# LCC 6312 Design, Technology & Representation Fall 2013

Tue, Thu 1:30-3:00 Skiles room 346 Teacher: Michael Nitsche

3 credit hours

# Course outline:

Of the three pillars of creative practice – art, craft, and design – this course will focus on the first two. More precisely it will look at performance art and the emerging field of digital craft and their connections to interaction design. The goal is to explore new expression for digital media through the key fields of both craft and performance. This includes questions of body, material, and memory. How are they incorporated in performance and in craft vs digital media design? How can digital media and interaction design learn from critical debates in Craft Research and Performance Studies?

Addressing these questions, we are looking at new ways of connecting the digital world to activity in physical locations in our discussions as well as in practical prototypes. Technologies discussed will be familiar from hacking and making communities. Our own projects will most likely use the Arduino platform with basic sensing and actuation.

The objective is to learn critical, aesthetic, and technical foundations in craft and performance-driven interaction design. To achieve this, the course will combine theory/ discussions and practice/ lab sessions. Assignments not only include readings and critical reviews but also design challenges and practical projects that serve as stepping stones for our exploration of craft and performance in digital media.

It requires students to actively engage in lively discussions of our assigned readings, pro-actively embrace prototyping technology, and creatively project the questions we develop onto their practical projects.

The last month will be dedicated to work on the final project and targets a collaboration with artist in residence, Jona Bokaer related to the theme of “memory.”

The course should be interesting for students interested in craft, performance, and digital media prototyping.

**Learning Outcomes:**

The projected learning goals of this course are:

for MS:

* 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 use of digital media to create prototypes
* Can compare, critique, and appraise digital media artifacts, services, and environments using formal terminology

additional for PhD:

* Students have knowledge, comprehension and ability to apply historical, cultural, and theoretical concepts to the study of digital media.
* Apply theoretical concepts to specific digital media works

**Workload:**

In addition to the theoretical work, we will encounter craft and performance not only as theoretical domains but also as practices. This includes planned visits to Tech’s craft center and Dramatech. The course is not dedicated to a single technology but we will include introductory sessions on basic prototyping with the Arduino platform in the second half of the term.

**Readings**:

There is no single textbook but useful texts are:

* Adamson, Glenn. (2007). *Thinking Through Craft*. New York: Berg Publishers.
* Dourish, Paul. (2001). *Where the Action Is. The Foundations of Embodied Interaction*. Cambridge, MA, London: MIT Press.
* Schechner, Richard. (2002). *Performance Studies. An Introduction*. Second Edition. New York, London: Routledge.

# Schedule:

Tue – theory session with theory reading assigned

Thu – discussion and hands on sessions

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I: The 3 Tiers** | | | |
| Tue | 20 Aug | Intro to this course | Bryan-Wilson 2012 |
| Thu | 22 Aug | Looking for performance  **Assignment**: group presentations | Schechner 2002; Auslander 2000;  Optional: Schechner 1988 |
| Tue | 27 Aug | DiGRA |  |
| Thu | 29 Aug | On craft: qualities, art struggles, and theory | Adamson 2013; Dormer 1997;  Optional: Pye 1968 |
| Tue | 3 Sept | Context: scraping the social surface of craft and performance | Morris 1888; Marx 1887; Phelan 1993; Dourish 2004 |
| Thu | 5 Sept | Visit the Craft center at Tech(TBC) |  |
| Tue | 10 Sept | **Due**: Group presentations  **Assignment**: own analysis |  |
| Thu | 12 Sept | Visit the Prototyping lab |  |
| **Part II: Materials at Work** | | | |
| Tue | 17 Sept | Body Media | Sennet 2008; Pallasmaa 2009; Risatti 2007 (chapter 11); |
| Thu | 19 Sept | DramaTech visit |  |
| Tue | 24 Sept | Craft Material | Performing Materiality  **Due**: own analysis  **Assignment**: design challenge | Adamson 2007;  Adamson 2013; Fischer-Lichte 2008; |
| Thu | 26 Sept | Digital Materials  Arduino mini intro | Arduino tutorials |
| Tue | 1 Oct | Action and Critical Thinking | Ratto 2011; Hertz 2012; McCullough 2007; Risatti 2007 (chap 16) |
| Thu | 3 Oct | Arduino intro |  |
| Tue | 8 Oct | Making and identity and memory | Adamson 2013; Greer 2004; Goffman 1959; optional: Turkle 2007 |
| Thu | 10 Oct | **Due**: design challenge presentation |  |
| Tue | 15 Oct | Recess |  |
| **Part 3: Final Project** | | | |
| Thu | 17 Oct | **Assignment**: final groups + meet and start discussion |  |
| Tue | 22 Oct | Design review |  |
| Thu | 24 Oct | **Due**: Design presentations to class (Jona on Skype?) |  |
| Tue | 29 Oct | Design presentations (if needed) |  |
| Thu | 31 Oct | **Due**: Own text presentations |  |
| Tue | 5 Nov | Own text presentations (if needed) |  |
| Thu | 7 Nov | Work on projects |  |
| Tue | 12 Nov | Work on projects |  |
| Thu | 14 Nov | **Due**: prototype working |  |
| Tue | 19 Nov | Work on projects |  |
| Thu | 21 Nov | Work on projects |  |
| Tue | 26 Nov | Work on projects |  |
| Thu | 28 Nov | Thanksgiving break |  |
| Tue | 3 Dec | **Due**: final project |  |
| Thu | 5 Dec | Catch up day |  |

