 1) extending one of the assigned research exercises 2) writing your own proposal for future research

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

# Materials

All required readings will be available as PDFs through Canvas or the Georgia Tech library

### **Course Technology**

- Readings and assignments will be on Canvas
- We may use a Microsoft Teams group for backchannel discussion and sharing links and resources.

#### **Course Objectives and Learning Outcomes**

The course objective is to lay a foundation for understanding creative research methods as related to digital media. The course learning outcomes are:

- To understand the methodological foundations of creative research
- To use the methods presented in this course to pose research questions, collect evidence, and make claims about digital artifacts.
- To create 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 and Grading

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

#### **Reading Reflections: 15%**

You will be responsible for 5 reading responses during the semester. You can do these at any time, but I highly suggest turning in 1 per module and writing immediately after reading, so that you are not doing them all at the end of the semester.

Regular readings will structure the theoretical portion of the course. Each student should complete readings and prepare a short, written response (300-500 words). Writing a response to what you read helps you to pay attention to what's important. It also creates a record for your own use, should you ever need to revisit these methods. 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 research method used. In other words, what concrete activities did the authors carry out to gather and analyze their evidence?
- Pose a question that you have about these activities and the evidence they produced.
- Discuss how this approach could be useful (or not so useful) in your own research interests.

Reading reflections will be submitted as Discussion posts on Canvas (you may comment on your peers' reflections for participation credit). Reading reflections will be graded using a contract system: if you complete the assignment fully and address all the required questions, you will be awarded full points.

## **Class Participation: 10%**

Two aspects make up your participation grade:

Over the course of the semester, each student will be responsible for presenting one reading in greater depth (either individually or as a pair with another student). I will circulate a signup sheet to determine the schedule of student presentations. Guidelines for presentations will be posted on Canvas.

You are also expected to participate in conversations about the class readings. This can be done verbally in class through seminar-style discussions; it can also be done online on Canvas by submitting thoughtful comments on your peers' reading reflections on the discussion board.

## **Methods Exercises: 40%**

In order to give you opportunities to practice the methods you are reading about, there will be multiple research exercises throughout the term. Several exercises will provide you opportunities to collect data, leading up to an exercise focused on analyzing those data. Instructions will be provided for each.

- ME1: Qualitative Interview submit your interview guide, a corrected/edited transcript of your interview, interview recording, and short reflection memo.
- ME2: Probes -- submit your interview guide and probe/artifact, a corrected/edited transcript of your interview, interview recording, and short reflection memo.

- ME3: Speculative design submit your interview guide and probe/artifact, a corrected/edited transcript of your interview and recording (or autoethnographic notes), and short reflection memo.
- ME4: Qualitative analysis submit your codes, coded/annotated version of a transcript, and a reflection memo on initial themes and findings

Submission of your exercise materials (e.g., interview guides, transcripts, recordings) will be graded using a contract system: if you submit all the components, you will be awarded full points on those parts. (Don't worry if you don't do a perfect job using the methods, this is an opportunity for you to try them out!). The written memos, which allow you to reflect on your use of the methods, will be graded based on quality.

# **Final Project Checkpoints: 15%**

In order to give you opportunities to understand different parts of the research process, there will be multiple assignments throughout the term. These can also help you frame your final project. Instructions will be provided for each.

- FPC1 Brainstorming research questions (4 points)
- FPC2 IRB/CITI Certification (3 points)
- FPC3 Starting a literature review and annotated bibliography (4 points)
- FPC4 Final project proposal (RQ(s) and methods) (3 points)

Final project checkpoints will be graded using a contract system: if you complete the assignment, you will be awarded full points.

#### Final Project: 20%

At the end of the term, you will develop a final project. You have two options for this project:

Option 1: Extend one of the research exercises assigned in the course, but at a more significant scale of investigation. The specifics of each of the final report will differ based on the student's project. If the student is interested in using this project as part of a research publication, they should get IRB approval **before** interacting with participants. In general, a final report should contain the following and be approximately 3000-4800 words (about 5-8 single spaced pages), not counting references.

- Abstract
- Problem statement/research question
- Related work
- Explanation of your approach, methods, and (if applicable) design work
- Summary of your initial findings
- Describing how your findings relates to the related work
- Future directions or new questions this project raised

Option 2: Write a full proposal for a short creative research project, which could conceivably be carried out as an independent study next term with a professor of your own choosing. The specifics of this proposal will be customized to the goals of each student. In general a proposal should contain the following and be approximately 3000 words (about 5 single spaced pages) not counting references:

- Abstract
- Problem statement/research question
- Related work
- Proposed work, and methods
- Intended designs (if applicable)
- Intended deliverables and outcomes
- Planned Timeline

Half of the final project points will be graded using a contract system: if you complete the assignment, you will be awarded full points. Half of the final project points will be graded based on quality of the submission.

