

LMC 6399 Syllabus – Discovery and Invention

3 Units
Fall 2026

Instructor Information

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General Course Information

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.

These creative research methods will span approaches used in the 4 core areas of the digital media program: media studies, science & technology studies, design research, and human-computer interaction.

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

Course Learning Outcomes

At the end of this course, students will be able to:

- 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.

Required Course Materials

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

CORE Impacts

Not applicable.

Grading Policy:

Major Assignments during the class add up to 100 points total:

- Perusall Annotations: 15%
- Discussion Leader: 5%
- Methods Exercises: 40%
- Final Project: 30%

- Attendance/Participation: 10%

Final grades are based on your total points: A (100-90), B (89-80), C (79-70), D (69-50), F (49 and below).

Description of Graded Components

Perusall Annotations: 15 points (Complete 15 out of 19 reading assignments, 1 point each)

We will use the online tool Perusall, which allows for collective group notes on readings. Because we are trying to read and learn about the readings together, this will help us build a collective understanding of the readings. Your annotations on readings during this part of the class will be worth 15 points total, based on both the quantity and quality of engagement with the readings and your peers' comments. Perusall notes should be done before class starts.

Discussion Leader: 5 points

Every one will sign up to be discussion leader for one session of the class, where you will help ask questions about the readings and summarize classmates' comments from Perusall.

Methods Exercises: 40 points (4 assignments, 10 points each)

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
- ME2: Probes and Design Activities
- ME3: Authorial Design Methods
- ME4: Qualitative analysis

Final Project: 30 points

By the end of the term, you will 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. There will be multiple Final Project assignments throughout the semester to help you prepare.

- FP1: Brainstorming Research Questions (3 points)
- FP2: Starting a literature review (4 points)
- FP3: Final project proposed questions and methods (5 points)
- FP4: Final project presentation (3 points)
- FP5: Final project submission (15 points)

Participation: 10 points

Participation includes verbal participation in class (in small groups or in the whole class), you can post questions or share links on Teams/Canvas.

Course Policies

Attendance and/or Participation

In-person attendance and participation in this class is important so that we can explore and understand the readings together in seminars, and do hands-on activities in lab sessions.

3 unexcused absences are allowed (you do not need to provide any specific reason – but it may include a job/internship interview, health reasons, traffic, needing to do a presentation for another project, or other unexcused 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 contact me and we can make a plan for alternate arrangements.

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 in order 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.

Use of Generative AI

Assignments in this class may not always feel straightforward (that's the nature of interdisciplinary courses and research-oriented work!). There can be temptation to turn to a generative 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 generative AI.

That being said, I know that generative AI tools can be useful for grammar checking and other tasks. We will broadly follow the ACM Policy's on generative AI software tools

(<https://www.acm.org/publications/policies/frequently-asked-questions>):

- You cannot plagiarize, misrepresent, or falsify content (textual, visual, or otherwise)
- The resulting work you create is an accurate representation of the authors' underlying work and novel intellectual contributions and is not primarily the result of the tool's generative capabilities. (You cannot have the AI generate its own response to a class prompt and turn that in!)
- You accept responsibility for the veracity and correctness of material you turn in

If you use generative AI software tools, you will need to disclose its use as following in an appendix or footnote:

- For the **creation of any content** (textual, visual, or otherwise), you must indicate:
 - Which section(s) were created by generative AI
 - What tool you used and what tool version

- Attach the transcript of your interactions/chatlog with the generative AI tool
- Describe any post-generation editing you did (such as re-phrasing the generated text)
- (For small amounts of generated text – a sentence or less – you do not need to share the input prompts).
- For the **editing of any human-created content**, you must indicate:
 - Which section(s) were edited by generative AI
- For the **inspiration of any content** (e.g., finding sources or clarifying concepts), you must indicate:
 - What types of content you searched for or asked for when using generative AI

Late Assignments

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. If there are extenuating circumstances preventing you from turning in assignments on time, please contact me.

Student Use of Mobile and Computing Devices in the Classroom

Please use computers and other devices in class thoughtfully and for activities related to the course (referring to readings, Perusall notes, sharing comments in our Canvas group, etc). We are all busy and have a lot of commitments, but our class time is one of the few times we have to actually discuss and think about the readings in person together. If computer and device usage gets in the way of our discussions, I may ask us to limit our in-class computer/device usage.

Campus Resources for Students

Graduate Student Academic 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 \(gatech.edu\)](#)). 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. The Dean of Students has a list of services that may be helpful for academic, financial, or personal assistance (see <https://studentlife.gatech.edu/dean-students/academic-financial-personal-assistance>).