ID 8803

Design with Access in Mind: Accessibility Design Seminar and Co-Design Lab

Credits: 3 Credits
Semester: Fall 2026
Meeting Time / Location: TBD

Instructor Information

Instructor: Dr. Abigale Stangl
Email: astangl3@gatech.edu

General Course Information

Description

ID 8803 introduces accessibility as a foundation for designing products, interfaces, media, information systems, materials, and engineered environments. Drawing on disability studies, HCI, design justice, human factors, and inclusive design, students explore accessibility through participatory design, multimodal prototyping, critique, and accessible documentation. As an interdisciplinary graduate seminar and co-design lab, the course brings together students from Industrial Design, HCI, Digital Media, Information Science, Mechanical Engineering, and related fields to develop inclusive design strategies through lectures, workshops, observational studies, and project-based work grounded in stakeholder needs.

Relevant workforce pathways: Technical Writer, Accessibility Specialist, UX Designer, Product Designer, Developer, Data Scientist, Researcher. Careers in UX and interaction design, industrial design, accessibility and assistive technology, technical communication, human-computer interaction, inclusive education, disability advocacy, and responsible data science and computing.

Course Learning Outcomes

Upon successful completion of this course, you should be able to:

- Demonstrate sociocultural inclusion by designing with—not for—disabled partners and stakeholders and grounded in mutual agreements and ethical frameworks for technology development.

- Apply accessibility frameworks from disability studies, human-centered design, human factors, inclusive design, and design justice to design considerations and rationale.
- Create and evaluate prototypes, systems, or communication artifacts that can be experienced across visual, auditory, tactile, spatial, digital, and material modes.
- Conduct accessibility-centered research by iterating, documenting, and evaluating design processes using participatory and interdisciplinary methods.

Required Course Materials

All required readings, media, handouts, and assignment materials will be provided through Canvas modules.

Course materials are organized in the following modules:

- M1: Access as Design Foundation
- M2: Disability Justice, Co-Design, and Inclusive Workflows
- M3: Prototyping, Evaluation, and Dissemination

Students will also use course-supported tools and materials for accessibility-centered design and prototyping, which may include screen readers, captioning and transcription tools, tactile graphics workflows, 3D printers, prototyping supplies, materials samples, fabrication tools, accessible documentation formats, and interface prototyping tools. Unless otherwise noted, required materials will be introduced and supported in class.

Grading Policy:

Your final grade in this course is based on six scaffolded assignments and participation that build toward your final project.

Assignments

A1: Access Narrative / Reflection - 5 points
A2: Accessibility Audit & Modality Study - 15 points
A3: Project Proposal & Agreement - 20 points
A4: Prototype Iterations (Cycles 1–4) - 20 points
A5: Production Plan & QA Checklist - 10 points
A6: Final Deliverables - 20 points
Participation - 10 points

Description of Graded Components

- **A1: Access Narrative / Reflection:** Introduces accessibility through a multimodal narrative assignment focused on positionality, observation, description, and reflection.
- **A2: Accessibility Audit & Modality Study:** Develops accessibility analysis and multisensory prototyping skills through a hands-on audit of an existing product, interface, media object, information workflow, material system, or environment.
- **A3: Project Proposal & Agreement:** Defines the goals, scope, collaboration structure, accessibility commitments, stakeholder relationships, and working agreements for the semester project.
- **A4: Prototype Iterations (Cycles 1-4):** Documents iterative design cycles, including feedback, revision, evaluation, and evidence of accessibility-centered design decisions across physical, digital, material, or hybrid formats.
- **A5: Production Plan & QA Checklist:** Prepares students for final fabrication, testing, and dissemination by requiring a detailed production workflow, accessibility review process, and quality assurance plan.
- **A6: Final Deliverables:** Includes the completed prototype, system, or intervention, supporting documentation, reflections, and showcase-ready deliverables. Final Showcase participation is graded within A6.