# Workshops

Over the semester, we will have several interactive virtual workshops on Fridays to go over research professionalization topics. Attendance is strongly encouraged, though we will record the sessions for those who cannot make the time.

- W1: Academic Reading Strategies Friday Aug 25
- W2: Institutional Review Boards (IRBs) Friday Sep 15
- W3: Citation management tools Friday Sep 29
- W4: Conferences and publications Friday Oct 27
- W5: Writing about your research Friday Nov 17

# Class Schedule

Date	Topic, Readings and Class Activities	Assignments	
Mon	Course Intro		
Aug	Class:		
21	• Introductions		
	Design activity		
	Syllabus		
Wed	Epistemology and Research Questions		
Aug	Readings:		
23	<ul> <li>John W. Creswell. 2014. Research Design: Qualitative, Quantitative, and Mixed</li> </ul>		
	Methods Approaches. Chapter 1: The Selection of a Research Approach (pgs 30-55 in PDF).		
	<ul> <li>Annette Lareau. 2021. Listening to People: A Practical Guide to Interviewing,</li> </ul>		
	Participant Observation, Data Analysis, and Writing It All Up. Excerpts from Chapter		
	2: Before you Begin – Dreaming and Thinking. (Read pgs 11-17; and "Your		
	Research Journey on pgs 29-33)		
	Class:		
	<ul> <li>Discussion early steps of research, epistemology, research approaches</li> </ul>		
	<ul> <li>Activity on brainstorming research ideas and RQs</li> </ul>		
	<ul> <li>Introduce Final Project Checkpoint 1 on brainstorming research ideas (Due Fri Sep</li> </ul>		
	1)		
Fri	W1: Online Workshop: Academic Reading Strategies		
Aug			
25	<ul> <li>Strategies for reading; reading for different purposes</li> </ul>		

Date	Topic, Readings and Class Activities	Assignments	
	Module 1: Learning About People – Interviews and Observations		
Mon Aug 28	Preparing for Interviews  Readings  Annette Lareau. 2021. Listening to People: A Practical Guide to Interviewing, Participant Observation, Data Analysis, and Writing It All Up.  Excerpts from Chapter 3: Preparing – The Early Steps in a Study. (Read pages 38-49; 52-59). Can skip "What to Wear" and "Safety in the Field"  Excerpts from Chapter 4: Learning to Interview – What to do Before and after the Interview. (Read pages 60-64; 74-90)  Class  Discussion on readings  Look at a sample interview guide		
Wed Aug 30	<ul> <li>Activity - Preparing an interview guide on technology use in everyday life</li> <li>Doing Interviews Readings:         <ul> <li>Annette Lareau. 2021. Listening to People: A Practical Guide to Interviewing,</li></ul></li></ul>	Bring your interview guide from Mon	
Fri Sep 1 Mon Sep 4	LABOR DAY HOLIDAY – NO CLASS	FPC1 Due	
Wed Sep 6	Ethnography/observation (while people do interviews)  Readings:  • Annette Lareau. 2021. Listening to People: A Practical Guide to Interviewing, Participant Observation, Data Analysis, and Writing It All Up.  • Excerpts from Chapter 6: Learning to do Participant Observation: A Practical Guide (Read pages 140-143)  • Chapter 7: Writing High Quality Field Notes: Details Matter (pgs 163-194)  Class  • Discussion of readings • Discussion of memoing, and sample analytic memos • Signing up for reading presentations in future weeks		

