

Cover Letter for TH 230 (Engaging with Timbre)

Dear DCD Committee,

I present this syllabus for an upper-level undergraduate theory elective to be taught in a university conservatory, potentially another environment with adjustments. The course centers on timbre, a critical aspect of music universally important in genres, styles, and repertoire worldwide that is often glossed over in undergraduate curricula. Featuring a wide range of engaging activities, this course balances traditional academic tasks such as precis writing with public-oriented pursuits such as lightning talks. Through contextualized listening, performing, composing, writing, and speaking, I hope the students become aware of timbre-related cultural, historical, and social issues that shape our understanding of music. Emphasizing their ability to communicate effectively with professionals and the public alike, I aim to stimulate them to make music theory more public and relevant as a way of sensitive and contextualizing thinking and talking about music.

Designed as the culminating study in our theory curriculum, this course assumes advanced competency and is reading and writing-intensive. The workload is substantial yet balanced because most assignments comprise a pass-or-fail component that is earnable via faithful commitment, thus relieving students from grading pressure. Inspired by the Universal Design for Learning ideas, this course seeks to empower students by inviting them to lead in-class discussions and choose topics for week 11, fostering community by democratizing the course. Students then contribute to public knowledge of timbre by creating a Wikipedia entry on something they are interested in, bringing this vibe beyond the classroom. The critical thinking and communicative skills will be invaluable whether the students advance to postgraduate programs or enter the job market.

While timbre is the main focus, this course covers various topics. In the limited time available, I have selected topics essential to timbral studies for modules 1 and 2 while also exploring a selection of world music, both traditional and popular, in modules 3 and 4. The course content complements our institution's curriculum, such as (European) tonal and post-tonal music, jazz, and Black Gospel. Reflecting on my cultural background, I have included more Asian music (some of which I can demonstrate in class) and non-Anglophone pop songs to provide a global perspective.

As diverse as the course might seem, my central goal is to foster harmony and community among our institution's student body through meaningfully and respectfully engaging with music cultures and people worldwide from the perspective of timbre. I am eager to learn as much as the students from this course, and I believe we can all walk away more prepared to share music theory with everybody. I am grateful for the opportunity to present my syllabus to you and eagerly await your ideas and suggestions.

Sincerely,

Ruixue Hu (Eastman School of Music)

TH 230 (Music Theory Special Topics): Engaging with Timbre

Basic Information

Instructor: Ruixue Hu

Email: rhu14@u.rochester.edu

Office Hours: by appointment

Meeting Time: TBD, two credit hours per week

Course Description

This upper-level undergraduate theory elective course explores timbre studies with diverse examples of genres worldwide, fulfilling the special topic requirement. We begin by examining the history and conception of timbre and surveying the relevant analytical methods. We then engage with timbre in different genres and styles from various global cultures, including concert music, traditional music worldwide, and pop, from an interdisciplinary perspective. Highlights in our repertoire include music for cochlear implants, qin music, Dong Grand Songs, and pop songs by Sigur rós, Azis, and Tiger Hu; students also contribute music they want to study. This course offers multiple activities, including transcription, academic writing, presentation, composition, and discussion, balancing theory and practice. This course does not have exams.

Learning Outcomes

In this course, together we will:

1. Establish a general understanding of timbre's definition, application, and implication while learning, applying, and evaluating various analytical perspectives and methods.
2. Explore how aspects such as culture, history, society, identity, and (dis)ability contextualize our understanding of timbre.
3. Transcribe, compose, and perform various genres of music where timbre is essential, such as concert music, traditional music from around the world, film and popular music, and electronic music.
4. Contribute to the broader public knowledge of timbre by creating a Wikipedia entry.
5. Practice academic writing and presentation on timbre-related topics.

