UNIV 213 Science & Engineering of Music & Sound Spring 2020

Tentative Course Schedule

The schedule below provides a very tentative framework for the course. Because the course is being offered for the first time this semester, the schedule below is likely to change significantly. Depending on the progression of the course and student interest, some of the material listed below might be omitted, and other material might be added. If there is a particular topic not listed below that you would be interested in covering, please let me know. If there is enough interest among other students, the topic could be added.

Some, if not most, of the topics below could be moved within the schedule to accommodate visitors' availability, potential field trips, and other unforeseen circumstances. The exam schedule will be announced later and will also affect the timing of topic coverage.

Specific reading assignments will be posted at the course web site. Most reading assignments will consist of relevant textbook sections, but supplemental readings from other sources might also be assigned to cover additional topics.

Week	Lecture Dates	Lecture Topics
1	Jan. 13-17	introduction; nature of sound, pressure, waves, and vibrating systems
2	Jan. 20-24	[no class Mon.] human inner ear; perception of sound
3	Jan. 27-31	wave fundamentals; sound pressure level; decibel
4	Feb. 3-7	pitch & timbre; pitch intervals; scales & temperament
5	Feb. 10-14	more on scales & temperament
6	Feb. 17-21	vibrating strings; resonance; bowed and plucked instruments; piano
7	Feb. 24-28	vibrating columns of air; woodwind instruments
8	Mar. 2-6	brass instruments; valves & slides
–	**Mar. 9-13**	**Spring Recess**
9	Mar. 16-20	vibrating sticks, bars, and membranes; percussion instruments
10	Mar. 23-27	keyboard instruments
11	Mar. 30-Apr. 3	loudspeakers & microphones
12	Apr. 6-10	sound absorption, reflection, refraction, and diffraction; Doppler effect
13	Apr. 13-17	room & auditorium acoustics
14	Apr. 20-24	electronic music; Theremin
15	Apr. 27	"Loose Ends;" review for Final Exam; course evaluations