Date	Topic, Readings and Class Activities	Assignments
	Module 2: Using Design in Qualitative Research	
Mon Sep 11	<ul> <li>Knowledge and Research Through Design Readings:         <ul> <li>Schon (1983) The Reflective Practitioner. Routledge. Chapter 3: Design as a Reflective Conversation with the Situation. (Pg 76-104)</li> <li>Vera Khovanskaya, Phoebe Sengers, Melissa Mazmanian, and Charles Darrah. 2017. Reworking the Gaps between Design and Ethnography. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, 5373–5385. <a href="https://doi.org/10.1145/3025453.3026051">https://doi.org/10.1145/3025453.3026051</a></li> </ul> </li> <li>Class         <ul> <li>Reading presentations and discussion</li> <li>Discussion of politics and uses of design</li> </ul> </li> </ul>	
Wed Sep 13	<ul> <li>Probes Readings:         <ul> <li>Bill Gaver, Tony Dunne, and Elena Pacenti. 1999. Cultural probes. interactions 6, 1</li></ul></li></ul>	
Fri Sep 15	<ul> <li>W2: Online Workshop: Institutional Review Boards (IRB)</li> <li>Why IRB is important and doing IRB before your research!</li> <li>Introduce FPC2: Getting CITI certification (Due Oct 6)</li> </ul>	ME1 Due
Mon Sep 18	<ul> <li>Values in Design</li> <li>Readings:         <ul> <li>Batya Friedman, Peter H. Kahn, and Alan Borning. 2008. Value Sensitive Design and Information Systems. In The Handbook of Information and Computer Ethics, Kenneth Einar Himma and Herman T. Tavani (eds.). John Wiley &amp; Sons, Inc., Hoboken, NJ, USA. (Read pages 69-80; 85-94)</li> <li>Phoebe Sengers, Kirsten Boehner, Shay David, and Joseph Jofish Kaye. 2005. Reflective design. In Proceedings of the 4th decennial conference on Critical computing between sense and sensibility - CC '05, ACM Press, New York, New York, USA, 49-58. <a href="https://doi.org/10.1145/1094562.1094569">https://doi.org/10.1145/1094562.1094569</a></li> </ul> </li> <li>Class:         <ul> <li>Reading presentations and discussion</li> <li>VSD Activities</li> </ul> </li> </ul>	

Date	Topic, Readings and Class Activities	Assignments
Wed	Doing a Literature Review	
Sep 20	<ul> <li>Richmond Y. Wong and Deirdre K. Mulligan. 2019. Bringing Design to the Privacy Table: Broadening "Design" in "Privacy by Design" Through the Lens of HCI. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19). 1–17. https://doi.org/10.1145/3290605.3300492</li> </ul>	
	<ul> <li>Class</li> <li>Reading presentations and discussion</li> <li>Overview of why a review is useful</li> <li>Finding sources; creating an annotated bibliography</li> <li>Introduce FPC3: Starting your literature review (Due Oct 27)</li> </ul>	
	Module 3: Authorial Design Methods	
Mon Sep 25	Speculative and Critical Design  Read  Anthony Dunne and Fiona Raby. 2001. Design Noir: The Secret Life of Electronic Objects. Birkhauser. (Excerpt, pgs 58-65)  Anthony Dunne and Fiona Raby. 2013. Speculative Everything. The MIT Press, Cambridge, Massachusetts  (A/B chart, preface, pg vii)  Chapter 1: Beyond Radical Design? (pgs 1-9)  Chapter 3: Design as Critique. (pgs 33-45)  Ivica Mitrovic, 2015. "Introduction to Speculative Design Practice," https://speculative.hr/en/introduction-to-speculative-design-practice/  Class  Reading presentations and discussion  Speculative and critical design brainstorming activities	
Wed Sep 27	<ul> <li>Critical Making Read         <ul> <li>Matt Ratto. 2011. Critical making: Conceptual and material studies in technology and social life. Information Society 27, 4 (2011), 252–260.</li></ul></li></ul>	
Fri Sep 29	W3: Online Workshop: Citation Management Tools  Using Zotero	ME2 Due

