



GETTING STARTED USING MUSIC TECHNOLOGY:
ENTRY POINTS ACROSS THE COLLEGE MUSIC CURRICULUM

SESSION I BASIC MODELS
SESSION II MORE COMPLICATED APPROACHES

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1. MATRIX OF ENTRY POINTS X TOOLS

	CAI		Internet				Desktop Publishing			Notation/Sequencing			Simulation			Digital Audio			Web Authoring		Other Authoring
	Basic	Multimedia	Browsing/Links	Email/Discussion Groups	Search Engines	Word Processing	Scanning	Digital Photo	Graphic Editing	Generative Music	Intelligent Accompaniment	Players	Capture	Burners	Class Management	HTML Editing	PowerPoint	QT, RealVideo, & Flash			
Basic Music Listening	x	x	x						x			x	x	x							
Enhancing Teaching Materials						x	x	x	x	x						x					
Research Exploration			x	x	x	x															
Classroom Management			x	x											x	x					
Music Simulation		x								x	x										
Engaging Students in Performance									x		x	x	x	x							
Engaging Students in Creating Music									x	x	x		x	x	x				x		
Enhancing Instruction with Multimedia						x	x	x	x	x			x	x	x		x	x	x		

2. MUSIC AND NON-MUSIC SOFTWARE RECOMMENDED FOR USE IN COLLEGE-LEVEL CURRICULUM DEVELOPMENT

Notes: This listing represents a sample of chosen titles on the basis of personal use. We know that each of the titles below has been used in educational and professional settings and each is well regarded by musicians that use them. We have no financial relationship with any of the companies or vendors mentioned here. Check McCormick's (<http://www.mccormick.net/~ccm/>) SoundFree (<http://www.soundfree.com/>), ABRACATA (<http://www.abracata.com/>), or Lentino's (<http://www.lentino.com/>) for current pricing on music software. Vendors such as MacWarehouse or MicroWarehouse are reasonable choices for other software titles noted in this presentation. Also be sure to check your own college/university bookstore or your Instructional Technology professionals for special institutional prices. Prices are highly variable. Hybrid indicates that both Mac/Win versions are on a CD-ROM.

MUSIC

COMPUTER-AIDED INSTRUCTION: FLEXIBLE PRACTICE

MBac Music Lessons I and II MIDI MBac Software \$72 Mac/Win
Excellent basic-level tutorial and drill program for music fundamentals.
Auralia/Musition 2 MIDI Rising Software \$100 (Mac/Win)
Newest entry into the aural skills/theory software grouping.
MacCAMT 2000 MIDI MacCamT Music Software \$90.00 Mac/Win
Comprehensive aural skills program that covers intervals, scales, chords, and melodic dictation.
Practica Musica 4 MIDI Ars Nova \$95 Mac/Win
Alternative tuning systems for computer sound offered. Many drills and multi-levels. Excellent system for customizing dictation melodies. Good for junior high through college.

COMPUTER-AIDED INSTRUCTION: SIMULATION

Band-in-a-Box MIDI PG Music \$49.95 Mac/Win
Music accompaniment program for improvisation. Many music styles are available and user can generate custom styles. Provides solos in the style of various artists.
SmartMusic (aka Vivace or Practice Studio) QT/MIDI Coda \$99.00 and up Mac/Win
Intelligent Accompaniment program that follows the digital audio signal of the instrument or voice.
In Concert MIDI Cakewalk \$34.00 Mac/Win
Intelligent accompaniment program that follows MIDI data.

