COURSE OUTLINE

CMN256
Course Number

Digital Audio Production III
Course Title

3
Credits

2/2
Hours:

CMN253
Co- or Pre-requisite

FA20
Implementation

sem/year

Catalog description:
This course continues the study of multitrack recording techniques using state of the art Digital Audio Workstations. Topics include advanced mastering techniques, digital signal processing, auto-tune, session management, techniques for real-time and processed audio plug-ins including reverb, delay, sampling, automation, MIDI sequencing, and virtual instruments. etc. Students will produce multiple multilayered recordings using live talent in a studio environment acting as a producer, engineer, mixer, and mastering engineer.

Is course New, Revised, or Modified? New

Required texts/other materials:
By: Daniel W. Hosken (Author), Publisher: Routledge
ISBN: 0415997291
Release Date: July 1, 2010

Protools 101
Course Technology PTR
ISBN 10: 143545880X
Release Date: January 3, 2011

Revision date: Course coordinator: Scott Hornick, Assistant Professor of Music – CM 149; (609) 570-3716; hornicks@mccc.edu

Information resources: Digital Audio


Electronic Engineering


Film Sound


Loudspeakers


Microphones


Year, Tim, Rick Waller and John Boudreau Microphone Techniques for Live Sound Reinforcement (Shure Publications, Niles, IL, 2006).

Pro Audio, General


SUGGESTED PERIODICALS

Electronic Musician Intertec Publishing, 6400 Hollis Street, Ste. 12, Emeryville, CA 94608,

Entertainment Design formerly TCI and Theatre Crafts, Intertec Publishing, 32West 18th Street, New York, NY 10011-4612,

EQ Miller-Freeman PSN, Inc., 460 Park Avenue South, 9th Floor, New York, NY 10016 Lighting Dimensions Intertec Publishing, 32West 18th Street, New York, NY 10011-4612 Live Sound International HUGE Press, P.O. Box 577, Shawnee Mission, KS 66201,

Mix Intertec Publishing, 6400 Hollis Street, Ste. 12, Emeryville, CA 94608,

Pro Sound News Miller-Freeman PSN, Inc., 460 Park Avenue South, 9th Floor, New York, NY 10016,
Other learning resources: (Describe any other student learning resources that are specific to this course, including any special tutoring or study group support, learning system software, etc.)

Course Competencies/Goals:
Upon Successful Completion of the course, the student will be able to:
1. Create multi-layered, multi-track recordings using live talent on a Digital Audio Workstation. (GE Goal 4, MCCC Goals 4.1, 10.2, 10.3, 11.4)
2. Demonstrate conceptual and working knowledge of the basic principles of the Digital Audio Workstation through classroom discussion, written assignments, and audio laboratory exercises, and use appropriate technical and musical terminology in articulating these concepts; (GE Goals 1, 2, 4, MCCC Goals 1.1, 1.2, 1.3, 10.1-4, 11.1, 11.4)
3. Apply production techniques, technologies, and aesthetics related to the development of a compelling soundtrack using midi and virtual instruments. (GE Goals 1, 4, MCCC Goals 4.1, 11.4)
4. Use and apply editing and mixing techniques associated with Digital Audio Workstations. (GE Goal 4, MCCC Goals 4.1, 11.4)
5. Demonstrate the ability to work collaboratively with people from diverse backgrounds. (MCCC Goals 1.2, 1.3, 8.2.)

Course-specific Institutional Learning Goals (ILGs)/General Education Goals. (To an extent consistent with its primary purposes, each course in every program is expected to reflect the college’s commitment to general education, as affirmed in the 2005 General Education Policy. A General Education Course is one whose primary purposes and overall design coincide strongly with one or more of the approved general education goals and objectives. For any approved (or proposed) General Education Course, the General Education Goals and Objectives form (the form identified as the “Gen Ed Attachment”) should be completed and attached to the course outline. Below is a complete list of Mercer’s General Education Knowledge Goals and Core Skills. Retain on this course outline the Goals and Skills that pertain to your course and delete those that are not a central part of the course.)

