

Daily Schedule

Updated: 4/19/24

Course Blackboard page (<https://blackboard.sc.edu>)

Required Textbook:

Gann, Kyle. 2019. *The Arithmetic of Listening: Tuning Theory and History for the Impractical Musician*.
Urbana, IL: University of Illinois Press.

1. The Harmonic Series (Ch. 1-2)

WEEK 1

Mon., Jan. 8 *Course Introduction*
Reading: Gann Ch. 1 The Cosmic Joke; and Ch. 2 The Harmonic Series

Wed., Jan. 10 *String Length & Pitch Interval; The Harmonic Series*

Fri., Jan. 12 - A **Assignments/Activities:** (Due Wed., Jan. 17, 10:50 am)
• Quiz 1a: Gann Ch. 1 – Part 1
• Activity #1: Music & Number

WEEK 2

Mon., Jan. 15 Dr. Martin Luther King, Jr. Service Day (NO CLASS)

Wed., Jan. 17 *The Harmonic Series (cont.)*

Fri., Jan. 19 - A **Assignments/Activities:** (Due Mon., Jan. 22, 10:50 am)
• Quiz 1b: Gann Ch. 1 – Part 2
• Activity #2: The Harmonic Series
• Quiz 2: Gann Ch. 2

2. Generating Scales (Ch. 3)

WEEK 3

Mon., Jan. 22 Generating Scales
Reading: Gann Ch. 3 Generating Scales

Wed., Jan. 24 *Ancient Greek Scales*

Fri., Jan. 26 - A **Assignments/Activities:** (Due Mon., Jan. 29, 10:50 am)
• Quiz 3: Gann Ch. 3
• Activity #3: Ancient Greek Music

3. Pythagorean Tuning (Ch. 4)

WEEK 4

Mon., Jan. 29 *The Pythagorean Scale*
Reading: Gann Ch. 4 The Pythagorean Scale

Wed., Jan. 31 *The Pythagorean Scale (cont.)*

Fri., Feb. 2 - A **Assignments/Activities:** (Due Mon., Feb. 5, 10:50 am)
• Quiz 4a: The Pythagorean Scale
• Quiz 4b: Pythagorean Intervals (Ratios)
• Quiz 4c: Pythagorean Intervals (Cents)
• Activity #4: The Harmony of the Spheres

4. Just Intonation (Ch. 5)

WEEK 5

Mon., Feb. 5 *The Just (5-limit) Scale (cont.)*
Reading: Gann Ch. 5 The Five Limit, the Second Dimension

Wed., Feb. 7 *The Just (5-limit) Scale (cont.)*

Fri., Feb. 9 - A **Assignments/Activities:** (Due Mon., Feb. 12, 10:50 am)

- Quiz 5a: The Five Limit
- Quiz 5b: Just (5-limit) Intervals (Ratios)
- Quiz 5c: Just (5-limit) Intervals (Cents)
- Activity #5: Making Sound Visible

5. Meantone Temperament (Ch. 6)

WEEK 6

Mon., Feb. 12 *Meantone Temperament*
Reading: Gann Ch. 6 Meantone Temperament and the Primacy of Thirds

Wed., Feb. 14 *Meantone Temperament (cont.)*

Fri., Feb. 16 - A **Assignments/Activities:** (Due Mon., Feb. 19, 10:50 am)

- Quiz 6a: Meantone Temperament
- Quiz 6b: Meantone Comma Calculations
- Quiz 6c: 1/4-Comma Meantone Intervals
- Activity #6: Perspective

6. Equal Temperament (Ch. 8)

WEEK 7

Mon., Feb. 19 *Equal Temperament*
Reading: Gann Ch. 8 Twelve-Step Equal Temperament

Wed., Feb. 21 *Equal Temperament (cont.)*

Fri., Feb. 23 - A **Assignments/Activities:** (Due Mon., Feb. 26, 10:50 am)

MIDTERM EXAM (Ch. 1-6 & 8)¹

7. Well Temperament (Ch. 7)

WEEK 8

Mon., Feb. 26 *Well Temperament*
Reading: Gann Ch. 7 Well Temperament

Wed., Feb. 28 *Well Temperament (cont.)*

Fri., March 1 - A **Assignments/Activities:**

- Activity #7: Historical Temperaments (optional)

Teaching Demo Proposal (Due Fri., March 1, 11:59 pm)

WEEK 9 SPRING BREAK

¹ The online Midterm Exam will be posted on Wed., Feb. 21.