Participation: Participation is graded based on your consistent engagement in class activities, workshops, feedback sessions, peer critique, and collaboration with classmates and co-design partners. Because this course is hands-on and collaborative, your contributions directly support both your learning and your peers' progress.

Submission: All work is due on Tuesday's at 11:00 AM via Canvas in accessible formats (.docx, .html, or .txt unless otherwise noted). Physical builds must also be brought to class for review when required.

Late Work: Late submissions lose one letter grade (10%) per day unless an extension is arranged in advance.

Resubmission: A1 and A2 may be revised once for partial credit recovery. Later assignments are iterative and include revision as part of the course design process.
At Georgia Tech, final course grades are awarded on a scale of A--F with no +/-- grades permitted.

Grading Scale

A (90--100%) Excellent
B (80--89%) Good
C (70--79%) Satisfactory
D (60--69%) Passing
F (0--59%) Failure

Course Policies

Attendance and/or Participation

Participation will be graded based on your consistent engagement in class activities, workshops, and feedback sessions. Because this course is hands-on and collaborative, your contributions directly support both your learning and your peers' progress. Participation is assessed through the following:

- **Preparedness:** Coming to class on time with required materials and having completed assigned readings, drafts, or preparatory work.
- **Engagement:** Actively contributing to discussions, activities, critiques, and group work.
- **Collaboration:** Providing constructive peer feedback and respectfully engaging with classmates and co-design partners.
- **Presence:** Attending class regularly and notifying the instructor in advance when possible if you must miss class.

General participation benchmarks:

- **Excellent:** Consistently engaged, prepared, collaborative, and supportive of peers.
- **Good:** Participates regularly, with occasional lapses in preparation or engagement.
- **Adequate:** Attends most classes but contributes minimally.
- **Poor:** Frequent absences, limited participation, or little contribution to collaborative work.

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. Review Georgia Tech's Honor Code and the student Code of Conduct. Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities
If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404--894-2563) 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 to set up a time to discuss your learning needs.

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. The Student-Faculty Expectations articulate some basic expectations 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. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Pre- &/or Co-Requisites
No formal prerequisites.
Recommended: a background or interest in design, development, media studies, human-computer interaction, disability studies, or related fields. Curiosity, openness to hands-on work, and willingness to collaborate are essential.

Collaboration, Group Work, and Use of Generative AI
Collaboration is central to this course. You will work in pairs or small groups on several assignments, particularly the project proposal (A3), prototyping cycles (A4), and final deliverables (A6). The spirit of this collaboration is co-design: working with peers and community partners in ways that value lived experience and distribute agency equitably.

a) Permitted and expected collaboration includes:

- Brainstorming, idea sharing, and prototyping with peers.
- Co-writing and co-signing agreements and shared planning documents.
- Peer feedback and critique during workshops.
- Partner collaboration with disabled co-designers when arranged through class activities and course partnerships.

b) Individual responsibility:

- Some assignments are individual and must reflect your own work, though you may discuss ideas informally with peers.
- For group assignments, each student must clearly document their contributions in the submission.

- Reflections must always be written individually, even when based on shared work.

c) Use of outside resources:

- Academic sources, accessibility guidelines, and open design toolkits are encouraged, but they must be properly cited.
- Generative AI tools may be used for brainstorming or prototyping support when their use is disclosed.
- Final work must demonstrate your own learning, design decisions, and authorship.

d) Reporting contributions:

- Each group submission should include a short note describing who contributed what.
- Transparency in documenting collaboration helps ensure fairness and accountability.

e) Student Use of Artificial Intelligence

- Acceptable uses include:
    - Practicing prompt engineering using frameworks such as ReAcT, CARE, CLEAR, or CREATE.
    - Brainstorming or idea generation in the early stages of projects.
    - Refining, polishing, or clarifying your written work (after you have drafted it yourself).
    - Using AI tools for research assistance with proper fact-checking and source validation.
- Not acceptable:
    - Submitting unedited or unrefined AI-generated text, images, or designs as your own original work.
    - Using AI tools for restricted or Institute--prohibited purposes (e.g., DeepSeek for Georgia Tech work).
    - Relying on AI outputs without verification or citation.
- Documentation requirements: If you use AI, you must:
    - 1. Include your prompts and the resulting output in an appendix.
    - 2. Cite AI tools as you would any other source (quote directly if using exact wording).
    - 3. Reflect briefly on how you revised or fact-checked the AI-generated material.

