

David Bard-Schwarz

- MUTH 2500.002 Theory IV Fall 2015
- MU 250 MW 10:00 to 10:50
- Office Hours: Fridays 10:00 to noon
- Instructor: Dr. David Bard-Schwarz
- Office: MU 104
- E-mail: david.schwarz@unt.edu

In this course we will spend roughly the first month of the course deepening our skills in composition and analysis of diatonic tonal and chromatic tonal music. We will spend the rest of the course studying two early-to-mid 20th Century techniques--atonal and serial (12-tone) music.

All of the pieces we will discuss are present below as mp3 files to which you may listen on line but may not download and pdf files that you may download and print; do not download and print pdfs from the College of Music computer room.

Coming to class regularly and punctually is very important. You will be dropped from the course after three unexcused absences; I take roll at the top of the hour; three latenesses = one unexcused absence. You will be excused from class due to natural disasters, transportation problems beyond your control, medical emergencies (concerning you or members of your immediate family), and official UNT musical activities.

A proven case of plagiarism on an exam will result in an F for the course.

You will need a good theory book; we recommend Steven G. Laitz, *The Complete Musician* Third Edition. (New York and Oxford: Oxford University Press, 2012).

Grades will be determined as follows:

- In-class work and weekly assignments = 10%
- Exam #1: (over diatonic and chromatic tonal music only) = 30%
- Exam #2: (over atonal music only)
- Exam #3: (over serial music only)
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- The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be

made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Audio/Video Player

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- [max volume](#)

00:00

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- **video** [08.24.2015 Introduction to the Class](#)
- [Beethoven, Symphony no. 5 in C minor: first movement by Bruno Walter and the Columbia Symphony Orchestra](#)
- **video** [08.26.2015 The Sonata and the First Movement of Beethoven, Symphony no. 5, first movement](#)
- **audio lecture** [08.31.2015 augmented sixth chords and beethoven](#)
- [Beethoven, Symphony no. 5 in C minor: second movement by Bruno Walter and the Columbia Symphony Orchestra](#)
- [Beethoven, Symphony no. 4 in B-flat major: first movement by not known](#)
- [Webern, Pieces for String Quartet Opus 5, no. 1 by Quartetto Italiano](#)
- [Webern, Pieces for String Quartet Opus 5, no. 2 by Quartetto Italiano](#)

- [Webern, Pieces for String Quartet Opus 5, no. 3 by Quartetto Italiano](#)
- [Webern, Pieces for String Quartet Opus 5, no. 4 by Quartetto Italiano](#)
- [Webern, Pieces for String Quartet Opus 5, no. 5 by Quartetto Italiano](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 1 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 2 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 3 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 4 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 5 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 6 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 7 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 8 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 9 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 10 by Elizabeth Klein](#)
- [Dallapiccola, Quaderno Musicale di Annalibera, no. 11 by Elizabeth Klein](#)
- 08.24.2015

See Video Above!

- 08.26.2015

See Video Above!

[Beethoven, Symphony no. 5 in C minor, first movement: pdf](#)

reading full orchestral scores

- the strings, winds, brass, and percussion sections and SATB distribution
- german letters / english letters
- transposing instruments: "the key of the instrument is the sound that is produced when written C is played" (Kent Kennan)
 - Horn in F sounds a perfect fifth lower than written
 - B-flat clarinet sounds a major second lower than written
 - A clarinet sounds a minor third lower than written
 - English Horn sounds a perfect fifth lower than written
 - piccolo sounds an octave higher than written
 - string bass sounds an octave lower than written

the sonata: (introduction), exposition, development, recapitulation, (coda)--binary and ternary possibilities

- 08.31.2015

See Audio Above!

the augmented sixth chord

Here is a worksheet of the [augmented sixth chord: pdf](#). Notice how the augmented sixth interval expands out to an octave that is scale degree 5 in a key.