Course Overview

Module 1: Concepts and Methods

Week 1: History and conception of timbre

Week 2: Analytical methods and perspectives

Week 3: Listening to timbre: meaning, psychology, and (dis)ability

Module 2: Timbre in Concert Music

Week 4: Timbre as organizing principle in concert music

Week 5: Timbre and harmony

Week 6: Student composition showcase

Module 3: Timbre in Traditional Music of the Globe

Week 7: Timbre as an organizing principle in world music

Week 8: Timbre in community music of the globe

Week 9: Wikipedia entry presentations

Week 10: Timbre in West African drumming

Module 4: Timbre in Pop Music

Week 11: Timbre in our favorites

Week 12: Vocal timbre

Week 13: Timbre in Nordic and Slavic pop

Week 14: Final presentations

Weekly Outline

For all assigned materials, consider the following (and any other relevant) aspects:

- When and where is this music from? (geography, people, and culture)
- Who performs, and how, for whom? (instrument, format, and technique)
- How is it used, communicated, and understood? (context, function, and meaning)

Module 1: Concepts and Methods (Weeks 1–3)

Week 1	(dates TBD)
Theme	History and conception of timbre
Discussion	<ul style="list-style-type: none"> • Timbre is a physical, musical, and cognitive phenomenon simultaneously. Share your first memories and experience about timbre by posting one piece that gave you the “epiphany” about timbre. • Watch the Nakamura official MV, which has embedded subtitles. How does timbre in this song interact with the lyrics and the video? • What new understanding and experience about timbre have you gained after going over the assigned materials?
Readings	<ul style="list-style-type: none"> • Van Elferen, Isabella. 2021. “Timbrality: The Vibrant Aesthetics of Tone Color.” In <i>The Oxford Handbook of Timbre</i>. Eds. Emily I. Dolan and Alexander Rehding. 69–91. New York: Oxford University Press. • Blake, David. 2019. “Timbre.” in <i>The Oxford Handbook of Critical Concepts in Music Theory</i>. Eds. Alexander Rehding and Steven Rings. 136–59. New York: Oxford University Press.
Audiovisual	<ul style="list-style-type: none"> • Wagner, Melinda. <i>Limbic Fragments</i> (2014). (https://www.youtube.com/watch?v=efBvEYyouUGc) • Nakamura, Aya. “Pookie” (2019). (https://www.youtube.com/watch?v=bPa-VG0AWo)

Week 2	(dates TBD)
Theme	Analytical methods and perspectives
Discussion	<ul style="list-style-type: none"> Guided by the tutorial video on Blackboard, complete a spectrogram analysis of the assigned pieces and share your results on Blackboard. What information does the graph offer that is not (easily) accessible through aural perception, given that the Hisaishi has a score while the Barrett does not? How can we best adjust the computational parameters to make spectrograms more effective for each piece? What are the advantages and disadvantages of spectrogram analysis?
Readings	<ul style="list-style-type: none"> Barrett, Natasha. 1999. "Little Animals: Compositional Structuring Processes." <i>Computer Music Journal</i> 23 (2): 11–18. McAdams, Stephens et al. 2004. "Analyzing Musical Sound." In <i>Empirical Musicology</i>. Eds. Eric Clarke and Nicholas Cook. 157–96. New York: Oxford University Press.
Audiovisual	<ul style="list-style-type: none"> Barrett, Natasha. <i>Little Animals</i> (1997). Hisaishi, Joe. <i>East Land Symphony</i> (2016), first movement.

Week 3	(dates TBD)
Theme	Listening to timbre: meaning, psychology and (dis)ability
Discussion	<ul style="list-style-type: none"> Following examples in the Helmreich article, create a brief outline with a few sentences describing how you would compose for cochlear implants. Aided with the translations provided, discuss the meaning and function timbre plays in both examples.
Readings	<ul style="list-style-type: none"> Helmreich, Stefan. 2021. "Music for Cochlear Implants." in <i>The Oxford Handbook of Timbre</i>. 485–94. Levin, Theodore and Valentina Süzükei. 2021. "Timbre-centered Listening in the Soundscape of Tuva," in <i>The Oxford Handbook of Timbre</i>. 205–28.
Audiovisual	<ul style="list-style-type: none"> Cochlear implant simulation from www.sens.com: https://www.youtube.com/watch?v=SpKKYBkJ9Hw Optional further information, from Barrow Neurological Institute: https://www.youtube.com/watch?v=vnHAqCgp6Lw Tengger (腾格尔). "天堂/Heaven (Tiāntáng)." (https://www.youtube.com/watch?v=H2mvc0miJ-w) Vaanchig, Batzorig. "Chinggis khaanii Magtaal." (https://www.youtube.com/watch?v=p_5yt5IX38I)
Misc.	<ul style="list-style-type: none"> Start thinking about ideas for your composition.