Date	Topic, Readings and Class Activities	Assignments
Mon	Autoethnographic Methods	
Oct 2	<ul> <li>Carman Neustaedter and Phoebe Sengers. 2012. Autobiographical design in HCI research: designing and learning through use-it-yourself. In Proceedings of the Designing Interactive Systems Conference (DIS '12). 514–523. <a href="https://doi.org/10.1145/2317956.2318034">https://doi.org/10.1145/2317956.2318034</a></li> <li>Jen Liu, Daragh Byrne, and Laura Devendorf. 2018. Design for Collaborative Survival: An Inquiry into Human-Fungi Relationships. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18). 1–13. <a href="https://doi.org/10.1145/3173574.3173614">https://doi.org/10.1145/3173574.3173614</a></li> </ul>	
	Reading presentations and discussion  Time to work on ME3.	
Wed	Time to work on ME3  Design Fiction	
Oct 4	Read	
0014	<ul> <li>Richmond Wong, Using Design Fiction and Science Fiction to Interrogate Privacy in Sensing Technologies. (Blog Post). <a href="https://medium.com/@richmondywong/using-design-fiction-and-science-fiction-to-interrogate-privacy-in-sensing-technologies-ea963b3017cd">https://medium.com/@richmondywong/using-design-fiction-and-science-fiction-to-interrogate-privacy-in-sensing-technologies-ea963b3017cd</a> </li> <li>Richmond Y. Wong, Deirdre K Mulligan, Ellen Van Wyk, James Pierce, and John Chuang. 2017. Eliciting Values Reflections by Engaging Privacy Futures Using Design Workbooks. Proceedings of the ACM on Human Computer Interaction 1, CSCW (2017). <a href="https://doi.org/10.1145/3134746">https://doi.org/10.1145/3134746</a></li> </ul>	
	<ul> <li>Reading presentations and discussion</li> <li>Design fiction activity or ME3 time</li> </ul>	
Fri	Design netion detivity of twice time	FPC2 due
Oct 6		
	Interlude – Other Research Examples	
Mon Oct 9	FALL BREAK – NO CLASS	
Wed	Flex Day – TBD. Catch up day in case we have to cancel a class earlier. Otherwise, we can	
Oct	look at one of the following:	
11	Community and participatory-based research methods	
	Workshop methods	
	Art-inspired research methods	
	<ul><li>More-than-human design approaches</li><li>Quantitative or computational methods</li></ul>	
	Historical/Archival methods	
	Design Fiction	
	<ul> <li>Go over some readings from the additional resources list)</li> </ul>	
	Have another guest speaker	
Mon	Guest speaker TBD (online or in person)	
Oct	Reading: we will read 1 paper by the guest speaker, and have questions prepared  about of time.	
16 Wed	ahead of time Guest speaker TBD (online or in person)	
Oct 18	Reading: we will read 1 paper by the guest speaker, and have questions prepared ahead of time	
-		1

Date	Topic, Readings and Class Activities	Assignments
Fri Oct		ME3 Due
20		
	Module 4: Analyzing Qualitative and Design Research	
Mon Oct 23	<ul> <li>Qualitative Analysis 1</li> <li>Readings         <ul> <li>Johnny Saldaña. 2013. The Coding Manual for Qualitative Researchers. Sage, Los Angeles. Chapter 1: An Introduction to Codes and Coding. Pgs 1-40</li> </ul> </li> <li>Class         <ul> <li>Bring a printed copy of your transcript from one of ME1-ME3. Make sure you've looked at your transcript to make sure it's ok – other people will look at it. Edit out sensitive data if needed.</li> <li>Introduce ME4 on Analysis (due Fri Nov 17)</li> </ul> </li> </ul>	Bring a printed copy of one transcript from ME1-ME3
Wed Oct 25	<ul> <li>Qualitative Analysis 2</li> <li>John Lofland, David Snow, Leon Anderson, and Lyn Lofland. 2006. Analyzing Social Settings: A guide to qualitaitve observation and analysis. Wadsworth, Belmont, CA. Chapter 9, Developing Analysis (pg 195-219)</li> <li>Virginia Braun, Victoria Clarke, Nikki Hayfield, and Gareth Terry. 2019. Thematic Analysis. In Handbook of Research Methods in Health Social Sciences, Pranee Liamputtong (ed.). Springer Singapore, Singapore, 843–860. <a href="https://doi.org/10.1007/978-981-10-5251-4">https://doi.org/10.1007/978-981-10-5251-4</a> 103</li> <li>Class</li> <li>Overview of qualitative analysis techniques and perspectives</li> <li>Sample coding schema</li> <li>Bring another printed copy of your transcript from one of ME1-ME3. Make sure you've looked at your transcript to make sure it's ok – other people will look at it. Edit out sensitive data if needed.</li> </ul>	Bring a printed copy of one transcript from ME1-ME3
Fri Oct 27	W4: Online Workshop: Publishing Conferences and Journals	A3 Due
Mon Oct 30	<ul> <li>Analyzing Design Work Read</li> <li>William Gaver. 2014. Science and Design: The Implications of Different Forms of Accountability. In Ways of Knowing in HCI, Judith S. Olson and Wendy A. Kellogg (eds.). Springer New York, New York, NY, 143–165. https://doi.org/10.1007/978-1-4939-0378-8 7</li> <li>Sandjar Kozubaev, Chris Elsden, Noura Howell, Marie Louise Juul Søndergaard, Nick Merrill, Britta Schulte, and Richmond Y. Wong. 2020. Expanding Modes of Reflection in Design Futuring. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20). 1–15. https://doi.org/10.1145/3313831.3376526</li> <li>Class</li> <li>Reading presentations and discussion</li> </ul>	
	Introduce FPC4 – final project proposal (due Fri Nov 10)	

