

# **COURSE OUTLINE**

## **MUSC-109**

### **Techniques of Electronic and Computer Music**

**3 Semester Hours**

## **HOWARD COMMUNITY COLLEGE**

### **Description**

This course will serve as an introduction to the techniques of electronic music production. Students will be exposed to the principles of sound synthesis with an emphasis on computer control via the Musical Digital Interface Standard (MIDI). Various software programs for the direct programming of synthesizers and sequencing of music will be utilized. Audio reproduction techniques will be employed by students in the realization of final projects. Each student will be required to spend at least two additional hours per week in the lab independently working on assigned projects. Prerequisite: MUSC-110. (3 hours weekly)

### **Overall Course Objectives**

Upon completion of this course, the student will be able to:

1. Demonstrate a working understanding of the sound synthesis technologies of commonly available commercial synthesizers.
2. Create a personal library of sound timbres using voicing/librarian software.
3. Arrange, compose, and sequence original music under computer control.
4. Create computer generated notation using desktop publishing music software.
5. Record and mixdown an original final project.
6. Explain advanced techniques for synchronizing music with a visual image via SMPTE timecode.
7. Demonstrate an understanding of the basic techniques of file management and editing on the computer.

### **Major Topics**

- I. An Overview of MIDI
- II. MIDI Equipment
- III. Composing Tools
  - A. Sequencing
  - B. MIDI Files
  - C. Notation
- IV. Composing Techniques
- V. Sound Editing
- VI. Synchronization and Audio Production
- VII. Automation and Post-Production

## **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

Final grades will be calculated from written tests based on classroom lectures and textbook reading and a final project containing original or arranged music demonstrating the student's command of the technological skills introduced in the classroom.

The course includes a comprehensive final.

## **Other Course Information**

This course is an Arts and Sciences elective, a Fine Arts elective, and a Humanities elective.