

**AUBURN UNIVERSITY
COURSE SYLLABUS**

Course Number:	CTMU 7550/7556
Course Title:	Applications of Technology in Music Education
Credit Hours:	3 Semester Hours
Prerequisites:	Admission to Graduate School
Co-requisites:	none
Instructor:	Dr. Jane Kuehne kuehnjm@auburn.edu * 334-844-6852 (office) * 334-332-7228 (cell/text)
Updated:	May 2012

Office Hours and Help:

Generally, I will be available Tuesday, Wednesday, and Thursday evenings for online appointments/help sessions. I will try to answer email in a timely fashion but please be aware that it may take me some time to find an answer before replying to you. Please be patient.

The GTA for this class may also be able to help you with your question. Message him/her in Canvas.

Course Description: Current tools, skills, and concepts for creating aural and visual interactive applications. The technology focus of this course is the development of basic MIDI, computer music sequencing and notation skills for music teaching.

Justification for Graduate Credit:

Students will not only gain operational skills in developing music instructional materials with digital tools, but they will understand the underlying software and hardware structures of the digital tools. With this knowledge, they will be able to evaluate the utility of existing and future music instruction digital media and hardware systems in direct, expository, discussion, constructivist, and cooperative learning environments and choose tools which enhance the curricular goals of music education programs.

Required Materials

BOOK: Technology Strategies for Music Educators, 2nd Edition (available via Kindle, or on paper)

SOFTWARE AND HARDWARE DISTANCE STUDENTS WILL NEED

NOTE: On-campus students will use the computers provided with the software provided.

ALSO NOTE: I am fairly flexible on software you use, but the following software is what I will be using to teach the class.

HARDWARE

- Computer capable of running the following software.
- A MIDI capable piano keyboard, or MIDI controller.
- A way to connect the keyboard/controller to your computer
- “Modern” keyboards connect via USB
- “Older” keyboard may need a USB MIDI interface
- Note – if you have an iPad, it is possible to use it as a MIDI controller using the app Pianist Pro – follow the directions for connecting it.

WORD PROCESSING, SPREADSHEET, MULTIMEDIA/PRESENTATION, DATABASE

- Microsoft Office – Word, Excel, PowerPoint
- OpenOffice.org (free download) – we will use the database part of this

SEQUENCING SOFTWARE

- MAC: Garageband, Logic Pro
- Windows: Mixcraft, Pro-tools or similar

NOTATION SOFTWARE

- A recent version of Finale (no later than 2009). I think there is a 30-day trial of this also. *Wait to download and install until we start notation.* If you have Sibelius and want to attempt the assignments with it, you are welcome, but I won't be able to provide tech support.

OTHER

- If time allows in the course, we will use Flash, but *don't download it until I tell you!* You can use the free 30-day trial to do what we will do.

Course Objectives:

Students will be able to:

1. Describe the structure of hardware and software components used in music instruction.
2. Evaluate and select hardware and software for music instruction.
3. Produce and access materials for music instruction using digital tools.
4. Develop proposals for integrating current technology into music education programs.
5. Evaluate music instructional technology products and systems.

The student will have knowledge of:

1. Strategies to identify and evaluate technology resources and technical assistance (i.e. those available on-line and on-site within a school and district setting) AL 290-3-3.42(4)(d)1.(i)
2. Methods for assessing advantages and limitations of current and emerging technologies, and on-line and software content to facilitate teaching and student learning AL 290-3-3.42(4)(d)1.(ii)
3. Strategies for developing and implementing a classroom management plan to ensure equitable and effective student access to available technology resources; AL 290-3-3.42(4)(d)1.(iii)
4. Safe, responsible, legal and ethical uses of technologies including fair-use and copyright guidelines and Internet user protection policies; AL 290-3-3.42(4)(d)1.(iv)
5. Characteristics of appropriate and effective learner-centered lessons and units that integrate technology; AL 290-3-3.42(4)(d)1.(v)
6. Technology tools (including but not limited to spreadsheets, web page development, digital video, the Internet, and email) for instruction, student assessment, management, reporting purposes and communication with parents/guardians of students; AL 290-3-3.42(4)(d)1.(vi)
7. How to facilitate students' individual and collaborative use of technologies (including but not limited to spreadsheets, web page development, digital video, the Internet, and email) to locate, collect, create, produce, communicate, and present information AL 290-3-3.42(4)(d)1.(vii)
8. The variety and application of technologies that are responsive to diversity of learners, learning styles and special needs of all students (for example, assistive technologies for students with special needs); AL 290-3-3.42(4)(d)1.(viii)
9. Processes and criteria for evaluating students' technology proficiency and students' technology-based products within curricular areas; AL 290-3-3.42(4)(d)1.(ix)
10. The resources for enhancing professional growth using technology (for example, through accessing web-based information, on-line collaboration with other educators and experts, and on-line professional courses). AL 290-3-3.42(4)(d)1.(x)

11. How to evaluate research literature related to multimedia and hypermedia design in music instruction.

Course Content and Schedule:

Week 1 – Orientation, Music Technology Background, Microsoft Functions
 Week 2 – Copyright Law and Professional Organizations, Music Sequencing
 Week 3 – Music Sequencing and Music Notation
 Week 4 – Writing a Grant Application/Proposal, A Little Bit of Flash
 Week 5 – A little Bit of Flash, Grant Proposal 5-minuit quick presentations

