Course Description
This class will explore the role of digital technologies in creating, performing, and responding to music, with applications to lifelong music learning and participation. A primary emphasis of the course will be the development of students’ Musical Technological Pedagogical and Content Knowledge (M-TPACK). The technological focus of the class will include music notation software, MIDI and digital audio, instructional computer programs, Internet resources for music learning, social media, and productivity tools.

Office Hours
There are no specific office hours for this course as the instructor may be contacted at any time via the Canvas messaging system or his UF email address. Messages will be responded to within 24 hours during the week and 48 hours on the weekend. If a phone or video chat consultation is desired, those may be arranged directly with the instructor.

Required Text

Additional Resources
- The textbook for this class has a companion website at http://digitalmusicking.com
- Students will utilize tutorials from Lynda.com, accessed via e-Learning Support Services – see https://lss.at.ufl.edu/help/Lynda
- Additional selected readings as indicated in the weekly schedule will be available for download from the course site.
- A USB MIDI Keyboard for use as an input device with music notation and DAW software is recommended. If you do not already own an appropriate MIDI keyboard, the Korg nanoKEY2 Slim-Line USB Keyboard <http://tinyurl.com/nanokey2> is an inexpensive option that would be satisfactory. Note that the nanoKEY2, available through various resellers, works fairly well as an input device, but does not have self-contained sounds and would probably not be the best choice as a performing instrument.
Course Goals

Through full participation in this course, the graduate music education student will:

1. discuss the role of technology in music education;
2. compare and contrast MIDI and digital audio;
3. identify types of music software and evaluate software titles;
4. catalog Internet resources that can be used for music learning;
5. discuss research and best practices related to creating, performing, and responding to music;
6. describe the affordances and constraints of technologies with application to creating, performing, and responding to music;
7. make connections among curricular outcomes, pedagogies, and technologies;
8. describe ways in which technologies can be utilized to assess music learning;
9. design lessons and develop instructional resources for technology-assisted music learning; and
10. develop a personal learning network for ongoing professional development

COURSE POLICIES

WORKLOAD & ASSIGNMENTS
This graduate course requires considerable reading, along with discriminating reflection, writing, and discussion. Be prepared to devote the time necessary to be successful. The compressed format of this online course will require 15-20 hours of work per week to meet course expectations. Late work will not be accepted unless prior arrangements have been with your instructor.

EMAIL
Your UFL email account is the official email address used by the University, where official correspondence is sent. Important communication regarding this course may take place via email, and your UFL email address is what will be used. All students need to regularly check their email, at least once per day. Make checking it part of your daily routine. Likewise, unless there are extenuating circumstances, when you send your instructor an email during the week (M-F) you can expect a reply within 24 hours. Instructors will reply on weekends as they are able.

COURSE TECHNOLOGY
Students taking this course must have access to the following equipment and software:

- Functional computer with Windows 8 or better, or Mac OS 10.11 or better
- High speed Internet connection
- Microsoft Office – available free for UF students at [http://software.ufl.edu](http://software.ufl.edu)
- Chrome web browser
- Other free software as noted in the syllabus and the Canvas course site
- Webcam (can be integrated with your computer or laptop)
**UF POLICIES**

**UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES**
Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**UNIVERSITY POLICY ON ACADEMIC MISCONDUCT**
Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php.

**GETTING HELP**
For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

Any requests to complete make-up work due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.
- Other resources are available at http://www.distance.ufl.edu/getting-help for:
  - Counseling and wellness resources
  - Disability resources
  - Resources for handling student concerns and complaints
  - Library Help Desk support

(3)
## COURSE ASSESSMENTS

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<thead>
<tr>
<th>Item</th>
<th>When</th>
<th>Percentage of Final Grade</th>
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<tbody>
<tr>
<td>Start-up Activities (Videochat, Twitter username, personal introduction to the class)</td>
<td>Module 1</td>
<td>5</td>
</tr>
<tr>
<td>Discussion Participation</td>
<td>Modules 1-7</td>
<td>10</td>
</tr>
<tr>
<td>Weekly PLN Engagement</td>
<td>Modules 1-8</td>
<td>5</td>
</tr>
<tr>
<td>Blog Reflections</td>
<td>Modules 1-7</td>
<td>10</td>
</tr>
<tr>
<td>Notation Projects = MuseScore (50%) &amp; Noteflight (50%)</td>
<td>Module 2</td>
<td>10</td>
</tr>
<tr>
<td>Soundtrap Project</td>
<td>Module 3</td>
<td>10</td>
</tr>
<tr>
<td>Audacity Projects = “Bart” (35%) and Remix (65%)</td>
<td>Module 4</td>
<td>5</td>
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<tr>
<td>Software and Web Resources = Instructional Software Evaluation (50%) &amp; Social Bookmarking Project (50%)</td>
<td>Module 5</td>
<td>10</td>
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<tr>
<td>Spotify Project</td>
<td>Module 5</td>
<td>5</td>
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<tr>
<td>Google Tools = Google Forms Quiz (50%) and Administrative Projects (50%)</td>
<td>Module 7</td>
<td>5</td>
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<tr>
<td>WebQuest Project (5% Plan, 95% WebQuest)</td>
<td>Plan – Module 6; WebQuest – Module 8</td>
<td>15</td>
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<tr>
<td>ePortfolio</td>
<td>Module 8</td>
<td>10</td>
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### Grading Scale

