

III. Statement of Course Need

A. Synthesizers and the musical application of computers through the use of MIDI, digital recording, and the manipulation of digital audio have revolutionized the music industry. The demand for trained and experienced musicians in this field is high. The first semester course (MUSC-190) provides a basic introduction to the MIDI protocol and to software synthesizers. A second semester course is needed not only to hone the technical and compositional skills developed over the course of the first semester but also to provide instruction in digital audio, sampling, and signal processing through more involved compositional projects

B. This course is taught in A-09B, our digital composition and music lab, equipped with computer stations and appropriate musical technologies and software.

C. Course transferability: Based on evaluations by the njtransfer.org website, this course transfers to most Associate and Bachelor programs as an equivalent music course in Music or Fine Arts. Kean University, Montclair State University, City University, Rowan University, and William Paterson University have similar courses.

IV. Place of Course in College Curriculum

A. Free elective

B. This course serves as a studio arts elective for AA Liberal Arts Majors

C. To see course transferability for New Jersey colleges and universities, go to the NJ Transfer website, www.njtransfer.org; for other colleges and universities, go to the individual college website.

V. Outline of Course Content

A. Sequencing MIDI with a PC

1. Automation
2. MIDI Effects
3. Logical Editing

B. Digital Audio

1. Recording
2. Editing
3. Building a CD

C. Sampling

1. Looping
2. Pitch Shifting

D. Signal Processing

1. Dynamic Range Processing
2. Filters
3. Delay
4. Pitch/Time Changing

E. Sound Mixing

1. Mixing Consoles

2. Multi-track Recording and Remixing
3. Audio monitoring

VI. General Education and Course Learning Outcomes

A. General Education Outcomes

The student will:

1. demonstrate the applications of various hardware and software technologies, including MIDI controller, sequencers and synthesizers and samplers, to the processes and applications of digital music composition. (GE-NJ 4, 6, *)
2. apply more advanced techniques in audio and digital procedures such as sampling, editing, processing, multitrack recording and remixing. (GE-NJ 4)

B. Course Learning Outcomes

The student will be able to:

1. integrate concepts/procedures of digital audio in composition and related musical applications.
2. integrate concepts/procedures of music synthesis in composition and related musical applications.

(* embedded critical thinking)

C. Assessment Instruments

1. weekly laboratory work and preparation
2. written examinations or quizzes on factual aspects of the course content
3. composition/arrangement assignments
4. creativity, effort, participation, attendance

VII. Grade Determinants

- A. Written exams and/or quizzes
- B. Weekly homework and preparation
- C. Completion, presentation and evaluation of all assigned composition, arrangement and orchestration projects
- D. Class participation, effort, progress, attendance

Formats, modes and methods that may be used for teaching and learning:

- A. lecture/discussion
- B. small-group work
- C. computer-assisted instruction
- D. laboratory
- E. student oral presentations

VIII. Texts and Materials

Text: None

(Please note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC bookstore is the sole resource for the most up-to-date information about textbooks.)

Materials: Students must purchase their own:
Headphones (1/4" jack)
Recordable compact discs

IX. Resources

- A. Soundproof studio
- B. Computer workstations with professional quality audio cards
- C. Sequencing Software
- D. Software synthesizers
- E. Compact Disc burning software
- F. Audio Playback system