

## Global Learning Semesters

### Course Syllabus

Course: MUS-380 Acoustics and Tech in Music

Department: Communications

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
MUS-380	Acoustics And Tech In Music	2
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	MUS-210
Department	Level of Course	Language of Instruction
Communications	Upper Division	English

### Course Description

This course is a seminar in acoustics and advanced computer technology and in information on processing for music production. The students are taught advanced techniques to operate a computer for music composition, production, editing-distortion and presentation. They are also taught to solve personal, artistic problems working with computer systems for music. This course explains, in other words, how a computer works and how it can be used for music and Hifi systems and other Aux systems. Finally provides students with an advanced "hands on" experience in an "in-home" contact with a contemporary music Laboratory and its equipment, using Macintosh or Windows computer based Music stations and connecting to basic equipment and other auxiliary equipment. Finally this course is designed to introduce students to academic music research, storing & archiving, for those students who want to pursue their knowledge and skills to academic music research.

### Prerequisites

MUS-210

### Topic Areas

1. Theories on Acoustics
2. Contemporary Music Lab Management and Computer-aided music research and lab methods, hardware, music application software and Analysis, synthesis, processing of analogue sound and/to digital sound, working with sound files and formats, storing and archiving.
3. Output and Input Controls (speakers, Hifi and other auxiliary equipment & Aux Systems, Printing Music score, Letter and Music fonts, High Speed Printers), CRT Technology, Output Controls, User Interface (MIDI)
4. Data Communications, Modems, Network, LANS

### Readings and Resources

#### Required Textbooks

- Walm, W.P. A Computer Aid in Musical Instruments Research
- Alexander, Lawrence Peter & Whitear, J. Caroline. How MIDI Works.

#### Recommended Readings

- Messic, Paul. Maximum MIDI, Music Applications in C++

- Shelly, B. Garry & Cashman, J. Thomas. Computer Fundamentals for an Information Age
- Lincoln, H. ed. The Computer and Music
- Rumsey, Francis & Mc Cormick, Tim. Sound and Recording: An Introduction
- Pierce, R. J. The Science of Musical Sound
- Chamberlain, H. Music and Microprocessor
- Kirk, Ross & Hunt, Andy. Digital Sound Processing for Music and Multimedia,