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<tr>
<td>A</td>
<td>93-100</td>
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<tr>
<td>A-</td>
<td>90-92</td>
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<td>B+</td>
<td>87-89</td>
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<tr>
<td>B</td>
<td>83-86</td>
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<tr>
<td>B-</td>
<td>80-82</td>
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<td>C+</td>
<td>77-79</td>
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<tr>
<td>C</td>
<td>73-76</td>
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<td>C-</td>
<td>70-72</td>
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<tr>
<td>D+</td>
<td>67-69</td>
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<tr>
<td>D</td>
<td>63-66</td>
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<tr>
<td>D-</td>
<td>60-62</td>
</tr>
<tr>
<td>F</td>
<td>59 &amp; below</td>
</tr>
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Module 1: A Conceptual Framework for Technology Assisted Music Learning

Objectives
- Describe the significance of technology in today’s world and people’s lives.
- Discuss the role of technology in general education.
- Provide examples of Technological Pedagogical and Content Knowledge (TPACK) in music education.
- Establish a digital Personal Learning Network

Technology Focus
- Overview of technologies for music learning
- Blogger.com
- Social Networks for Professional Learning
- Computer Basics

Module 2: Creating Music with Technology – An Overview of Creativity and Improvisation

Objectives
- Discuss research and best practices related to the acquisition of knowledge and skills for creating music, with a particular focus on improvisation.
- Describe the affordances and constraints of technologies with application to musical creativity.
- Make connections among creative curricular outcomes, pedagogies, and technologies.
- Describe MIDI and its connection to technologies for music learning.

Technology Focus
- Music Notation Software
- MIDI
- Cloud Computing

Module 3: Creating Music with Technology – Focus on Composition

Objectives
- Discuss research and best practices related to the acquisition of knowledge and skills for creating music, with a particular focus on composition.
- Describe the affordances and constraints of technologies with application to musical creativity.
- Make connections among creative curricular outcomes, pedagogies, and technologies.
- Compare and contrast MIDI and digital audio.
Technology Focus
- Digital Audio Workstations
- Soundtrap

Module 4: Performing Music with Technology

Objectives
- Discuss research and best practices related to the acquisition of knowledge and skills for music performance.
- Describe the affordances and constraints of a variety of technologies with application to musical performance.
- Make connections among performance curricular outcomes, pedagogies, and technologies.

Technology Focus
- Digital Tuners and Metronomes
- Digital Audio and Video
- Digital Audio Software and Recorders
- Digital Video Software and Cameras
- Auto Accompaniment Programs
- Music Notation Software
- Interactive Whiteboards
- Digital Instruments
- Smartphones, MP3 Players, and Tablet Computers
- Internet resources
- Video Conferencing

Module 5: Responding to Music with Technology

Objectives
- Discuss research and best practices related to the development of music listening skills and general musical understanding.
- Describe the affordances and constraints of a variety of technologies that may facilitate human response to music.
- Make connections among curricular outcomes, pedagogies, and technologies relevant to human response to music.
- Identify types of music software and discuss how to evaluate software titles.
- Explain ways in which Internet resources can be used for music learning.

Technology Focus
- Media (digital audio and video)
- Concept mapping software
- Instructional Software
Module 6: Instructional Design and Technology

Objectives
- Discuss how learning is contextual, active, social, and reflective, and how technology can facilitate these attributes.
- Explain how project based learning can be utilized as a model for instructional design that includes technology.
- Describe how backwards design facilitates coherency in instructional design through the alignment of learning objectives, instructional activities, and assessments.
- Utilize technology to differentiate music learning.
- Discuss the use of assistive technologies in music education.
- Differentiate between copyrighted, public domain, and Creative Commons media and materials that may be used in technology projects and lessons.
- Design a lesson that includes the use of technology
- Design a WebQuest

Technology Focus
- Web design

Module 7: Musical Assessment and Professional Productivity with Technology

Objectives
- Discuss essential assessment principles.
- Describe ways in which technologies can be utilized in the development of assessments.
- Apply technologies to the process of assessing specific music learning outcomes.
- Explain new assessment approaches enabled by technology.
- Describe technological solutions to aid in professional productivity.

Technology Focus
- Google Spreadsheets and Forms
- Digital audio and video
- Electronic survey tools
- Electronic grade books
- Student Response Systems
- Learning Management Systems
- Internet resources
- Electronic portfolios
- Calendaring software
- Databases
- Desktop publishing software
- Cloud-based file storage and sharing services
- Slide presentation software

Module 8: Coda

Objectives
- Discuss the pros and cons of online learning for advanced, formalized professional development.
- Implement strategies to develop your personal Musical Technological Pedagogical and Content Knowledge