LMC 6650 MN (90722): Digital Craft
Project Studio Fall 2015
Mo + Wed 1:30-3:00
Where? Skiles 002 (Mo) + craft center/ TSRB 325 (Wed)
[NOTE that room and time might be adjusted to optimize for participation]

Instructor Name, Contact Information and Office Hours

Michael Nitsche
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office hours: Mo 3:15-4:15 TBC
Where? TSRB 320B

Course Description

The course investigates material culture and digital media through the lens of craft and it will specifically look for novel creative practices that combine traditional crafting with digital techniques. Methodological, we focus on a single material, clay, and combine critical readings and discussions on issues of craft and pottery with hands-on exploration. On the one hand, we will read and analyze scholarly work in the area of craft research, media studies, and HCI. This includes work by Adamson, Dormer, and Sennet as well as Rosner and Buechley. On the other hand, we will explore foundations of working with clay and meet experienced potters to learn about their manipulation techniques and how to respond to them. This includes collaborations with the Goat Farm and with Cherrylion Studios.
Through a practice-led and theory-informed approach we explore interventions that transform material work with clay through the inclusion of digital practices. The final deliverable will be a proof of concept prototype that exemplifies the space in-between the two fields and what we have learned about it. The goal is not an optimization of existing craft or HCI practices, nor is it a combination of them with forms of personal fabrication but a transformative new activity achieved through critical reflection and making.
No previous experience in pottery is required – but interest in hands-on work with clay is necessary. The course is not limited to any particular digital technology but students are bound to engage with physical computing technologies and should be flexible and curious to explore different options.

The weekly meetings will be broken down into a theory and discussion session and a practice session per week. Students are expected to read the assigned texts, contribute actively in discussions, develop designs, as well as engage with the practice of clay manipulation. Because we will work with physical materials, students should expect some financial contributions (e.g. for materials including clay and physical computing components). We will not use a single textbook and all reading assignments will be online as pdf.

Learning Outcomes

The learning outcomes of this course for MS students should be:

- 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.
- Can analyze digital media as cultural objects.
- Can summarize their work orally and in written form using formal terminology.

- Can communicate, coordinate, and work productively as a team member.

Additional learning outcomes of this course for PhD students should be:

- Students can formulate original interpretations and design original prototypes that reflect an understanding of the humanistic context of digital media.
- Students can formulate and explore the answers to critical questions in the domains of Arts & Entertainment, Public & Civic Media, and Knowledge & Creativity as related to new media.
- Apply theoretical concepts to specific digital media works.

Required Texts

There will be no single textbook but a good reference book is:
- Adamson, Glenn, ed. 2010. *The Craft Reader*. Oxford, UK, New York Berg.

Grading

	Percentage	Some relevant elements
Participation seminar + participation lab	20%	active in discussions, active in example sessions; active in design meetings, teamwork, homework; activity and engagement in lab meetings;
Paper Presentation	15%	Presentation of selected research paper; covering background; field, method, logic of the paper; critical review with clear argumentation; clarity; quality presentation (slides, delivery); ability to answer questions
Crafter Presentation	15%	Presentation of example potter; covering history, technique, any personal traits; wider acceptance (or rejection); critical review with clear argumentation; clarity; quality presentation (slides, delivery); depth and precision; ability to answer questions
Project Design presentation	10%	Creative design; clear focus; well developed; well presented; maybe a prototype operational?
Final project	25%	Imagination, courage, technical skills, teamwork(!), work with compromises without loosing the core idea; ask questions with your project; about 15-20 images documenting the work and the process; ~2 min video documentation (and quality of that video)
Final project paper + documentation	15%	clear argumentation; referencing of texts used in course and beyond; critical analysis and productive break down of the project;

For PhD students only: **Critical paper on digital materiality**	8% (overall percentage will be adjusted to include extra assignment)	Referencing of texts used in class and beyond; clear argumentation; clear presentation in style, grammar, visuals; clear structure

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

Schedule

Note that the schedule is likely to change over the course of the term.

Field, Method, and Intro to Basics	8/17	Field: Overview	Nitsche et al.
	8/19	Practice: (craft center) lab intro; basic materials and techniques	
	8/24	Field: Positions of craft	Shiner; Dormer; Adamson
	8/26	Practice: (craft center) basic techniques	
	8/31	Method: practice led research and experience **DUE**: crafter presentation; students will present selected craftspeople in class	Frayling; Wiberg; Giaccardi/ Karana;
Process in theory and practice	9/2	Practice: (craft center) Rachel Garceau techniques	
	9/7	School holiday	
	9/9	Practice: (craft center) Rachel Garceau	
	9/14	Process: Material and technology	Heidegger; Sennet; Makela
	9/16	Practice: (field trip) Cherrylion Studios	
	9/21	Process: The transformative element of creating stuff and the way of creating *Zheng guest presentation?*	Richards; Wildenhain; Ingold
	9/23	Practice: (field trip) Cherrylion Studios	
	9/28	**DUE**: paper presentation; students present selected papers on craft and HCI in class	

	9/30	Practice: (field trip TBC) **DUE**: presentation of your first pottery object and reflection of the practice you applied to get there	
	10/5	Process: Discussion/ Development: construction of the pottery practice lay out	Keller & Keller; Slivka; Leach
	10/7	TBC (conference)	
	10/12	School Holiday	
Explore the new space in theory and practice	10/14	Visiting scholar guest talk: *Anna Valgarde* (ITU Copenhagen)	
	10/19	**DUE**: Project Design presentations	
	10/21	Individual review sessions	
	10/26	Explore: "Participatory Design with Materials" or Where is the Digital Bauhaus?	Bowen; Binder/ Lowgren/ Malmborg
	10/28	Work on project	
	11/2	**DUE**: Project prototype presentations in class	
	11/4	Work on project	
	11/9	Explore: Craft and Expression	Bryan-Wilson; Oliver
	11/11	TBC (conference)	
	11/16	Explore: Cognition and craft	Malafouris;
	11/18	Work on project	
Review	11/23	**DUE:** Project presentations	
	11/25	TBC	
	11/30	**DUE**: your paper on the project	
	12/2	Review session of course	