Module 2: Timbre in Concert Music (Weeks 4–6)

Week 4	(dates TBD)
Theme	Timbre as organizing principle in concert music

Discussion	<ul style="list-style-type: none"> • Compare timbre’s organizing function in the assigned pieces. How do both composers approach timbre working with an orchestra versus a solo instrument?
Readings	<ul style="list-style-type: none"> • Cramer, Alfred. 2002. “Schoenberg's <i>Klangfarbenmelodie</i>: A Principle of Early Atonal Harmony.” <i>Music Theory Spectrum</i> 24 (1): 1–34. • Saariaho, Kaija. 1987. “Timbre and Harmony: Interpolations of timbral structures.” <i>Contemporary Music Review</i> 2 (1): 93–133.
Audiovisual	<ul style="list-style-type: none"> • Schoenberg, Arnold. <i>Five Pieces for Orchestra</i> (1909), No. 3, “Farben.” • Saariaho, Kaija. <i>Couleurs du Vent</i> (1998).
Misc.	<ul style="list-style-type: none"> • Individual composition project meeting. • Brainstorm about timbre-related topics and repertoire for week 11. We will vote for up to two topics/repertoire in week 7.

Week 5	(dates TBD)
Theme	Timbre and Harmony
Discussion	<ul style="list-style-type: none"> • After going over the assigned materials, share on Blackboard how you plan to write your composition, focusing on the employment of timbre. • Share your topics and repertoire of interest with a brief explanation.
Readings	<ul style="list-style-type: none"> • Hasegawa, Robert. 2021. “Timbre as Harmony–Harmony as Timbre.” in <i>The Oxford Handbook of Timbre</i>. 525–51.
Audiovisual	<ul style="list-style-type: none"> • Langgaard, Rued. <i>The Music of the Spheres</i> (1918). • Ligeti, György. <i>Atmosphères</i> (1961).

Week 6: Composition Showcase

Module 3: Timbre in Traditional Music of the Globe (Weeks 7–10)

Week 7	(dates TBD)
Theme	Timbre as an organizing principle in world music
Discussion	<ul style="list-style-type: none"> • Saariaho’s piece (week 5) and the two shakuhachi pieces we encountered this week all feature a solo flute of some kind as the central instrument. Compare their ways of employing timbre in organizing their musical form. • What unique ways of using timbre do you observe in qin music and shakuhachi music? • Ruixue will demonstrate qin in class and have further questions.
Readings	<ul style="list-style-type: none"> • Cogan, Robert and Escot Pozzi. 1986. “Tone Colors of the Ancient Chinese Instrument, the Ch’in.” in <i>Sonic Design: The Nature of Sound and Music</i>. 333–47. Englewood Cliffs, NJ: Prentice-Hall, Inc. • Browning, Joseph. 2017. “Mimesis Stories: Composing New Nature Music for the <i>Shakuhachi</i>.” <i>Ethnomusicology Forum</i> 26 (2): 171–92.
Audiovisual	<ul style="list-style-type: none"> • Kakizakai, Kaoru. <i>Tsuru no Sugomori</i>, in <i>Traditional Shakuhachi II</i> (2009). • Franklin, Jim. “Fluid Convex,” in <i>Songs from the Lake</i> (2021).

	<ul style="list-style-type: none"> Hu, Ruixue. Qin performance, <i>Three Variations of Plum Blossom</i>. (2024)
Misc.	<ul style="list-style-type: none"> We will vote for our topics/repertoire at the beginning of our class meeting.

Week 8	(dates TBD)
Theme	Timbre in community music of the globe
Discussion	<ul style="list-style-type: none"> Discuss the role(s) of each part of the Dong Grand Choir and their associated timbral qualities. How does the use of timbre, along with other musical aspects, foster the collaboration between the singers? What do you think about the title and the programmatic nature of <i>Song of Cicada in May</i>? How effective and perceivable is the use of imitative sounds in this song?
Readings	<ul style="list-style-type: none"> Kertz-Welzel, Alexandra. 2016. "Daring to Question: A Philosophical Critique of Community Music." <i>Philosophy of Music Education Review</i> 24 (2): 113–30. Ingram, Catherine. 2013. "Understanding Musical Participation: 'Listening' Participants and Big Song Singers in Kam Villages, Southwestern China." In <i>Taking Part in Music: Case Studies in Ethnomusicology</i>, Eds. Ian Russell and Catherine Ingram. 53–65. Aberdeen: Aberdeen University Press.
Audiovisual	<ul style="list-style-type: none"> Andes Manta: The Music of the Andes (https://www.youtube.com/watch?v=3A6F0C4Sceg) Dong (Kam) Grand Song, <i>Song of Cicada in May</i> (https://www.youtube.com/watch?v=IatdS9TNWYM)

