

Teaching Demo

Description

Teach a tuning theory concept to the class. Your 5 min. oral presentation should have two parts:¹ 1. Definition; 2. Demo. In part 1, define a tuning theory term or concept that is of interest to you. In part 2, demonstrate the concept through a carefully prepared example (video, recording, tone experiment, etc.). Create a one-page supporting handout for your presentation that will help the audience follow along. The presentations will take place in class on the following two dates: Mon., March 25, and Wed., March 27

Topics

Here are some possible topics:²

6:8:9:12 pitch nexus Benedetti's puzzles (Duffin 2006) Cent Chain of fifths Comma - Pythagorean comma - Syntonic comma - Diesis Harmonic series Harmonics Lambdoma Line of fifths Lissajous figures In tune vs. out of tune Interval Octave complement Microtone Monochord Prime limit Pure interval Pythagorean means	Quarter tone Superparticular ratio Tuning fork Tuning lattice More advanced topics: Absolute pitch Ancient Greek genera Auditory illusions (Deutsch) - Octave illusion - Tritone paradox Basilar membrane Bearing plan (White 1917) Combination tones - Difference tone - Summation tone Chladni plates Consonance vs. dissonance Dissonance curve (Sethares 2005) Equal divisions of the octave (EDO) Generated collection	Glissando Harmonic table Helmholtz resonator Historical pitch Historical instrument - Archicembalo - Kithara - Lautenwerck Just noticeable difference (JND) Microtonal music Overtone singing Pitch drift Portamento Schisma Scordatura Spectrum Subharmonic Tone circle Tone spiral Virtual pitch Xenharmonic music
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Presentation

Carefully define the term or concept you have chosen *in your own words*. Then demonstrate the term or concept via your primary instrument, a class ensemble, a video, a recording, a tone experiment designed in software, etc.³ Use the Gann textbook, audio examples, and examples presented in class as model for your work.

Supporting Handout

Your handout (typed, 1-2 pages) should contain at least the following information: appropriate header information: e.g., class number/name, a title, your name, and your USC e-mail address (where colleagues may reach you with questions); a definition of your term or concept; other supporting information (e.g., explanatory text, musical examples, diagrams, equations, tuning charts, etc.); a list of references and citations for the dictionaries and media you used, as appropriate.

¹ Due to time constraints, presentations will be strictly limited to an absolute maximum of 5 min. The final minute of your presentation may be an audience Q & A, but this is not a required of the project.

² For more terms and concepts, see Gann 2019, pp. 277-283. For more advanced concepts, try the Xenharmonic Wiki. You may repeat a topic that has already been presented in class, but you may not use the same media resources for your demo.

³ The classroom computer is a Mac mini. Demos that require the use of the classroom computer must be prepared in advance of class time; e.g., 10:30-10:50 am on the day of the presentation.

BAIN MUSC 726T
Tuning Theory

Deliverables

Over the course of the next month, you will submit the following 3 items in Blackboard:

1. **TEACHING DEMO PROPOSAL** (Due: Fri., March 1, 11:59 pm)
Upload a .docx of the project proposal form into the *Teaching Demo Proposal* Blackboard assignment.
2. **REVISED TEACHING DEMO PROPOSAL** (Due: Fri., March 15, 11:59 pm)
Upload a .docx of the revised proposal form into the *Revised Teaching Demo Proposal* Blackboard assignment.
3. **TEACHING DEMO HANDOUT** (Due: ~~March 25, 10:50 am~~; **Fri., March 29, 11:59 pm**)
Bring a printed copy of your handout (18 copies) to your presentation and give everyone a copy of it at the beginning of your presentation. Upload a pdf copy of your handout into the *Teaching Demo Project* Blackboard assignment **by the deadline above**.

Grading

Your score will be approximately weighted as follows:

- **Teaching Demo Proposal** – 10 %
You will receive a score of 1/1 if you submit the proposal form. If you don't submit the proposal, you will receive score of 0/1. You will also receive written feedback that says your proposal is approved, or if necessary, it may receive suggestions for improvement or alternative avenues for exploration.

Primary qualitative factors: Proposal form was submitted on time. Proposal form contains all of the required information. The topic is appropriately related to tuning theory.

- **Revised Teaching Demo Proposal** – 10 %
Document and modifications you have made since your initial proposal, provide a draft of your definition, and include a brief description of the demo you will perform.

Primary qualitative factors: Revised proposal includes an original definition by the presenter. Proposal includes a brief description of the demo that will be performed. Revised proposal accurately reflects the topic and information that will be presented.

- **Presentation** – 40 %
Give a 5 min. oral presentation to the class as described above. Presentations will be strictly timed so we can get all of the presentations in on two class days.

Primary qualitative factors: Presentation is clear, concise, interesting, and related to tuning theory. Demo illuminates the term or concept being introduced. Creativity, depth, effort, engagement, ingenuity, originality, technique, etc. will also be considered.

With instructor permission, a recorded video presentation may be submitted in lieu of the oral presentation.

- **Supporting Handout** – 40 %
Provide the class with a printed copy of your handout at the beginning of your presentation and upload a pdf copy of your handout into Blackboard as described above.

Primary qualitative factors. Appropriate headers, title, and author/contact information are included. The term or concept definition is included at the top of the handout and is in *your own words*. The information is presented in the same order as your oral presentation. The handout is well organized, easy to read, and well organized.