



RADNOR TOWNSHIP SCHOOL DISTRICT  
Course Overview



Electronic Music Technology  
Course # 7825

**General Information**

Credits: N/A

Length: Semester

Weighted: N/A

Format: Meets Every-other Day

Prerequisite: Basic note-reading skill for treble and bass clefs; Basic keyboard skill and ability to play with steady beat.

Grade: 8

**Course Description**

Electronic Music Technology is offered as an eighth grade elective, meeting every-other day for one semester. Students are introduced to the study of music technology building upon music fundamentals from prior music study. Areas of instruction include instrument and equipment care, continued music literacy (reading and writing music), keyboard performance skills, basic music composition components, electronic sound design and manipulation, music technology related history, concepts, terminology and experience with a variety of software applications and iPads for music creation.

**Course Objectives:**

The students will be able to:

1. Accurately perform melody, harmony and rhythm parts of a composition and record the parts separately using either computer software or iPad app.
2. Compose, perform and record melody, harmony and rhythm parts of their own creation, using either computer software or iPad app.
3. Orchestrate and perform two-, three- or four-part synthesizer ensemble pieces within expected performance parameters for their individual levels of expertise.
4. Describe the differences between music in MIDI format and the various audio formats
5. Change instrumentation using an existing music composition stored as digital data; and alter instrument sounds, tempo, range, and dynamics during the course of the piece, while still maintaining the original integrity of the composition.
6. Using the music evaluation template, listen to and analyze the compositions of important composers of the electronic medium.
7. Listen to, and provide discussion on, musical arrangements and compositions created by others in the class.
8. Using the computer and voice editing software, edit an existing electronic sound using controls for pitch, waveform, filter and resonance, attack and decay, and digital effects.
9. Using the computer and voice editing software, create a new synthesizer sound using all available parameters in software, and then save the sound in computer memory.
10. Develop an understanding of how developments during the 20th Century in history, music, and technology affected and defined the growth of electronic music and technology.

11. Compile a portfolio of their work to include: audio recordings of performances and compositions, completed music analysis and self-assessment rubrics.

**Common Assessments:**

1. Basic Recording / Performance and technical skill
2. Melody Composing
3. Music Compositions
4. Sound Editing/Soundscape

**Major Units of Study:**

**Music Listening (Both quarters)**

Listening to music based upon, and utilizing, electronic music instruments provides audible examples for students to identify, analyze, discuss and critique. Specific examples played in class are targeted to particular assignments and skill development. This is an ongoing class activity throughout the semester. New terminology is often introduced and used during the discussion following listening examples.

**Keyboard Performance/Recording Basics/Editing Music Data (First quarter)**

Students perform and record simple two- and three-part exercises and songs while monitoring a metronome beat, recording each part separately and layering additional parts. Students also create a two-part drum composition of between 16 – 32 measures, and learn the process of “quantizing” to correct rhythmic timing. Using pre-recorded MIDI music files, students experiment with changing instrumentation, tempo, range, transposition, and other expressive parameters while maintaining the integrity of the original composition.

**Melodic Composition (First quarter)**

Students learn the basic structure of how melody is created and how it interacts with harmony and rhythm. Students learn to identify basic components of melody, melodic contour, motifs and phrases. Students create their own basic melodies using the components identified in existing melodies.

**Music Composition and Recording**

Students compose and record a composition of at least three parts, recorded part-by-part using keyboard and recording software. Compositions are analyzed and edited on computer; Final playback and analysis in class. Two to three compositions are assigned over the course of the two quarters.

**The Science of Sound/Sound Synthesis & Editing/Composing a “Soundscape”**

Students are introduced to musical and audio concepts and terminology allowing them to identify, describe and manipulate electronic sound parameters through software. Students learn the key components of sound synthesis and how these components affect specific musical elements; Student create a non-traditional music composition using complex electronic timbres to express an overall musical idea or “soundscape.”

***Materials & Texts***

GarageBand recording software; FreeAlpha AudioUnit software plug-in; iMac computer; Korg USB keyboard controller; iPads; headphones for monitoring computer audio output; selected recordings for listening examples; recordings of student compositions from past Music Tech classes.

***Summer Assignment***

N/A