

CMS.842 Playful and Social Interaction Design Exploration

Graduate Elective

Spring 2016

Version 2

Wednesday 7pm-10, room: 56-167

Instructor: Mikael Jakobsson (mjason@mit.edu), E15-320C

Office hours by appointment.

Course website: <http://stellar.mit.edu/S/course/CMS/sp16/CMS.842/>

Course Content & Learning Objectives

This course invites students to explore research questions that are best studied through the design, evaluation, and use of playful prototypes. The overall objective of the course is a richer understanding of the potential and limitations of using iterative design and rapid prototyping as research methods. Students will familiarize themselves with the theoretical foundations of interaction design and explorative design research, as well as practice methods applied to working with the physical and digital design materials they choose. By the end of the course, the student should:

- Have a fundamental understanding of the different forms of inquiry through design as applied to playful and social experiences.
- Be able to apply interaction design methods to the exploration of design spaces related to their interests.
- Understand how concepts from play and games can be utilized in the design of a wide variety of social systems, and be able to reflect on problems and limitations related to these practices.
- Be able to work creatively with physical and digital design materials.

Learning Activities

Students will be working throughout the semester on one individual project encompassing a complete cycle of formulating a research question, design conceptualization, development, testing, and dissemination of findings. In addition, students will be working in class on short design exercises and be assigned readings and other exercises to be done between sessions. Class sessions will be dedicated reading seminars, presentations, exercises, and continuous feedback and discussion of the different stages of the main projects (often referred to as "crits").

Requirements and Grading

The performance on the main assignment as expressed through its deliverables (one or more prototypes, an oral presentation and a written report) together with the performance during the crit sessions will be the basis for student assessment. Fulfillment of the learning objectives will be evaluated throughout the course and aggregated in a summative assessment.

- Students who miss more than three crit sessions will fail the process component of the class. Exceptions will only be granted with a doctor or MIT Student Support Services note or for religious holidays (advance notification required). Please note that even if an exception is granted, the grade may be affected.
- Students who do not submit all deliverables of the main assignment on time will fail the product component of the class. Extensions will only be granted with a doctor or MIT student support services note. Please note that even if an extension is granted, the grade may be affected.

Electronics Policy

Laptops/tablets are allowed in the class on the condition that students refrain from using them for activities unrelated to the class such as checking email or social media. We request the full attention of the students during class.

Statement on Plagiarism

Academic integrity is the foundation of all scholarship, because being able to trace how our ideas have developed in relation to other people's theories, research, and evidence, as well as our own, is what ensures the soundness of our research. Thus university communities have a collective investment in ensuring that the practices of academic integrity are thoroughly learned and carefully practiced.

As members of this class and the larger scholarly community you are expected to abide by the norms of academic integrity. Everything you submit must be your own work, written specifically for this class. While a good deal of collaboration is encouraged in and out of class, all sources—of ideas as well as words and images, whether from a friend, a text, or the internet—must be acknowledged according to the conventions of academic citation. Willful disregard for these conventions—i.e., plagiarism—can result in withdrawal from the course with a grade of F, and/or suspension or expulsion from the Institute. For more information about policies and practices, please refer to the MIT Policy on Academic Integrity: integrity.mit.edu

Writing and Communication Center

The WCC at MIT (Writing and Communication Center) offers *free* one-on-one professional advice from communication experts (MIT lecturers who all have advanced degrees and who are all published writers). The WCC works with undergraduate students, graduate students and post-docs.

The WCC helps you strategize about all types of academic and professional writing as well as about all aspects of oral presentations (including practicing your presentations & designing slides). No matter what department or discipline you are in, we help you think your way more deeply into your topic, help you strategize to convey your message more effectively to particular audiences, help you polish your style, and help you see new implications in your data, research and ideas. The WCC also helps with everything from understanding genre conventions to analyzing what particular journals require. We also help with all English as Second Language issues, from writing and grammar to pronunciation and conversation practice,

The WCC is located in Kendall Square (E39-115, 55 Hayward Street, around the corner from Rebecca's Cafe). To register with our online scheduler and to make appointments, go to <https://mit.mywconline.com/> . To access the WCC's many pages of advice about writing and oral presentations, go to <http://cmsw.mit.edu/writing-and-communication-center/> . The Center's core hours are Monday-Friday, 9:00 a.m.-6:00 p.m.; evening hours vary by semester—check the online scheduler for up-to-date hours.

Course Calendar

Week 1	Feb 3	Introduction Week
Week 2	Feb 10	Design as Research Method
Week 3	Feb 17	Fundamentals of Play
Week 4	Feb 24	Concept Presentations
Week 5	Mar 2	The Design Process & Prototyping
Week 6	Mar 9	Thinking Through Prototypes
Week 7	Mar 16	Testing
Week 8	Mar 23	Spring Vacation
Week 9	Mar 30	Presentations
Week 10	Apr 6	Presentations
Week 11	Apr 13	Techniques For Presentation and Dissemination
Week 12	Apr 20	Reflective Practices & Interaction Criticism
Week 13	Apr 27	Project Work and Individual Consultation
Week 14	May 4	Final Presentations
Week 15	May 11	Final Presentations Submission deadline for all main assignment deliverables.

