

Music Technology Electives that work at the Secondary Level

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This handout is posted at: <http://tomrudolph.com/handouts.htm>

US National Trend: More Required Electives

- National and State Music Standards
<http://www.menc.org/resources/view/national-standards-for-music-education>
- NETS Standards
<http://www.iste.org/AM/Template.cfm?Section=NETS>
- Performers/Non-Performers
Music technology can address the entire student population
- Music Electives can create new performing groups, clubs, and activities

Music Technology Electives at Selected US Schools

- Bay Shore HS, Bay Shore, New York
- Dr. Phillips HS, Orlando, FL
- Douglas Anderson School of the Arts, Jacksonville, Florida
- Haverford HS, Havertown, PA
- Hilltop HS, Chula Vista, CA
- James Blake HS, Silver Spring, MD
- Roosevelt HS St. Louis, MO

Instructor Background

Must be experienced in one or more areas of music technology

<http://www.ti-me.org/timeareas.html>

Five main areas offered in the US:

1. Music theory and composition
2. Music composition, arranging & music technology fundamentals
3. Playing electronic instruments
4. Digital audio recording and editing
5. Multimedia: presentations, web design, film scoring, audio/video
(no one program includes them all; some combine two or more of the above topics in one course. Most schools offer beginning and advanced courses)

1. Music Theory and Composition

- Traditional music theory course, using software to enhance independent learning; composition projects (usually notation-based) to put skills into practice.
- Instructor Technology background required: minimal (TI:ME level one courses or equivalent experience)
- Audience: All students
- Course Titles:
 - Music Theory/Composition I (Bayshore HS)
 - Music Theory and Composition 1A & 1B (James Blake HS)
- Required Hardware/Software:
 - Computers, Keyboards (optional);
 - Theory Ear-training software;
 - Notation or Music Production Software.
- Textbooks:
 - Alfred Theory Books
 - Alfred Music Tech Series: Composing with Notation Software

Sample Course Description:

Music Theory and Composition 1A & 1B

James Blake HS

The main objective of this course is the development of music literacy. Students experience melodic, harmonic, and rhythmic dictation, keyboard harmony, and sight singing. Students also learn how to arrange music for various combinations of voices. The elements of music are stressed through emphasis on music terminology, notation, major and minor scales, intervals, triads, and beginning part writing.

2. Music Composition, Arranging, & Music Tech.

A wide variety of software is used:

- Notation software based – Sibelius or Finale
- Music production software-based: GarageBand, Reason, Home Studio, Band-in-a-Box and others.

Instructor Technology background required: moderate to advanced (TI:ME Level Two courses or equivalent experience)

Audience:

- Notation-based best for performers;
- Music production software best for performers and non-performers.

Required Hardware:

- MIDI lab with Keyboards and computers

Course Titles:

- Song Writing by Computer – Haverford HS
- Music theory/composition II & III (Bay Shore HS)
- Music and Its Technology A & B (James Blake HS)
- Electronic Music I/II (two levels combined) Dr. Phillips High School, Orlando, FL
- Music Technology I & II (Hilltop HS)

Textbooks:

- Alfred Music Tech Series:
 - Sequencing and Music Production Software*
 - Composing with Notation*
- Teaching Music with Reason

Sample Course Description:

Electronic Music I Douglas Anderson School of the Arts
Electronic Music I is designed to provide music students with a basic understanding of producing music electronically. It is geared as a hands-on survey of electronic music from its inception in the late eighteen hundreds to the latest music technology available today.

3. Playing Electronic Instruments

Performing Ensembles using electronic instruments

Instructor Technology background required:

- Moderate to advanced (TI:ME Level Two courses or equivalent experience)

Audience:

- Performers and students who play non-band/orchestra instruments

Hardware such as:

- MIDI keyboards
- Guitars
- MIDI Controllers

Course Titles:

- Electronic Keyboard Lab (Haverford HS)
- Piano Lab 1A & 1B (James Blake HS)
- Guitar Lab 1A & 1B (James Blake HS)
- Music Tech Ensemble 1, 2 (Hilltop HS)

Sample Course Description:

Music Tech Ensemble - Hilltop HS

This course is an advanced performance oriented ensemble that utilizes the latest in electronic musical instruments such as synthesizers, electronic percussion, and electric guitars, in combination with acoustic instruments and vocals. Performances and rehearsals outside of class time are required. The class continues advanced study in musical performance with electronic and acoustic music instruments, and vocals in variety of ensemble settings typically encountered by professional musicians.

Textbooks:

- Alfred Music Tech Series: Playing Keyboard
- Alfred and Kjos Publishers: Adult Piano methods

4. Digital Audio

Stereo and multitrack recording; audio editing, microphones, digital audio basics.

