NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY MUS 235 - ADVANCED RECORDING TECHNIQUES (3 CR.)

Course Description

Introduces advanced digital recording techniques that lead to mixdowns and digital masters for commercial CD duplication, other digital media and on-line distribution. Provides knowledge and skills in refined areas of digital multi track recording and mixdown techniques. Includes a study of the process which converts finished digital masters to compact disks and digital files suitable for retail release. Studies trouble shooting skills pertaining to digital audio workstations. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose

This course is designed to introduce the student to advanced techniques in initial recording practices and advanced practices in final mixdown of multi-channel recordings. Through theoretical study, experimentation with a variety of recording techniques and directed lab activities, the student will acquire an in depth understanding of all steps in the process of creating a professional quality master product using advanced practices in dynamic range processing, multiple use of sub-mix routings, synchronization of signal processing events, and application to digital masters.

Course Prerequisites/Co-Requisites

Prerequisite is MUS 140 - "Introduction to Recording Techniques" or division approval.

Course Objectives

Upon completion of this course, the student will be able to:

- understand the techniques used in multi-channel recording
- > apply advanced skills in microphone utilization as required in a professional studio
- operate a multi-channel mixer with an active patch bay and sufficient outboard effects generators and dynamic range processors to accommodate numerous sub-mixes in a professional studio environment
- demonstrate on above mentioned equipment an ability to provide proper patching, input/output selection, channel assignment, and monitoring functions without additional help
- > reduce multi-channel recordings to final stereo recordings possessing accurate timbre representation and multi-dimensional sound quality
- make artistic use of output processing and noise reduction devices to improve the quality of a finished master

Major Topics to be Included

- Advanced multi-channel digital techniques including looping, punch ins, clean up of noisy audio and related topics.
- Relevant nomenclature and specifications
- Advanced capabilities of the multi-channel mixing console
- Advanced microphone selection and utilization in complicated studio settings
- Advanced techniques in multi-channel mixing options
- Advanced use of signal processing and noise reduction devices
- Use of equalization, advanced time based simulation, compression and dynamic panning to create multi-dimensional master copies
- Practical application in live recording and mixdown sessions