LMC 8001 – Proseminar II
Spring 2024
3 Units
(Details of the syllabus subject to change; the version on Canvas will be the most up-to-date!)

Course Information

Course Meeting
Wednesday 12:30-1:45pm; 2-3:15pm
Skiles 010

Instructor
Richmond Wong, PhD
Assistant Professor, Digital Media, School of Literature Media & Communication
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he/him/his

Drop-In (“Office”) Hours
To be announced, link on canvas. Please email me in the meantime to set up an appointment (or if the listed times don’t work for you).

Course Description
This course is to provide an understanding of approaches to research and major topics in design and human-computer interaction (HCI). We will discuss how research questions, methods, and disciplines take different approaches to framing problems, claiming validity, make arguments, and shape and create knowledge. The course will primarily consist of readings and seminar discussions, though we may also have guest speakers or other activities on certain days.

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 have a Microsoft Folder: https://gtvault-my.sharepoint.com:/f:/g/personal/rwong34_gatech_edu/Ej3Phagu_mRHnQDP104wH1sB5Y3Pj3wKGMHqsd0dX9069A?e=RVd8Hh
  ○ Collective Notes Doc: https://gtvault-my.sharepoint.com:/w:/g/personal/rwong34_gatech_edu/EWJpmF_is9VKmtOpygDljTMBwVHienbHXsIM8IAwR8Cz6Q?e=DozOxM

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:
- Understand the historical, theoretical, and cultural contexts of design and HCI research
- To create and analyze digital artifacts with an awareness of history and culture, with respect and sensitivity to multiple and diverse audiences.
- Apply formal concepts and theories using appropriate methods

Course Approach and Philosophy
Many, though not all, readings in this class are from the quals list, spanning design, HCI, and STS. The goal of this class is not necessarily to read through the quals list, but to provide enough background and scaffolding so that you can have a framework to work your way through the quals reading lists.

The course will primarily be in a seminar style – so students are expected to keep up with the readings and participate in class discussions and/or the Canvas discussion threads. Readings should be completed before class. We’ll talk about strategies for reading books during the first week, but the key goal will be to focus on reading for the main argument(s) of each reading, rather than reading word-for-word to memorize every specific detail and example presented by the authors.

Some aspects of the class may change over time. We’ll go through the syllabus and proposed course readings together during the first week and identify readings and topics that we want to emphasize more. We will also start the semester with a shared collaborative notes doc to help us start our discussions, and evaluate how well this works for us.

Most weeks, I’m splitting the class readings and class times into 2 sessions, an “A” and “B” block (with a short break in between). We’ll usually spend about half of our time on topic A and half on topic B, although most weeks the A and B topics will have thematic connections.

On reading - at Georgia Tech, 3 credit class usually indicates that students should expect to spend about 6 hours per week on the class outside of our meeting times. Given that, I’d say you should not be spending more than 4 hours per week reading for this class. It is a skill that you can develop over time, so reading should get faster during the semester. But if you are consistently spending more than 4 hours per week looking at the readings, let me know and we can work in more depth on developing reading strategies.

On writing – I strongly believe that writing is a way of thinking, formulating, and refining one’s ideas. Weekly writing activities in response to the readings are an important way to help develop this skill. If you feel like you need additional help, please reach out and I can help provide some resources. The GaTech Communication Center (https://www.communicationcenter.gatech.edu/) is a useful resource to help improve writing in general.

On discussion – everyone has different experiences and backgrounds, and we all bring a different and unique take on the readings. Towards this end, I strive to create a learning environment built on respect, curiosity, generosity, and humility, during our interactions with each other. We will also have a collective notes doc to use during class as a backchannel, place to share notes, and to share initial thoughts or ideas at the beginning of class:
https://gtvault-my.sharepoint.com/:w:/g/personal/rwong34_gatech_edu/EWJPmF_is9VKmtOpygDttjTMBwVHiemBYsLM8lAwRBCz6Q?e=DozOxM

Assignments and Grading
Major assignments during the class add up to 100 points total.

Reading Reflections (10 out of 13 weeks, 2 points each): 20 points
Each week you will be expected to post a reading reflection to a Discussion thread on Canvas before we meet. Please post these by noon on Wednesdays. Reading reflections are meant to help you explore possible ideas through writing. Grading is based on completion.