COMPUTER-AIDED INSTRUCTION: MULTIMEDIA

Xplora I Peter Gabriel CD/RealWorld \$59.95 Mac Only
Provides text, QuickTime movies, animation and images of the music of Peter Gabriel. Examples of multicultural music and instruments. HyperCard-based.
Beethoven Symphony No. 9 CD/ATI Voyager \$55.95 Mac Only
Stravinsky Rite of Spring CD/ATI Voyager \$35.95 Mac Only
Dvorak: Symphony No. 9 CD/ATI Voyager \$35.95 Mac Only
Schubert Irons Quintet CD/ATI Voyager \$35.95 Hybrid
Stravinsky Rite of Spring CD/ATI Voyager \$55.95 Mac Only
Beethoven & Beyond CD/ATI Voyager \$19.95 Hybrid
Bach and Beyond CD/ATI Voyager \$19.95 Mac Only
The Classical Ideal CD/ATI Voyager \$19.95 Hybrid
Each of the above based on a masterwork or a particular style of music. Contains much information, CD-quality sound, graphics and animation.
Apple PIP Music CD/ATI Voyager \$49.95 Hybrid
Wonderful tour of American history in music with photos, historical digital recordings, MIDI performances, lyrics, historical notes, and indexed by period, instrument, dates, and more.
Crazy for Ragtime CD/MIDI Cakewalk \$30.00 Hybrid
Another Robert Winter production covering Ragtime music and the era of the early 1920s.
Living Jazz CD/ATI Voyager \$19.95 Hybrid
Herbie Hancock takes you on a tour of jazz in America and the historical jazz hotspots in New Orleans, Chicago, New York, and other places.

SEQUENCING

PowerTracks Digital Audio MIDI PG Music \$29 Wintel Only
Great bargain basement sequencer that does digital audio sequencing as well
Performer/Digital Performer MIDI Mark of the Unicorn \$295 Mac Only
Professional-level sequencer.
Cubase (family of sequencers) MIDI Steinberg/Jones \$100-300 Mac/Win
Professional-level sequencer.
MicroLogic Logic (family of sequencers) MIDI Emagic \$100-300 Mac/Win
Professional-level sequencer.
Cakewalk (family of sequencers) MIDI Cakewalk \$100-300 Wintel Only
Nice entry-level version of the full, professional version of Cakewalk

NOTATION

Finale 2001 (family of notation titles) MIDI Coda \$90-219 Mac/Win
Combines a powerful printing program with sequencing in real-time. Printing is very elaborate, allowing user much freedom in placing graphics. Updated often. Major Plug-in support. Considered to be industry standard by some.
Sibelius MIDI Sibelius \$219 Mac/Win
Major competitor to Finale. Claims are made that it is easier to learn than Finale but has many of the same options. Support for Internet posting and scanning.
Overture 2 MIDI Cakewalk \$219 Mac/Win
Designed to offer high-end features with ease of use.

DIGITAL AUDIO RECORDING AND EDITING

QuickTime Movie Player Pro Digital Audio and Video Apple Computer \$30 Mac/Win
Allows for basic editing of audio and video formats. Cannot record, but can open, save, and convert files in many audio formats. Can be used to piece together video, still graphics, and sound.
Peak LE/Peak Digital Audio BIA \$50-200 Mac Only
Excellent entry-level and professional digital audio editing software.
Sound Forge XP/Sound Forge Digital Audio Sonic Foundry \$49-200 Wintel Only
Professional-level and professional digital audio editing software.
Peak and Sound Forge allow for the multi-channel recording of sound for standalone sound files or for use in multimedia production. They do not require special equipment, just a microphone and sound recording capability. Each software program can extract CD quality sound files from audio CDs for use in instruction; each can save sound files in ReadAudio format for use on the Net. More advanced solutions for digital recording using a computer are available, but are probably not needed for general needs in curriculum development.

CD BURNING

Toast (family of products) Adaptec Free \$80 Mac Only
EasyCD Creator (family of products) Adaptec Free \$100 Win Only

MPEG3 GRABBING

Win AMP Winamp Free Win Only
Audio Grabber Audio Grabber Free \$25 Win Only
Audio Catalyst Xingtech Free Mac/Win

NON-MUSIC

WORD PROCESSING/PRESENTATION/SPREADSHEET

Microsoft Office Suite Microsoft \$200 Mac/Win
Excellent value and includes Word, PowerPoint, Excel, and Outlook Express. Recent versions might also contain personal organizers. Highly integrated. The most recent version is for Mac (2001) and contains many new features for personal productivity.

DATABASE

Filemaker Pro 5 Filemaker \$100 and up Mac/Win
Relational database features and links for interface with web pages.

EMAIL

Eudora Pro 5 Qualcomm Free \$50 Mac/Win
Mature package that offers many advanced features.

