MUS 140 - INTRODUCTION TO RECORDING TECHNIQUES (3 CR.)

**Course Description**

Introduces students to the theory of and practices in digital audio. Describes basic background of the history of audio, culminating with hands-on operation of a digital audio workstation (DAW). Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**General Course Purpose**

This class introduces the student to Industry standard software and hardware: Digidesign ProTools, as well as the Macintosh operating system, used in all audio classes that utilize computers for Audio and DAWs in the MSRTC. Related equipment, including microphones, outboard processors and basic concepts in music theory and terms are covered. Studies definitions and nomenclature for equipment and terms used in the current professional environment. Intended for students who are considering a career in music recording technology and/or entering the Music Recording Technology certificate program.

**Course Prerequisites/Co-Requisites**

The student is not expected to have any previous musical experience.

**Course Objectives**

At the end of this unit in basic recording techniques, the student will be able to:

- Describe electronic music theory and terms such as sound, sample rate, bit depth and more.
- Use a Mac and associated peripherals used in digital audio and is able to demonstrate this knowledge in class.
- Describe an overview of the history of audio till the present.
- Demonstrate skills in microphone selection and placement.
- Operate a DAW (ProTools) and record a session by themselves.

**Major Topics to be Included**

- What sound is and what are its properties.
- Noise and noise reduction techniques.
- An overview of the history of audio, emphasis on magnetic tape.
- Common terms in use in digital and analog audio.
- Microphone types, cables, signal routing, gain staging.
- Using a Mac and Mbox Pro and/or similar interface.
- Basic Pro Tools, being able to create a session and perform basic recording, editing and manipulation of recording.
- Basic song writing and producing skills.
- Time based effects.
- Dynamics and equalization.
- Samples: importing and matching samples to create a multi track recording.
- Demonstrate basic editing techniques in class.
- Mixing and basic mastering of multiple tracks to stereo two track final.
- Basic knowledge of MIDI devices.
- Basic command of musical terms and music theory at a rudimentary level (a class in music theory or basic musicianship is recommended).