

Common Course Outline

MUSC 140
Introduction to Audio Technology
3 Semester Hours

The Community College of Baltimore County

Description:

Introduction to Audio Technology provides basic instruction and hands-on experience with a variety of professional audio recording equipment, which employ a variety of skills and techniques. Students learn the basic principles of electricity and electronics, acoustical theory, and the basic operation of recording studio equipment.

Overall Course Objectives:

Upon successful completion of this course the student will:

1. Demonstrate conceptual and working knowledge of the basic principles of acoustics through classroom discussion, written assignments, and audio laboratory exercises, and use appropriate technical and musical terminology in articulating these concepts;
2. Articulate orally and in writing and using appropriate technical language, the basic concepts of electricity and electronic circuits;
3. Demonstrate proficiency with electrical concepts through the proper wiring of electrical connections and circuits;
4. List/name safe practices and legal guidelines regarding electrical power, wiring, and connections;
5. Trace an audio signal as it flows within and between studio equipment;
6. Correctly perform set-up, operational, and basic maintenance procedures on a wide variety of recording studio equipment, including but not limited to: microphones, direct injection boxes, signal patch bays, mixing consoles, hardware and software audio recorders, amplifiers, studio monitor speakers, signal processing equipment, and audio duplication equipment; and
7. Trace important historical developments in audio recording technology.

Major Topics:

These topics will be covered in the following general order:

1. Historical background of recording technology
2. Fundamentals of sound and musical acoustics
3. Audio terminology
4. Fundamentals of electricity and electronic circuits
5. Microphones and other transducers
6. Mixing consoles
7. Recording machines and media

8. The signal flow chain
9. Audio signal processors and effects
10. Amplifiers, loudspeakers, and reproduction equipment
11. Recording practices/styles/philosophies

Course Requirements:

The Community College of Baltimore County is committed to providing a high-quality learning experience that results in growth in knowledge, attitudes, and skills necessary to function successfully as a transfer student, in a career and as a citizen. To accomplish this goal, we maintain high academic standards and expect students to accept responsibility for their individual growth by attending classes, completing all homework and other assignments, participating in class activities and preparing for tests.

Assessment is based on:

1. Class attendance
2. Participation in classroom activities and discussions
3. Completion of classroom and homework assignments and tasks
4. Written evaluations

Other Course Information:

This course is required for the 30-credit certificate in Music Production and Audio Recording Technology

We take seriously our responsibility to maintain high-quality programs and will periodically ask you to participate in assessment activities to determine whether our students are attaining the knowledge, attitudes and skills appropriate to various courses and programs. The assessment activities may take many different forms such as surveys, standardized or faculty-developed tests, discussion groups or portfolio evaluations. We ask that you take these activities seriously so that we can obtain valid data to use for the continuous improvement of CCBC's courses and programs.