[dominant.6.4: pdf](#)

[augmented sixths, part-writing: pdf](#)

[bad augmented sixth: pdf](#)

- 09.02.2015

For today be ready to discuss precisely how Beethoven modulates from C minor to E-flat major in the exposition.

- 09.07.2015

Labor Day: no class

- 09.09.2015

Figured bass review.

For today, be ready to discuss in detail the harmony of the second key area, mm. 65-122.

- 09.14.2015

For today **hand in a simple two, three, or four part reduction of mm. 130-142 of the development section.** Hint: You'll get a really clear idea of what's going on if you play the lower note of the bassoon part and the clarinet line above it (remember the clarinet sounds a major second lower than written). Write a sentence or two on what key the music is in; where does that key come from? is it a surprise? why? why not? Is there any thing else about the texture, orchestration, harmonic rhythm that we have heard before?

- 09.16.2015

6/4 chords

work through the harmonies of the development section from measure 158 to measure 195

[figured bass: pdf due today.](#)

- 09.21.2015

The recapitulation. Be ready to discuss this question: How precisely does Beethoven comment on his modulation from C minor to E-flat major

(exposition) in the recapitulation? Is material in E-flat simply transposed from E-flat major to C minor? If so, how does he "get" from C minor to C minor and make it sound compelling?

My pepsi challenge: modulate from C major to F-sharp major using a single French Augmented Sixth chord. Bring solutions to class on Monday (this is completely optional)

- 09.23.2015

The Neapolitan

Be ready to discuss the harmony of the coda. What happens immediately after the final cadence of the recapitulation proper? How does Beethoven approach the immense dominant of the coda? Where does this harmony come from? Why is the immense dominant *so* immense?

- 09.28.2015

[Beethoven, Symphony no. 5, II: pdf.](#)

See how precisely you can account for Beethoven's modulation from A-flat major to C major and (crucially) back again to A-flat major.

- 09.30.2015

[Beethoven, Symphony no. 4, I: pdf](#)

[\(in class work\) Excerpt of Beethoven, Symphony no. 6 in F major \(page 1 + beginning of development\): pdf](#)

- 10.05.2015

Exam #1 on Beethoven, Symphony no. 4, I

You will get questions on mm. 1-38, 185-337, 447-451.

- 10.07.2015

[Webern, Pieces for String Quartet Opus 5: pdf](#)

Introduction to Atonal Music and Atonal Pitch-Class Set Theory

Factors that characterize culture and the arts at the turn of the 20th Century in Central Europe and the US:

- Freud's discovery of the unconscious (dream, the divided subject)
 - [sinesthesia \(the interpretation of one sensation in terms of another\)](#),
 - [abstract expressionism \(the artifice of symmetry\)](#)
 - [abstract expressionism \(the externalization of states of mind\)](#)
 - [Mondrian, Red Tree: jpg](#)
 - [Mondrian, Grey Tree: jpg](#)
 - [Mondrian, Red and Black Tree: jpg](#)
 - [Mondrian, White Tree: jpg](#)
 - atonality (symmetrical division of the octave, centripetal to centrifugal energy, undercutting conceptual grids, liberation of dissonance, collapse of chord tone / non-chord tone binary, pitches and pitch-classes (refigured)).
- 10.12.2015

the results from last class's vote: 1) a single orchestral movement got 48 votes, 2) doing lots of small pieces got 6 votes, 3) doing a mixture of the two got 3 votes. So a single orchestral movement wins and I'll do that again in the next section of theory IV. thanks!

[Joseph N. Straus: Introduction to Post-Tonal Theory \(chapter 1\): pdf](#)

ordered pitch intervals, unordered pitch intervals, ordered pitch class intervals, unordered pitch class intervals.

segmentation

- 10.14.2015

In class quiz on: 1) pitch class numbers, 2) ordered pitch intervals, 3) unordered pitch intervals, 4) ordered pitch class intervals, and 5) unordered pitch class intervals.

