LMC 6318 Experimental Media

Tue/Thu 9:30-10:45 (Skiles 346)
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Office hours: TBD

Description

What can we learn from material practices and conditions to design new media interactions?
This class is structured in four main steps. 1) Starting with a discussions on forms of creativity
we will move into challenges posed by 2) material (and media) practices surrounding these
materials before we move into 3) experiential encounters with them. In the final 4) section of the
course, students will apply those findings in their own designs. These final project will ask
students to ideate, design, and implement working prototypes of experimental media objects
based on the observed practices and the students' own encounters.
The class emphasizes experiential engagement through Students will not only participate in
discussions, and design challenges but will also observe and analyze a practitioners before they
will design specific interventions in relation to this practice.
What you should expect: an introduction to issues of creativity research through readings and
discussions, an in-depth study of a craftsperson and their practice, a final project in which you
combine material practices with digital ones to a proof-of-concept prototype.
The course should be interesting for students with an interest in physical computing, speculative
prototyping, and an openness to embrace material literacy.
Some experience in hardware prototyping is recommended.

Learning Outcomes
- Demonstrate the ability to analyze and critically evaluate existing digital media artifacts,
  services, and environments using formal knowledge, and to explain and defend one's
  critical evaluation.
- Demonstrate the ability to devise, design, create, and assess prototypical digital media
  artifacts, services, or environments and to contextualize them within recognized
  traditions of practice.

- Demonstrate ability to use common digital media authoring tools
- Demonstrate ability to set up and use common tools for writing code and managing the
  software development process
- Demonstrate use of digital media to create prototypes
- Demonstrate good time management skills
- Demonstrate ability to set realistic goals
- Can develop interactive media artifacts
- Can design and create digital artifacts that create the experience of agency for the
  interactor.
- Can communicate, coordinate, and work productively as a team member.
- Can summarize their work orally and in written form using formal terminology
- Can justify the design choices in their works

Schedule (changes are bound to happen)

Week	Date	Topic	Reading	Deliverable
		Creativity		
1	1/7	Intro to course **Assignment**: find a physical "creative object" that you can bring to class		
	1/9	Discussion: Approaches to creativity **Due**: creative item (present in class)		Bring in your "creative object"
2	1/14	Creativity: An Introduction **Assignment**: find a "creative person"	Sawyer	
	1/16	Discussion: who is creative and why? **Due**: creative person **Assignment**: Report on practice **Assignment**: Report on experience		Present your "creative person"
3	1/21	How did they get there? Creativity, cognition, and learning	Boden; Papert	
	1/23	Discussion: What is the role of the material?		
		Practices		
4	1/28	Practices and observations TBC	Wikan; Schön	
	1/30	Discussion		
5	2/4	Creativity and Doing	Hallam/ Ingold; Keller & Keller;	
	2/6	Discussion: how to translate this to hybrid worlds?	Cole/ Perner-Wilson; Rosner	
6	2/11	Media, Stuff, and Practices	Nitsche; (Kember/ Zylinska)	
	2/13	Discussion: How do media relate to materials? The curious case of puppetry	(Bell)	

7	2/18	**Due**: Report on practice (present in class)		
	2/20	**Due**: Report on practice (present in class)		
		Materials and Experiences		
8	2/25	Experience, craft, and Creativity	Ingold; Dormer (Sennet; Malafouris)	
	2/27	Exercise: material encountering	Karana; Höök	
9	3/4	(visit to craft lab/ prototyping lab)		
	3/6	(visit to craft lab/ prototyping lab)		
		Sign up for individual project pre-ideation discussion		
10	3/11	**Due**: Report on experience		
	3/13	**Due**: Report on experience **Assignment**: Design intervention **Assignment**: Final paper		
11	3/18	Spring Break		
	3/20	Spring Break		
12	3/25	**Due**: Present your project ideation		
	3/27	**Due**: Present your project ideation		
13	4/1	Work on final project		
	4/3	Work on final project		
14	4/8	Work on final project		
	4/10	Work on final project **Due**: draft of paper		
15	4/15	Work on final project		
	4/17	Work on final project		
16	4/22	Work on final project		
	4/24	**Due**: final presentation		
		Due: final paper		