GRAPHICS

GraphicConverter Lemkesoft Free \$30 Mac Only
Wonderful graphic program that performs a number of conversion options, including batch processing. The batch options are worth the shareware cost.
Photoshop Lite/Photoshop 6 Adobe Free \$50 Mac/Win
The industry standard for graphics manipulation and editing. Continues to develop with newer options frequently added. Powerful features for preparation of graphics for web. Based on a bitmapped data structure but newer versions include more vector options. The Lite version often comes bundled with scanners.

VIDEO EDITING

Movie 2 Apple Computer Free \$50 Mac Only
Bundled with some new Macs and also available as a standalone. Very easy to use and recent version has a fair number of options. Allows the transfer of movie clips from FireWire devices such as digital video cameras. Permits mixing of audio files.
Media Cleaner Pro Terran \$300 Mac/Win
Excellent for special preparation of videos for a number of media. Especially good for compression options.
Premiere 5.1 Adobe \$200-550 Mac/Win
Full-featured digital video editor that offers extensive video treatment. Also supports import via FireWire.

WEB PAGE EDITORS

FrontPage 2000 Microsoft \$60 Mac/Win
Easy to use webpage editor with modest features.
Dreamweaver 3 Macromedia \$250 Mac/Win
Becoming the most used web page editor system. Offers excellent management tools and supports integration of Flash and Shockwave files.

CLASS MANAGEMENT/WEB-BASED

CourseInfo Blackboard Site License Mac/Win
WebCT WebCT Site License Mac/Win

MULTIMEDIA DEVELOPMENT

HyperStudio 3 Roger Wagner \$100 Mac/Win
Simple but effective program for the development of multimedia. Some scripting extensions possible but not an intuitive or extensive. Excellent built-in objects. Easy to mount files for access on the Internet.
Director 8 Shockwave Studio Macromedia \$500 and up Mac/Win
This package is a professional multimedia development program with powerful scripting and extensibility with the use of Xtras. Files can be shockcode to work interactively on the Internet.
Flash 5 Macromedia \$130 Mac/Win
Animation package for the web page development. Uses a Director-like interface.

3. Contact Information for Contributors

The following represents a listing of those contributors and their projects which we either used in our presentations or inspired us as we prepared. We have included the Entry Points for each sub-discipline. A big "thank you" to them for helping us!!

FUNDAMENTALS AND MUSIC APPRECIATION

MANAGEMENT Application: Non music major class, Music Fundamentals Through Experience
Software: WebCT School: University of Arizona
Contact info: **Diana R. Sinclair** Web info: drcinche@u.arizona.edu

CREATING Application: "Music Culture and the Digital Multimedia Environment"
Software: Web editing software, graphics, digital audio School: UC Berkeley
Contact info: **Mary Kay Duggan** Web info: <http://media2.bme.berkeley.edu/classes/m198>

ENHANCING TEACHING Application: Music appreciation
Software: WebCT School: Ohlone College
Contact info: **Jim McManus**
Web info: jmcm@ziplink.net http://www.ohlone.cc.ca.us/instr/music/music_101.htm

MANAGEMENT Application: WebCT Course Template for The Enjoyment of Music.
Software: WebCT School: W.W. Norton
Contact info: **Steven S. Hoag** slhoag@wwnorton.com
Web info: <http://www.norton.webct.com>

MULTIMEDIA Application: "History & Styles of Rock" course (MUS 2673),
Software: WebCT and Director/Shockwave School: UT at San Antonio
Contact info: **Scott D. Lipscomb** Web info: slipscomb@utsa.edu

SIMULATION Application: "Music, Computers and Digital Technology" developed for the non-major
Software: Appletunes and Music Mouse School: Washington and Jefferson College
Contact info: **John Bauerlein** Web info: jfb@sturgate.net

MUSIC EDUCATION

MANAGEMENT Application: Matching band techniques; woodwind methods courses
Software: WebCT School: Rutgers Contact info: **Cecil Adlerley** Web info: cadlerc@rci.rutgers.edu

MANAGEMENT Application: Music education classes
Software: CourseInfo School: Ball State University Contact info: **William I. Bauer** Web info: WIB@aol.com

ENHANCED TEACHING Application: WebCT course at Auburn for Secondary Music Methods.
Software: WebCT and HyperCard School: Auburn
Contact info: **Kim Walls** Web info: kwalls@auburn.edu
<http://www.auburn.edu/musiceducation/304stacks/>