- Reminder: AI systems often "hallucinate" (generate false or misleading information). You are responsible for verifying all information against original sources. Treat AI engagement as an extension of our collaboration policy: it can enrich learning when used transparently, but final work must reflect your own understanding and authorship. This proposed amalgamation integrates key strengths of existing frameworks (ReAcT, CARE, CLEAR, CREATE, PREP, EDIT) while remaining pragmatically simple for instructional use. [Lee, D., & Palmer, E. (2025). Prompt engineering in higher education: A systematic review to help inform curricula. International Journal of Educational Technology in Higher Education, 22(7). https://doi.org/10.1186/s41239-025-00503-7]
    - Define role: Explain to the AI agent who it is (Ali, et al., 2023; Wang et al., 2021).
    - Provide background: Inform AI agent of context (Wang et al., 2021).
    - Define objectives: Explain to the AI agent your goals (Tupper et al., 2023).
    - Set parameters: Allow or limit tolerances (Abdulshahed, 2023).
    - Be precise: Ensure your instruction or question is concise and explicit (Lo, 2023).
    - Specify format: Describe or even provide a template (Clavié et al., 2023; Susnjak, 2023).
    - Rinse and repeat: Critically assess the response in relation to your requirements and
    - Adjust your prompt accordingly to elicit more useable responses (Cain, 2023; Korzynski et al., 2023; Lo, 2023; Wang et al., 2021).

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

All assignments in this course are due on **Friday's at 11:00 AM** via Canvas, unless otherwise noted. Staying on schedule is important because the course is iterative, and each assignment scaffolds into the next.

f) *Extensions*

- Extensions may be granted for documented illness, accessibility barriers, religious observances, or Institute-approved activities (e.g., athletic events, field trips, interviews).
- Whenever possible, you must request an extension **before the due date**.
- Extensions will be set in consultation with the instructor to ensure you remain on track for subsequent assignments.

g) *Late Work*

- Work submitted late without prior arrangement will lose **one letter grade (10%) per day late**.

- Work more than **five days late** will not be accepted unless there are documented extenuating circumstances.
- Because peer workshops depend on timely drafts, missed drafts cannot always be made up, but submitting them is still encouraged for partial credit.

h) *Missed In--Class Work*

- Many activities (e.g., prototyping, peer review, co-design sessions) are difficult to replicate outside of class. If you must miss class, you are responsible for:
- Notifying the instructor in advance.
- Reviewing posted notes and resources on Canvas.
- Completing any make-up or substitute task assigned.

Exams and Final Showcase

This course does not have traditional written exams. Instead, the **C ollege of Design/ Industrial Design, Final Launchpad Showcase** is a required culminating experience. Absence from the Showcase must be arranged in advance and will only be excused for documented emergencies or Institute-approved conflicts. Students who cannot attend in person will be expected to present virtually or submit an alternative deliverable.

Inclement Weather and Digital Learning Days

If campus operations are affected by severe weather or other emergencies, we will **pivot to digital instruction** rather than cancel class. In such cases:

- Class will meet at the **regularly scheduled time** via **Teams** (link posted on Canvas).
- Lecture materials, slides, and activity instructions will also be posted on Canvas for students who cannot join live.
- Hands-on activities (e.g., prototyping workshops) may be modified for remote participation or rescheduled for the next in-person class session.
- Assignment deadlines will remain in place unless otherwise announced; if adjustments are needed, I will post updated due dates on Canvas.
- Students should check **Canvas announcements and email** for updates about class format or assignment changes during inclement weather or digital learning days.

