Creating Music Technology Courses
Session I: Designing Introductory Courses

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Overview

- Introductory Music Tech Courses (Session I)
- Music Multimedia Tech Course and Performance Groups (Session II)
- Agenda
  - Analysis and matrix development
  - Model courses from the data
  - Examples of student projects
  - Variations on the model
  - Textbooks

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Matrix

- Basic computer skills (WP, DP, Hardware & OS)
- Music CAI (Basic and Multimedia)
- Internet skills (Browsing, email, search engines)
- Acoustics, History, Other unique aspects (Intro only)s
- Notation & Sequencing
- Computers in Performance (Live, generative, accompaniment)
- Digital Audio (basics, capture & edit, MIDI & synthesis)
- Digital Graphics (scanning, digital photo & vector graphic editing)
- Digital Video (DVD, video capture & editing)
- Web Authoring (HTML, Flash, Java/Javascript/XML, Site Mgmt)
- Other Authoring (Powerpoint, QT/RealVideo, Hyperstudio, Authorware, Director)
- Course Structure

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Matrix, cont.

- Course Structure
  - Prerequisites
  - Length and credit
  - In class or online
  - Text and readings
  - Proportion of exams to projects
  - Use of Course Management Software: Mallard, WebCT, or Blackboard

Limitations

- Not comprehensive; based on feedback from ATMI postings and web searches
- Included those courses that clearly were introductory (no or few prerequisites)
- Project work present (but not exclusively)
- Looked for a variety of approaches and a wide range of school types and sizes
- Examined only those with sufficient on-line materials to complete the matrix analysis.

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Breakdown of Matrix Categories

- General Introduction
  - Omnibus (course designed to cover as many topics as possible)

    20 courses in sample

    Interesting examples: Clayton, Terra Community, University of Illinois, University of North Carolina (Greensboro)
  - Production (emphasis on notation, sequencing and digital audio)

    15 courses in sample

    Interesting examples: Cal State Northridge, Central Michigan, Rutgers
  - Production/Management (a production course but with heavy emphasis on management)

    2 courses in sample

    Interesting example: Metropolitan College of Denver

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Breakdown of Matrix Categories

- General Introduction (con't)
  - Production/Multimedia (a production course but with added multimedia such as CD production)
    - 4 courses in sample
    - Interesting example: Alma College
  - Composition/Listening/Electronic Music (a course designed to blend technology with music listening or with issues of contemporary music
    - 6 courses in sample
    - Interesting examples: Brown, University of Colorado

Breakdown of Matrix Categories

More Specialized

- "Introduction to MIDI" approach

  This is a course that focuses almost completely on MIDI and and MIDI software; popular option for some schools)

  Example: Penn State

- Arts, Culture, and Technology

  Courses in this category blend project activity with readings and paper writing that address the impact of technology on culture. Celebrates social context.

  Example: SUNY, Stonybrook

- Short or "mini" courses

  These approaches are much shorter than a semester or a quarter and serve as a means for introducing music technology experiences within a busy curriculum

  Example: St. Cloud State

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Model Class: “Omnibus” approach

CONTENT

- Attention to computer concepts and web use
- Computer-aided instruction included
- Music production software dominates in all classes studied
  - digital audio is more present today than ever before, especially as it fits into sequencing
  - notation software is pervasive
- Web development concepts are included in many classes, along with Powerpoint
- Multimedia authoring with applications such as HyperStudio, Flash, and Director were not noted in the sample
- Digital video was also not noted in the sample but this may change in the next year as tools become more affordable

Model Class: “Omnibus” approach

STRUCTURE

- Project-driven but a great variety in the freedom offered the students
- Average percentage of weight between projects and exams is roughly 60-40, with many classes having no exams
- Most classes seem to take advantage of a local lab, often run by the instructor of the course
- A small percentage of courses sampled use campus web management systems like Blackboard or WebCT (perhaps not always seen with this kind of analysis)
- Most classes are semester-based and carry 3 credits
- Not clear WHO is taking these classes

Model Class: Production Approach

- Strong emphasis on practical matters geared toward composition and performance
- Music notation tasks abound, with projects centered on the student's current needs
- Emphasis on MIDI merged with digital audio
- Other topics such as some multimedia, computer concepts, or web development
- Little or no attention at all to CAI

Project Examples for Introductory Classes

- Examples of original compositions
  - Prof. Jerome Miskell, Mount Union College
  - Prof. James Betts, Monmouth College
- Personal web portfolios of creative work
  - Prof. Scott Cohen, Radford University
  - Prof. Bret Battey, U. of Washington
- Projects for the music department
  - Prof. Mary Badarak, Clayton College
- Student writing about music technology
  - Prof. Ray Riley, Alma College
- HyperStudio, web projects for teaching music
  - Prof. Peter Webster, Northwestern

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Textbooks: Introductory Courses

- Experiencing Music Technology: Williams & Webster
- Teaching Music with Technology: Rudolph
- Various books on MIDI and music production (e.g. Anatomy of a Home Studio, Desktop Musician, Introduction to the Creation of Electroacoustic Music)
- Instructor packs with related readings

Reflections on Introductory Courses

- Can be very exciting for both music and non-music student
- Can take many different approaches, but probably should not be limited to only a few types of technology activity
- Projects designed as applicable to the student's field of interest and represented as web portfolios
- Complicated and demanding enough to justify as a single course which might include some structure that encourages creative thinking
- Use this creativeness as a resource for the music unit

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