



## COURSE OUTLINE

<b>Course Number</b> <b>CMN 153</b>	<b>Course Title</b> <b>Digital Audio Production I</b>	<b>Credits</b> <b>3</b>
<b>Hours:</b> <b>Lecture/Lab/Other</b>  <b>2/2</b>	<b>Co- or Pre-requisite</b> <b>NONE</b>	<b>Implementation</b> <b>Semester &amp; Year</b> <b>Fall 2022</b>

### **Catalog description:**

Students practice and develop audio production techniques used in broadcasting and other commercial applications. Theory of audio fundamentals combines with lab exploration of digital editing, digital multi-tracking, digital music creation, synchronizing audio with video. Students write and/or produce commercials, documentaries and short soundtracks for video and other entertainment venues.

### **General Education Category:**

**Not GenEd**

### **Course coordinator:**

**Mitchell Canter**  
**(609) 570-3755**  
**canterm@mccc.edu**

### **Required texts & Other materials:**

Sauls, Samuel J. & Stark, Craig A. (2016) Audio Production Worktext: Concepts, Techniques, and Equipment, 9<sup>th</sup> Edition, New York: Routledge. ISBN # 978-1138557048

High Quality, over-the-ear headphones.

### **Course Student Learning Outcomes (SLO):**

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

1. Operate basic studio equipment and virtual devices that behave as studio equipment including: [ILG #4]
  - a. Microphones
  - b. Audio consoles
  - c. Audio Effects
    - i. Reverb/Echo
    - ii. Compressor/Limiter
    - iii. Noise Gate
    - iv. Phaser/Flanger

2. Apply theoretical concepts of sound and sound production using technology & digital editing workstations (DAWs) [ILG #4, 10, 11]
3. Effectively edit audio waveforms and sequence audio files [ILG #4]
4. Produce radio spots, imagers and news packages [ILG #1, 4, 6, 10]
5. Produce a synchronized mix down of a live musical performance using multiple tracks of audio [ILG #4, 6]
6. Identify visual “cues” and synch audio to a video sequence [ILG #4, 6, 11]
7. Demonstrate a “discriminating ear” for audio quality and detail [ILG \$4, 6, 11]

### **Course-specific Institutional Learning Goals (ILG):**

**Institutional Learning Goal 1. Written and Oral Communication in English.** Students will communicate effectively in both speech and writing.

**Institutional Learning Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Institutional Learning Goal 6. Humanities.** Students will analyze works in the fields of art, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language.

**Institutional Learning Goal 10. Information Literacy:** Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

**Institutional Learning Goal 11. Critical Thinking:** Students will use critical thinking skills understand, analyze, or apply information or solve problems.

### **Units of study in detail – Unit Student Learning Outcomes:**

#### **Unit I      The Physics of Sound & Acoustic Environments [SLO #2]**

*The student will be able to...*

- Explain the principles of transduction.
- Demonstrate understanding of how ears, microphones, speakers and other devices function as transducers.

#### **Unit II      Basic Editing [SLO #3, 4]**

*The student will be able to...*

- Perform basic digital audio editing using computer software
- Demonstrate understanding of timing and what makes a “good edit.”

#### **Unit III      Microphones & Loudspeakers [SLO #2]**

*The student will be able to...*

- Identify different categorizations of microphones
- Analyze frequency response curves to make qualitative judgments
- Analyze polar pattern diagrams to make application judgments.
- Identify different categories of loudspeakers

## **Unit IV      Multi-track Sequencing**

**[SLO# 3, 4]**

***The student will be able to...***

- Assemble several distinct audio tracks in audio editing software.
- Apply changes in audio levels to achieve a balanced end product.

## **Unit V      Consoles, Recording & Signal Processing**

**[SLO #1, 2]**

***The student will be able to...***

- Trace an audio signals path through various audio components
- Identify the differences between on-air and production consoles
- Describe the differences between analog and digital recording

## **Unit VI      News Production & Interviewing for Actualities**

**[SLO #1, 3, 4, 7]**

***The student will be able to...***

- Demonstrate ability to use AP Newsdesk
- Conduct an interview on a news topic
- Edit sound bites from interview audio
- Construct a long-form interview program

## **Unit VII      Composing music from loops**

**[SLO #2, 4]**

***The student will be able to...***

- Demonstrate ability to build a song from the building blocks of music loops using multi-track software.
- Sequence and integrate music created with software into a production.

## **Unit VIII      Producing Dialog**

**[SLO #1, 3, 4]**

***The student will be able to...***

- Construct a radio commercial using multiple voices.
- Demonstrate understanding of depth and presence of recorded subjects with the use of specific microphone placement.
- Sequence a final product by integrating recorded voices, sound effects and/or music.
- Listen to & objectively critique the work of others

## Unit IX Sound Design

[SLO #1, 2, 3, 6, 7]

### *The student will be able to...*

- Describe the different applications of Sound Design
- Design an audio sequence to work with a video sequence
- Define the difference between analytical and critical listening.

## Unit X Multi-track Music Production

[SLO #3, 5, 7]

### *The student will be able to...*

- Sequence and mixdown several tracks of audio into a song.
- Effectively use effects in a mixdown.
- Listen to & objectively critique the work of others

### Evaluation of student learning:

Assignment	Points per Assignment	Grade Weight (%)
Basic production eval/critique (Digital Audio Editing)	100	10
Digital editing w/multiple tracks	100	
Digital editing w/multiple tracks & multiple clips	100	20
Digital editing “news package”	100	
Commercial production w/Sound effects & music)	100	
Adv. multi-track recording session (live band)	100	30
Adv. multi-track post-production (mixdown of band tracks)	100	
Sound Design: Audio/Video Sync production	100	
Unit Exams	100	20
Written Homework /Blackboard Quizzes	100	10
Final Exam	100	10
		<b>100</b>

\*\*Note that if your major is: Audio Production, Communication: New Media, Digital Film, Television or Entertainment Technology, you must pass this course with a ‘C’ or better in order to advance to the next scheduled course.