



COURSE OUTLINE

MUS 235

Course Number

Music Composition in the Virtual Studio

Course title

3

Credits

2 lecture/ 2 lab

Hours

Catalog description:

Strategies for writing, recording, and producing music in the context of an integrated MIDI/digital audio production environment. Topics include MIDI data entry, recording live sound sources, editing, plug-ins, mixing, mastering, digital music production, generating .wav and .mp3 files, etc. Assignments include creative projects and listening/discussion of relevant "popular" and "art" music.

Prerequisites: MUS 127 and CMN253

Corequisites: n/a

Required texts/other materials:

An Introduction to Music Technology

By: Daniel W. Hosken

Publisher: [Routledge](#)

ISBN: 0415997291

Release Date: July 1, 2010

Pro Tools 101

By: Avid Technologies

Publisher: [Course Technology PTR](#)

ISBN-10: 143545880X

Release Date: January 3, 2011

Equipment

- Professional grade stereo headphone. ([AKG](#), [Sennheiser](#), [Audio-Technica](#))
Example: **AKG K240S stereo studio headphones**
- **External hard drive**

Last revised: Fall 2021

Course coordinator: Scott Hornick, Associate Professor of Music – CM 149;

(609) 570-3716; hornicks@mccc.edu

Course Competencies/Goals:

The student will be able to:

1. Demonstrate an understanding of the music industry and the history of recording and how changes in technology have affected music through classroom discussion and written assignments, using appropriate technological and musical terminology. (MCCC Core Skills A and D)
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. (MCCC Core Skills A, B, D, and E)
3. Analyze musical form in the context of recording. (MCCC Core Skills A, B, and D)
4. Plan, construct, and record a musical composition using a digital audio workstation. The piece should include personal participation, using voice or instruments, and should use a variety of sound sources. (MCCC Core Skills B, D, and E)
5. Compose, play, print, and publish music using music-notation software. (MCCC Core Skills goals B, E)
6. Apply production techniques, digital technology, and aesthetic principles in the composition of an effective orchestral score using exclusively MIDI and virtual instruments. (MCCC Core Skills B, E)
7. Demonstrate the ability to work collaboratively with people from diverse backgrounds. (MCCC Core Skills F.)

Course-specific General Education Knowledge Goals and Core Skills.

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 C. Ethical Decision-Making. Students will recognize, analyze and assess ethical issues and situations.

Goal D. 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.

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.

Goal G. Intra-Cultural and Inter-Cultural Responsibility. Students will demonstrate an awareness of the responsibilities of intelligent citizenship in a diverse and pluralistic society, and will demonstrate cultural, global, and environmental awareness.

Units of Study

Unit I The Historical Background of Sound Recording

The student will be able to:

1. Write an essay elucidating the historical context of sound recording technology and music's role in the evolution of that technology.
2. Identify and discuss important technological and artistic innovators throughout the history of sound recording.
3. Differentiate between the respective roles of the musician/artist and the producer.

Unit II Digital Audio Basics

The student will be able to:

1. Answer questions about binary math—bits and bytes.
2. Describe in writing the similarities and differences between analog and digital theory and techniques.
3. Use field-specific terminology in describing the theoretical underpinnings of digital recording, including sampling rate, quantization, and aliasing.
4. Use a digital audio workstation to record and manipulate a variety of sounds.

Unit III Concepts and Application of Musical Forms

The student will be able to:

1. Define and identify the musical phrase and demonstrate the ability to link a succession of discrete phrases into a coherent musical utterance in the context of notated and recorded composition exercises.
2. Differentiate among different types of musical texture (monophonic, homophonic, polyphonic, and heterophonic) in the context of short compositional exercises to be notated and recorded.
3. Demonstrate knowledge of various large-scale compositional forms, including popular song forms, sonata form, rondo, and theme and variations, through analysis and the composition and recording of short pieces employing these forms.
4. Describe and demonstrate the use of repetition as a compositional structuring principle, employing devices such as ostinato figures, sequential repetition, and phrase fragments.
5. Demonstrate the ability to compose "programmatically," i.e., allowing an extra-musical source such as a poem, painting, story, or movie scene dictate the arc of a composition rather than a predetermined form as in objective 3.
6. Incorporate the use of nonpitched sounds and noise combined with more traditional musical timbres into the texture of a composition in an aesthetically convincing manner.

UNIT IV MIDI, Sequencing and Music-Notation Software

The student will be able to:

1. Identify the two types of MIDI-compatible tracks that the digital audio workstation provides.
2. Describe the difference between sample-based operation and tick-based operation.
3. Prepare a system to record MIDI data.
4. Use Virtual Studio Technology (VST) and effects.
5. Set up a virtual instrument to play MIDI data recorded on an instrument track.
6. Create a soundtrack using MIDI and virtual instruments.

7. Combine MIDI applications with preexisting audio recordings.
8. Compose a short piece of music using music-notation software.

Unit V Worlds of Music

The student will be able to:

1. Explore a variety of genres and styles of music throughout the world.
2. Discuss how the technology has united or divided different cultures and places.

Unit VI Studies in Electronic Music

The student will be able to:

1. Demonstrate chronological knowledge of the development of electronic instruments.
2. Place in historical perspective the use of taped music, both in concert and in other environments.
3. Define electronic music and how it has integrated with musical texture and musical culture.
4. Discuss the ethical issues involved in using sounds recorded or composed by others in one's own compositions.

