Syllabus - LMC 6313- Spring 2025 – Principles of Interaction Design

Units: 3

Course Meetings

Mondays and Wednesdays, 2:00pm – 2:50pm in Skiles 346

Fridays, 9:30am – 12:15pm in Skiles 346

Instructor

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she / her / hers

Office hours: By appointment only.

Note: This syllabus is subject to change at the discretion of the instructor.

Course Description

Interaction Design is designing how people interact with technology. This class strategically focuses on screen based interfaces, with some special topics. This class approaches design as a practice and asks students to learn by doing, giving constructive feedback, and iteratively doing again. Students will dive into the nitty gritty details of designing interfaces and gain familiarity in designing and evaluating interfaces.

Goals

The projected learning outcomes of this course are:

- Conduct exploratory qualitative design research in the form of contextual inquiry
- Conduct detail-oriented task analysis of existing user interactions
- Design and prototype interfaces
- Evaluate interfaces: think aloud, heuristic, and accessibility evaluations
- Iterate and refine the design of interfaces on the basis of evaluation results

Textbook

About Face: The Essentials of Interaction Design, 2014 editions

You can read this book online for free with a GT login. When it asks for your institution, enter “Georgia Tech Library”.

Additional readings will be provided online.

Schedule

Schedule

Due dates and readings are shown on the Schedule. Unless otherwise specified, assignments and readings are due before the start of class on the due date listed. Stay tuned for announcements or edits to the Schedule as the semester progresses. Readings for each day may be finalized as time goes on.

Grading

Grading of each assignment is based on points. The number of points for an assignment indicates its weight in determining the final grade. Assignments are due at the beginning of class unless otherwise specified.

Late assignments receive at most 50% credit. Assignments that are turned in on time, but where the student is not present in class to represent their work, also receive at most 50% credit. This is because the pedagogical value of many assignments includes using this assignment for in-class activities such as giving and receiving feedback on the assignment.

If you have to miss class for a valid reason such as illness, family emergency, etc., please proactively coordinate with the instructor in advance to find an alternative make up assignment, which could take a different form than the original assignment.

Grade Ranges

A: 90 – 100%
B: 80 – 89%
C: 70 – 79%
D: 60 – 69%
F: 0 – 59%

Attendance Policy

Attendance is required and contributes to the participation part of the grade in the Grading Breakdown. The class relies on in-class activities to develop the skills of giving and receiving feedback, which are key to professional interaction design practice.

If you are sick, stay home and rest to protect yourself and others. Give the Instructor a heads up before class, and coordinate with them to find an alternate make up assignment.

Being late to class will detract from your attendance and participation grade.

Accommodations

Please refer to the Office of Disability Services for information on how to request accommodation. The instructor is committed to working with you to accommodate your needs. Communicating with the Instructor about your needs will assist us in best accommodating your needs.

Technology use

Bring a computer to class every day. No use of cell phones (including texting) in class.

Inclusivity Statement

The Ivan Allen College of Liberal Arts is committed 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 in our community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

Workload

Students are expected to work not only in class but also outside of class sessions on assignments and projects.

Mental Health 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 being in school 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).

Library Resources

The GT Library has numerous resources, gadget rental, study space, activities, and more.

Georgia Tech Honor Code

The Georgia Tech Honor Code will be strictly enforced.

Student & Faculty Expectations

Students and faculty will uphold the Student-Faculty Expectations Agreement.

Communication Center

This is a helpful resource available to you: Communication Center.

ChatGPT and other Generative 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 other generative 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 to demonstrate and evaluate your learning. They enable receiving useful feedback from peers and the instructor, to help you learn and improve on your skills and work. Using automated tools to do most of the assignment for you can break that feedback loop, transforming the assignments from useful to busy work – Ultimately this is just harming your learning, wasting your educational opportunity in this program.

ChatGPT and generative 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 and generative AI can be useful for certain types of tasks, or as resources to help in writing. Therefore, for any assignment for which you use ChatGPT or any other generative AI, you must both

(1) cite the tools you use, as you would cite a research paper or other resource that you used in your work, and (2) add a section titled “Generative AI Usage” documenting how you used the tool(s). Include transcripts of LLM text or dialogues, and any iterations of generative image, sound, or other media from/with AI, etc, to thoroughly document your process of using generative AI in producing the output of your project.

In general, you will not be penalized for using ChatGPT and other generative AI tools if you disclose how you used it. Of course, low quality assignments will still receive lower grades. However, writing a false statement about your use of ChatGPT or other generative 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 (while keeping in mind the normative bent of generative AI tools, which are based on training data whose statistical majorities may not match what you want for your work)
- Generating a stock image for use in your UI design

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

Schedule

Date	Topic	Due at start of class	Review before class
Mon Jan 6	Interaction Design Basics		
Wed Jan 8		Example of an interaction design from your everyday life	What is interaction design? How to survive a design critique: Guide to giving and receiving feedback
Fri Jan 10			
Mon Jan 13			
Wed Jan 15			
Fri Jan 17			2025-01-17_lab.docx
Mon Jan 20	MLK Day – no class		
Wed Jan 22		UI Element Scavenger Hunt	
Fri Jan 24		One-Button UI v1	Thinking Aloud: The #1 Usability Tool

Mon Jan 27		One-Button UI v2 due for everyone on this day. People will be called to present in random order.	
Wed Jan 29			
Fri Jan 31			
Mon Feb 3	Information Organization		
Wed Feb 5			
Fri Feb 7		Social Media App v1	How to conduct a heuristic evaluation Top ten usability heuristics
Mon Feb 10		Social Media App v2 due for everyone on this day. People will be called on to present in random order.	
Wed Feb 12			
Fri Feb 14			
Mon Feb 17	Accessibility		Bennett & Rosner – The Promise of Empathy: Design, Disability, and Knowing the "Other"
Wed Feb 19	Learning from users		Contextual Inquiry
Fri Feb 21			Affinity Diagramming Task Analysis
Mon Feb 24		User Observation Documentation due for everyone on this day	
Wed Feb 26			
Fri Feb 28	Ethics in Design		
Mon Mar 3	Self-Tracking		Elsden et al. - Fitter, happier, more productive: what to ask of a data-driven life Dear Data Project
Wed Mar 5	Ethics in Design cont'd		
Fri Mar 7		Self-Tracking UI v1	Benjamin – Captivating Technology Intro
Mon Mar 10	Ethics in Design cont'd	AI Ethics in IxD due for all groups on Monday	
Wed Mar 12			
Fri Mar 14			
Mon Mar 17	Spring break – no class		
Wed Mar 19	Spring break – no class		
Fri Mar 21			
Mon Mar 24	Final Projects	Final project team selection by 11:59pm	Dunne & Raby - Speculative Everything - Chapter 1 Wong et al. - Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds Kozubaev et al. - Expanding Modes of Reflection in Design Futuring
Wed Mar 26			Søndergaard et al – Fabulation as an Approach for Design Futuring Helms et al. - Scaling Bodily Fluids for Utopian Fabulations Tsaknaki et al. - Fabulating Biodata Design Futures for Living and Knowing Together

Fri Mar 28			
Mon Mar 31		Brainstorm Documentation Project Proposal	
Wed Apr 2			
Fri Apr 4			
Mon Apr 7			
Wed Apr 9		Project UI v1	
Fri Apr 11			
Mon Apr 14			
Wed Apr 16			
Fri Apr 18			
Mon Apr 21	Last day of class	Project UI v2 Project Presentation Project Demo Video	
TBD	No exams	Project Individual Report	
TBD	No class		