## DMA – TMUS 8329 Major Project (4–6 cr.)\* Guidelines for Recording Project

In addition to the normal requirements of a recital, it is expected that the student will become involved in all aspects of the recording, in effect acting as producer from start to finish. *Before undertaking the Recording Project:* the student must submit a prospectus that is reviewed and approved by the faculty advisory committee and the Associate Dean of Graduate Studies. A copy of the prospectus must be kept in the student's file.

For a recording to fulfill the requirement, it must adhere to the following criteria.

- 1. Be comparable in length to a recital.
- 2. The student is responsible for coordinating all matters pertaining to the recording including: contracting of musicians, studio manager and recording engineer; CD printing or duplication, graphic art design layout, and recording label (optional).
- 3. The recording must be unique in some way that sets it apart from other recordings. Examples can include but are not limited to recordings that feature: original compositions and/or arrangements, collections of works that are less known and/or have not been readily available in recordings, and so on. This aspect of the project should reflect the student's creativity and research skills.
- 4. The submitted recording must be of professional quality.
- 5. Post-recording work is an essential aspect of the project. *The student must oversee the editing, mixing, and (optionally) the mastering of the recording.* Refer to the definitions of these processes at the bottom of this document.
  - a. Editing (if necessary)
  - b. Mixing
  - c. Mastering (optional)
- 6. The submitted recording should resemble a commercial product. This includes:
  - a. Printed or pressed CD
  - b. Liner Notes written by the student
    - In addition to liner notes, the student will cite information such as the recording date, recording engineer, studio name, personnel, work titles with composer citation, work length.
  - c. Album artwork and layout (this can be done by an outside party)

**Editing** happens before mixing. It can take place during and/or after the recording session. This process can involve but is not limited to rerecording passages and inserting them in place of undesirable passages, and eliminating ambient noise.

**Audio mixing** is the process by which multiple recorded sounds are combined into one or more channels, most commonly two-channel stereo. In the process, the source signal's level, frequency content, dynamics and panoramic position are commonly being manipulated and effects such as reverb might be added. This practical, aesthetic or otherwise creative treatment is done in order to produce an enhanced mix that is more appealing to listeners.

Audio mixing is done in studios as part of an album or track making. The mixing stage often follows the multi-track recording stage and the final mixes are normally submitted to a mastering engineer. The process is generally carried out by a mixing engineer, though sometimes it is the musical producer or recording engineer who mixes the recorded material.

**Mastering**, a form of audio post-production, is the process of preparing and transferring recorded audio from a source containing the final mix to a data storage device (the master); the source from which all copies will be produced (via methods such as pressing, duplication or replication). The format of choice these days is digital masters.

The source material is processed using equalization, compression, limiting, noise reduction and other processes. Subsequently, it is rendered to a medium such as CD or DVD. This mastered source material is also put in the proper order at this stage. This is commonly called the assembly or track sequencing. More tasks such as editing, pre-gapping, leveling, fading in and out, noise reduction and other signal restoration and enhancement processes can be applied as part of the mastering stage.

The process of audio mastering varies depending on the specific needs of the audio to be processed. Steps of the process typically include but are not limited to the following:

1. Transferring the recorded audio tracks into the Digital Audio Workstation (DAW) (optional).

2. Sequence the separate songs or tracks (the spaces in between) as they will appear on the final product (for example, an audio CD).

3. Process or "sweeten" audio to maximize the sound quality for its particular medium.

4. Transfer the audio to the final master format.

Examples of possible actions taken during mastering:

- 1. Edit minor flaws.
- 2. Apply noise reduction to eliminate hum and hiss.
- 3. Adjust stereo width.
- 4. Add ambience.
- 5. Equalize audio between tracks.
- 6. Adjust volumes.
- 7. Dynamic expansion.
- 8. Dynamic compression.
- 9. Peak limit the tracks.