MUSIC TECHNOLOGY MAJOR | Competency-Based Learning Outcomes

1. MUSICIANSHIP

1.1. Music Theory

1.1.1. Materials of Music

1.1.1.1. fundamentals of pitch, rhythm, intervals, melody, voice-leading, chords, etc.
1.1.1.2. music notation including alternate methods such as lead sheets and number charts (Nashville)

1.1.2. Literature & Context

1.1.2.1. form
1.1.2.2. style & Genre

1.2. Applied Music

1.2.1. Instrumental/Vocal Performance

1.2.1.1. sight-singing skills
1.2.1.2. performance skills on at least one instrument/voice
1.2.1.3. ensemble performance
1.2.1.4. solo performance

1.2.2. Composition & Arrangement Skills

1.2.3. Basic Conducting Skills

1.2.3.1. standard beat patterns
1.2.3.2. rehearsal techniques

2. RECORDING & PRODUCTION TECHNIQUES

2.1. Audio Recording Principles

2.1.1. Fundamental Acoustics & Physics of Sound

2.1.2. Analog Sound Production

2.1.2.1. microphones, direct boxes, electronic instruments
2.1.2.2. electric engineering (circuits, electrical concepts, etc.)

2.1.3. Digital Audio

2.1.3.1. AD/DA conversion, sample rates, resolution
2.1.3.2. digital audio workstations, MIDI, digital synthesis, etc.
2.2. Music Production & Engineering

2.2.1. Critical Listening Skills

2.2.1.1. nature of sound, especially recorded or amplified musical performance.
2.2.1.2. aesthetic qualities of sound, balance, panning, timbre, processing, effects, etc.

2.2.2. Recording, Editing, Mixing Best Practices & Skills

2.2.2.1. understand gain structure and complex signal flow in a studio environment
2.2.2.2. music production in-the-box, DSP, plug-ins, etc.
2.2.2.3. microphone technique
2.2.2.4. serial tracking vs. group (‘live’) recording

2.3. Music & Audio Postproduction

2.3.1. Postproduction Workflows & Techniques

2.3.1.1. ADR, sound FX, foley, & music editing
2.3.1.2. rerecording mixing & mastering

2.3.2. Composing for Picture & Video Games

3. PROFESSIONALISM

3.1. Professional Reputation & Good Communication

3.1.1. Ethics, Professionalism, & Client Relations

3.1.2. Communication

3.1.2.1. networking
3.1.2.2. writing skills
3.1.2.3. presentation skills
3.1.2.4. listening (understanding)

3.2. Music Business

3.2.1. Copyright, Royalties, Contracts, Revenue Streams, etc.

3.2.2. Project/Time Management

3.2.2.1. schedules & deadlines, workflows, & planning
3.2.2.2. deliverables

3.2.3. Promotion & Marketing

3.2.3.1. the old model (major labels, big budgets, etc.)
3.2.3.2. new models (social networking, crowd-funding, new media, etc.)
ADDITIONAL COMPETENCIES FOR MUSIC PRODUCTION CONCENTRATION:

4. SONGWRITING & COMPOSITION

4.1. Additional Music Theory & Composition Skills

4.1.1. Keyboard Proficiency

4.1.2. Classical Composition & Orchestration Experience

4.1.3. Commercial Songwriting Experience (Music & Lyrics)

4.2. Additional Music Performance Experience

ADDITIONAL COMPETENCIES FOR RECORDING ARTS CONCENTRATION:

5. ADVANCED AUDIO ENGINEERING SKILLS

5.1. Live Sound Production & Recording

5.1.1. Front-of-House Engineering Experience

5.1.2. Monitor Engineering Experience

5.1.3. Live Concert/Recital Recording Experience

5.2. Advanced Studio Workflow

5.2.1. Creative Collaborations

5.2.1.1. experience in the role of producer, engineer, assistant, musician, etc.
5.2.1.2. creativity & problem solving

5.2.2. Engineering Fluency

5.2.2.1. high-level proficiency with all standard D.A.W. operations
5.2.2.2. setting the proper atmosphere for productive sessions, i.e. facilitating great music-making without letting the technology/tools get in the way
**Music Core:**
MUS 102 University Chorale
MUS 111 Materials of Mus I
MUS 112 Materials of Mus II
MUS 113 Aural Skills I
MUS 114 Aural Skills II
MUS 211 Materials of Mus III
MUS 213 Aural Skills III
Music History Elective
Applied Lessons
Performance Ensembles
Departmental Recital

**Technology Core:**
PHY 105 Physics of Sound
MUS 210 Intro to Mus Tech
MUS 215 Critical Listening
MUS 305 Studio Techniques I
MUS 309 Music Business
MUS 356 Music Postproduction
MUS 495 Senior Seminar

**Concentrations:**
**Recording Arts**
MUS 310
MUS 405
MUS 481
Art or Communications Elective

**Music Production**
MUS 212
MUS 214
MUS 216
MUS 355
Electives (additional applied lessons, ensembles)
Keyboard Proficiency