AUDIO 219
DIGITAL AUDIO IV

COURSE LEARNING OUTCOMES
1. Develop professionalism by meeting course expectations.
2. Develop time management skills and responsibility to meet project criteria and deadlines.
3. Configure a session's tempo and meter for different styles of music.
4. Utilize software tools to analyze and identify tempo and meter of different styles of music.
5. Create and utilize MIDI template sessions.
6. Explain MIDI synchronization concepts and set up a session for synch with MIDI hardware.
7. Analyze and correct for MIDI hardware latency.
8. Create MIDI sequences and arrangements for different styles of music.
9. Extract and apply groove templates to MIDI quantization operations.
10. Use time compression/ expansion software to conform loops to a given tempo.
11. Apply "comp" editing to vocal tracks.
12. Identify vocal intonation problems and use pitch correction software to tune vocal parts.
13. Use side chain functions of dynamics processors to reduce vocal sibilance.
14. Develop critical listening ability to hear out of phase tracks.
15. Implement techniques to correct out of phase elements in a mix.
16. Analyze and implement subtractive EQ techniques during mixdown.

COURSE OUTLINE
I.   Introductions
     A. Expectations/ Responsibilities
     B. Professionalism
          1. Work Ethic/ Attitude
          2. Meeting Client Expectations/ Quality Control
     C. Know Your Limitations
     D. Overcoming Obstacles

II. Configuring a Session's Tempo and Meter
     A. Tempo options
          1. Creating individual tempo events
          2. Programming multiple tempo events
     B. Meter options
          1. Programming meter changes
          2. Setting the grid resolution
     C. Identify tempo and meter of tracks of unknown tempo/ meter

III. Configuring A Session for MIDI Production
     A. Templates
          1. Create MIDI recording templates
          2. Import data to current session from pre-made templates
     B. MIDI routing/ synchronization
          1. Routing to hardware MIDI devices
          2. MIDI synchronization between DAWs and hardware MIDI devices
          3. Correcting for hardware latency

IV. Sequencing and Arranging
   A. Arranging
      1. Time operations window techniques
      2. Grid mode arranging techniques
   B. Drum sequencing
      1. Even meter
      2. Odd meter
   C. Bass sequencing
   D. Sequencing chord progressions

V. Advanced MIDI Editing
   A. Extract groove templates and use in quantization
   B. Edit with the MIDI Events List
   C. System Exclusive Messages
   D. Create patch changes
   E. MIDI input filtering

VI. Working with Loops
   A. Use TCE plug-ins to conform loops to a given tempo
   B. Alter a drum beat with edit functions
   C. Set up song structure in grid mode

VII. Working with Vocals
   A. Work with Playlists
   B. Comp vocal takes
   C. Advanced pitch correction software
      1. Fixing subtle vocal intonation problems
      2. Creating harmonies
   D. Correct sibilance problems on vocals

VIII. Advanced Mixing
   A. Ear training: identify phase problems on tracks
   B. Correct phase problems on tracks using software plug-ins
   C. Correct phase problems using "nudge" technique
   D. Subtractive EQ techniques

WORKLOAD EXPECTATION STATEMENT

The average student will spend 44 hours in lecture and 22 hours in a supervised lab. The student is also expected to spend approximately 99 hours in independent lab work and studying written materials in preparation for class, lab, exams and other forms of student learning evaluation.