Grading and Main Deliverables

Assignment	Description	% of final grade
Report on practice	you identify a craftsperson/ maker/ practitioner and deliver an in-depth analysis of their practice – as observer; this will include (but might not be limited to) a documentation of what they do, their tools, their workshop, their materials, as well as an interview of the crafter to understand why they are doing this particular craft/ practice; on your visit to the practitioner observe their techniques, tools, work conditions, approaches to the material (as much as possible). Take as many images as possible and <u>prepare your questions in advance</u>. Be considerate about their time. you present your observations in the form of a short ppt presentation in class; you submit the ppt file on Canvas **Criteria**: depth of visual as well as other material (did you cover multiple areas from space to tools to practices to variations in techniques?) clarity of presentation, slides, materials; covering key points of practice, circumstances, materials, objects at work, other conditions; demonstrating a critical perspective; timely delivery; lead a discussion in class afterwards **Deliverable**: presentation in class and ppt on Canvas; documentation (20+ images, videos)	12%
Report on experience	you engage in the crafting/ making practice yourself; it is important to differentiate this step from the first! You should not mix the observation stage with the personal experience stage; the report on this second stage is an own presentation that might include the object you created, a personal reflection on how it was done, what worked, what did not work; any detail of your personal encounter with that craft; work with extensive documentation (make videos of your encounter, sketches of your work, photos of the process); you submit the presentation/ documentation on Canvas **Criteria**: clarity of presentation, slides, materials; covering key points of experience, materials, objects at work, other conditions; if possible: hands on elements; demonstrating a critical perspective; timely delivery; lead a discussion in class afterwards **Deliverable**: presentation in class and ppt on Canvas; documentation (20+ images; videos)	10%
Final Project	only after both observation phases are completed you should start the design and implementation of the final project, which is a digital response to the craft/ making/ practice you will ideate, design, and implement a proof-of-concept prototype for an experimental media project centering on creativity and material practices that you observed in others;	

	at least partially tried yourself, and identified a digital media intervention in response to and with them The main concern is that the design should be clearly inspired by the practice and its conditions first and emphasize the differences, new questions, problems, or opportunities that such a new focus provides.	
	First you present your project ideation: clearly identify the driving concept for your idea: what is the conceptual change that digital media can open up for this particular practice and its circumstances? Based on this main challenge, very roughly (avoid anything that could be misunderstood as final design idea; use hand sketches, rough estimates, image assemblage and the like) outline 2-3 very different ideas; highlight their individual operations and logics You will also research other projects and papers that relate to this chosen area and present at least one paper as part of your ideation to highlight connections, differences, and what you learned from that paper for your own take **Criteria**: clarity and delivery of the main challenge; openness and richness of the idea sketches. use of multiple methods, details in the exploration, aesthetics (visuals, textures, moving images, sketches), timeliness, presentation (fluency, preparedness, shared roles), clarity of paper analysis; develop the key contributions of the paper and provide key questions that arise from the work; **Deliverable**: presentation in class and ppt on Canvas	12%
	Prototype presentation: part of the evolution from the concept to the design to the implementation is the delivery of a low fi prototype of your project; you present the prototype informally in class **Criteria**: does the technical solution work and is it feasible? If not: do you have an alternative? **Deliverable**: informal presentation in class	
	Final presentation: you will present your project in class **Criteria**: did your project respond to the challenge identified in the observation? Does it relate to theoretical challenges we discussed in class? Connect your piece to at least 2 sources read in class and/ or beyond. Does the project build connections between the media intervention and the practice observed toward your own interpretation? Is the result engaging and does it further the discussion? **Criteria:** fluency of the presentation (timely, focused, all members active, well-structured, good visuals, good delivery); connection to texts; logic (based on observation, informed by experience, grown from design process); functionality of the result; critical engagement provided by the piece **Deliverable**: presentation of the piece and an explanatory ppt in class; submit ppt and at all available material (at least 10	26%

	images covering process and 10 covering the result) on Canvas	
Documentation	a YouTube style video (~ 2 min) that explains the nature, logic, process, evolution, and results of your project **Deliverable**: video submission on Canvas	10%
	you will deliver a final paper that critically examines the whole process from the different observation stages to the project design and implementation; length: about 6 pages in ACM format; you submit the paper on Canvas	10%
Participation	Timely contribution to in-class assignments! active in discussions, active in example sessions; active in design meetings, teamwork, homework; activity and engagement in all meetings; attendance is not participation!	20%

No use of cell phones (including texting) in class.