RESEARCH Application: Music education research courses
Software: Word Processing, Basic Web Editing, Graphics School: Northwestern University
Contact info: **Peter Webster** Web info: <http://faculty.web-at.northwestern.edu/music/websterD23>

BASIC LISTENING Application: Music education methods courses
Software: Word Processing, Basic Web Editing, Graphics School: Illinois State University
Contact info: **Margaret Kelly** Web info: <http://www.arts.ilstu.edu/music/faculty/kelly/>

MUSIC TECHNOLOGY

MANAGEMENT Application: Computers for musicians course with a University computer literacy component
Software: CourseInfo School: Duquesne University
Contact info: **Judith Bowman** Web info: bowman@duq.edu

ENHANCED TEACHING Application: Music technology, Assorted courses, administrative materials
Software: Web editing, basic word processing School: East Carolina University
Contact info: **Rodney Schmidt** schmidt@mail.ecu.edu
Web info: <http://www.music.ecu.edu/courses/7123.html>; <http://www.music.ecu.edu/courses/2280.html>

MUSIC PERFORMANCE AND COMPOSITION

PERFORMANCE Application: On-line research project for guitar teaching and learning
Software: WebCT School: Southern Alberta Institute of Technology
Contact info: **Bryan Green** Web info: bryan.green@sait.ab.ca

PERFORMANCE Application: MIDI Ensemble
Software: Sequencing, etc. School: Terra Community College
Contact info: **Richard Repp** Web info: rrepp@mail.net

PERFORMANCE Application: MIDI Ensemble
Software: Sequencing, etc. School: Capital University
Contact info: **Rocky Reuter** Web info: rreuter@cap.edu

ENHANCED TEACHING Application: Performance Studio Handbook
Software: Word Processing, Basic Web Editing, Graphics School: Arizona State University
Contact info: **Trygve Peterson** Web info: <http://www.public.asu.edu/~trygve/peterson/sep.html>

CREATING Application: Music Composition
Software: MAX School: University of Georgia
Contact info: **Leonard Ball** Web info: lball@arches.uga.edu

PERFORMANCE Application: Performance with web support
Software: Web editing software, graphics, digital audio
School: Penn State University <http://www.personal.psu.edu/users/f/g/fgk1/>
Contact info: **Fred Kersten** Web info: <http://www.personal.psu.edu/users/f/gk1/exib.html>

MUSIC THEORY/AURAL SKILLS

SIMULATION Application: Harmonic dictation work in aural skills
Software: Band-in-a-Box School: North Dakota State University
Contact info: **John Miller** Web info: cmiller@badlands.nodak.edu

MANAGEMENT Application: Freshman jazz theory
Software: PowerPoint and HyperCard School: University of North Texas
Contact info: **Dan Haerle** Web info: dhaerle@music.unm.edu

MANAGEMENT Application: aural-skills class
Software: WebCT School: Bowling Green State University
Contact info: **William E. Luke** wluke@bgsu.edu

ENHANCED TEACHING Application: Music Theory Classes
Software: Word Processing, Basic Web Editing, Graphics, Music Notation
School: Illinois State University
Contact info: **Steve Taylor** Web info: <http://www.arts.ilstu.edu/~staylor/music203/>

MULTIMEDIA Application: Music theory call charts
Software: QuickTime School: West Chester University
Contact info: **Floyd Richmond** Web info: frichmond@wcupa.edu

MULTIMEDIA Application: Many examples of music analysis/reviews of operas
Software: CD TimeSketch School: Univ. of Delaware
Contact info: **Larry Peterson** Web info: lpeterson@UDeI.edu

MUSIC HISTORY AND ETHNOMUSICOLOGY

BASIC LISTENING Application: Courses in world music
Software: Basic Web Editing, Graphics School: Florida State University
Contact info: **Dale Olsen** Web info: <http://otm.cornell.edu/~scm/dolsen.htm>

RESEARCH Application: Graduate-level music history
Software: Word Processing, Basic Web Editing, Sibelius Notation Plug-in
School: Acadia University
Contact info: **Gordon Callon** Web info: <http://ace.acadia.na.ca/core/GIC/home.htm>

CREATING Application: Baroque On!
Software: Word processing, advanced web editing, Notation software
School: Australian Project