Date	Topic,	Readings and Class Activities	Assignments
Wed	Contributions, Evaluation		
Nov	Read		
1	•	Steve Harrison, Sengers, Phoebe, and Tatar, Deborah. <b>The Three Paradigms of HCI</b> .	
		1–18.  Jacob O. Wobbrock and Julie A Kientz. 2016. <b>Research contribution in human-</b>	
	•	computer interaction. interactions 23, 3 (April 2016), 38–44.	
		https://doi.org/10.1145/2907069	
	Class	111tb3.//d01.01g/10.11+3/2307003	
	•	Reading presentations and discussion	
	•	Overview of validity and quality	
	ı	Module 5: Theory, Culture, and Design	
Mon	Justice	· · · · · · · · · · · · · · · · · · ·	
Nov	Read		
6	•	Nassim Parvin. 2018. Doing Justice to Stories: On Ethics and Politics of Digital	
		Storytelling. Engaging Science, Technology, and Society 4, (November 2018), 515–	
		534. https://doi.org/10.17351/ests2018.248	
	•	Sasha Costanza-Chock 2020. Directions for Future Work: From #TechWontBuildIt	
		to #DesignJustice. In Design Justice. The MIT Press, 211–236. (Web link:	
	Class	https://designjustice.mitpress.mit.edu/pub/ev26fjji/release/1)	
	Class	Duccontations and discussion	
Wed	Fomini	Presentations and discussion st and Abolitionist Methods	
Nov	Read	st and Abolitionist Methods	
8	•	Ruha Benjamin. 2019. <b>Introduction.</b> In Race after technology: abolitionist tools for	
		the new Jim code. Polity, Medford, MA. (pg 11-46)	
	•	Catherine D'Ignazio and Lauren F. Klein. 2020. Chapter 2: Collect, Analyze, Imagine,	
		<b>Teach.</b> In Data feminism. The MIT Press, Cambridge, Massachusetts. (pg 49-72).	
		(Web link: <a href="https://data-feminism.mitpress.mit.edu/pub/ei7cogfn/release/4">https://data-feminism.mitpress.mit.edu/pub/ei7cogfn/release/4</a> )	
	Class		
	•	Presentations and discussion	
Fri			FPC4 Due
Nov			
10 Man	Disas	rse Analysis	
Mon Nov	Read	ise Alialysis	
13	Neau	Ellie Harmon and Melissa Mazmanian. 2013. Stories of the Smartphone in	
13	•	everyday discourse: conflict, tension & instability. In Proceedings of the SIGCHI	
		Conference on Human Factors in Computing Systems (CHI '13), ACM Press, New	
		York, New York, USA, 1051-1060. https://doi.org/10.1145/2470654.2466134	
	•	Anna Lauren Hoffmann. 2020. <b>Terms of inclusion: Data, discourse, violence.</b> New	
		Media & Society (September 2020). 18 pages.	
		https://doi.org/10.1177/1461444820958725	
	Class		
	•	Presentations and discussion	
	•	Overview of discourse analysis approaches	

Date	Topic, Readings and Class Activities	Assignments
Wed Nov	Peer Review and Final Projects Read	Bring your final project
15	<ul> <li>Nick Merrill. 2020. How I Write Reviews. <a href="https://www.else.how/p/how-i-write-reviews">https://www.else.how/p/how-i-write-reviews</a></li> <li>Dan Cosley. 2014. How I Review Papers.         <a href="https://blogs.cornell.edu/danco/2014/06/12/how-i-review-papers/">https://blogs.cornell.edu/danco/2014/06/12/how-i-review-papers/</a> (Reading the review notes after the footnotes is optional)</li> <li>An Unofficial Guide to Reviewing for CHI. (Downloaded Aug 2023). Read Section 3 (pg 9-18)</li> </ul> Class <ul> <li>Doing peer reviews</li> </ul>	proposal from FPC4
	Pair peer reviews on final project drafts	
Fri Nov 17	W5: Writing about your research	ME4 Due
Mon Nov 20	Understanding Cultural Artifacts  Read  • Shannon Mattern. 2021. Unboxing the Toolkit. Toolshed. Retrieved May 17, 2023 from <a href="https://tool-shed.org/unboxing-the-toolkit/">https://tool-shed.org/unboxing-the-toolkit/</a> Class  • Presentations and discussion	
Wed Nov 22	THANKSGIVING HOLIDAY - NO CLASS	
	Final Projects Module	
Mon Nov 27	Flex Day – TBD. Catch up day in case we have to cancel a class earlier, or start final project presentations earlier if needed. Otherwise, we can look at one of the following:  Community and participatory-based research methods  Workshop methods  Art-inspired research methods  More-than-human design approaches  Quantitative or computational methods  Historical/Archival methods  Go over some readings from the additional resources list)  Have another guest speaker	
Wed Nov	Final Project Presentations 1 Class	
29 Mon	<ul> <li>About 12 presentations, 5 minutes each</li> <li>Final Project Presentations 2</li> </ul>	
Mon Dec 4	Class  • About 12 project presentations, 5 minutes each	
Wed Dec 13	- About 12 project presentations, 5 minutes each	Final project due (5:30pm)

