9166 Introduction to Sound Engineering (10)

20S/20E/20M

A Sound Engineering Course

9166: INTRODUCTION TO SOUND ENGINEERING (10) 20S/20E/20M

Course Description

This course introduces students to the field of sound engineering. Students will learn the importance of safe practices while performing entry-level activities related to live performances and studio work. Students will learn music and audio theory, as well as how to play a musical instrument at an introductory level and participate in a live performance.

Goal 1: Describe and apply appropriate health and safety practices.

GLO 1.1: Describe and apply appropriate **health and safety** practices.

- SLO 10.1.1.1 Create and maintain a safe and organized working environment.
- SLO 10.1.1.2 Give examples of workplace safety and health hazards related to sound engineering.
- SLO 10.1.1.3 Discuss sound pressure levels and their relationships to hearing loss.
- SLO 10.1.1.4 Use hearing protection as required.
- SLO 10.1.1.5 Demonstrate proper selection and use of a variety of personal protective equipment (PPE).
- SLO 10.1.1.6 Outline the safety principles for working on and around electrical and sound equipment.
- SLO 10.1.1.7 Outline workplace fire safety principles.

Goal 2: Demonstrate an understanding of **audio theory** and **music theory**.

GLO 2.1: Demonstrate an understanding of audio theory.

- SLO 10.2.1.1 Demonstrate a basic understanding of sound.
- SLO 10.2.1.2 Demonstrate an understanding of the basic principles of acoustics.
- SLO 10.2.1.3 Describe frequency and pitch.
- SLO 10.2.1.4 Demonstrate a basic understanding of psychoacoustic phenomena.

GLO 2.2: Demonstrate an understanding of music theory.

- SLO 10.2.2.1 Define music.
- SLO 10.2.2.2 Identify basic intervals and rhythms by ear.
- SLO 10.2.2.3 Demonstrate an understanding of basic notation.
- SLO 10.2.2.4 Describe the typical components of song composition.

Goal 3: Communicate by **making music**.

GLO 3.1: Communicate by **making music**.

- SLO 10.3.1.1 Interpret the musical alphabet on a musical instrument.
- SLO 10.3.1.2 Demonstrate an understanding of simple chords and rhythms.
- SLO 10.3.1.3 Play a simple melody on an instrument.
- SLO 10.3.1.4 Play basic piece on an instrument.
- SLO 10.3.1.5 Demonstrate the I, IV, V form on an instrument.
- SLO 10.3.1.6 Improvise musical ideas over a I, IV, V form.
- SLO 10.3.1.7 Participate in a percussion ensemble (e.g., drum circle).
- SLO 10.3.1.8 Participate in a non-percussion ensemble.
- SLO 10.3.1.9 Sing intervals.
- SLO 10.3.1.10 Sing a simple melody.

GLO 3.2: Participate in a musical performance.

SLO 10.3.2.1 Demonstrate the skills required to participate in a musical performance at an entry level.

Goal 4: Engineer studio sessions and live performances.

- **GLO 4.1:** Demonstrate the identification, selection, and management of **musical instruments** and **recording equipment**.
 - SLO 10.4.1.1 Discuss the importance of managing and storing musical instruments and recording equipment.
 - SLO 10.4.1.2 Identify, select, and manage musical instruments and recording equipment.
 - SLO 10.4.1.3 Differentiate between different types of microphones, and describe their applications.
 - SLO 10.4.1.4 Differentiate between different types of electrical cables and connections, and describe their applications.
 - SLO 10.4.1.5 Identify musical instruments.
 - SLO 10.4.1.6 Identify parts of musical instruments.

SLO 10.4.1.7 Describe the characteristics of various musical instruments and how they are used in the recording process.

GLO 4.2: Perform pre-production sound engineering duties.

- SLO 10.4.2.1 Participate in a sound check.
- SLO 10.4.2.2 Describe pre-production sound engineering duties in a studio session.
- SLO 10.4.2.3 Prepare for a session in a recording studio.