8. Extended Just Intonation (Ch. 9-11)

WEEK 10

Mon., March 11 *The Seven Limit*
Reading: Gann Ch. 9 The Seven Limit, pp. 109-117; Interlude F, pp. 125-131.

Wed., March 13 *The Eleven Limit*
Reading: Gann Ch. 10 The Eleven Limit and The Fourth Dimension, pp. 138-140; Interlude H, pp. 141-147.

Revised Teaching Demo Proposal (Due Fri., March 15, 11:59 pm)

Fri., March 15 - A **Assignments/Activities:** (Due Mon., March 18, 10:50 am)

- Quiz 7: Gann Ch. 7
- Activity #8: Just Intonation in the Renaissance

WEEK 11

Mon., March 18 Guest Speaker: Stephen Ackert
The Temperament Wars, from Pythagoras to Bach

Wed., March 20 *The Thirteen Limit and Beyond*
Reading: Gann Ch. 11 The Thirteen Limit and Beyond, pp. 148-158

Fri., March 22 - A **Assignments/Activities:** (Due Mon., March 25, 10:50 am)

- Quiz 8: Gann Ch. 9

WEEK 12

Mon., March 25 Teaching Demo Presentations: Day 1

Wed., March 27 Teaching Demo Presentations: Day 2

Upload a pdf copy of your Teaching Demo Handout into Blackboard for grading (Due: Fri., March 29, 11:59 pm)

Fri., March 29 - A **Assignments/Activities:** (Due Mon., April 1, 10:50 am)

- Quiz 9: Gann Ch. 10-11
- Activity #9: Just Intonation in the Twentieth Century

9. Equal Divisions of the Octave (Ch. 12-13)

WEEK 13

Mon., April 1 Teaching Demo Discussion Day; Final Project Discussion

Wed., April 3 *Twelve-Based Equal Temperaments*
Reading: Gann Ch. 13 Twelve-Based Equal Temperaments, pp. 205-230

Fri., April 5 - A **Assignments/Activities:** (Due Mon., April 8, 10:50 am)

- Quiz 10: Gann Ch. 13
- Activity #10 Isomorphic Keyboards

Final Project Proposal (Due Fri., April 5, 11:59 pm)

BAIN MUSC 726T
Tuning Theory

- WEEK 14
Mon., April 8 *Non-Twelve-Divisible Based Equal Temperaments*
Reading: Gann Ch. 12 Non-Twelve-Divisible Equal Temperaments (selected), pp. 174-177, 185-186, and Interlude L, pp. 199-204.
- Wed., April 10 *Other Interesting Topics*
- Fri., April 12 - A **Assignments/Activities:** (Due Mon., April 15, 10:50 am)
• Quiz 11: Gann Ch. 12

Revised Final Project Proposal (Due Fri., April 12, 11:59 pm)
- WEEK 15
Mon., April 15 *Final Project Presentations: Day 1*
- Wed., April 17 *Final Project Presentations: Day 2*
- Fri., April 19 - A **Assignments/Activities:** (Due Mon., April 22, 10:50 am)
• Quiz 12: EDO Interval Calculations (n/k)
• Activity #11 Jacob Collier's Use of Microtonality
- WEEK 16
Mon., April 22 *Final Project Presentations: Day 3*

Upload your project files into the *Final Project* Blackboard assignment
(Due: Mon., April 22, 11:59 pm)

FINAL EXAM (Ch. 7-13)²
Due: Mon., April 29, 11:59 pm

² The online Final Exam will be posted on Wed., April 24.