# 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

**Date Syllabus Prepared:** Updated May 2011

Instructor: Dr. Jane M. Kuehne – kuehnjm@auburn.edu - 334-844-6852 (office) – 334-332-7228 (cell/text)

# Office Hours and Assistance:

The instructor will not be available 24 hours per day. She will attempt to answer email in a timely manner on weekdays, but will not answer on a weekend unless it is absolutely necessary. Please remember that for some emails she needs to check/find information and it may take a day or more to answer your questions.

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**

## **Required Textbooks**

None. I will provide you with materials as needed.

## Recommended (but not required):

- 1. Williams, D. B., & Webster, P. R. (2005). Experiencing Music Technology (3rd Ed.) Schirmer. ISBN: 0534176720
- 2. Rudolf, T. E. (2005). *Teaching music with technology* (2<sup>nd</sup> Ed,). Chicago: GIA Publications. ISBN 1579993133
- Reese, S.; McCord, K.; and Walls, K. (2001). Strategies for teaching: Technology. Reston, VA: MENC. ISBN1-56545-140-6 Order from www.menc.org

<u>Software</u> – All of the programs are cross-platform (at some level). Students who wish to bring their own laptops to the workshop should obtain and install their own copies of software programs. Students may also bring their own MIDI keyboards and MIDI interfaces. (If you plan to do so, contact the instructor ASAP)

- 1. Microsoft Office (Word, PowerPoint, Excel). You should be able to get this for around \$100 Student/Teacher version in many places.
- 2. Finale 2009/2010/2011– available for around \$239.95 at http://www.academicsuperstore.com system requirements available at http://www.finalemusic.com/finale/system-requirements.aspx

# 3. **WAIT ON THIS!**

MixCraft 5 (Windows)

 $\frac{\text{https://store6.esellerate.net/store/checkout/CustomLayout.aspx?l=\&ClickID=\&s=STR5543411856\&pc=\&page=OnePageMoreInfoo.htm\&SkuRefNum=SKU92343920978}{\text{o.htm}}$ 

OR Garageband (MAC) - should have it on your MAC

4. Audacity – available as a free download (open source) at <a href="http://audacity.sourceforge.net/">http://audacity.sourceforge.net/</a>
See the same site for system information.

# Hardware

- 1. Computer (up-to-date enough to run the above software)
- 2. MIDI compatible music keyboard (piano keyboard)
- 3. USB MIDI interface (connects MIDI keyboard to computer). If you have a Yamaha keyboard, you may want to get a Yamaha brand interface.
- 4. Working Web Cam (you can get these at Wal-mart for around \$30 or less).
- 5. Please make sure your hardware is working. Test out everything as soon as you can. If needed, contact Dr Kuehne for help.

# **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:**

- 1. Music Technology background, hardware requirements, etc.
- 2. Word processing and excel spreadsheets (with database type functions).
- 3. Copyright.
- 4. Professional Organizations
- 5. Music Sequencing MIDI and Audio, Hardware Requirements, Applications to classroom.
- 6. Music Notation Process and Product Composition through notation, Applications to classroom.
- 7. Grant Applications and Projects Getting money for music technology.

# **Course Requirements/Evaluation:**

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

Grading system: A = 90 - 100 B = 80 - 89 C = 70 - 79

<u>Music Instructional Media</u>: Daily Assignments and Projects will involve the creation and evaluation of multimedia products for music learning. They will be uploaded to Blackboard and/or the student's Auburn University home page. Self-assessment, peer evaluation, and technology-mediated discussion are also integral parts of the learning experience. Students will produce the following types of media and present them in class:

D = 60 - 69

F = Below 60

# **Time Class Info Registration**

- 1. Complete the file required by TIME to get TIME Certification credit.
- 2. Submit by due date to Dr. Kuehne on Blackboard.

