COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Music Technology 2
COURSE NUMBER	AUDI 0210
DIVISION	Arts, Communications, and Humanities
DEPARTMENT	AUDI
CIP CODE	10.0203
CREDIT HOURS	3.00

CONTACT HOURS/WEEK	Class: 3.00	Lab: X	Clinical: X

PREREQUISITES AUDI0110 with a grade C or above.

COURSE PLACEMENT Students must meet the correct placement measure for this course. Information may be found at: https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html

COURSE DESCRIPTION

This course is an introduction to the advanced skills of music computing, expanding skills learned in AUDI 106, Music Applications for Computers, with emphasis on MIDI and audio equipment and set-up, and creative use of music production software (audio, sequencing, and DAW). Aspects of sound design will be introduced as creative tools for more mainstream application. In addition to the practical "hands-on" training, time will be spent analyzing successful sequencing techniques.

KANSAS SYSTEMWIDE TRANSFER: AUDI0210

The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit: https://kansasregents.org/workforce_development/program-alignment

General Education Learning Outcome
☐ Basic Skills for Communication
☐ Mathematics
☐ Humanities
☐ Natural and Physical Sciences
☐ Social and Behavioral Sciences

Institutional Learning Outcomes
☐ Communication
☐ Computation and Financial Literacy
☐ Critical Reasoning
☐ Technology and Information Literacy
☐ Community and Civic Responsibility
☐ Personal and Interpersonal Skills

TEXTBOOKS
http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
      I.   Studio setup and equipment
           A.   MIDI theory
           B.   MIDI interfaces
           C.   Audio interfaces
           D.   Virtual signal flow
           E.   Signal flow and signal paths
      II.   Digital Audio software
           A.   Operating 2-track audio recording/editing software
           B.   Operating multi-track audio recording/editing software
           C.   Recording from microphones
           D.   "Ripping" audio
           E.   DSP editing functions
      III.   Digital Audio
           A.   Digital audio theory
           B.   File formats

IV.   Current technology in historical context
      A.   Historical overview of electronic music technologies
      B.   Historical overview of the sounds of electronic music
V.   Cubase sequencing software
      A.   Using multiple sound sources in a sequence
      B.   Setting up names for patches
      C.   Using virtual instruments
      D.   Using audio tracks
      E.   Automating mixes
      F.   Programming drums
      G.   Using drum loops
      H.   Aux routing and effects
VI.   "Better sequencing"
      A.   Analysis of the form of commercial "pop" sequenced productions
      B.   Analysis of sequencing techniques used in commercial "pop" production.
      C.   Analysis of arranging techniques used in commercial "pop" production.
VII.   Sampling
      A.   Sample acquisition
      B.   Sample editing
      C.   Patch construction
      D.   Utilization of samples in a sequencer/DAW project
VIII.   Sound design and electronic music composition techniques
      A.   Mono/stereo sound design techniques.
      B.   Multi-track sound design techniques.
      C.   Electronic music composition theory.
      D.   Electronic music composition techniques.

COURSE LEARNING OUTCOMES AND COMPETENCIES
Upon successful completion of this course, the student will:
A. The learner will understand common studio equipment and set-up practices.
B. The learner will be able to complete projects using both 2-track and multi-tack digital audio software.
C. The learner will understand the concept and theory of digital audio.
D. The learner will appreciate the historical and technological development of electronic music and technologies.
E. The learner will be able to complete advanced projects using sequencing/DAW software.
F. The learner will demonstrate knowledge of commercial "pop" music production techniques.
G. The learner will understand and be able to us sampling software.

H. The learner will be able to demonstrate and discuss sound design and electronic music composition techniques.

I. COURSE COMPETENCIES:

The learner will understand common studio equipment and set-up practices.
1.   The learner will understand MIDI theory, how it works, and what it is capable of.
2.   The learner will be able to set up MIDI interfaces, and be able to identify the best product for different situations.
3.   The learner will be able to set up audio interfaces, and be able to identify the best product for different situations.
4.   The learner will understand and be able to set up and trace virtual signal paths.
5.   The learner will be able to correctly plug equipment together, trace signal flow and identify signal flow problems.

The learner will be able to complete projects using both 2-track and multi-track digital audio software.
6.   The learner will be able to operate 2-track audio recording/editing software.
7.   The learner will be able to operate multi-track audio recording/editing software.
8.   The learner will be able to record audio into this software using microphones.
9.   The learner will be able to import audio into this software by "ripping" it from other sources.
10. The learner will understand and be able to efficiently use DSP editing functions.

The learner will understand the concept and theory of digital audio.
11. The learner will understand how PCM digital audio is recorded, stored, and reproduced.
12. The learner will understand and be able to appropriately choose digital audio file formats.

The learner will appreciate the historical and technological development of electronic music and technologies.
13. The learner will understand the significant historical technological development that have lead to current state-of-the-art equipment.
14. The learner will understand the sonic characteristics of electronic music created by composers over the course of the history of electronic music.

The learner will be able to complete advanced projects using sequencing/DAW software.
15. The learner will be able to use multiple sound sources in a sequencing project.

16. The learner will understand and be able to setting up patch names for hardware MIDI devices for recall from the sequencing software.
17. The learner will be able to using virtual instruments.
18. The learner will be able to record to, and edit audio tracks.
19. The learner will be able to automating mixes, including fader, panning, and controller automation.
20. The learner will be able to correctly programming drum and percussion tracks.
21. The learner will be able to use and edit drum loops.
22. The learner will be able to correctly use built in effects and auxiliary routings.

The learner will demonstrate knowledge of commercial "pop" music production techniques.
23. The learner will analyze the form of a commercial "pop" production and demonstrate application of those techniques.
24. The learner will analyze the sequencing techniques used in a commercial "pop" production, and demonstrate application of those techniques.
25. The learner will analyze the arranging techniques used in a commercial "pop" production, and demonstrate application of those techniques.

The learner will understand and be able to use sampling software.
26. The learner will be able to put sounds from various sources into sampling software.
27. The learner will be able to edit source sounds so they are appropriate for musical use.
28. The learner will be able to construct patches of sounds from those edited source sounds.
29. The learner will be able to effectively and appropriately use those samples in a larger sequenced project.

The learner will be able to demonstrate and discuss sound design and electronic music composition techniques.
30. The learner will understand and demonstrate mono/stereo sound design techniques.
31. The learner will understand and demonstrate multi-track sound design techniques.
32. The learner will be able to discuss electronic music composition techniques.
33. The learner will be able to demonstrate electronic music composition techniques.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES
Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.