The schedule is bound to change – particularly to accommodate our collaboration as well as the discussion-base and explorative nature of our course.

# Grading:

|  |  |  |
| --- | --- | --- |
|  | Percentage | Some relevant elements |
| **Participation seminar + participation lab** | 25% | active in discussions, active in example sessions; active in design meetings, teamwork, homework |
| **Presentation of own work** | 10% | Argumentation of presentation and paper; form; clarity; relevance to other texts |
| **Own Analysis** | 15% | Referencing texts (written and digital) from the course; argumentation; clarity; depth and precision |
| **Group Analysis** | 10% | Referencing texts (written and digital) from the course; argumentation; clarity; presentation; depth and precision; ability to answer questions |
| **Design challenge** | 15% | conceptual clarity, creativity and imagination, originality, connecting the design and action to discussion in class |
| **Final project** | 25% | Participation, imagination, courage, technical skills, teamwork(!), work with compromises without loosing quality; NOTE that your group project’s grade will serve as guideline for individual grades but your personal grade might vary from it depending on your involvement in the project |

100-90% = A

89-78% = B

77-64% = C

63- = D

Grading of individual pieces will be in percentage. Late submissions are not accepted without appropriate excuse. A one day delayed submission automatically has a 10% reduction of the grade; 2 days: 20%; 3 days 30% and so on.

# Technical skills to learn:

This course uses creative practices that are not only digital – be ready to dance, knit, or carve. The digital technologies will most likely focus on the Arduino platform and students are expected to quickly adapt to that. See: <http://www.arduino.cc/>

There are countless tutorials online but a good first start is: <http://arduino.cc/en/Guide/HomePage>

A comparable simple introduction text is: “Getting Started with Arduino”

Other start up books will be on T-Square

Please note: Students will have supply own materials for the course

Recommended kits to purchase: <http://www.adafruit.com/products/68>

Alternative: <http://www.makershed.com/Getting_Started_with_Arduino_Kit_V3_0_p/msgsa.htm>

# Main Assignments:

Group analysis: you will be split up into random groups of 2-3 students, receive a crafter/ artist, select one or two pieces from this person’s work, and explore their background (production, perception, history, technology …) starting questions include: How does this particular piece use material, body, and skill/ technique to come to life? How does it connect to its surroundings (does it blend in or create a contrast or a dialogue)? What is the underlying idea of this involvement (e.g. does it follow a specific theory)? Can you draw a parallel to a digital media piece (a game, a web site, a hack, a database …)?

Do not remain on the level of your own first impression – this is not about what you thought when looking at the piece. Instead, research the artist’s and the piece’s background to give a more substantial presentation.

*you hand in*: analyses will be presented as powerpoint talks by the whole group and discussed in class; submit your powerpoint via T-Square; it should clearly show your argumentation; the presentation should be concise, last about 15 Minutes; make sure all group members are involved in the presentation; leave time for discussion

Own analysis: find an object (that is not yours!) as a “work of memory;” (e.g. look in the folk art section of the High Museum for inspiration) analyze it including the way it was created, by whom, when, why, under what circumstances? Use this as a basis to write about it as an expressive object. how does it relate to other onlookers, or users, or makers?; write a 3 page analysis; use the ACM template

Contextualize your analysis in relation to texts discussed in the course and other research

*you hand in*: a pdf using the template; if necessary: include image or video of the object you discuss

Design challenge: a design exercise that will ask you to think further about the object you analyzed already; the task itself will be given at the assignment and will ask you to develop an own approach in relation to the chosen object, design an activity/ modification/ action around it, and present it in class

*you hand in*: the presentation in class in person carries the most weight; if your particular design needs further elements (images, videos, objects); submit what is possible via T-Square

Presentation of own text (this will be in the initial design phase of your final project; take a – preferably academic/ critical – text from your own background and present it to the course; put it in context with the course but especially with the specifics of your final project; How does this text inform your final project? What does it add to it?); you will present a brief discussion of the chosen text in class (10 minutes sharp); do not reduce yourself to a mere retelling but offer a critical discussion and connect the text to the group project and the course overall

*you hand in*: your powerpoint presentation and media you used/ the selected text on T-Square

group project – we will form groups of ~3 students working on final group projects there are three stages:

*first* you will present your project in a very short powerpoint presentation to the group; this will clarify: who does what on the project? What is the project about? What is its name? How will it look and feel and work?

