

BAIN MUSC 336
Introduction to Computer Music

SYLLABUS

Instructor

Dr. Reginald Bain, Professor
Composition and Theory

Contact Information

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Office: Music Building, R227
Office Hours: MW 1:00-2:00 pm, and by appointment

Course Information

Term: Fall 2025
Format: MW 12:00 - 12:50 pm; B3WEB¹
Location: Music Building, R006; Lab: Computer Music Studio B, R011
Blackboard Page: <https://blackboard.sc.edu>
Website: <https://reginaldbain.com>

COURSE MODULES

1. Course & Studio Introduction
 2. Audio Editing & Transformation
 3. Interactive Music Programming & MIDI
 4. Real-Time Digital Audio
 5. Synthesis
 6. Special Topics
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Description

Techniques of computer-generated music with a focus on music programming, MIDI, digital audio, and synthesis.

Prerequisites

Permission of instructor required. This course has been designed to support the BM Composition degree and Audio Recording minor. General knowledge of personal computers and operating systems (Mac OS or Windows).

Required Textbooks (Open Access)

Burk, Phil, Larry Polansky, Douglas Repetto, Mary Roberts and Dan Rockmore. 2011. *Music and Computers: A Theoretical and Historical Approach*, Archival Version. Available online at: <https://musicandcomputersbook.com>.

Hass, Jeffery. 2025. *Introduction to Computer Music: An Electronic Textbook*, 2nd ed. Bloomington, IN: Indiana University. Available online at: <https://cmtext.indiana.edu>.

Other digital course materials will be made available via the course Blackboard page and website.

Technical Requirements

A computer, Web access, and a university-provided Blackboard account are required to access the digital course materials and submit work in Blackboard. The creative projects are designed so they may be completed in Computer Music Studio B. If you run into any technical difficulties, please let me know as soon as possible via e-mail so I may assist you. For complete technical requirements, see *Links for Students > Blended Courses* on the class website.

Instructional Methods & Course Format

This course will be taught using multiple instructional methods including flipping, group discussion, lecture/demonstration, pair programming, student-centered learning, and guided discovery-learning activities with associated critical discussion. For more information about the course format see *Links for Students > Blended Course Information* on the course website.

¹ Blended/Hybrid Up to 49% web. Course that is taught both face-to-face and online with 49% or less of the course offered online. Course meets in-person on Monday and Wednesday and activities/assignments are completed asynchronously online by students in lieu of a Friday meeting.

I am always happy to help you. Please don't hesitate to ask for help. The earlier you ask for assistance the better.

Course Goals and Objectives

Upon successful completion of this course, students will be able to:

- Edit and transform digital audio for creative purposes
- Program a computer to generate real-time interactive music and sound
- Synthesize, sequence, and mix digital music
- Identify the acoustic and psychoacoustic principles involved in digital audio and sound synthesis
- Create original (or derivative) computer music
- Navigate online resources available in the field of computer music and related disciplines
- Analyze electronic music and place it within an appropriate theoretical/historical context

Course Requirements

Daily use of the course Blackboard page and website to access the digital course materials. Weekly reading, listening, and homework activities. There will be two online exams (*Midterm Exam* and *Final Exam*) and three creative projects (1. Audio; 2. Programming; 3. Free Choice) with detailed technical/artistic guidelines. Submission dates/times are available in the *Reading & Assessment Schedule* as well as in Blackboard. All work for the course will be submitted electronically (via Blackboard). Late work cannot be accepted – except in the case of a documented *excused absence*. Work that is not submitted is averaged into the student's grade using a score of zero.

Attendance Policy

This course will follow the university *Attendance Policy* which is available online at:

<https://academicbulletins.sc.edu/undergraduate/policies-regulations/undergraduate-academic-regulations/>

Attendance will be taken at every f2f meeting and the record posted in Blackboard. It is the student's responsibility to sign the daily attendance sheet and check the Blackboard record for accuracy. Attendance is subject to the university's "5% Rule." The instructor may exact a one letter-grade penalty if the student exceeds this threshold.

University Policies and Student Services

Information about the university's **academic integrity** policy, **Student Disability Resource Center (SDRC)**, and **other student services** is available on the course website (see *Links for Students*). If you are registered with the SDRC, please be sure that I receive a copy of your accommodation letter during the first week of class so I may work with you (and SDRC as necessary) to make sure your accommodations are met. The SDRC is located in Close-Hipp, Suite 102. You may reach the SDRC via e-mail sadrc@mailbox.sc.edu or phone 777-6142. More information is available online at:

<https://sc.edu/about/offices_and_divisions/student_disability_resource_center/index.php>.

Health and Wellness

The School of Music cares about the health, safety and wellbeing of its students, faculty, and staff. This site provides information on a variety of wellness topics to encourage our Gamecock Music Community to embrace and promote self-care:

https://sc.edu/study/colleges_schools/music/spark_laboratory/music_wellness/index.php

Classroom & Studio Policies

I am committed to making each day we meet a safe, active, focused, positive, and distraction-free learning environment for everyone in the class. I expect all students to follow the university guidelines for classroom *safety* and *acceptable conduct*, as well as the guidelines for *studio etiquette* documented in the *Studio B Policies* document.

Grading Scale & Distribution

100-90	A	89-85	B+	84-80	B	79-75	C+	74-70	C	69-65	D+	64-60	D	59-0	F
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25% – Assignments & Activities

45% – Three Creative Projects: Audio; Programming; and Free Choice (15% ea.)

30% – Midterm and Final Exam (15% ea.)