Midterm Research Project
Due: Fri., March 27, 11:59 pm[1]

Final Presentation

The last three days of the class will be dedicated to student presentations. Each student in the class will give a 10 min. oral presentation[2] on an instructor-approved *tuning theory* topic.[3] The three deliverables for the presentation will be a: 1. Slide presentation, 2. Presentation Handout, and 3. File Submission & Reflections assignment.[4]

Midterm Research Project

The purpose of the *Midterm Research Project* (MRP) is to provide you with the opportunity to work with your instructor to develop an area of interest/focus in the field of tuning theory. You will investigate that area on your own and begin to refine your ideas for the final presentation. The deliverables for the MRP are:

1. Presentation Title & Abstract
2. Presentation Outline
3. Presentation Bibliography/Discography/Media Examples

The easiest type of presentation to execute is an analysis of a microtonal work. For example, you could introduce the opening passage of a microtonal work to the class and then analyze it using the analytical models you studied this term. Alternatively, you could present your own original tuning theory research, discuss pedagogical issues surrounding tuning theory, discuss issues of tuning related to your primary instrument, compose/analyze an original microtonal composition, design a microtonal electronic instrument, etc. In the class syllabus, you will find a list of microtonal composers. In Gann 2019, you will a number of analytical models and approaches in the Interludes. Finally, you will find a list of interesting tuning theory topics below.

TUNING THEORY TOPICS

Absolute pitch	Electronic music	Microtones
Acoustics & psychoacoustics	Equal divisions of the octave (EDO)	Microtonal music
- Beats	Extended just intonation	Microtonal notation
- Just noticeable difference	Glissandi and Portamenti	MOS Scales (Wilson)
Alternate tunings	Harmonic series	Non-Western music
Ancient Greek music	Harmonic table	Overtone singing
Auditory illusions (Deutsch)	Helmholtz resonator	Pitch drift
Barbershop music	Historical performance practice	Polytunings
Benedetti's puzzles (Duffin 2006)	Historical pitch	Scordatura
Combination tones	Historical instruments	Sonification
Computer music	- Archicembalo	Spectral analysis
Chladni plates	- Kithara	Stretched tuning
Consonance/dissonance	- Lautenwerck	Subharmonic series
Cymatics	- Etc.	Tunings & Temperaments
Dissonance curves	Interacting partials	Tuning theory software
EDOs	Lissajous figures	Tuning, Timbre, Spectrum & Scale
Electronic instruments	Mathematics	(Sethares 2005)
- Long-string instrument	- Lamdoma	Xenharmonic music
- Ondes Martenot	- Spirals	
- Theremin	- Tuning systems	
- Etc.		

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[1] Upload your .pdf documents into the *Midterm Research Project* Blackboard assignment by the project deadline.
[2] Presentations will be strictly timed. Students will not allowed to go over the 10 min. duration.
[3] I am happy to assist you in the selection of a project.
[4] Students will be asked to reflect on their own presentation (and the presentations by their colleagues) in the *Reflections and File Submission* assignment. For the Final Presentation rubric, see *Projects > Final Presentation* on the class website. Students are expected to attend, and be attentive to, all of the presentations. Under extenuating circumstances (and with instructor permission), a video presentation may be submitted in order to fulfill the oral presentation requirement.

MIDTERM RESEARCH PROJECT TASKS

Choose a topic for your final presentation. This will, likely, take a few weeks. Briefly run your ideas by me after class to get informal approval on your topic. If you need help choosing a topic, I am happy to assist you. Research the topic on your own. For the *Midterm Research Project*, create a tentative *title*, *abstract*, and *outline* for your presentation. Also create tentative *bibliography*, *discography,* and *list of media resources.* Your Final Presentation must include recorded examples. You will create these examples between the Midterm Research Project and the date of your final presentation. Finaly, be sure to choose a date for your presentation. A sign-up sheet will be made available in class.

Submission
Upload the following three pdf files into Blackboard by the Midterm Research Project deadline:

1. Presenter's Name, Presentation Title, Presenter's e-mail, and Presentation Abstract
2. Presentation Outline
3. Presentation Bibliography/Discography

Grading
Your score will be approximately weighted as follows:

Title & Abstract – 30 %

- Title describes the presentation fully and accurately.
- The 1-paragraph abstract is about 100-150 words in length.
- The abstract is clear, well written, and easy to understand.
- The abstract clearly describes how the presentation utilizes ideas from geometrical music theory.

Presentation Outline – 30 %

- The order of the presentation and use of time is made clear.
- The topics that will be covered in the presentation are fully explained.
- The type of visual and recorded examples you plan use (e.g., figures, diagrams, tables, animation, video, etc.) are generally described.

Bibliography/Discography – 30 %

- What links, articles/books, and YouTube recordings[5] will you plan use?
- Items are listed under appropriate subheadings.
- Each entry should include at least: author, title, date, url (when available). It may also be important include information like the performer's name, instrument, etc. If you want to use a style guide, I recommend the *Chicago Manual of Style*.[6]

General impression of project and proposal – 10 %

- Project and proposal was completed correctly (including on time submission).
- Recordings are of high quality (e.g., a commercial or live recording by a well-known early music ensemble).
- Documents are carefully produced.
- Intangibles: Clarity, creativity, depth, effort, hard work, originality, use of color, etc.

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[5] If you need to use something other than YouTube, please let me know.
[6] Chicago-Style Citation Quick Guide – https://www.chicagomanualofstyle.org/tools_citationguide.html