

week	tuesday	thursday
1		1/21: what is sound, music? basic math review
2	1/26: music terminology (scales, intervals, ...)	1/28: physics terminology (velocity, acceleration, ...)
3	2/2: periodic motion, SHM, resonance	2/4: wave properties, superposition, standing waves
4	2/9: reflection, refraction, diffraction, Doppler effect	2/11: Fourier analysis and synthesis
5	2/16: plucked and bowed strings	2/18: string instruments
6	2/23: oscillating air columns; open and closed tubes	2/25: wind instruments
7	3/2: percussion instruments (inharmonicities)	3/4: voice (vocal organs, vocal tract, formants, ...)
8	3/9: speech, singing	3/11: anatomy of human ear, Fechner's law, logarithms
9	3/16: loudness (SIL, dB)	3/18: Fletcher-Munson curves (phon, sones)
10	3/23: pitch perception (critical band, JND, LFD)	3/25: missing fundamental, aural harmonics
11	3/30: timbre, attack & decay transients; con/dissonance	4/1: room acoustics (reflections, echoes, resonances)
12	4/6: reverberation time; acoustical criteria & design	4/8: basic electricity (volts, current, energy, power)
13	4/13: Faraday's law (electromagnetic induction)	4/15: generators & motors; microphones & speakers
14	4/20: musical scales and intervals	4/22: circle of fifths, Pythagorean tuning
15	4/27: equal temperament, just tuning systems	4/29: comparing tuning systems
16	5/4: last day of classes	5/6: no class