

EXISTING COURSE ADOPTION PROCEDURE (ECAP)
REVISED PROCEDURE FOR BRINGING COURSES OFF THE MASTER COURSE
LIST

Drafted by Curriculum Committee, Indiana University East, Sept. 2002

Please fill out the following form when sending courses to the Curriculum Committee for consideration:

PART 1:

Course number: **MUS-K361** Course Title: **Introduction to MIDI & Computer Music**

Credit hours: **3** Division offering: **HSS**

This is a course designed to teach the basics of the MIDI (Musical Instrument Digital Interface) system, its software and hardware as well as the principals of MIDI sequencing, digital sampling, principles of digital synthesis, digital audio editing.

Faculty member submitting this proposal: Elliott Miles McKinley

PART 2:

Have you contacted all campuses in the IU system who are currently teaching this course and examined their methods of teaching this course? (you should consult the office of the Vice Chancellor of Academic Affairs for help in contacting campuses and procuring sample syllabi)

Yes

Below, please list all those campuses that teach the course in question:

IU South Bend, IU Southeast, IU Bloomington, IUPUI

PART 3:

1) Describe the course content and your rationale for bringing it forward:

This course will include study of MIDI, digital audio and software/hardware music synthesis with a hands-on approach using software tools such as “Reason” and the object-oriented software “Max/MSP/Jitter.” Students will create new sounds toward the goal of a final creative project (installation, performance, etc.). Rationale: This course is part of the overall program in music (minor and majors) and will serve as a required course for composers and students who have chosen music technology as part of a concentration. The course will also serve as an upper-level elective for music students and interested non-music students.

2) Describe the course’s placement in the program, including its intended audience and any prerequisites:

The course will serve as an upper-level elective for the music program (and can serve as an upper-level elective for the general student population). It will also serve as a requirement for the music tech and composition majors. Prerequisites:

Currently none. May eventually have lower level pre-req and/or instructor consent.

3) List the anticipated student learning objectives and outcomes:

Campus Learning Objective 1 – Educated persons should be exposed to a broad variety of academic fields traditionally known as the Liberal Arts (humanities, fine arts, social sciences, natural sciences) in order to develop a critical appreciation of a diversity of ideas and creative expression.

Campus Learning Objective 2 – Educated persons should have achieved a depth in some field of knowledge. A sequential accumulation of knowledge and skills in an academic discipline is essential for a focused personal and professional development.

The student will become familiar with background, technology and techniques in creating music in a digital domain (MIDI, audio synthesis, etc.). Objective: Hands on working with computers and software in music-making culminating in a creative project. Critical thinking and creative thinking are desired outcomes.

4) Discuss any special features of the course (eg. a service learning component):

Multimedia (video/audio) and hands-on use of digital-audio workstations (DAW's). Possible option for online/distance-learning component.

5) Attach a proposed syllabus for the course as it would be taught on the IU East campus:

Attached

PART 4:

Representatives of your Division need to examine the sample syllabi and other materials from these campuses and determine whether your approach will be comparable. Please describe below your Division's final determination on this point and provide the chair's signature.

I approve the above-mentioned course as following the model framework given by other campuses in the IU system.

Division Chair

Date

Introduction to MIDI and Computer Music

MUS-K 361 (3 cr.)

Spring 2009

Class meetings: Monday and Wednesday, 2:00 p.m. to 3:15 p.m.

Springwood Hall 217

INSTRUCTOR: ELLIOTT MILES MCKINLEY

Office: Springwood 225

Phone: 765-973-8278

Email: elmmckin@indiana.edu

Office Hours: TBA (and by appointment)

PREREQUISITES

There are no prerequisites for this class and assumes no previous experience. However, any previous study in music and a working knowledge of computers may be helpful.

COURSE DESCRIPTION

Introduction to MIDI and Computer Music is a course designed to teach basic concepts of the MIDI (Musical Instrument Digital Interface) system along with the software, hardware, and principals of creating music using computers. Topic will include MIDI sequencing, audio sampling, digital synthesis, algorithmic composition, and digital audio editing.

