

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

[CLASS ]

[MUSIC]

**Expanded Course Outline**

<b>Course Subject Area:</b>	<b>MU</b>
<b>Course Number:</b>	<b>1080</b>
<b>Course Title:</b>	<b>Introduction to Music Technology</b>
<b>Units:</b>	<b>3</b>
<b>C/S Classification #:</b>	<b>04</b>
<b>Component:</b>	<b>Lecture</b>
<b>Grading Basis:</b> (graded only, CR/NC only, student's choice)	<b>Graded only</b>
<b>Repeat Basis:</b> (may be taken once, taken multiple times, taken multiple times only with different topics)	<b>May be taken once</b>
<b>Cross Listed Course:</b> (if offered with another department)	
<b>Dual Listed Course:</b> (if offered as lower/upper division or undergraduate/graduate)	
<b>Major course/Service course/GE Course:</b> (pick all that apply)	<b>Major course</b>
<b>General Education Area/Subarea:</b> (as appropriate)	
<b>Date Prepared:</b>	<b>12/23/2014</b>
<b>Prepared by:</b>	<b>Jennifer Amaya</b>

**I. Catalog Description**

Introduction to the essential elements and application of computer-based music technology. Principles, uses, and techniques for working with MIDI, notation, and sequencing software and hardware.

**II. Required Coursework and Background**

**Prerequisite(s):** MU 100, MU 120, MU 1000 or MU 1201

**III. Expected Outcomes**

1. A basic understanding of computers and how they work with music applications to produce music, edit music, digitally record music, and notate music.
2. A basic understanding of MIDI, MIDI devices, and MIDI data.
3. Ability to notate music using music notation software at a basic level.
4. Ability to record and edit MIDI data graphically and as music notation.
5. Ability to create a music sequence using a professional music sequencing application.

6. Ability to record or bounce a MIDI sequence/mix to audio, and to burn it to an audio CD.

The outcomes of this course relate to the following Music Department Student Learning Outcomes:

- #3: Demonstrate musicianship skills (including those involving technology) and conceptual understandings.
- #4: Demonstrate and articulate personal growth as a musician and student of music in the world.
- #5: Articulate a holistic understanding of the many influences on any musical endeavor (e.g., cultural, artistic, technological, economic, etc.).
- #6: Develop specialized knowledge appropriate to the option or emphasis area.

BA-general:

3. **Communicate effectively**--verbally and in writing--about specific musical works and musicians, about the creative process in music, and about music's role in human culture.
4. **Demonstrate** creativity, musicianship skills, an understanding of appropriate technology, and conceptual understandings.

BA-MIS:

1. **Interpret** relationships between music and: commerce; technology; media; and audience.
2. **Articulate** fundamental understanding of entrepreneurship and standard music industry practices

BM-general: 2. **utilize** current/recent technologies appropriate to the musical endeavor.

#### IV. Instructional Materials

Amaya, Jenny. *Sibelius 101: Introduction to Sibelius*. Burlington, MA: Avid Technology, 2014.

Amaya, Jenny. *Sibelius 7 Essential Training*. (Online training videos.) <http://www.lynda.com/Sibelius-tutorials/Sibelius-Essential-Training/95611-2.html?srchtrk=index:1%0Alinktypeid:2%0Aq:sibelius%0Apage:1%0As:relevance%0Asa:true%0Aproducttypeid:2>. Carpinteria, CA: Lynda.com, 2012.

Humberstone, James. *Sibelius 7 Music Notation Essentials*. Boston, MA: Cengage Learning PTR, 2012.

Parsons, Alan. *The Art & Science of Sound Recording: MIDI History, Development, & Applications*. (Online video recording.) [www.artandscienceofsound.com](http://www.artandscienceofsound.com). Distributed by Keyfax New Media. Santa Cruz, CA: 2009.

Roberts, David E. *The Power in Digital Performer*. Milwaukee, WI: Hal Leonard Books, 2012.

## **V. Minimum Student Material**

1. Notebook/Binder
2. Appropriate digital storage device (flash drive, portable hard drive)
3. Over-the-ear headphones with 1/4" stereo adapter
4. Several blank CDs (R or RW)
5. Internet access

## **VI. Minimum College Facilities**

1. Classroom with whiteboard
2. Computer lab with digital audio workstations (enrollment capacity + instructor) each containing at least:
  - a. Computer capable of processing digital audio
  - b. Up-to-date professional notation and sequencing software applications
  - c. Audio interface
  - d. Microphone and desktop mic stand
  - e. Internet access
3. Projection capabilities from the instructor's workstation
4. Quality stereo monitoring system
  - a. Two professional-quality active speakers (or two passive speakers with powered amplifier)
  - b. Audio mixing console.

## **VII. Course Outline**

1. Music notation instruction equivalent or equal to Avid's official Sibelius 101 course. (Instruction covering the software interface, selection, editing, time signatures, key signatures, clefs, note input methods, basic line and text input, and saving.) Students should be able to create a simple/basic score.
2. Pertinent notation instruction beyond the beginning level that is important for the basic use of notation software, such as an introduction to multiple voices and basic layout and formatting tasks.
3. The history and basics of MIDI.
4. Introduction to music production and sequencing.
5. Introduction to sequencing using a professional sequencing application similar or equal to Digital Performer. (Instruction covering the software interface, selection, editing, setting meter and tempo, working with the software's virtual instruments,

- MIDI recording, click tracks, quantization, adjusting velocities, and saving and organizing session folders and files.)
6. Introduction to ReWire (using an application similar or equal to Reason).
  7. A basic introduction to importing, recording, and editing audio within the sequencing application.
  8. Setting levels and pans in the software mixer.
  9. Completing an internal layback (bounce to stereo audio track) of all sequenced data.
  10. Exporting and burning the bounced audio (stereo mix) to an audio CD.

### **VIII. Instructional Methods**

1. Use of multiple software applications (notation and sequencing)
2. Lectures
3. Demonstrations
4. Problem solving and creative assignments
5. Group discussions

### **IX. Evaluation of Outcomes**

1. Small notation assignments.
2. Notation software exam, testing a student's knowledge of the software. (This can be the official Sibelius 101 exam, if all Avid Learning Partner policies are met.)
3. Large notation project.
4. MIDI exam, testing a student's knowledge of the history and fundamentals of MIDI.
5. Small sequencing assignment, evaluating a student's ability to create a tempo and meter map (click track), and to record and quantize MIDI data within bars and beats.
6. Large sequencing project evaluating student's overall sequencing abilities.
7. Attendance/participation.