[Straus, chapter 2 on normal form + prime form: pdf](#)

terms:

- segmentation = the process of delimiting, marking off, what you hear in an atonal piece (determining the sets)
- cardinality = the number of different pitch classes in a set
- the three principles of segmentation
 - 1) include all notes in your segmentation
 - 2) don't overlap sets
 - 3) sets must have cardinality of 3 to 9 (inclusive)

the four steps to find normal form:

- 1) arrange all pitch classes ascending within an octave
- 2) rotate the collection (the number of rotations will equal the number of rotations)
- 3) choose the rotation with the smallest unordered pitch interval from the first to the last note
- 4) assign pitch class numbers to the pc set within hard brackets

• 10.19.2015

• 10.21.2015

• 10.26.2015

Today we'll review normal form and introduce prime form; see chapter 2 of the Straus *Introduction to Post-Tonal Theory* for complete explanations (see 03.11.2015 above). We'll work today with the following [segmentation of the Webern Opus 5, no.1: JPG](#)

prime form

- 10.28.2015

In-class quiz on normal form and prime form

transposition of pitch class sets: read Straus, Chapter 2 (you can find it under 03.11.2015), pp. 38-44.

[List of Set Classes \(PC sets in prime form\) from Straus: pdf](#)

[Some work for today: JPG](#)

[Some more work for today: JPG](#)

[Some more work yet for today: JPG](#)

- 11.02.2015

Introduction to inversion

inversions of pitch class sets: read Straus, Chapter 2 (you can find it under 03.11.2015), pp. 44-52.

- 11.04.2015

In-class quiz on inversion

[To work on for today: JPG](#)

[Still more to work on for today: JPG](#)

Why Invert (first) and then Transpose (next)?

Because if you reverse the steps, you get different results.

- First Inverting then transposing [6780] at T3I:
- [6780] becomes [6540] becomes [0456] becomes [3789]
- First transposing then inverting [6780] at T3I:

- [6780] becomes [9te3] becomes [3219] becomes [9123]

- 11.09.2015

[summary of transposition and inversion of pc sets: pdf](#)

[pentachords for practice; are any of these pc sets related? If so, how? In pitch or pc space only?: pdf](#)

interval vectors and Z-related pc sets

- 11.11.2015

subsets and supersets

[we'll work in detail on these three pc sets from Webern Opus 5, no. 4: JPG](#)

[practice with pc sets: normal form, prime form, transposition, inversion, pc space, pitch space, the Z relation: pdf](#)

- 11.16.2015

There will be a review session this evening (Friday) from 6 to 7:30 in MU 321. Bring questions!

- 11.18.2015

Exam #2 on Webern

here are the [pc sets from Webern Opus 5: pdf](#)

- 11.23.2015

[Dallapiccola, Quaderno Musicale di Annalibera: pdf](#)

Introduction to 12-tone music and serial analysis: prime, retrograde, inversion, and retrograde inversion.

- 11.25.2015

[Straus, Chapter 5 \(12-tone techniques\): pdf](#)

[Webern, Wie bin ich froh: pdf](#)

[Webern, Wie bin ich froh \(matrix\): pdf](#)

[serial description of "wie bin ich froh": JPG](#)

- 11.30.2015

In-class quiz on Webern's Opus 27 #2 today

[Webern, Variations for Piano Opus 27, no. 2: \(matrix\) pdf](#)

[Webern, Variations for Piano Opus 27, no. 2: pdf](#)

[serial description of webern opus 27 no. 2: JPG](#)

- 12.02.2015

[Webern, Symphony Opus 21, II: matrix: pdf](#)

[Webern, Symphony Opus 21, II: pdf](#)

[Webern, Symphony Opus 21 II, theme: JPG](#)

[Webern, Symphony Opus 21 II, variation 1 \(beginning\): JPG](#)

- 12.05.2015

NOTE: THIS IS A SATURDAY! Final Exam 8-10