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.
Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
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 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
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 7. History. Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
Institutional Learning Goal 8. Diversity and Global Perspective: Students will understand the importance of a global perspective and culturally diverse peoples
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 I Understanding Roles in the Recording Studio
The student will be able to:
1. Describe the different roles and tasks assigned in the studio. (CG5,)
2. Describe how roles are assigned and the interactions of each person. (CG5,4)
3. Demonstrate understanding by performing tasks based on each role (CG5,)
4. Demonstrate understanding of all material by working on recording projects. (CG4,52)

Unit II Creating a Recording Session
The student will be able to:
1. Demonstrate knowledge by creating appropriate session parameters for a project. (CG4)
2. Construct a digital recording session by creating tracks. (CG4)
3. Organize a recording session for playback and editing. (CG4)
4. Select the best method and path to save, locate, and open sessions on available hard drives. (CG4)

Unit III The Audio Recording
The student will be able to:
1. Demonstrate understanding by setting up hardware and software for recording audio. (CG2 & 4)
2. Construct tracks for recording audio in a session. (CG4)
3. Organize regions and audio files after recording to minimize clutter and optimize the session. (CG4)

Unit IV Producing and Recording Live Talent
The student will be able to:
1. Demonstrate knowledge by collaboratively planning for live talent in the recording session. (CG 2, 5)
2. Solve as a team, the best method to utilize for recording the live talent. (CG 1, 2, 4, 5)
3. Assemble a multilayered session using a mix of the live talent and virtual accompanying. (CG, 1, 2, 3, 4)
4. Construct a Master Mix using the necessary plug-ins to shape the final sound. (CG1, 2, 4)
5. Develop an audio CD of the final Product. (CG4)
6. Appraise the final product based on creativity and technical execution. (CG 2, 5)

Unit V Mixing Techniques
The student will be able to:
1. Operate software to configure Inserts and Sends to add external signal processing tracks. (CG4)
2. Demonstrate ability to configure the Sends view in the Mix window to display a single send across all tracks. (CG4)
3. Execute the recording and edit basic automation for the mix. (CG4)
4. Select plug-ins to audio tracks for internal effects processing and sound shaping. (CG4)

Unit VI Mixing Techniques
The student will be able to:
1. Select inserts and sends to add external signal processing to tracks. (CG4)
2. Assemble the sends view in the Mix window to display a single send across all tracks. (CG4)
3. Organize recording and edit basic automation for your mix. (CG4)
4. Operate plug-ins to create internal effects processing and sound shaping. CG4)

Unit VII Mastering Techniques
The student will be able to:
1. Demonstrate knowledge by configuring files and tracks to ensure all needed effects are present. (CG4)
2. Determine the correct levels of each track to make sure nothing is clipping. (CG4)
3. Identify the correct levels to make sure the final product meets professional standard (CG4)
Evaluation of student learning:
Achievement of the course objectives will be evaluated through the use of the following tools:
- Informal writing in course journals, documenting the student’s reactions to course content, reflections on the various lectures, projects, and field trips, and thoughts on their own developing career interests. (CG2)
- A test assessing students’ comprehension of music technology and audio engineering terminology, and practices. (CG2)
- A group project to demonstrate the students’ ability to move from session planning to final production of a multilayered musical recording using live talent. (CG1, 3, 4 & 5)
- A group project to demonstrate the students’ ability to move from session planning to final production of a multilayered musical recording using virtual instruments. (CG1, 3, 4 & 5)
- A series of laboratories using various types of production software used for audio production. (CG 2, 4)

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<thead>
<tr>
<th>Project Values/Grade Breakdown</th>
<th>The final grade is based on the following values:</th>
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<tbody>
<tr>
<td>Mid Term Exam</td>
<td>15%</td>
</tr>
<tr>
<td>Laboratory Assignments</td>
<td>25%</td>
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<tr>
<td>Multilayered musical recording using live talent</td>
<td>25%</td>
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<tr>
<td>Multilayered musical recording using virtual instruments</td>
<td>25%</td>
</tr>
<tr>
<td>Course Journals, Essays</td>
<td>10%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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</tbody>
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Important Health and Safety Information
As an entertainment technology student you are involved in an industry that is dependent upon good hearing. Please protect yours! Tests have indicated that if you are rehearsing, recording, performing, listening to recorded music (especially through portable equipment) and/or attending gigs, concerts and nightclubs, it is very likely that you are experiencing daily sound levels well above those recommended for good aural health.
Damage to your hearing is not reversible. Avoid noisy environments as much as possible. Wear earplugs for your protection. Disposable earplugs are readily available or you can see an audiologist to have specialized hearing protection devices designed specifically for you.

Academic Integrity Statement:
As per the student handbook, “A student will be guilty of violating academic integrity if he/she (a) knowingly represents the work of others as his/her own, (b) uses or obtains unauthorized assistance in the execution of academic work, or (c) gives fraudulent assistance to another student.” Students should read the Academic Integrity policy in the MCCC Rights and Responsibilities Student Handbook. Academic Dishonesty will result in failure of this course.