# MUSC 110
# Survey of Music and Audio Technology
3 Credits

Community College of Baltimore County
Common Course Outline

## Description

**MUSC 110 – Survey of Music and Audio Technology:** Explores emerging applied software applications in audio technology as tools to generate, present, collaborate and share for education, employment and personal enrichment. Students manage and organize audio files, apply information literacy skills to research, present course materials, develop solutions to workplace problems, and identify ethical practices in the field of audio technology.

**Pre-requisites:** ESOL 052 and ESOL 054

## Overall Course Objectives

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

1. differentiate between the components and basic structure of a modern computer system (RAM, storage, processing, operating systems, applications, hardware);
2. analyze the nature and properties of sound, and the ways it can be created, measured, shaped and manipulated, stored, and transmitted;
3. describe an audio signal as it flows within and between digital and analog audio equipment;
4. diagram the basic use and setup of analog and digital sound systems;
5. use a Digital Audio Workstation to complete recording projects of music from a variety of cultures, genres, and styles;
6. demonstrate digital editing and mixing, with attention to musical differences in style, genre, and cultural characteristics;
7. determine the most suitable audio format for a web post;
8. interact with music notation software;
9. create original musical content through the following means: Digital Audio Workstation software, MIDI (Musical Instrument Digital Interface) sequencing, and music notation software;
10. identify risks, threats, and vulnerabilities of computers and mobile devices;
11. find, evaluate, use, and cite academic resources in the discipline of audio and/or music technology; and
12. discuss ethical and legal issues in the capture, manipulation, and transmission of pre-existing sound or music.

## Major Topics

I. Fundamentals of computer components and use
II. Fundamentals of computer file handling, storage, and organization
III. Fundamentals of sound
IV. Audio terminology
V. Historical perspectives of sound recording technology
    a. inventions and recording practices
    b. styles and genres
    c. philosophies that shape our current technological landscape
VI. Integrating digital and analog technologies
VII. Moving digital signals and files between applications
VIII. Digital signal processors (DSP) and effects
IX. Digital media formats, possibilities, and limitations
X. Overview of the Digital Audio Workstation
XI. MIDI and Digital Audio Workstation applications
XII. Music notation programs
XIII. Security
XIV. Ethical and legal use of audio recording and editing technology

## Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Three unit quizzes
- Two projects demonstrating applied skills, once of which will assess General Education Outcomes
- Final exam and/or final project

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

## Other Course Information

This course is an approved General Education course in the Information Technology category. Multiple assignments will infuse CCBC General Education Program objectives with at least one assignment worth a minimum of 10% of the total course grade. General Education Program outcomes: Please refer to the current CCBC Catalog for General Education course criteria and outcomes.

Students must have regular access to a computer that meets CCBC minimum technology requirements, high-speed internet, and a Smart phone for the downloading and use of apps.

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