COURSE OBJECTIVES

To become acquainted basic computer music making with an active learning hands-on approach culminating in several creative projects.

COURSE MATERIALS

- USB2 Hard-drive. You must have at least one to save your own work—at least 2GB.

Required Readings: (under review)

- Rowe, Robert: *Machine Musicianship*.
- Truesdell, Cliff: *Introducing Reason 4*.

Supplemental Readings:

- Manuals for the software applications in use (Reason, Max/MSP, ProTools) will be available.
- Additional readings will be assigned and made available as the semester progresses.

Listening:

- As assigned. A listening list of major works in electronic music will be assembled.

EXPECTATIONS

Attendance: As a general rule, do not expect your grade to be of a higher percentage than that of the percentage of class attended. If an illness, the illness of your child, threatening weather, unexpected commuting difficulties, or another emergency requires that you miss class, it will count as an excused absence.

Quizzes: Five quizzes will be given in the form of short-answer, multiple-choice (or guess as the case may be), or short essay questions. Most of the quizzes will be given in class (one or two may be posted on ONCOURSE). Missed quizzes will not be allowed a make-up in the case of an unexcused absence.

Assignments: Four short creative exercises, using techniques learned, will be assigned. Details TBA. Work will be presented in class. Late work will be penalized.

Final Project: A final creative project will be assigned using all techniques learned. Details TBA. A short two-page essay will accompany the final projects. Projects will be presented in a class “concert” at the end of the semester.

GRADING BREAKDOWN

- Quizzes (4% each x 5): 20%
- Assignments (10% x 4): 40%
- Final Project: 30%
- General Participation: 10%

Incompletes: Incompletes are awarded only when a calamity or major illness prevent you from completing the course work on time, and only if that calamity or illness occurs so late in the term that you cannot reasonably be expected to make up the work before the term's end. In addition, an incomplete will be awarded only if you have a good chance at passing the course based on the work completed.

Keep in mind that all grades are earned, not given.

GENERAL POLICIES

Learning Disabilities: If you have any special needs or requirements please notify me during the first week of class so that appropriate accommodations can be made.

Cheating and Plagiarism: According to IU policy, academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F for the entire course. You should note that any instance of cheating or plagiarism will result in a lowering of your term grade and a report sent to the office of Dean of Students. Lying (for example, a false excuse for absence) will be considered a category of cheating.

Course Records: Records for this course will be kept on file in my office for six months. Any inquiries concerning your course grade and materials should be made by December 2009.

CLASS SCHEDULE (SUBJECT TO CHANGE AS NEEDED)

WEEK ONE (January 21)

READING: *TBA*

IN-CLASS: Introductions—getting to know the relative backgrounds in music, computers, electronic music, etc. What is music? Why use computers to make music? An overview of the history of electronic music in the 20th Century and the first music created on a computer (Max Matthews / Bell Labs).

WEEK TWO (September 1 & 3)

The schedule has yet to be determined.

Very rough outline of the order:

Introduction to MIDI

MIDI sequencing

MIDI hardware setups

Remixing a song — MIDI messages and transmission — Mix automation — Creating and editing MIDI controller messages

Rearranging a song — Real-time MIDI effects — Synthesizer polyphony — Tempo changes

Introduction to Reason — Basic acoustics

Synthesis with Reason — More acoustics — Filters

LFOs — CV and pattern sequencing — Sampling — Sample preparation in DSP

Digital Audio Concepts – Basic concepts

Introduction to audio in ProTools

Resonance — Formants and Spectral Effects — Soundbite tempo conformance — Fades

Begin Final Project - Intro to Max/MSP

Digital audio concepts — Mixing strategies

Audio effects: EQ, Delay, Reverberation — Making MP3s and audio CDs

Dynamics processing — Mastering Mon (11/24): Quiz 2

Final project workshop

Final Project

