#### University of South Carolina School of Music

# BAIN MUSC 336 Introduction to Computer Music

## **SYLLABUS**

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Dr. Reginald Bain, Professor Composition and Theory

#### **Contact Information**

E-mail: rbain@mozart.sc.edu Voice mail: (803) 777-8183 Office: Music Building, R227

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

## **Course Information**

Term: Fall 2023

Format: MW 12:00 - 12:50 pm; B3WEB<sup>1</sup> 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. Digital Audio
- 5. Synthesis
- 6. Sequencing & Special Topics

## **Description**

Techniques of computer-generated music production including aspects of MIDI, digital synthesis, and music programming.

## **Prerequisites**

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:
<a href="https://musicandcomputersbook.com">https://musicandcomputersbook.com</a>

Hass, Jeffery. 2020. *Introduction to Computer Music: An Electronic Textbook*, 2nd ed. Bloomington, IN: Indiana University. Available online at: <a href="https://cmtext.indiana.edu">https://cmtext.indiana.edu</a>>.

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 that I may assist you. For complete technical requirements, see the following page on the course website: Links for Students > Blended Courses.

# **Instructional Methods**

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.

<sup>&</sup>lt;sup>1</sup> 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.

# BAIN MUSC 336 Introduction to Computer Music

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
- 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) audio, programming, and sequencing projects
- 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 Blackboard exams (*Midterm Exam* and *Final Exam*) and three creative projects (1. Audio; 2. Programming; 3. Synthesis, Sequencing, or RTI) 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* that is available online at:

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

Your instructor will take attendance every day. An unexcused absence in excess of "The 5% Rule" will be decremented from the Homework/Attendance grade at a rate of 2% per day.

# **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 <a href="mailto:sadrc@mailbox.sc.edu">sadrc@mailbox.sc.edu</a> or phone 777-6142. More information is available online at:

<a href="https://sc.edu/about/offices">https://sc.edu/about/offices</a> 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** 

25% - Homework/Attendance

45% - Three Creative Projects: Audio; Programming; and Synthesis, Sequencing, or RTI (15% ea.)

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