Instructor Technology background required: advanced (TI:ME Level 2 or equivalent)

Audience: All Students

Course Titles:

- Digital Audio 1 and 2 – Haverford HS.
- Music Engineering & Music Business – Hilltop HS
- Electronic Music II - Dr. Phillips HS

Hardware/Software:

- Computers with digital audio recording software

Textbooks:

Alfred Music Tech Series: *Sequencing and Music Production*
Recording in the Digital World by Rudolph and Leonard

Sample Course Description:

Digital Audio 1 - Haverford High School

Open to students in ALL levels, one quarter. Open to all grades. No prerequisite. This course is designed for the student who has little or no experience in the area of digital recording. No musical training is required. All students must provide their own stereo 1/8" jack headphones. Students will develop an understanding of the basic concepts of the science of sound and digital audio, demonstrate an understanding of microphones and microphone placement, edit audio using digital audio software, and burn audio to a CD.

5. Multimedia: Presentations, Websites, Film Scoring

Creating multimedia using presentation software and/or web design; Scoring music to accompany video using high-end software such as Final Cut and Premier.

Instructor Technology background required:

- advanced (TI:ME Level 2 courses or equiv.)

Audience: All students

Required Hardware/Software: Computers & Software designed for specific applications: Adobe Premier, Final Cut Express, Dream Weaver, PowerPoint and other related titles.

Course Titles:

- Multimedia – Bay Shore HS;
- Web Design/Multimedia Arts 1, 2 – Hilltop HS

Sample Course Description - Bay Shore HS

Students in the Multi-media course will utilize state-of-the-art technology to create and develop digital portfolios on CD-Rom and video format. They will also produce audio Cd's, DVD and digital video pieces including web pages and animated works. Students will become proficient in using professional software products including Adobe Photoshop, DVD Pro and Adobe Dream Weaver and Final Cut Pro.

Where to begin

1. Start with existing music staff – someone with an interest in technology
2. Start with the existing school computer lab
3. Offer an elective (some schools offer two levels at once in the same class)
4. Add a dedicated music technology lab
 - Add additional electives
5. Seek out technology training at colleges and universities
 - TI:ME level one and level Two certification (www.ti-me.org)
 - Berklee Music online courses www.berkleemusic.com

Support and Service (USA)

Support and Service for Music Technology Labs:

1. SoundTree – www.soundtree.com
2. Sweetwater – www.sweetwater.com

Reference Articles

- Profiles of schools in each issue of *Music Education Technology Magazine*:
www.metmagazine.com
- SoundTree lesson plans <http://www.soundtree.com/lesson-plans>
- Article Reviewing specific music tech lab applications: *Music Technology Labs* by John Kuzmich
<http://www.sbomagazine.com/ME2/dirmod.asp?sid=38E3A63FB1744A5DA5C0927E8FCAC262&nm=Archives&type=Publishing&mod=Publications%3A%3AArticle&mid=8F3A7027421841978F18BE895F87F791&tier=4&id=F928016EFC014B5F9BE1DEDDC9632896>

Reference books and Publications:

<http://www.ti-me.org/findpublications.html>

Technology Guide for Music Educators

TI:ME publication; edited by S. Watson

Teaching Music with Technology

GIA Publications by Tom Rudolph

Strategies for Teaching: Technology

Edited by Sam Reese (MENC publication)

Technology Integration in the Elementary Music Classroom

TI:ME Publication; by Amy Burns

Alfred Music Tech Series

Composing with Notation Software by Richmond, et al.

Playing Keyboard by Rudolph et al

Sequencing and Music Production by Langol et al

Schools and Web Links

Bay Shore HS, Bay Shore, NY

<http://www2.bayshore.k12.ny.us/bshs/Multim.html>

Haverford HS, Havertown, PA

<http://www.feinmusic.com/digitalrecording/Welcome.html>

http://metmagazine.com/spotlight/recording_electives_trigger/

Hilltop HS, Chula Vista, CA,.

<http://hhs.suhd.k12.ca.us/~musictech/>

James Blake HS, Silver Spring, MD

<http://www.montgomeryschoolsmd.org/schools/blakehs/departments/music/index.htm>

Dr. Phillips High School, Orlando, FL

Mr. Keith Galasso

<http://www.dphs.ocps.net/Teacher%20Web%20Pages/Panther%20Trax/traxfinal/bio.htm>

http://metmagazine.com/mag/recording_future_dr/

Douglas Anderson School of the Arts, Jacksonville, FL

<http://www.da-arts.org/about-da/>

