

LMC 6650 BM: ADAM Lab Project Studio

Mobile Learning Technologies

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Office hours: TBD

Class meetings: T 1:35–2:55 (TSRB 325), F 1:05–2:55



This syllabus is a living document subject to change during the term.

Course Description

This course will focus on the design and development of alternate methods of teaching introductory computing concepts within mobile and installation-based environments. Rather than starting from scratch, it will make use of the current online EarSketch (<http://ears sketch.gatech.edu>) learning environment and curriculum as a research domain for exploring potential mobile approaches to computational remixing that reach learners in formal and informal settings. Students in this course will, over the duration of a year, design, prototype, build, and evaluate mobile CS learning experiences – grounded in EarSketch’s computational music remixing paradigm – with a focus on the new high school AP CS standards.

M.S. Learning Objectives

- 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
- Demonstrate good time management skills
- Develop interactive media artifacts
- Can justify the design choices in their works
- Can formulate and test design hypotheses
- Can communicate, coordinate, and work productively as a team member

Ph.D. Learning Objectives

- Students can identify and analyze a domain within the field digital media and identify areas for original contribution as well as methods to pursue these contributions.
- Apply theoretical concepts to specific digital media works
- 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
- Summarize and paraphrase key theoretical works

Attendance & Participation

Class attendance and participation is mandatory. Participation in class discussion is imperative because it allows you to explore the readings, computing concepts, and projects collaboratively, and in the process, discover meanings and issues that you probably would not discover on your own. Participation in class also challenges you to continuously question, refine, and articulate your own ideas and interpretations.

In addition, much of this class is based in critiques, which require full participation and cannot be replicated outside of class. Extensive teaching and learning occur through critiques: it is through critiques that you will develop your skills for both making and discussion of the made. Thus, your attendance and participation in critiques is an important and required aspect of this class.

Grading

If you complete all of the requirements for the assignment reasonably well, you should expect to earn a B. In order to earn an A, you must complete and go “above and beyond” all of the requirements and your work must be exceptional across multiple grading factors.

Absence from more than three classes will result in the loss of 1-letter grade for the course.

Tardiness for more than four classes will result in the loss of 1-letter grade for the course.

Information for Students with Disabilities

Please notify the instructor if you have any disabilities with which you need special assistance or consideration. The campus disability assistance program can be contacted through ADAPTS: <http://www.adapts.gatech.edu>.

Honor Code Statement

Students are expected to adhere to the Georgia Tech Honor Code: <http://honor.gatech.edu>.

Assignments

The output of the studio will be split across semesters:

Fall 2014: Each student team (1–3 students, depending on course size) will present a design document with clear rationale based in the related academic literature, reference media sources, and the current EarSketch ecosystem.

Winter 2015: Each student team (1–3 students, depend on course size) will implement and evaluate functional prototypes of their designs from fall 2014.

Course Schedule

Tuesdays for the course will be dedicated to research discussions, design meetings, and project coordination.

Fridays will be a student–led reading group focused on topics related to our work, including the learning sciences, mobile media, educational media, and music computation.

Lagniappe

All ADAM Lab members are required to get IRB training. It is a simple online process that takes about an hour to complete. Go here (<http://researchintegrity.gatech.edu/about-irb/irb-required-training/>) for the training and test site.

Door access is for lab members only. Please coordinate with Dr. Magerko or Mr. Terrell for door access.

Please do not remove any equipment from the lab without permission. There will be a signup sheet on the lockers for games, books, etc.