# ChatGPT/AI Tools Policy

I want to acknowledge that we are still in a period where there are not clear norms about how to use ChatGPT and similar AI tools. This policy may get updated over the semester as we all learn about different uses of these tools, or encounter them in new situations.

Assignments are a form of communication. The assignments in this class are meant to be opportunities for you to show me how well you're meeting the course objectives (of being able to analyze, critically think, or apply new skills). And the assignments provide an opportunity to evaluate how well you are meeting those course objectives, so that I can give you feedback to improve, and so I can adjust my teaching as we go along. Using automated tools to do most of the assignment for you break that feedback loop – instead of these assignments being a communication mechanism between us, they just become more busy work that doesn't mean anything (which none of us should want!)

ChatGPT and AI tools are based on matching patterns on past materials, and they're not actively thinking/reasoning like a human does. (A metaphor: if you asked me to design a bridge without any engineering training, and I drew up some blueprints based on a bunch of designs of bridges through Google, it might look pretty cool and it might even stand up! But we probably wouldn't build that exact bridge because I didn't follow any of the reasoning and requirements that's been developed in structural and civil engineering).

Assignments in this class may not always feel straightforward (that's the nature of research!). There can be temptation to turn to an automated AI tool as soon as you hit a challenge. It's ok to sit for a while and be unsure, or work on something else for a while and come back, or talk to a person. I'd rather you talk to your peers first for ideas and brainstorming before turning to ChatGPT. (In the same way that you'll get richer research data by talking to real people than talking to a ChatGPT persona; you'll get richer research ideas by talking to real people instead of talking to ChatGPT!).

That being said, I know that tools like ChatGPT can be useful for certain types of tasks, or as resources to help in writing. Therefore, **every assignment must include a ChatGPT & AI Use statement at the end** (approximately 100 words) describing if and how you used ChatGPT as part of the assignment. If you did use it, you should include a couple sentences specifying what you did, reflecting on what you think worked well and what worked less well, as well as any strategies you tried in your prompts.

In general, you will not be penalized for using ChatGPT and AI tools if you disclose how you used it (however, low quality assignments will still receive lower grades). However, writing a false statement about your use of ChatGPT & AI tools, or turning in a document that was completely written by ChatGPT or an AI tool are likely violations of the academic honor code (plagiarism, false claims of performance, deliberate falsification), and will result in a 0 grade and a possible referral to the Office of Student Integrity.

Use of ChatGPT and AI tools is a large gray zone – the following are not 100% rules, but some suggestions and guidelines to help you use these tools in a way that will be helpful to you achieving the course goals and objectives.

Likely useful ways of using ChatGPT:

- Helping to re-word or re-structure a sentence or paragraph to help you more clearly convey an idea
- Translating languages (you may need to double check manually for errors)
- Finding a specific resource/paper you already know about but can't remember the name of
- Providing a template for a paragraph
- Asking it to critique your writing
- Cut down words you've written to meet a word count or page limit.
- Brainstorming (along with other techniques of brainstorming, some of which we will discuss in class)

Likely non-useful ways of using ChatGPT:

- Writing the assignment for you and turning it in this is likely a violation of the academic honor code and will be dealt with as such
- Citing factual statements from ChatGPT ChatGPT can "hallucinate," or create very convincing sounding facts and citations, and passing them off as real
- Finding new sources and papers the hallucination problem again
- Using ChatGPT as a general search engine the hallucination problem again

# Course Expectations and Guidelines

#### A note on COVID-19

I want to acknowledge that we are still in a dynamic and what can feel like a precarious time. I will strive to create a stimulating learning environment, although there may be uncertainties or complications that arise during the course that will require flexibility and mutual trust. Do not hesitate to contact me if there is anything you would like to discuss at any point during the course. Please communicate with me if a situation arises that will require flexibility and we can adjust as needed. If you feel ill, please stay home if you feel sick, to protect yourself and others.