Week 9: Wikipedia Entry Presentation

Week 10	(dates TBD)
Theme	Timbre in West African drumming
Discussion	<ul style="list-style-type: none"> How do the various timbral qualities correlate with how they are produced in performances? Evaluate the advantages and disadvantages of the mnemonic notation and other possible notation systems, including staff notation. Connect this week's notational and performative aspects of timbre with what we learned about qin and shakuhachi. How can we best notate timbre in each case? What do we gain and lose by notating timbre in a specific way?
Readings	<ul style="list-style-type: none"> Stone, Ruth M. 2004. "Voices: Layered Tone Colors." in <i>Music in West Africa: Experiencing Music, Expressing Culture</i>. 47–63. New York: Oxford University Press. Agawu, Kofi. 1992. "Representing African Music." <i>Critical Inquiry</i> 18 (2): 245–66.

Audiovisual	<ul style="list-style-type: none"> • Five(ish) Minute Drum Lesson - African Drumming: Lesson 1: The Djembe (https://www.youtube.com/watch?v=q5U8md4rZS8&t=1s) • Five(ish) Minute Drum Lesson - African Drumming: Lesson 2: The Fanga (https://www.youtube.com/watch?v=nuQFbD43P4k)
-------------	---

Module 4: Timbre in Pop Music (Weeks 11–14)

Week 11: Our favorite topics (TBD).

Week 12	(dates TBD)
Theme	Vocal timbre
Discussion	<ul style="list-style-type: none"> • Unique timbres and their innovative employment are often markers of identity, especially in pop styles. Share one pop song that impressed you with its timbre. Discuss its musical details and its context: what cultural/ethnic/social background is relevant?
Readings	<ul style="list-style-type: none"> • Heidemann, Kate. 2016. “A System for Describing Vocal Timbre in Popular Song.” <i>Music Theory Online</i>, 22 (1). • Hardman, Kristi. 2022. “The Continua of Sound Qualities for Tanya Tagaq’s <i>Katajjaq</i> Sounds.” In <i>Trends in World Music Analysis: New Directions in World Music Analysis</i>. Eds. Lawrence Beaumont Shuster et al. 85–99. London and New York: Routledge.
Audiovisual	<ul style="list-style-type: none"> • Fitzgerald, Ella. “How High the Moon.” (https://www.youtube.com/watch?v=1GUmXnYheK0) • Hu, Tiger (Hu, Yanbin 胡彦斌). “月光 (Moonlight).” In 音樂賦潮 (yīnyuè bīncháo) (2008). • Tagaq, Tanya. “Colonizer,” in <i>Tongues</i> (2022).

Week 13	(dates TBD)
Theme	Timbre in Nordic and Slavic Pop
Discussion	<ul style="list-style-type: none"> • Research the background of the three artists and get to know more about their cultures and identities. What unique timbres have they employed in their music, and what connections might we draw? • After reading the Moore chapter, bring the perspective of persona into the previous question. How do the artists use their timbral qualities (in conjunction with other musical parameters) to portray complex personas? Share your interpretation of these items.
Readings	<ul style="list-style-type: none"> • Moore, Allan. 2012. “Persona.” In <i>Song Means: Analysing and Interpreting Recorded Popular Song</i>. 179–214. Farnham: Ashgate.
Audiovisual	<ul style="list-style-type: none"> • Vitas. “Посвящение (Dedication),” in <i>Mama</i> (2003). • Sigur rós. “Untitled #1” and “Untitled #2,” in <i>()</i> (2002). • Azis. “Sen trope.” (2011).

