

*"The mind is a fire to be kindled, not a vessel to be filled."
— Plutarch*

MUS_TECH 259-0: Introduction to Music Technology

Northwestern University—Fall, 2002
Tuesday & Thursday 8:30 to 9:50 a.m., Kresge 22

Dr. Scott D. Lipscomb, Associate Professor

Office Hours: Tuesday 10 to 11 a.m., Wednesday noon to 1 p.m. , by appointment,
or via email & Blackboard at anytime

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COURSE SYLLABUS

Course description: An introduction to computers and the music experience. Topics will include computer-aided instruction, music printing, MIDI sequencing, and software development, as well as some non-music topics. This course offers the professional musician resources that can increase the mastery of basic musicianship, facilitate the routines associated with the creative and/or educational process, serve as inspiration, and save valuable time in the execution of both musical and non-musical tasks.

Incoming competency of students expected by instructor: The course is designed as an introduction to technology for the music major. There are no assumptions and/or prerequisites regarding student technical understanding and background. The goal of the course is to get you proficient in several areas involved with music and computers.

Statement of Course Objectives:

This course will provide students an opportunity to become familiar with:

- ✓ basic categories of music software and their role in music teaching, learning, composition, and performance
- ✓ components of a computer system and how they relate to one another
- ✓ the history of music and technology, especially computer-aided instruction (CAI)
- ✓ specific software for music theory, music composition, sequencing, sound editing, basic multimedia development, and creative thinking
- ✓ the performance characteristics of MIDI synthesizers & digital samplers and their integration with software applications
- ✓ the MIDI protocol
- ✓ integration of technology into the traditional curriculum and the use of technology to extend the philosophy/curriculum of music programs
- ✓ managing files with the computer's operating system
- ✓ word processing, spell checking, and printing
- ✓ graphic software for creating illustrations
- ✓ networking and communication programs, including basic web design

Required texts:

[W&W] Williams, D.B. & Webster, P.R. (1999). Experiencing Music Technology: Software, Data, and Hardware, 2nd edition. NY: Schirmer Books. [ISBN: 0-02-865324-6 (paperback)]

Additional Materials & Requirements:

- ✓ Each student must purchase a 100 MB ZIP cartridge that is to be available at all times; **very important:** always copy files from the lab computer onto this disk at the conclusion of each session, since network and computers do crash ... though, thankfully, not often!
- ✓ Students will be required to utilize Blackboard for class assignments and virtual "discussions" outside of class. Point a web browser to <http://courses.northwestern.edu>, then click on "Login" and provide your NUnset username & password.

Schedule of Assignments (subject to change)¹:

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| Sept. 27 th | No class | Oct. 29 th | WYSIWYG web editors |
| Oct. 1 st | W&W, pp. xv-xxxii and 1-27 history of music & computers overview of software categories | Oct. 31 st & Nov. 5 th | W&W, pp. 269-339 music notation 10/31 – Midterm Project due |
| Oct. 3 rd | W&W, pp. 29-58 and 80-114 computer basics | Nov. 7 th & 12 th | W&W, pp. 341-451 music sequencing |
| Oct. 8 th | W&W, pp. 59-79 and 115-118 the Internet & HTML | Nov. 14 th & 19 th | W&W, pp. 527-628 multimedia authoring systems |
| Oct. 10 th | W&W, pp. 163-202 and 384-459 Intro to MIDI & synthesizers | Nov. 21 st & 26 th | W&W, pp. 453-525 review pp. 163-172 digital sampling sound design recording & importing sounds |
| Oct. 15 th & 17 th | W&W, pp. 119-162 and 202-206 MIDI (continued) and CAI Multimedia stacks 10/15 – decide on course “Theme” & Midterm Project Topic | Nov. 28 th | No class (Happy Thanksgiving!) |
| Oct. 22 nd & 24 th | W&W, pp. 207-248 word processing graphic images general design characteristics | Dec. 3 rd & 5 th | review W&W, pp. 527-628 connectivity & collaboration |
| | | Dec. 11 th from ?? to ?? [TBA] | Final Presentations [copy must be sent to Dr. Lipscomb] |

¹ Specific due dates for assignments and exam dates are available in the "Calendar" module of Blackboard. Any changes to the schedule will be reflected in this calendar, available to students at all times.

Assessment:

Student performance in this class will be evaluated in four areas: short assignments, quizzes, a midterm presentation, and a final presentation. Successful completion of these components – and, hence, the course – will require 2-3 hours of lab time per week *in addition to class attendance*.

- Assignments: 30%
- Quizzes (unannounced): 20%
- Midterm Project: 20%
- Final Project: 30%

Assignments: Instructions describing each assignment will be handed out in class. Each of these will involve completion of a small musical task related to a topic being covered in class. Many of the assignments may be completed in pairs ... take advantage of this opportunity. All assignments are due at the beginning of class on the due date.² Assignments submitted on time and complete have the potential to earn 100%. Any completed assignment submitted after the due deadline can earn only 75%. Under no circumstances will an assignment be accepted if it is more than two class periods beyond the due date or if it is incomplete.

Quizzes: The dates/times of these quizzes will not be announced. These brief tests will assess the student's comprehension of both the reading material and topics introduced in class.

Midterm Project: In pairs, students will provide an in-class evaluation & critique of a commercially available music software package. Detailed instructions will be provided on Blackboard.

Final Project: The final project can take one of three forms:

- a large composition using a number of digital resources, including a printed score and an audio compact disc; Music Education students will be advised to compose something for a potential public school ensemble
- an educational multimedia Hypercard stack or QuickTime movie that incorporates CD audio, digitized sound, MIDI resources, DVD, or some combination of several of these
- a web site that includes multiple hyperlinked pages, tables, MIDI sound, digital sound, images, and links to external web pages of interest to potential users

Because the projects form such a substantial portion of the grade and will provide a tangible product resulting from your efforts, it will be important to elaborate further. Each of your projects – and a number of the assignments – should be related to a “Theme” you will pick early in the quarter and upon which you expand as you progress in your general knowledge and technological skill level. Your final project should be the largest expansion – a culmination – of this Theme. Each student's Final Project will be presented (or demonstrated) to the entire class during our Final Exam time period and will be in lieu of a Final Exam. [Topics for both the Midterm & Final Projects must be approved by Dr. Lipscomb.]

² Due dates will be available – and always updated – in the Calendar available via the course Blackboard site.