Tentative Reading List

Students will be assigned some readings individually based on the specifics of their projects. Since information retrieval is an important part of the research process, they will also be asked to find and evaluate their own source materials.

Bardzell, Jeffrey, and Shaowen Bardzell. 2011. "Pleasure Is Your Birthright: Digitally Enabled Designer Sex Toys As a Case of Third-Wave HCI." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 257–66. CHI '11. New York, NY, USA: ACM.

Bardzell, Jeffrey, Shaowen Bardzell, Guo Zhang, and Tyler Pace. 2014. "The Lonely Raccoon at the Ball: Designing for Intimacy, Sociability, and Selfhood." In *Proceedings of the 32Nd Annual ACM Conference on Human Factors in Computing Systems*, 3943–52. CHI '14. New York, NY, USA: ACM.

Bardzell, Jeffrey, Jay Bolter, and Jonas Löwgren. 2010. "Interaction Criticism: Three Readings of an Interaction Design, and What They Get Us." *Interactions* 17 (2): 32–37.

Binder, Thomas, Jonas Löwgren, and Lone Malmberg. 2008. *(Re)Searching the Digital Bauhaus*. Springer Science & Business Media.

Bowers, John. 2012. "The Logic of Annotated Portfolios: Communicating the Value of 'Research Through Design.'" In *Proceedings of the Designing Interactive Systems Conference*, 68–77. DIS '12. New York, NY, USA: ACM.

Dunne, Anthony. 2006. *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design*. The MIT Press.

- Eladhari, Mirjam P., and Elina M. I. Ollila. 2012. "Design for Research Results Experimental Prototyping and Play Testing." *Simulation & Gaming* 43 (3): 391–412.
- Fallman, Daniel. 2008. "The Interaction Design Research Triangle of Design Practice, Design Studies, and Design Exploration." *Design Issues* 24 (3): 4–18.
- Flanagan, Mary. 2013. *Critical Play: Radical Game Design*. Cambridge, Mass.: The MIT Press.
- Fullerton, Tracy, Hoffman, Steven S, and Christopher, Zimmerman, Eric Swain. 2008. *Game Design Workshop: a Playcentric Approach to Creating Innovative Games*. Amsterdam: Morgan Kaufmann/Elsevier.
- Gaver, Bill, and John Bowers. 2012. "Annotated Portfolios." *Interactions* 19 (4): 40–49.
- Gaver, William. 2012. "What Should We Expect from Research Through Design?" In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 937–46. CHI '12. New York, NY, USA: ACM.
- Gaver, William W., Andrew Boucher, Sarah Pennington, and Brendan Walker. 2004. "Cultural Probes and the Value of Uncertainty." *Interactions* 11 (5): 53–56.
- Gaver, Bill, Tony Dunne, and Elena Pacenti. 1999. "Design: Cultural Probes." *Interactions* 6 (1): 21–29.
- Geertz, Clifford. "Deep play: Notes on the Balinese cockfight." *The Interpretation of Cultures: Selected Essays* (2002): 80-98.
- Höök, Kristina, and Jonas Löwgren. 2012. "Strong Concepts: Intermediate-Level Knowledge in Interaction Design Research." *ACM Trans. Comput.-Hum. Interact.* 19 (3): 23:1–23:18.
- Koven, Bernard De. 2013. *The Well-Played Game: A Player's Philosophy*. Cambridge, Massachusetts: The MIT Press.
- Lim, Youn-Kyung, Erik Stolterman, and Josh Tenenber. 2008. "The Anatomy of Prototypes: Prototypes As Filters, Prototypes As Manifestations of Design Ideas." *ACM Trans. Comput.-Hum. Interact.* 15 (2): 7:1–7:27.
- Moggridge, Bil. 2007. *Designing Interactions*. Cambridge, Mass: The MIT Press.
- Nelson, Harold G., and Erik Stolterman. 2014. *The Design Way: Intentional Change in an Unpredictable World*. Second edition. The MIT Press.
- Oulasvirta, Antti, Esko Kurvinen, and Tomi Kankainen. 2003. "Understanding Contexts by Being There: Case Studies in Bodystorming." *Personal Ubiquitous Comput.* 7 (2): 125–34.
- Salen, Katie, Zimmerman, Eric. 2003. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass: The MIT Press.
- Sanders, Elizabeth B.-N., and Pieter Jan Stappers. 2008. "Co-Creation and the New Landscapes of Design." *CoDesign* 4 (1): 5–18.
- Sicart, Miguel. 2014. *Play Matters*. Cambridge, Massachusetts: The MIT Press.
- Schön, Donald. 1984. *The Reflective Practitioner: How Professionals Think In Action*. Basic Books.