Week 14: Lightning Talk Presentation

Class Policy

- Be respectful to everyone in the class and all the people who make the music we enjoy and study. While we will experience most of the musics and cultures as non-natives or non-practitioners, let us remain open-minded and always be sensitive to the contexts.
- Be responsible: attend classes, pay attention, and complete assignments with good faith and effort. No late assignments will be accepted without emergencies or disability accommodations. You have three non-penalty absences, no questions asked. Each absence beyond three will lower your semester total grade by **3%**. You will automatically fail this class if you accumulate six absences.
- Be communicative: I support professional development opportunities such as competitions and masterclasses. However, please communicate in advance to resolve time conflicts. Professional opportunities do not exempt you from submitting assignments.

Materials

No textbook is required; readings and audiovisual content will be distributed on Blackboard. You need a computer or tablet with earphones or speakers to access the audiovisual files. If you need audio analysis software, I recommend Sonic Visualizer, which is accessible online for free.

Course Components and Assessment

All assignments are ineligible for resubmission. Nevertheless, they are designed to help you progress, and a significant portion of the grade can be earned by faithful completion. You work with peers or discuss with the instructor to prepare for some assignments while completing others individually. The detailed rubrics below use **points**: one point converts to 1% of your semester grade. The maximum number of points you can earn is **100**.

I. Weekly forum discussion (Blackboard) and in-class engagement (**40** points total)

Online and in-class discussions may involve guided listening and response, preparing and raising meaningful questions (whether or not as discussion leaders), group discussion and mini-reporting, and sharing your unique repertoire and experience.

- You earn **2** points each time you complete the Blackboard weekly discussion with good faith (pass or fail). You can earn up to **20** points from weekly discussions.
- Students sign up as discussion leaders by rotation. Each week, a pair of discussion leaders summarize the critical points of the reading(s) and prepare at least five questions in addition to those in the discussion prompt regarding the assigned readings and media. You earn **2** points each time you actively attend a regular class on time, whether or not you are the discussion leader. You can earn up to **20** points from attendance.
- Attending “special” classes such as Composition Showcase does not carry grades per se, but performing in that class does. Attending these classes is necessary if you want to learn from peers and earn points.

II. Precis Assignment Series (20 points total)

This assignment series progressively trains your ability to capture the gist of academic essays.

- First assignment (5): Individually identify (or compose) a thesis statement for the assigned reading in ONE sentence (pass or fail).
- Second assignment (5): Working with a partner, provide at least three supporting arguments or resources besides locating the thesis statement. Multiple reasonable answers are accepted (pass or fail).
- Third assignment (10): Individually summarize an academic essay of your choosing from our reading list in ONE page, double-spaced (graded holistically).

You are encouraged but not required to submit your precis to the instructor for comments and suggestions within a week before the due date. Below is the grading rubric for the third assignment.

Aspect Considered	Max
Capturing the key ideas and arguments	4
Clarity in writing	2
Organization	2
Conciseness	2

III. Composition workshop (10 points total)

- In week 4, students will meet with the instructor one-on-one for a 15-minute coaching session on their composition projects. We will identify the type and format of your composition and discuss ideas and drafts you may have. Attending the coaching and demonstrating reasonable effort will grant you 3 points (pass or fail). Your work should last between two to three minutes. While I recommend exploring the timbral potential of your instrument or voice, you may write for any instrumentation or use electronic means.
- In week 6, students perform or share their composition in class, followed by discussions and feedback. Introduce your work in less than two minutes and perform live (for suitable pieces such as solo, vocal/piano, or small ensemble), play electronically (for multimedia or electronic compositions), or share a video recording for inconvenient cases (such as work for large ensemble or stationary instruments). This will grant you 2 points (pass or fail).
- Students submit their electronic files and a one-page explanation in which they share their composition process, features, contexts, and intended meanings by week 7, allowing time for revision. Submissions will be holistically graded using the following rubric (5):

Aspect Considered	Max
Clear display of timbral techniques	1
Convincing choice and arrangement of timbres	1
Unambiguous and effective notation	1
Accurate and illuminating description	1
Creativity in non-timbral aspects	1

IV. Wikipedia Entry: Group Work (15 points total)

In this assignment, students work in groups of three to contribute to the broader public knowledge of a (collection of) piece(s), a style, or a genre where timbre is significant via Wikipedia. You can create entries or add to existing ones, and the text of your entry should be at least four pages long, double-spaced. Read it aloud at least once to ensure it is error-free and well-written. Your entry may address the following aspects with an overall style and level of technicality with the public in mind:

1. A brief overview of the piece in one or two paragraphs. Who composed, produced, and performed it? When, where, and how was it disseminated?
2. Historical and cultural background of the composer/producer/performer.
3. Format, form, function, and features of the piece, centering on timbre.
4. Significance, influence, and implications.
5. Don't forget to include a reference section if you cite. You are also encouraged to provide a discography/playlist where possible.