Course Requirements/Evaluation:

1. Participation in class activities, general discussions, etc. (10%)
2. Copyright and Professional Organizations Discussion Posts/Discussion (10%)
3. MIDI/Sequencing Projects (20%)
4. Notation Projects (20%)
5. Word processing and Excel Projects (20%)
6. Final Grant Application/Proposal Paper (20%)

Grading System:

- I use a 4-point grading scale, A=4, B=3, C=2, D=1, F=0
- A = 4-3.55 B = 3.15-3.54 C = 2.75-3.15 D = 2.36-2.74 F = below 2.74

Class Policy Statements:

Participation: Students are expected to participate in all class discussions and participate in all exercises. It is the student's responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.

All students are expected to have occasional dialogue with each other through the class discussion board by responding to other student's postings.

Attendance/Absences: Attendance is required at each class meeting. For distance students, if you miss the live class meeting, you must watch the class archive and post notes to the discussion board, or other designated area.

Because of the short time frame of this class, students are expected to be in attendance at every class meeting. If you know you will be missing a class, please let the instructor know before you miss the class.

All assignments must be turned in or posted by the deadlines announced in class or on Canvas.

Unannounced quizzes: There will be no unannounced quizzes.

Due dates and formats: Assignments and exams are due on the date required. If a student needs to submit it late, he/she must contact the professor to explain the reason.

Incompletes: Final semester grades of Incomplete will not be given except in cases of serious documented illness or other serious reason. Incompletes must be removed by the third week of the following semester.

Accommodations: Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternative time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If

you do not have an Accommodation Memo but need accommodations, make an appointment with the Program for Students with Disabilities at 1244 Haley Center, 844-2096 (V/TT).

Honesty Code: The University Academic Honesty Code and the *Tiger Cub* Rules and Regulations pertaining to Cheating will apply to this class.

Behavior Code: All students enrolled in the course have the right to attend class without unnecessary distractions, regardless of location (on campus or distance). Please be aware that professional and collegial behavior and interactions are expected. Refrain from unnecessary private text chatting while the instructor or fellow students are presenting material.

College of Education Professionalism Policy

As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or disposition are listed below:

- Engage in responsible and ethical professional practices
- Contribute to collaborative learning communities
- Demonstrate a commitment to diversity
- Model and nurture intellectual vitality

Other: Students must satisfy all course objectives in order to pass this course.

Contingency: In the event of an emergency situation, the course will be modified so that students may complete and still receive earned credit.

Assignment Overviews

Copyright and Professional Organizations Discussion

1. Choose an organization and write a description of its purpose, who its members are, and procedures for membership.
2. Post to Canvas and respond to copyright scenarios on Canvas Discussion board.

Word Processing/Excel Projects

1. Create a newsletter or concert program “properly” formatted (2-fold, 3-fold front and back)
2. Excel spreadsheet of student- or inventory-related data
3. Mail merge letter and envelopes related to the database
4. Create a grade book using Excel.
 - a. Must have 10 students
 - b. Percentage based grades
 - c. Class mean, median, modes
5. Submit by due date

Sequencing Project 1

1. Must be at least 32 measures long (longer than 1:00 minute in length).
2. 5 or more tracks
3. 4 or more timbres (patches)
4. Standard MIDI format

Sequencing Project 2

1. Use your/an existing MIDI file that has at least 5 different tracks (each track must have a different patch/program) and is over 1 minute in length.
2. Cut it to be around 1:00 minute in length. Choose the cut place in a place that makes sense musically (cadence).
3. Change the key of the entire piece (up or down transpose - all tracks).
4. After changing to a new key, change the key (transpose) of 1-2 tracks - so it is clearly recognizable by ear.
5. Change the patch/program (instrument) of at least 2 tracks - so it is clearly recognizable by ear.
6. Edit the volume of the piece (throughout).
7. Pan the piece (left/right)
8. Change the tempos throughout - interpretation (speeding up, slowing down).
9. Put aural accents (>) throughout - so it is clearly recognizable by ear (velocity).

Notation Project 1

1. Reproduce each of the pages provided in class.

Notation Project 2

1. Arrange a public domain piece or choose a more difficult musical excerpt and transcribe.
2. At least 24 measures long
3. 6 or more staves
4. At least 1 transposing instrument
5. Printed full score
6. Printed individual parts

Final Proposal Paper

1. 8-12 pages, double-spaced, 1-inch margins

2. Cover page with student name and contact info
3. 2 pages describing uses of current technology in music education programs (use citations from bibliography to support)
4. A proposal for integrating electronic instruments, sequencers, and notation software into your music education program
5. A bibliography of related music education technology literature (at least 5 references, at least one should be research)
6. 2 pages describing:
 - a. Setup and basic operation of electronic instruments
 - b. Describe MIDI, General MIDI, standard MIDI files, and their practical uses
 - c. Common features of electronic instruments
7. 2 pages describing:
 - a. Definition of the term "sequencer" and description of the types of sequencers (hardware, software, integrated)
 - b. Describe common feature sets found in high-end MIDI and/or Audio sequencing programs versus low-end programs