- Reading reflections should engage at least 2 (or more) readings from a week
- The format of these short writings can vary.
  - You can do a “standard” response that analyzes the readings, their themes, and how they relate to each other
  - You might reflect on initial research ideas or connections these readings sparked for you
  - You might critique the readings' approaches or claims
You might try to apply the theories or concepts to another domain or experience
You might contribute some discussion questions
You might ask questions about concepts, words, or passages that you didn’t understand
You can use these as opportunities to be creative as well! For example:

- Write a letter as one of the authors that we read, written to another author about their work
- Write a fictional memo to a company saying why the ideas in the readings are relevant or important to them
- Write a short script or skit about the readings

**Participation: 35 points**
Participation can include lots of things – you don’t need to have some amazing brilliant insight or even have fully understood all the readings. Questions, issues, examples are all ok, such as:

- What did the author mean on page X when they wrote [...]?
- This approach looks interesting, but how would you actually do it?
- I had a half-baked idea while reading this, and I’d like to see what others think about [...]?
- I’m not sure how this counts as research/STS/HCI/Design
- I found this thing outside of class that seems like an example of the reading, but doesn’t fully seem to fit [author’s] concept.
- We’ve read X and Y, which seem to contradict or critique each other. I tend to side with X, but I’m curious if anyone sided with Y, and why so?
- I worked on a project similar to paper X, but I did A, while X did B. I wonder what would have happened if I went in a different direction.

**Discussion Lead (2 times, 5 points each): 10 points**
Students will each sign up to lead the discussion for at least 2 half-sessions, starting in week 3. Leading the discussion means helping provide generative questions that help us draw connections and critically discuss the readings, beyond “what did everyone think of the reading?” Some things that you might do include:

- Identify a theme common to several readings and invite discussion about its differences and significance across the readings
- Identify potential contradictions or tensions between the readings
- Situate a reading in relation to something we previously read
- Point to a specific passage that is difficult to understand and invite interpretations and discussion
- Ask or propose how a concept/method/theory might relate to our own research
- Finding a paper that cites one of the readings from the week, summarize it for us, and tell us how that paper made use of what we read.

Discussion leads may also want to skim through the class reading responses and see if there’s anything that you might invite people to talk more about.

*(Participation and discussion prompts adapted from Showen Bardzell’s IST597 course)*

**Final Essay: 35 points**
More details will be shared later, but this will likely consist of an option to create a research proposal, or to write a synthesis of several papers from the course.

- Final essay topic proposal/brainstorm = 5 points
- Outline/draft = 10 points
- Final version = 20 points
Course Schedule

- Weeks 1-3 focus on theoretical background
- Weeks 4-8 provide an introduction to HCI and design, and some historical and cultural context
- Weeks 9-14 focus on specific areas of research in HCI and design

Part 1: Theoretical Background

1. January 10: Introduction

Readings: No readings beforehand

Class:

- Introductions
- Read how to read readings
  - Mar Hicks’ Reading Tips for History Classes: https://marhicks.com/blog/?p=681
  - Paul Edwards’ How to Read a Book: http://pne.people.si.umich.edu/PDF/howtoread.pdf
- Apply to some readings (readings available on Canvas):
- Short discussion and use of the shared Word Doc for comments: https://gtvault-my.sharepoint.com/:w:/g/personal/rwong34_gatech_edu/EWJPmF_is9VKmtOpygD tjTMBwVHienbHXs1M8IawRBCz6Q?e=DozOxM
- Go over class syllabus and collectively indicate interests: https://gtvault-my.sharepoint.com/:w:/g/personal/rwong34_gatech_edu/EbXGbXVD12llFu8sXuXamsWEB3OL17HLYQe5D Nst2xf3RKw?e=klJkpf

2. January 17: Scientific Knowledge and Inquiry

A. What is “Science”?
   - Stengers, Isabelle. Power and Invention. Excerpts:
     ii. Chapter 4. Turtles All the Way Down (pages 61-75)

B. Interpretivist approaches to inquiry (77 pages)
C. Optional:

Class Activities:

   • Sign up for discussion lead dates

3. January 24: Theories of Technology and Society

   A. Artifacts have politics; Social Construction of Tech

   B. Representations and Abstractions (52 pages)

   C. Optional

Part 2: HCI and Design Basics

4. January 31: Precursors and Early HCI

   A. Cybernetics

   B. Cognition and Computing and Design
         i. Read Chapters 1-2 (pg 1-44)
         ii. Skim 2.2-2.3 (pg 44-97); but take a look at Fitts’ Law on pg 51-57

