
Music Tech Research Lab

MUSI 7100**Fall 2026**

Course Hours: Mon/Wed 2:00-2:50 pm
Location: Mon: WV 175, Wed: Couch 204
Credits: 1–21 credit hours
CRN: 90507

Instructor: Henrik von Coler
Email: hvc@gatech.edu
Office: Couch 209
Office Hours: by appointment

1 General Course Information

1.1) Course Description

This section of the Music Tech Research Lab focuses on the research topics of the Lab for Interaction and Immersion (L42i). In guided individual research, students will explore novel technological and artistic concepts, as well as empirical and artistic research methods.

1.2) Learning Outcomes

After successful completion of the class, the students will demonstrate

- knowledge of technical and aesthetic practices in music technology,
- the ability to design and implement artistic works, artifacts and interfaces, software, software frameworks, research studies, and/or educational interventions in music technology
- the ability to approach a research project by formulating the research question, doing a literature survey, designing and realizing the methodology, evaluating and analyzing the results systematically, and presenting the results in a presentation and a scientific paper, artistic work, and/or artifact.

1.3) Required Course Materials

Relevant materials will be provided or linked in the official Canvas course.

1.4) Prerequisites

Students must be enrolled in the MS or PhD programs in music technology. Prior experience in music composition, theory, production, and/or performance is helpful, as is experience in allied

fields such as computer science, human-computer interaction, mechanical engineering, electrical engineering, industrial design, data analytics, psychology, and/or education.

2 Grading

2.1) Component Weighting

The overall grade consists of:

Component	Weight
Attendance	15%
Project work	35%
Paper	25%
Final presentation	25%

2.2) Description of Graded Components

Attendance

Presence is mandatory at Monday seminars and in lab meetings on Wednesdays. Mandatory individual meetings will be scheduled as needed.

Project Work

Individual or group project spanning one or multiple semesters. Grades will assigned according to quality, significance, and impact of the individual contribution. Students are expected to work on research questions and creative projects independently and complete assigned tasks in a timely manner.

Paper

A paper is written for every semester of this research class, documenting the progress and outcomes. Papers are written in conference style, describing the project in a scientific style in a quality that would allow conference submission. Grades will be assigned according to structure, clarity, references, quality of information, and form.

Final Presentation

A final presentation during the School of Music's demo day concludes every semester of this research class. Depending on the nature of the project, either of the following presentation modes applies:

- A) Demonstration with accompanying poster for research projects.
- B) Performance or installation of creative projects.

2.3) Grading Policies

All graded components will be graded in points. The final grade for the course will be determined by dividing the total points earned by the number of points possible for each of the categories listed above. These numbers will be converted into a letter grade according to the following scale:

Grade	Range
A	100–90%
B	89–80%
C	79–70%
D	69–60%
F	59% and below

3 Course Policies and General Information

3.1) Communication

All relevant deadlines for submissions and assignments will be published in the course's Canvas page. All additional communication happens in a dedicated Microsoft Teams channel for the course.

3.2) Use of Tools, Code, and Media

In courses involving software, hardware, audio systems, or creative tools, students are expected to use institutional resources responsibly, back up their work, and document external materials clearly. When generative or assistive tools are used, students should be prepared to explain their process and indicate where such tools materially shaped the submitted work.

3.3) Academic and Research Honesty/Integrity Statement

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review the student [Code of Conduct](#) and the [Academic Honor Code](#). Students are expected to perform research in an ethical and responsible manner.

3.4) Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the [Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

3.5) Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-

Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.