DATE: Fall 2015

COURSE NUMBER AND TITLE: MUSI 2012 Fundamentals of Musicianship III

CREDITS & HOURS: 3 credit hours: lecture

Lecture: Tuesday and Thursday from 9:35 – 10:55 pm in Couch 104

PROCEDURES: Class will meet two times weekly from 9:35 – 10:55 AM for lecture and activities. Attendance for all lectures is *strongly urged*. The instructors are under no obligation to make up material presented in class unless the student can provide a reasonable and, if appropriate, documented excuse.

REQUIRED PREREQUISITE: MUSI 2011 Fundamentals of Musicianship II

INSTRUCTORS: (Office hours upon request)

* Prof. Benjamin Diden
  + Couch Music Building – 840 McMillan Street – Room 101 – (404) 894-8951 –[benjamin.diden@coa.gatech.edu](mailto:benjamin.diden@coa.gatech.edu)
  + Office Hours: M/W 1:00 – 2:00 pm.
* Dr. Timothy Hsu
  + Couch – Room 205A – (404) 894-8992 – [timothy.hsu@music.gatech.edu](mailto:timothy.hsu@music.gatech.edu)
  + Office Hours: Tuesdays 10:00 – 11:00 am
* Dr. Jerry Ulrich
  + Couch – Room 205A – (404) 894-8992 – [julrich@gatech.edu](mailto:timothy.hsu@music.gatech.edu)
  + Office Hours: Mondays 10:00 – 11:00 am

PURPOSE: The third semester of integrated sequence in music theory, aural training, music technology, and music literature. Building upon the previous two courses in the sequence, chorale writing will be extended to include advanced chords and modulations; an expansion of contrapuntal and harmonic composition, as well as the introduction of interactive aural and acoustic design.

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

* Notate and harmonize short melodies with advanced theoretical techniques.
* Understand common practice musical forms, including formal analysis and content with respect to historical, social, and bibliographical context.
* Write successful 16-bar chromatic chorale exercises, and compose 3-4 voice fugue expositions in 18th century counterpoint.
* Understand basic relationship between acoustics, signal processing, perception, and music information retrieval.
* Program algorithmic compositions that interact between musicians and computer devices.

METHOD OF INSTRUCTION:

1. Lecture.
2. In-class demonstrations of harmonization, chorale writing, and species counterpoint.
3. Aural dictation and sight-singing of melodic and harmonic exercises.
4. In-class discussion of musical form and analysis within stylistic and historical context.
5. Student-to student interactive learning and assignments of 3-4 voice fugues, 4-part writing, and major stylistic practices.
6. Programming of extended MAX/MSP projects that explore interactive music composition.
7. Cooperative teaching and learning investigating the characteristics of human hearing, computer music analysis, and acoustic signal processing.

METHOD OF EVALUATION:

The following evaluative tools will be utilized in measuring progress towards obtaining the class objectives:

Homework 30%

Quizzes 30%

Final Project 15%

Final 25%

TOTAL 100%

All assignments, quizzes, and tests will be graded by points. The final grade for the course will be determined by dividing the total points earned by the number of points possible for each of the categories listed in Method of Evaluation. These numbers will be converted into a grade according to the following scale: A=100-90%, B=89-80%, C=79-70%, D= 69-60%, F= 59% and below.

GRADING POLICIES:

Homework assignments are due *by the beginning of class* ON THE DUE DATE. A penalty of one letter grade per day will be applied to all late assignments. Documented illnesses and family emergencies are excepted, of course. Quizzes and exams cannot be made up unless you have a valid, documented excuse.

ACADEMIC INTEGRITY: Students must do their own work on assignments, projects, and tests unless collaboration is previously specified and approved by the instructor. Students caught cheating will receive zero credit for that assignment/quiz/test and may be subject to further sanctions through the Office of Student Integrity. Students are expected to abide by the Georgia Tech Honor Code and avoid any instances of academic misconduct, including but not limited to:

1. Possessing, using, or exchanging improperly acquired written or oral information in the preparation of a paper or for an exam.
2. Substitution of material that is wholly or substantially identical to that created or published by another individual or individuals.
3. False claims of performance or work that has been submitted by the student.

Please refer to the published Georgia Institute of Technology Academic Honor Code for further information:

* osi.gatech.edu/plugins/content/index.php?id=46

STATEMENT REGARDING STUDENTS WITH DISABILITIES:

In accordance with the Americans with Disabilities Act, students with bona fide disabilities will be afforded reasonable accommodation. The ADAPTS Office will certify a disability and advise faculty members of reasonable accommodations. The web site for a student requesting accommodation is:

* <http://www.adapts.gatech.edu/plugins/content/index.php?id=12>

COURSE OUTLINE:

August 18: Syllabus, Review of Four-Part Harmony, Intro to the 19th century

August 20: Linear diminished seventh chords, piano music of the 19th century, MAX/msp review

August 25: Linear diminished seventh chords, Salon music, musical mappings in MAX

August 27: Neapolitan triad, German Lied, types of musical instruments and their mappings

September 1: Neapolitan triad, Art songs, Guthman competition reviews

September 3: Linear diminished seventh and Neapolitan applied uses, literature analysis, review

**September 8: Quizterm #1**

September 10: Augmented 6th chord intro, intro to perception and cognition, symphonic works of the 19th century

September 15: Augmented 6th chords in practice, psychoacoustic principles, tone poems

September 17: Augmented 6th chords, psychoacoustic metrics and cognition principles, symphonies

September 22: Ninth chords, large orchestral works

September 24: 13th chords, review

**September 29: Quizterm #2**

October 1: Contrapuntal methods review, analysis of fugues from Ren to 21st century, intro to acoustics

October 6: Writing of fugues, room acoustics, concert hall examples, 19th century opera

October 8: *Art of the Fugue*, Shostakovich, Puccini operas, instrument acoustics

**October 13: Fall Break**

October 15: Verdi and Wagner opera, concert halls

**October 20: Quizterm #3**

October 22: Late 19th century harmony analysis, intro to algorithmic composition, interactive music examples

October 27: Jason Freeman, guest composer lecture

October 29: Cyclic form, interactive music lab experiment

November 3: Student interactive music presentations

November 5: Student interactive music presentations

**November 10: Quizterm #4**

November 12: Intro to DSP and MIR, Chopin

November 16: Fourier, Schumann

November 19: Laplace/Fourier/Z Transforms, Mahler

**November 24:** Beat Detection, R. Strauss, **Projects DUE**

**November 26: Thanksgiving Holiday**

December 1: Project presentation

December 3: Project presentation

**December 8: 11:30-2:20: FINAL**