C. Optional

5. February 7: Early critical turns in cognition

A. Situated Actions, Cognition in practice, and Activity Theory (79 pages)
      i. Introduction, and Chapter 1: Readings and Responses (pgs 1-23)
      ii. Chapter 3: Introduction to the 1st Edition (pgs 29-32)
      iii. Chapter 5: Plans; Chapter 6: Situated Actions (pgs 51-84)

B. Critical Technical Practice
      i. Preface (pgs x-xvi);
      ii. Chapter 1: Introduction (pgs 1-26)
      iii. Chapter 2: Metaphor in Practice (pgs 27-48)

C. Optional

6. February 14: HCI as a Field, and PhD-Meta

A. HCI as a field

B. PhD Meta
   i. Chapter 7: Writing about your research
   ii. Chapter 8: Publishing and promoting your work
   iii. Chapter 9: Talking about your research
   iv. Chapter 10: Going to conferences

C. Optional

Class Activities:

- We’ll look at SIGCHI resources online and see
- We’ll each look at a past Dissertation from Digital Media and talk a little bit about how a Dissertation is organized: https://dm.lmc.gatech.edu/alumni-dissertations/

7. February 21: Ways of Knowing

A. Feminist Epistemologies

B. Design as a way of knowing

C. Optional


8. February 28: Design Oriented Methods

A. Speculative methods
      i. A/B chart (pg vii)
      ii. Ch 1: Beyond Radical Design? (pg 1-9)
      iii. Ch 3: Design as Critique (pg 33-45)

B. Politics of Design Methods and Participation

C. Optional


Part 3: Major topics in HCI and Design
9. March 6: Critical HCI

A. Early Critical turns in HCI

B. Critical Design & Critical Computing

C. Optional
10. March 13: Ubiquitous/Tangible Computing, and Online Communities

A. Ubicomp/Tangible computing and its critique

B. Online Identities and communities

C. Optional

March 20: Spring Break, No Class

11. March 27: Infrastructures, Work, and Computer-Supported Cooperative Work (CSCW)

A. Infrastructure

B. Work practice

c. Optional

12. April 3: Power and Justice

A. Recognizing Issues of Power and Justice

B. Considering design and alternatives
      i. Introduction: Why Fabulate Design? (pg 1-22)
      ii. Ch 2: Feminist Correctives in Design (pg 41-58)
      iii. Ch 4: Approaching Design as Critical Fabulations (81-100)

C. Optional

13. April 10: Posthumanism and More-Than-Human Design

A. Humans and Things

B. Ecologies and Multispecies
      i. 1 Arts of Noticing (17-26)
      ii. 2 Contamination as Collaboration: (27-36)
      iii. 3 Some Problems with Scale (37-44)
      iv. 11 The Life of the Forest (155-163)

C. Optional:
14. April 17: (Critical) Data and Algorithm Studies

A. Studying (Big) Data (58 pages)
      i. Chapter 1: Local Origins (pg 13-24)
      ii. Chapter 7: Local Ends (pg 189-196)

B. Studying Algorithms (41 pages)
      i. OR, we can watch part of Laura’s talk “Weaving algorithmic patterns with AdaCAD”:
         https://www.youtube.com/watch?v=kKQs0bVuN-8&t=328s (From 5:30 to 21:15)

C. Optional
   a. Bowker (2013) Data Flakes – an Afterword to Raw Data is an Oxymoron
ChatGPT/Al 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:
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
For late submissions, 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 Georgia Tech Academic Honor Code.

Accommodations
If you are a student with learning needs that require 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.

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.

3 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 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.

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 [https://studentlife.gatech.edu/content/get-help-now](https://studentlife.gatech.edu/content/get-help-now)). If you are the victim of sexual misconduct or harassment, resources are listed at: [https://diversity.gatech.edu/equity-compliance/reporting-options/i-want-report-incident](https://diversity.gatech.edu/equity-compliance/reporting-options/i-want-report-incident). VOICE Advocates also serve as confidential resources for victim-survivors (speaking to them does not trigger an official reporting process): [https://wellnesscenter.gatech.edu/voice](https://wellnesscenter.gatech.edu/voice)

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