VII Recording and Creating a Virtual Orchestra or Ensemble Using MIDI and Virtual Instruments

The student will be able to:

1. In teams, collaboratively plan the project.
2. As a team, develop the instrumentation.
3. Create a multilayered session using a mix of MIDI and virtual instrumentation.
4. Create a master mix using the necessary plug-ins to shape the final sound.
5. Create an audio CD of the final product.
6. Collaboratively evaluate the final product based on creativity and technical execution.

Unit VIII Create and Publish an Original Musical Composition

The student will be able to:

1. Compose an original piece of music using music-notation software.
2. Create a multilayered session of the original composition using a mix of the live talent and virtual accompaniment.
3. Create a master mix using the necessary plug-ins to shape the final sound.
4. Create an audio CD of the final product.
5. Collaboratively evaluate the final product based on creativity and technical execution.
6. Write a journal describing how the project was organized and developed and how aesthetic decisions were made.
7. Print the musical score of the composition.

Evaluation of Student Learning

Achievement of the course objectives will be evaluated through the use of the following tools:

- Writing in course journals, documenting the student's reactions to course content, reflections on the various lectures and projects, and thoughts on his/her own developing career interests.
- A test assessing student's comprehension of music technology and audio engineering terminology and practices.
- A final CD that demonstrates the student's ability to compose music in a virtual studio, resulting in final production of a multilayered musical recording.
- A group project to demonstrate the student's ability to move from session planning to final production of a multilayered musical recording using virtual instruments.
- A series of laboratories employing various types of production software used for audio production.

Project Values/Grade Breakdown

The final grade is based on the following values:	
Mid-term exam	15%
Laboratory assignments	25%
Multilayered musical recording from an original composition	25%
Multilayered musical recording using virtual instruments	25%
Course journals, essays	10%
Total	100%

Student Success Coach: Mercer students have a Student Success Coach available to support their efforts during their first semester through graduation. Students can connect with a Coach by emailing Successcoach@mccc.edu or calling 570-3451. www.mccc.edu/coaching has useful information about coaching and student success. For additional information, please contact:

Latonya Ashford Ligon at 570-3292 or by email ashfordl@mccc.edu .

Academic Advising after your first semester: Faculty advisors provide help with completing your major after your first semester. Your faculty advisor should be listed on the MyMercer portal. If you need further assistance please contact your division Executive Assistant.

Liberal Arts: Debbie Stotland LA162 570-3378 Stotland@mccc.edu

Business & Stem: Doris Geck BS134 570-3482 Geckd@mccc.edu

Health Professions: Barbara Pieslak MS126 570-3383 pieslakb@mccc.edu

Use your "MyMercer" Portal: Your "MyMercer" portal contains your MercerMail, financial information, class schedule, grades, your advisor and other information. Check your "MyMercer" portal every day. Visit www.mccc.edu/mymercer to access your portal.

Center for Inclusion, Transition and Accessibility: Arlene Stinson, Director:

Mercer County Community College recognizes disability as an aspect of diversity and the Center for Transition, Inclusion and Accessibility works to ensure inclusive learning environments by encouraging the college community to examine accessibility and through the delivery of effective academic accommodations to qualified individuals. Mercer County Community College is in compliance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA).

For information on Universal Design for Learning, information regarding meeting the needs of students with disabilities, or information regarding the provision of academic accommodations please visit the Center for Transition, Inclusion and Accessibility in LB216 or contact:

Arlene Stinson stinsona@mccc.edu, Lisa Ward wardl@mccc.edu or Susan Onaitis onaitiss@mccc.edu

Tutorial Center: Charles Haas, Director

Tutoring Center services are free and available for all students. Drop in or contact the following to schedule an appointment.

Charles Haas (WWC), LB214, 570-3452, haasc@mcccc.edu

Angela Frumin, (TC) 311, frumina@mccc.edu or John Kashmer, (WWC), LB214, kashmerj@mccc.edu

Career and Transfer Center: Planning to go to work or to transfer to a 4-year college after completing your Mercer degree? Contact the Career and Transfer Center for support and advice.

Letrice Thomas (WWC transfer services), SC201, 570-3397, thomasl@mccc.edu

Counseling Services: Are you experiencing personal challenges, feeling overwhelmed? Are you having stress and anxiety? Counseling services are available free of charge. Contact:

Dorothy Gasparro Ed.S, LPC, NCC, SC239, 570-3354, gasparrd@mccc.edu

Veteran's Services: If you are currently serving or have served in the US Armed Forces, or are a family member of someone who has, our Veterans Services Team is here to help you optimize your education benefits. Contact:

John Becker, SC220, 570-3240 or Jennifer Whitfield, SC222, 570-3269, whitfieje@mccc.edu or vets@mccc.edu

Important Fall 2018 dates:

09/11/18 – Last day for 100% refund

09/30/18– Start FASFA for spring

10/02/18 – 10-week semester starts

11/09/18 – Last day to withdraw from 14-week class

Academic Integrity Policy

As stated in 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 Handbook.

Academic Dishonesty will result in failure of this course.

Accommodations

Mercer County Community College is committed to ensuring the full participation of all students in its programs. If you have a documented differing ability or think that you may have a differing ability that is protected under the ADA or Section 504 of the Rehabilitation Act, please contact Arlene Stinson in LB 216 stinsona@mccc.edu for information regarding support services.

Financial Aid Application Statement

It is recommended that student complete an application for financial aid to determine eligibility for financial assistance. Visit www.fafsa.edu.gov to complete your application. Applications should be completed **before** December 1, 2018. Students who are interested in MCCC Foundation scholarships are expected to complete an application as well.