For our in-person class meetings, I will likely be wearing a high-quality N/KN-95 mask and have additional masks available should anyone want to use one. The University System of Georgia encourages people to wear masks based on their preference and assessment of personal risk. In addition, if interested, students can contact Stamps Health Services for information about scheduling a Covid-19 vaccine and/or booster.

#### **Due Dates and Late Policy**

Most assignments will be due at 11:59pm on their due date. For submissions after this time, one half point will be deducted for every late day (0.5 point for up to 24 hours late, 1 point for up to 48 hours, etc), up until half credit.

# **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 and to follow the <u>Georgia Tech Academic Honor Code</u>.

# **Accommodations**

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <a href="http://disabilityservices.gatech.edu/">http://disabilityservices.gatech.edu/</a>, 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.

# **Attendance**

Participation in this class is important so that we can explore and understand the readings together. Your attendance is important; however I acknowledge we live in uncertain times. Any absences due to health reasons and personal or family emergencies will be excused. Stay home if you feel sick, to protect yourself and others. Please communicate with me in advance if you will be missing a class.

4 unexcused absences are allowed (you do not need to provide any specific reason – but it may include a job/internship interview, needing to do a presentation for another project, or other activities that conflict with class). However additional unexcused absences will lower the student's overall grade by 1% each time. If you feel that you are falling behind due to an illness, emergency, or other reason, please come see me and we can make a plan for alternate arrangements.

# **Student-Faculty Expectations Agreement**

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See <a href="http://www.catalog.gatech.edu/rules/22/">http://www.catalog.gatech.edu/rules/22/</a> 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.

#### **Statement on Inclusivity and Diversity**

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

#### **Additional Resources**

If you are experiencing anxiety or depression or a medical, personal, or family crisis, or if you just feel overwhelmed, please do not hesitate to reach out for help. Everybody needs help sometimes, and college can be a personally challenging time. You are not alone, and many of us are available to be sympathetic listeners and to share our own strategies for coping with stressful situations. In addition, professional counselors and medical practitioners have expertise that can be very helpful. The Dean of Students has a list of services (see <a href="https://studentlife.gatech.edu/content/get-help-now">https://studentlife.gatech.edu/content/get-help-now</a>). If you are the victim of sexual misconduct or harassment, resources are listed at: <a href="https://diversity.gatech.edu/equity-compliance/reporting-options/i-want-report-incident">https://diversity.gatech.edu/equity-compliance/reporting-options/i-want-report-incident</a>. VOICE Advocates also serve as confidential resources for victim-survivors (speaking to them does not trigger an official reporting process): <a href="https://wellnesscenter.gatech.edu/voice">https://wellnesscenter.gatech.edu/voice</a>

# Acknowledgements

Several parts of the syllabus, including the introduction, assignments, and several weeks' readings are adapted from Prof. Yanni Loukissas' <u>version</u> of this course.

# Additional Readings and Resources:

#### **General Research**

• Calarco, J. M. (2020). A field guide to grad school: uncovering the hidden curriculum /. Princeton University Press. https://galileo-gatech.primo.exlibrisgroup.com/permalink/01GALI\_GIT/1plii6l/alma9915072082602947

#### **Qualitative Research:**

- Stefan Timmermans and Iddo Tavory. 2012. Theory construction in qualitative research: From grounded theory to abductive analysis. Sociological Theory 30, 3 (2012), 167–186. <a href="https://doi.org/10.1177/0735275112457914">https://doi.org/10.1177/0735275112457914</a>
- Syllabus for Dr. Raul Pacheco-Vega's graduate qualitative methods course: https://drive.google.com/file/d/1A3EC2vjCBS3Przri-SgEPfxG5K0biMV8/view
  - Qualitative interviews: <a href="http://www.raulpacheco.org/2022/04/a-partial-bibliography-on-books-and-articles-on-how-to-conduct-qualitative-research-interviews/">http://www.raulpacheco.org/2022/04/a-partial-bibliography-on-books-and-articles-on-how-to-conduct-qualitative-research-interviews/</a>
  - o Focus Groups: <a href="http://www.raulpacheco.org/2022/08/a-partial-commented-bibliography-on-focus-groups/">http://www.raulpacheco.org/2022/08/a-partial-commented-bibliography-on-focus-groups/</a>
  - o Field Notes: <a href="https://docs.google.com/document/d/1dtlqmb-hLe-f97fA8QNuMnj0EYtkvNQr/edit">https://docs.google.com/document/d/1dtlqmb-hLe-f97fA8QNuMnj0EYtkvNQr/edit</a>
  - o Collaborative ethnography: https://drive.google.com/file/d/1kisQuJRtP8iD2HuQbD4rK1CyIn0fi 7A/view

