COURSE OUTLINE

Course Number
CMN 153

Course Title
Digital Audio Production I

Credits
3

Hours:
lecture/Lab/Other
2/2

Co- or Pre-requisite
CMN 151 Intro to Radio w/minimum ‘C’ grade
Or permission of instructor

Fall / Spring semesters

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.

Required texts/other materials:


Revision date: Spring 2020

Course coordinator:
Mitch Canter, ext. 3755, canterm@mccc.edu

Information resources:

Other learning resources:
www.adobe.com/support/audition/ (online help)
Course Competencies/Goals

The student will be able to:

- Operate basic studio equipment and virtual devices that behave as studio equipment including:
  1. Microphones
  2. Audio consoles
  3. Audio Effects
    a. Reverb/Echo
    b. Compressor/Limiter
    c. Noise Gate
    d. Phaser/Flanger
- Effectively edit audio and sequence audio files
- Produce radio spots, imagers and news packages
- Produce a synchronized mix down of a live musical performance
- Identify visual “cues” and synch audio to video
- Demonstrate a “discriminating ear” for audio quality and detail

Course-specific General Education Knowledge Goals and Core Skills.

General Education Knowledge Goals
Goal 1. Communication. Students will communicate effectively in both speech and writing.
Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
Goal 6. Humanities. Students will analyze works in the fields of art, music.
Goal 7. History. Students will understand historical events and movements in World, Western, non-Western or

MCCC Core Skills
Goal A. Written and Oral Communication in English. Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
Goal B. Critical Thinking and Problem-solving. Students will use critical thinking and problem solving skills in analyzing information.
Goal E. Computer Literacy. Students will use computers to access, analyze or present information, solve problems, and communicate with others.
Goal F. Collaboration and Cooperation. Students will develop the interpersonal skills required for effective performance in group situations.

Units of study in detail.

Unit I The Physics of Sound & Acoustical Environments

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

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

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.

Unit IV  Multi-track Sequencing

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

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

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

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

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.

Unit IX  Sound Design

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 & Monitoring

The student will be able to…
• Identify different categories of loudspeakers
• Sequence and mixdown several tracks of audio into a song.
• Effectively use effects in a mixdown.

Evaluation of student learning:

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

100

**Note that if you are a Radio, Television or Entertainment Technology A.A.S. major, you must pass this course with a C or better in order to advance to the next scheduled course.

Academic Integrity Statement:
Students are expected to comply with the college-wide requirements for academic integrity. Mercer County Community College is committed to Academic Integrity—the honest, fair, and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work. Presenting another individual's work as one's own and receiving excessive help from another individual will qualify as a violation of Academic Integrity. The entire policy on Academic Integrity is located in the Student handbook and is found on the college website (https://mlink.mccc.edu/omb/0403_academic_integrity_OMB210.pdf).