100-90% = A
89-78% = B
77-64% = C
63- = D

Grading of individual pieces will be in percentage
Late submissions lead to automatic reductions of the grade unless a valid excuse is provided. Any 1 day delay, meaning anything after 5pm of the due day, will have 10% reduced from the grade; any 2 day delay will have 20% reduced, 3 day delays will not be accepted.
The Honor Code of Georgia Tech applies (see https://policylibrary.gatech.edu/student-life/academic-honor-code)

Attendance
A student is allowed three excused absences but increased absences and tardiness to come to class will affect the participation grade. With the fourth absence, the student's participation grade will be automatically lowered by 8 points, with the fifth an additional 8, six absences are an automatic failure of the class.
If a student needs to miss a class, contact the instructor 24 hours in advance. If Institute Approved Absences collide with class times please contact the instructor in advance to make sure the workload can be distributed.
Late submissions of any deliverable will receive a lowered grade (8% if up to 24 hour late, an additional 8% if up to 48 hours late, no submission is accepted beyond 2 days after the due date).

Inclusivity Statement
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.

There is zero tolerance for discrimination or harassment on any basis, including but not limited to race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. Georgia Tech is committed to providing its staff, faculty, and students the opportunity to pursue excellence in their academic and professional endeavors. This opportunity can exist only when each member of our community is assured an atmosphere of mutual respect. Georgia Tech's full antiharassment policy is online here: https://www.policylibrary.gatech.edu/employment/equal-opportunity-nondiscrimination-and-anti-harassment-policy

Violation of any of these expectations will result in appropriate penalties, including but not limited to reduction of grade, rescinding of lab access, or disciplinary action.

These statements might read a bit impersonal and detached but I want to re-emphasize that the class space should be free of harassment of any kind and be a safe space for us to creatively engage together.

What to do if you fall behind or are stressed

Your health is more important than this class. Sometimes it is difficult for the instructor to have enough personal contact to see how you are. But you should know that your health and wellbeing are much more important than any grade or coursework. Let us help if any situation develops – the earlier the better. Again, please inform the instructor of any issues or challenges and do not hesitate to reach out.

Coursework can be demanding and everybody can encounter challenges sometimes. There are many reasons, such as an illness or a family emergencies, that might affect focus and studying conditions. If this happens to you, come and see the instructor about it as soon as possible to make alternate arrangements for work that has been missed, and continue coming to class.

If you encounter more pressing difficulties, anxieties, or mental health challenges, then please let the instructor know but also turn to the support we have in place at the Institute. This includes the Counseling Center see https://counseling.gatech.edu/

Special Accommodation

Students who feel that they may need an accommodation for any sort of disability, please make an appointment to see the instructor during office hours.

Students with disabilities should also contact Disability Services at Tech. For an appointment with a counselor call (404) 894-2563 (voice) / (404) 894-1664 (TDD) email dsinfo@gatech.edu or visit Suite 123 in the Smithgall Student Services Building. More information at: https://disabilityservices.gatech.edu/about/contact-us

Sharing of work

Please be aware that your work might be accessible to others in future classes or in other academic presentations. This regards your code, presentations in class, as well as the videos and other deliverables. Participation in the course implies permission for sharing work with others in the class and with future students if your work is judged to be a valuable example. It might even be shared beyond Georgia Tech in a talk or possible other form. If you are not comfortable with this, please let the instructor know. Unless you inform the instructor in writing (email) that you do not want your work shared with others, it is assumed that it is available. The project videos and documentations might be shared openly by the instructor or the department online as showcases for the class or the program. Videos might be posted (with

proper credits) on the instructor's video channel. Unless you inform the instructor in writing (email) that you do not want your work shared, it is assumed that it is available.

Working References

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For the "practices" section:

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