Grading

	Percentage	Some relevant elements
Participation seminar + participation lab	25%	active in discussions, active in example sessions; active in design meetings, teamwork, homework
Paper Presentation	15%	Presentation of text and project; critical review with clear argumentation; clarity; presentation; depth and precision; ability to answer questions
Midterm project	20%	Creative design; clear focus; well

		developed; well presented; prototype operational
Final project	25%	Imagination, courage, technical skills, teamwork(!), work with compromises without loosing quality; ask questions with your project
Final project paper + documentation	15%	Clear documentation; ~2 min video; clear argument in write up; referencing of texts used in course and beyond; critical analysis and productive break down of the project;
For PhD students only: Critical paper on digital materiality	8% (overall percentage will be adjusted to include extra assignment)	Referencing of texts used in class and beyond; clear argumentation; clear presentation in style, grammar, visuals; clear structure

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

Grading of individual pieces will be in percentage. Late submissions are automatically reduced unless the student provides an appropriate excuse before the deadline. A one day delayed submission automatically has a 10% reduction of the grade; 2 days: 20%; 3 days 30% and so on.

Graded Assignments

Paper presentations: you will receive an academic paper on the connection between craft and HCI/ DM and present it to the class; Do not remain on the level of your own first impression; this is not only about the fact that somebody has done something – ask critical questions; how did the project relate to the material? How to the social, historical, technological context? You present in class using powerpoint slides; the presentation should be concise, last about 15 Minutes; leave time for discussion
you hand in: your powerpoint slides on T-Square;

Crafter presentation: you will do a short presentation on a particular potter; what is this crafter's background? Does s/he use any particular techniques, tools, materials? How does the work connect to other work with clay and ceramics? You present in class using powerpoint slides; the presentation should be concise, last about 15 Minutes; leave time for discussion
you hand in: your powerpoint slides on T-Square

First Pottery project: you present one key pottery object created over the first phase of the course and a short reflection on its production process; the reflection should be in some written form (e.g. as a ppt or handout); the object itself is not graded but completion is necessary

you hand in: nothing – the goal is to inform the course discussion on shared practices and experiences

Design presentation: based on our discussions and our experience with working with clay you develop an own project; to approach this project: set it on a solid background from the texts discussed (and others that help you to make your argument); identify the section of the production process for your intervention; explain in what way the intervention presents a transformative step and not a simply continuation or optimization of existing ones; clarify technology and feasibility; you present your idea to the class in practical form and in a powerpoint presentation; start documentation early and excessively!!
you hand in: your powerpoint slides on T-Square

Final project: you will develop your project into a proof-of-concept prototype; the goal is not to develop a flawless product but to create an intervention that shows a novel approach to think and engage with material-digital practices; your project should ask an interesting question and tackle it in an inspiring way; curiosity and exploration well followed through are more important than sheer functionality; you present your project in class as engaging as possible; if at all possible, we want to see the result of your new practice (what objects are achieved through your intervention?)
you hand in: full documentation and a prototype of your project as a physical artifact; a 2 min video documentary about it

Paper on final project: a critical review of your own project; the goal is to write a 3-4 page work in progress paper that provides a solid background section; approach, design, implementation, and critical reflection; this is not a mere post mortem but an academic critical paper; what question did you ask? What perspective did you open? What did your project activate, what did you leave out and why? write a 3 page analysis; use the ACM template
Contextualize your analysis in relation to texts discussed in the course and other research; you also will make a 2 minute video documentation about your project
you hand in: a pdf using the template; and your video + other visual materials/ documentation if needed

Digital materiality paper: (only for PhD students) write a critical review paper about the digital materiality; you can use your project as a jump off point and your final project paper as a basis, but this paper should reach for a wider context and open the more precise point of your final project up to the question of digital media at large; use the ACM style template and use references appropriately; length: approx. 3-4 pages (note that it should be significantly different from the final project paper); this grade will be 8% of your overall grade (all other assignment grades will be adjusted in percentage)
you hand in: a pdf using the ACM template

Attendance Policy
Attendance will count towards the final grade: more than 3 unexcused absences will result in failure of the course. All material must be submitted in order to achieve a passing grade

ADAPTS Information
Notify the instructor in the beginning of the course if you have any disabilities that might need special assistance or consideration. Georgia Tech offers accommodations to

students with genuine and documented disabilities. If you need such accommodations, please make an appointment with the ADAPTS office. Verification of a disability may be obtained by contacting the ADAPTS-Disability Services Program, 404-894-2563. http://www.adapts.gatech.edu

Honor Code:
Any material in a paper not composed by the author, or borrowed without attribution, will be considered plagiarized. Plagiarism is a serious offence and will be dealt with according to the GT Academic Honor Code. When in doubt, use quotation marks and cite sources. Sanctions for plagiarism can include receiving a failing grade in the course or, in serious cases, expulsion from the university.

Use of any previous semester course materials, such as tests, quizzes, homework, projects, and any other coursework, is prohibited in this course.

For any questions involving these or any other Academic Honor Code issues, please consult www.honor.gatech.edu.

References (Selection)

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HCI samples (selection)

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