# **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 Blackboard and respond to copyright scenarios on Blackboard 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 on Blackboard 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
- 5. Star Spangled Banner with percussion suggested (or any other composition)
- 6. Submit on Blackboard by due date

#### 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).
- 10. Submit on Blackboard by due date

### 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. 4 or more staves
- 4. At least 1 transposing instrument
- 5. Printed full score
- 6. Printed individual parts
- 7. Bach fugue for woodwind quartet suggested (or any other composition)
- 8. Submit on Blackboard by due date

## 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
- 8. Submit on Blackboard by due date

# **Class Policy Statements:**

<u>Participation:</u> 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.

Discussion participation will be evaluated on frequency, professionalism, and scholarly content. The quality and frequency of participation will be assessed by a variety of means. In all cases, students are expected to be professional, considerate, and prepared to participate.

Attendance will also be graded. All students should be prepared, present (logged in, viewing live classroom) promptly at the beginning of class. It is the student's responsibility to contact the instructor if he/she needs to be absent, or if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.

Assignments will be submitted by posting them to Blackboard.

Attendance/Absences: Attendance is required at each class meeting. If an exam is missed, a make-up exam will be given only for University-approved excuses as outlined in the *Tiger Cub*. Arrangement to take the make-up exam must be made in advance. Students who miss an exam because of illness need a doctor's statement for verification of sickness and should clear the absence with the instructor the day they return to class. Other unavoidable absences from campus must be documented and cleared with the instructor **in advance**. Note: Appointments for routine medical and dental checkups are not considered excused absences. Students must supply official evidence of illness or other excuse the day they return to class or the absence will not be excused. Distance students will fax their excuse to 334-844-4735.

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 email the instructor through Blackboard <u>before</u> you miss the class. The instructor will determine if the absence will be excused or not. If there is more than one unexcused absence, the instructor reserves the right to lower the final grade, typically by one letter grade per unexcused absence over one. See example below.

Students who must miss class should inform the instructor via Blackboard email as soon as possible before the absence.

<u>Distance students are expected to attend class live by connecting either through Live Classroom.</u> Those who have been granted permission ahead of time must view class archives and post detailed notes from watching the archives to the appropriate place on the discussion board as soon as possible after the missed class, preferably by the morning after the class was missed or by the day/time negotiated with the instructor.

On campus students are expected to be physically present for every class. If granted an excused absence, an on-campus student must watch the archive of the missed class and post detailed notes to the appropriate place on the discussion board no later than the morning after the missed class, or by the day/time negotiated with the instructor.

All assignments must be turned in or posted by the deadlines announced in class. Due to the nature of Blackboard, you may not be able to submit late assignments. Please be aware of this!

<u>Unannounced quizzes</u>: There will be no unannounced quizzes.

<u>Due dates and formats</u>: 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.

<u>Incompletes:</u> Final semester grades of Incomplete will not be given except in cases of documented illness. 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).

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

<u>Behavior Code:</u> 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.

<u>Technology:</u> All students are expected to check TigerMail and Blackboard communications regularly. Students are responsible for reading and responding to messages from the instructor in a timely professional manner. Students who send questions in Blackboard mail or discussion board should provide enough information so that the instructor can understand the questions.

All students will be required to submit assignments to Blackboard, and, are required to know how to do so. Students are responsible for obtaining access to and knowing how to operate standard software such as Microsoft Word and PowerPoint (or Open Office). Students should refer to the "Contacts" page on the Music Education Graduate Student Orientation and Community site or the OIT web page to obtain technical assistance.

Students are expected to utilize threaded discussions when appropriate instead of creating new threads. Threaded discussion assignments that are posted under new threads may not receive course credit. Student should also use the "Reply" function utilizing the heading in the received message in Blackboard email.

Distance students are responsible for knowing how to access the electronic classroom tools and features and for trouble-shooting and maintaining their own equipment. At least a 3 Mb broadband Internet service is required and computers should be up-to-date with plenty of RAM. Distance students must have a microphone/headset and use it correctly upon instructor request for voice conferencing. All distance students should work through the Music Education Distance Training materials provided at http://openBlackboard.auburn.edu and those on the Music Education Graduate Student Orientation and Community site at http://Blackboard.auburn.edu well ahead of the beginning of the course.

# 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.