You are highly encouraged to share your drafts with someone close to you but unfamiliar with your topic (a non-music professional would be ideal) for initial feedback. In addition, each group member submits a two-page double-spaced reflection where you explain why you chose the repertoire or genre, how you gathered the information, and what difficulties you encountered. A faithful submission will earn you **3** points (pass or fail).

Students share their Wikipedia page in class in week 9, followed by a 10-minute informal presentation where the group members share their experiences. Attending this will grant you **2** points (pass or fail). While the appearance of the Wikipedia page will not be graded, try your best to make it look accessible and straightforward as you contribute to public knowledge of music. The content of the Wikipedia page will be holistically graded using the following rubric (**10**):

Aspect Considered	Max
Organization and writing	2
Accessibility and appropriateness for an online public platform	3
Accurate description and inspiring discussion on timbre and its function	3
Proper citation	2

V. Individual Presentation (15 points total)

For this assignment, you will share your perspectives on timbre and its function and meaning in a piece of your choice (different from the Wikipedia one), preferably one that reflects your unique musical background and experience, in the format of lightning talk or podcast. Your presentation should be seven to ten minutes long. This means your presentation should be as concise as possible while delivering a compelling argument supported by evidence. Therefore, please use ten pages of slides at most, as you would aim to be attractive yet succinct: try to be visually and verbally focused.

You can deliver this in person in class as a lightning talk or record your presentation as a podcast and share it with the class (or further online). You may refer to the Society for Music Theory's podcasts (SMT-V) for models: <https://www.smt-v.org/>

Aspect Considered	Max
Verbal delivery: clarity, pace, articulation, volume, etc.	3
Effective presentation of argument and supporting points	3
Use of audiovisual aid	3
Accurate description and inspiring discussion on timbre and its function	3
Demonstrating how engaging with timbre enriches our understanding of the piece(s)	3

Total Course Grade Distribution (Letter grade conversion standard TBD)

Assignment and Breakdown	Max
Weekly Discussion (10*2) and Attendance (10*2)	40
Precis Assignments (5+5+10)	20
Composition Project (3+2+5)	15
Wikipedia Entry (3+2+10)	15
Lightning Talk Presentation (15)	15
Total: 100	

Academic Integrity Policy

For individual assignments, you must submit your original work. Generating answers with Artificial Intelligence (AI) services such as ChatGPT, Microsoft Bing, and Google Bard is prohibited. For collaborative assignments, list all team members involved. When borrowing ideas, be sure to cite them properly. Please contact me anytime if you need help determining whether something is acceptable or have questions.

Support Resources

Accommodations:

The Eastman School of Music is committed to fostering a welcoming, encouraging, and empowering environment where all students can thrive in their studies. The Office of Disability Resources works with students to identify barriers and establish reasonable accommodations to ensure all students have equal access and opportunity to participate in the University experience fully. It is a personal decision to disclose the existence of a disability and request an accommodation—a decision not to disclose will be respected. While we cannot make accommodations retroactively (for example, allowing a student to repeat a test with new accommodations), we encourage you to begin the documentation process anytime during the semester. I will always be happy to discuss the process with you.

Your right to a safe learning environment (Title IX):

All members of the Eastman community have the right to learn and work in a safe environment free from all forms of harassment, including harassment based on sex or gender. Students who have been subjected to sexual harassment, including sexual assault, dating/domestic violence, or stalking, have the right to receive academic, housing, transportation, or other accommodations, to receive counseling and health services, and to make a report about such behavior to the University and law enforcement. For more information, please visit www.rochester.edu/sexualmisconduct.

Acknowledgment

We acknowledge that the Eastman School of Music and the University of Rochester are located on the Indigenous Lands of the Seneca Nation. Recognizing the indigenous peoples who have lived and continue to live here, we also acknowledge the sovereignty of the Seneca Nation, part of the Haudenosaunee Confederacy, and their long-standing presence on this land, which precedes the establishment of this University and the United States of America.