[Digital Learning Days for Modified Campus Operations Links to an external site..]

Student Use of Mobile Devices in the Classroom

Please remember that your success in this class will hinge in part on your attention to in-class discussion and content: please refrain from using your device during class except at designated times and do your best to focus on the task at hand.

Additional Course Policies

Teaching Philosophy / Course Approach:

This course is grounded in inclusive, accessibility-centered design practice. We will approach tactile media not simply as a technical skill set, but as a way of thinking critically about communication, embodiment, and participation. The course emphasizes learning through making, reflection, critique, and collaboration with others. Students are encouraged to experiment, revise, and develop their own design process while engaging responsibly with community knowledge and lived experience.

Accommodations for Religious Observances:

Georgia Tech supports students' rights to observe religious holidays and practices. If a religious observance will affect your attendance, participation, or ability to complete coursework on time, please notify me as early as possible so that we can make appropriate arrangements.

Institute--Approved Absences

Students participating in Institute-approved activities should notify the instructor in advance whenever possible. Reasonable accommodations will be made for missed work or participation requirements consistent with Georgia Tech policy and the structure of the course.

Food and Drink in the Classroom

Food and drink are permitted only when they do not interfere with course activities, shared materials, or lab and fabrication equipment. Please be respectful of the workspace and of others, and do not bring food or drinks near tools, tactile materials, or devices when asked not to do so.

Freedom of Expression and Guidelines for Discussion

This course engages questions of disability, access, design justice, and lived experience. Thoughtful disagreement is welcome, but all discussion must remain respectful, attentive, and constructive. Students are expected to listen carefully, avoid dismissive or harmful language, and engage others in ways that support learning and dignity. We will work to create a classroom environment where critical dialogue can happen with care and accountability.

Lab Safety / Fabrication Safety

Students are expected to use fabrication tools, materials, and shared workspaces responsibly. Safety instructions for equipment and materials must be followed at all times.

If you are unsure how to use a tool, ask before proceeding. Unsafe use of equipment or disregard for classroom and lab procedures may result in loss of access to tools or required changes to project plans.

Preparation for Guest Speakers and Community Partners

Guest speakers and community partners contribute valuable expertise and lived experience to this course. Students are expected to arrive prepared, engage respectfully, and participate thoughtfully in these sessions. When requested, students should review materials or prepare questions in advance. Professional conduct is expected during all interactions with invited guests and collaborators.

Campus Resources for Students

Undergraduate Student Academic Success Resources:

A list of resources for undergraduate students' academic success and information about advising can be found at *Success at Tech*.

Academic Support: Academic Success and Advising (a unit in the Office of Undergraduate Education & Student Success) provides free support for your courses. Students can attend scheduled supplemental review (PLUS) sessions, stop by Drop-In Tutoring, or schedule a one-on-one appointment through Knack. To explore what options work best for you, please visit us online at success.gatech.edu/tutoring, email us at tutoring@gatech.edu, or come see us at Clough Undergraduate Learning Commons, Suite 283.

Graduate Student Academic and Professional Success Resources:

A list of resources for graduate students is given on the Office of Graduate and Postdoctoral Education website. Specific information for current graduate students includes

- Academic Resources such as the Communications Center, Language Institute, Library, Catalog, Registrar, resources for conducting research, Advocacy and Conflict Resolution resources, and how to manage unexpected situations that may impact your academic performance;
- Student Resources such as Campus Services, Child Care/Family programs, Health & Wellness, Career Services, and the Student Resource Guide; and
- Professional Development such as the programming from the Career Center and other professional development resources and events.

Student Well-Being:

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being (student-resource--guide (gatech.edu). Your learning, well-being, and sense of belonging matter in this course. Design work can be intellectually, emotionally, and materially demanding, especially when it involves collaboration, accessibility, and real-world stakeholders. Please communicate early if circumstances are affecting your participation or progress. Students are also encouraged to use Georgia Tech's academic, wellness, and counseling resources when needed.