GLO 4.3: Demonstrate **blocking** a live performance.

SLO 10.4.3.1 Participate in the blocking of a simple stage.

GLO 4.4: Engineer studio sessions and live performances.

- SLO 10.4.4.1 Compare and contrast sound engineering principles in a studio session and a live performance.
- SLO 10.4.4.2 Demonstrate an awareness of the steps used in audio recording.
- SLO 10.4.4.3 Describe sound engineering duties in a studio session and a live performance.
- SLO 10.4.4.4 Participate in the sound engineering of a studio session and a live performance.
- GLO 4.5: Perform post-production sound engineering duties.
 - SLO 10.4.5.1 Describe post-production sound engineering duties in a studio session and a live performance.
- **GLO 4.6:** Demonstrate **striking** a live performance.

SLO 10.4.6.1 Strike a simple stage.

- **Goal 5:** Describe and demonstrate the transferable **cross-curricular** knowledge and skills that are relevant to sound engineering.
 - **GLO 5.1:** Read, interpret, and communicate information that is relevant to sound engineering.

No applicable SLOs.

- **GLO 5.2:** Apply the knowledge and skills from **mathematics** that are relevant to sound engineering.
 - SLO 10.5.2.1 Demonstrate an understanding of the relationship between fractions and rhythms.
 - SLO 10.5.2.2 Add, subtract, multiply, and divide fractions.

- **GLO 5.3:** Apply the knowledge and skills from **the sciences** that are relevant to sound engineering.
 - SLO 10.5.3.1 Demonstrate an understanding of the physics of the human auditory system and the voice mechanism.
- **GLO 5.4:** Apply the knowledge and skills from **other subject areas** (e.g., information and communication technology, electronics, the arts) that are relevant to sound engineering.
 - SLO 10.5.4.1 Demonstrate an awareness of music production software.
 - SLO 10.5.4.2 Input a simple score using music notation software.
- **Goal 6:** Demonstrate an awareness of **sustainability** as it pertains to sound engineering.
 - **GLO 6.1:** Describe the impact of **human sustainability** on the well-being of those employed in the music industry and their consumers.

No applicable SLOs.

- **Goal 7:** Demonstrate an awareness of the **ethical and legal standards** as they pertain to sound engineering.
 - **GLO 7.1:** Demonstrate an awareness of the **ethical and legal standards** as they pertain to sound engineering.

No applicable SLOs.

Goal 8: Demonstrate employability skills.

GLO 8.1: Demonstrate fundamental employability skills.

- SLO 10.8.1.1 Demonstrate regular and punctual attendance.
- SLO 10.8.1.2 Demonstrate the ability to communicate respectfully and effectively with teachers, supervisors, co-workers, and students.
- SLO 10.8.1.3 Demonstrate accountability by taking responsibility for their actions.
- SLO 10.8.1.4 Demonstrate adaptability, initiative, and effort.
- SLO 10.8.1.5 Demonstrate teamwork skills.
- SLO 10.8.1.6 Demonstrate the ability to stay on task and effectively use time in class and work environments.
- SLO 10.8.1.7 Demonstrate the responsible use of wireless communication devices.

GLO 8.2: Demonstrate an awareness of **cultural proficiency** and its importance in the workplace.

No applicable SLOs.

GLO 8.3: Demonstrate critical thinking skills.

No applicable SLOs.

- **Goal 9:** Demonstrate an understanding of the **industry**.
 - **GLO 9.1:** Demonstrate an understanding of the **scope** of the music industry.

No applicable SLOs.

GLO 9.2: Demonstrate an understanding of the **educational and career opportunities**, as well as **industry associations**, in the sound engineering industry.

No applicable SLOs.

GLO 9.3: Demonstrate an understanding of **working conditions** in sound engineering.

No applicable SLOs.

- **Goal 10:** Demonstrate an awareness of the **evolution, technological progression**, and **emerging trends** in sound engineering.
 - **GLO 10.1:** Describe the **history, technological progression**, and **emerging trends** in sound engineering.

No applicable SLOs.

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