DATE OF LAST REVIEW: 02/11/2013

CIP CODE: 10.0203

SEMESTER: DEPARTMENTAL SYLLABUS

COURSE TITLE: Audio Recording 2

COURSE NUMBER: AUDI0260

CREDIT HOURS: 3

INSTRUCTOR: DEPARTMENTAL SYLLABUS

OFFICE LOCATION: DEPARTMENTAL SYLLABUS

OFFICE HOURS: DEPARTMENTAL SYLLABUS

TELEPHONE: DEPARTMENTAL SYLLABUS

EMAIL ADDRESS: KCKCC issued email accounts are the official means for electronically communicating with our students.

PREREQUISITE(S): AUDI0250 with a grade C or above.

REQUIRED TEXT AND MATERIALS:
Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

COURSE DESCRIPTION: This course will build on the skills acquired in AUDI 250. Topics that will be studied include mixing techniques, microphone techniques, synchronization and console automation, auditory perception, studio acoustics and design considerations, location recording, and digital studio issues. An emphasis is placed on gaining skill at using industry specific hardware equipment.

METHOD 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, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
I. Mixing techniques
   A. Signal flow
   B. EQ
   C. Advanced console operation
D. Stylistic/creative mixing

II. Miking techniques
   A. Miking drums
   B. Miking traditional “rock” instruments
   C. Small ensemble recording

III. Creative time-based studio effects
   A. Delay based effects
   B. Reverberation

IV. Dynamics processing
   A. Compression
   B. Gating
   C. Expansion

V. Location Recording
   A. Equipment
   B. Aesthetics
   C. Safe set-up
   D. Editing and concert documentation

VI. Synchronization
   A. SMPTE, MIDI Timecode, and word-clock synchronization
   B. Synchronizing hardware with the computer based DAWs

VII. Auditory Perception
   A. Directional cues
   B. Harmonic distortion
   C. Beats, combination tones, and masking
   D. Pitch vs. frequency

VIII. High Resolution Audio
   A. Technical specifications
   B. Perceivable benefits

IX. Acoustics
   A. Studio design characteristics
   B. Acoustic treatments
   C. Studio layout

X. Aural skills
   A. Frequency range recognition within pink noise
   B. Frequency range recognition within music
   C. Critical listening skills and evaluation

EXPECTED LEARNER OUTCOMES:
A. The learner will be able to use hardware mixing consoles and apply different mixing techniques in the recording studio.
B. The learner will be able to use microphones and various miking techniques appropriate to different settings.
C. The learner will be able to use time-based studio effects creatively using recording studio hardware.
D. The learner will be able to use hardware dynamics processors correctly.
E. The learner will be able to proficiently use and document concerts using specialist location recording hardware.
F. The learner will be able to describe synchronization and synchronize hardware recorders and computer based recording systems.
G. The learner will be able to discuss auditory perception issues and their affect on audio production and audio production techniques.
H. The learner will be able to discuss the benefits of high resolution audio formats.
I. The learner will be able to correct fundamental room acoustic problems in a recording situation.
J. The learner will develop specific aural skills relative to the field.

**COURSE COMPETENCIES:**

The learner will be able to use hardware mixing consoles and apply different mixing techniques in the recording studio.

1. The learner will be able to describe signal flow.
2. The learner will be able to discuss EQ and use it effectively.
3. The learner will be able to use advanced techniques to operate a hardware mixing console.
4. The learner will be able to discuss and employ different mixing styles.

The learner will be able to use microphones and various miking techniques appropriate to different settings.

5. The learner will be able to describe miking techniques for a rock drum set.
6. The learner will be able to correctly mike up common “rock” instruments.
7. The learner will be able to record small ensembles.

The learner will be able to use time-based studio effects creatively using recording studio hardware.

8. The learner will be able to creatively use delay based effects.
9. The learner will be able to creatively use artificial reverberation.

The learner will be able to use hardware dynamics processors correctly.

10. The learner will be able to discuss and use compression.
11. The learner will be able to discuss and use gating.
12. The learner will be able to discuss and use expansion.

The learner will be able to proficiently use and document concerts using specialist location recording hardware.

13. The learner will be able to use the various location recording equipment.
14. The learner will be able to discuss location recording aesthetics.
15. The learner will be able to safely set-up recording equipment in a public place.
16. The learner will be able to editing and document the concert appropriately.

The learner will be able to describe synchronization and synchronize hardware recorders and computer based recording systems.

17. The learner will be able to describe SMPTE, MIDI Timecode and word-clock synchronization.
18. The learner will be able to synchronize recording hardware devices with the computer based DAWs.

The learner will be able to discuss auditory perception issues and their affect on audio production and audio production techniques.
19. The learner will be able to discuss how one perceives directionality of a sound source, and how this illusion is recreated in a recorded production.
20. The learner will be able to discuss harmonic distortion and its affect on a listener.
21. The learner will be able to discuss beats, combination tones, and masking, and understand their relevance to an audio production.
22. The learner will be able to describe the difference between pitch and frequency.

The learner will be able to discuss the benefits of high resolution audio formats.
23. The learner will be able to discuss the technical specifications of high resolution audio.
24. The learner will be able to discuss the perceivable benefits of high resolution audio.

The learner will be able to correct fundamental room acoustic problems in a recording situation.
25. The learner will be able to discuss studio design characteristics.
26. The learner will be able to discuss acoustic treatments.
27. The learner will be able to discuss studio layouts.

The learner will develop specific aural skills relative to the field.
28. The learner will be able to recognize frequency ranges within pink noise.
29. The learner will be able to recognize frequency ranges within music.
30. The learner will be able to critically listening and evaluate recorded sound.

ASSESSMENT OF LEARNER OUTCOMES:
Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center at 913-288-7670.