# Ways to think about design

 William W. Gaver, Jacob Beaver, and Steve Benford. 2003. Ambiguity as a resource for design. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '03). Association for Computing Machinery, New York, NY, USA, 233–240. <a href="https://doi.org/10.1145/642611.642653">https://doi.org/10.1145/642611.642653</a>

#### **Probes**

 Kirsten Boehner, Janet Vertesi, Phoebe Sengers, and Paul Dourish. 2007. How HCI interprets the probes. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, San Jose California USA, 1077–1086. https://doi.org/10.1145/1240624.1240789

#### **Autoethnographic Methods**

Sarah Homewood. 2023. Self-Tracking to Do Less: An Autoethnography of Long COVID That Informs the Design of Pacing Technologies. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (CHI '23), Association for Computing Machinery, New York, NY, USA, 1–14. <a href="https://doi.org/10.1145/3544548.3581505">https://doi.org/10.1145/3544548.3581505</a>

# Critical Design, Speculative Design, Design Fiction

- Jeffrey Bardzell and Shaowen Bardzell. 2013. What is "critical" about critical design? In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems CHI '13, ACM Press, New York, New York, USA, 3297. https://doi.org/10.1145/2470654.2466451
- Richmond Y. Wong, Ellen Van Wyk, and James Pierce. 2017. Real-Fictional Entanglements: Using Science Fiction and Design Fiction to Interrogate Sensing Technologies. In Proceedings of the 2017 Conference on Designing Interactive Systems, 567–579. <a href="https://doi.org/10.1145/3064663.3064682">https://doi.org/10.1145/3064663.3064682</a>
- Richmond Y Wong. 2021. Using Design Fiction Memos to Analyze UX Professionals' Values Work Practices: A
  Case Study Bridging Ethnographic and Design Futuring Methods. In CHI Conference on Human Factors in
  Computing Systems (CHI '21), ACM, 18. <a href="https://doi.org/10.1145/3411764.3445709">https://doi.org/10.1145/3411764.3445709</a>

# **Discourses, Artifact Analysis**

 Tarleton Gillespie. 2010. The politics of 'platforms.' New Media & Society 12, 3 (May 2010), 347–364. https://doi.org/10.1177/1461444809342738

# **Theory and Culture**

- Carl DiSalvo. 2012. Chapter 2. Revealing Hegemony (pg 27-55). In Adversarial Design. The MIT Press, Cambridge, Massachusetts.
- Sasha Costanza-Chock. 2020. Introduction: #TravelingWhileTrans, Design Justice, and Escape from the Matrix of Domination. In Design Justice. The MIT Press, 1–30. (Web link: https://designjustice.mitpress.mit.edu/pub/ap8rgw5e/release/1)
- Lynn Dombrowski, Ellie Harmon, and Sarah Fox. 2016. **Social Justice-Oriented Interaction Design**. In Proceedings of the 2016 ACM Conference on Designing Interactive Systems (DIS '16), ACM Press, New York, New York, USA, 656–671. <a href="https://doi.org/10.1145/2901790.2901861">https://doi.org/10.1145/2901790.2901861</a>
- Catherine D'Ignazio and Lauren F. Klein. 2020. Introduction: Why Data Science Needs Feminism. In Data feminism. The MIT Press, Cambridge, Massachusetts. (pg 1-19). (Web link: <a href="https://data-feminism.mitpress.mit.edu/pub/frfa9szd/release/6">https://data-feminism.mitpress.mit.edu/pub/frfa9szd/release/6</a>)
- Ruha Benjamin. 2019. **5. Retooling Solidarity, Reimagining Justice.** In Race after technology: abolitionist tools for the new Jim code. Polity, Medford, MA. **(pg 167-196)**