*second* you will show a running technical prototype that shows your basic concept up and running

*third* you will present your completed project in class

*you hand in*: all via T-Square; a zipped folder that contains: a simple web site (NO FLASH!) that gives access to the material of your project such as: design documents, sketches; a lot (!) of images taken during the process and at finalization; if by any means possible: a mini video outlining the project; your powerpoint presentation; a ~3 page post-mortem write-up of the piece using the ACM template

NOTE: you will grade each other in the group; these grades will serve as indication for the teacher to consider necessary adjustments of individual group members’ grades in relation to the overall result of the group

Critical review – (only for PhD students) write a critical review paper about the group project that was realized; this should include a contextualization of the project within the readings and the background of the course; a critical review of the project itself (using the proper terminology); and an assessment of its qualities and design; use the ACM style template and use references appropriately; this grade will be 8% of your overall grade (all other assignment grades will be adjusted in percentage)

# References:

* Adamson, Glenn. (2007). Thinking Through Craft. New York: Berg Publishers.
* Adamson, Glenn. (2013). The Invention of Craft. London, New Delhi, New York, Sydney: Bloomsbury.
* Adamson, Glenn (Ed.). (2010). The Craft Reader. Oxford, UK, New York Berg.
* Alfoldy, Sandra (Ed.). (2010). NeoCraft: Modernity and the Crafts. Halifax, CAN: The Press of the Nova Scotia College of Art and Design.
* Bell, Nicholas R. (2012). Craft Futures. A Generation at Hand. In N. R. Bell (Ed.), 40 under 40. Craft Futures (pp. 13-41). Washington, DC: Renwick Gallery of the Smithsonian American Art Museum.
* Benford, Steve, & Giannachi, Gabriella. (2011). Performing Mixed Reality. Cambridge, MA: The MIT Press.
* Chaiklin, Seth, & Lave, Jean (Eds.). (1994). Understanding Practice. Perspectives on Activity and Context. Cambridge, UK; New York, NY: Cambridge University Press.
* Dixon, Steve. (2007). Digital Performance. A History of New Media in Theater, Dance, Performance Art, and Installation. Cambridge, MA/ London: MIT Press.
* Dormer, Peter (Ed.). (1997). The Culture of Craft. Manchester, New York: Manchester University Press.
* Dourish, Paul. (2001). Where the Action Is. The Foundations of Embodied Interaction. Cambridge, MA, London: MIT Press.
* Dunne, Anthony. (2008). Hertzian Tales. Electronic Products, aesthetic Experience, and Critical Design. Cambridge, MA: MIT Press.
* Fischer-Lichte, Erika. (2008). The Transformative Power of Performance: A New Aesthetics. London: Routledge.
* Frayling, Christopher. (2011). On Craftsmanship. Towards a new Bauhaus. London: Oberon Books.
* Greenhalgh, Paul. (1997). The History of Craft. In P. Dormer (Ed.), The Culture of Craft (pp. 20-52). Manchester, UK: Manchester University Press.
* Jacucci, Giulio. (2004). Interaction as Performance. (Ph.D.), University of Oulu, Oulu.
* Laurel, Brenda. (1991). Computers as Theatre. Reading/ Mass: Addison-Wesley Publishing Company.
* Levine, Faythe, & Heimerl, Cortney. (2008). Handmade Nation: The Rise of DIY, Art, Craft, and Design. New York: Princeton Architectural Press.
* Manovich, Lev. (2001). The Language of New Media. Cambridge, MA; London: MIT Press.
* McCullough, Malcolm. (1998). Abstracting Craft: The Practiced Digital Hand. Cambridge, MA: MIT Press.
* McKenzie, Jon. (2001). Perform or else. From Discipline to Performance. New York, NY: Routledge.
* Phelan, Peggy. (1993). Unmarked. The Politics of Performance. London, New York: Routledge.
* Risatti, Howard. (2007). A Theory of Craft. Function and Aesthetic Expression. Chapel Hill: University of North Carolina.
* Schechner, Richard. (2002). Performance Studies. An Introduction. Second Edition. New York, London: Routledge.
* Schechner, Richard. (2003). Performance Theory. New York: Routledge.
* Sennet, Richard. (2008). The Craftsman. New Haven, CT; London, UK: Yale University Press.
* Turkle, Sherry (Ed.). (2007). Evocative Objects. Things we Think with. Cambridge, MA, London: MIT Press.

**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**:

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.

**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 me or [www.honor.gatech.edu](http://www.honor.gatech.edu).