Overview of the course:
This course explores research in the mind and brain sciences that helps us to understand how we understand music. Although a portion of the material we cover will relate quite directly to what happens when we listen to music, other readings and topics will concern some of the more-general cognitive capacities that humans recruit to make sense of the sounds they hear. One challenge, then, will be to come to terms with what we have learned from research in music psychology and music cognition, which often involves relatively technical explorations of how musical sounds are organized. A second challenge will be to consider what research that isn’t as directly related to music—research, for instance, on analogical processes, the motor system, categorization, or gesture—can tell us about how we organize our understanding of the sounds we associate with music.

There will be three main ways we explore the topics outlined below. The first will be through readings for each meeting of the class, which will be on Canvas and accompanied by guiding questions. Exploring possible answers to those questions will shape class discussion. The second way we’ll explore these topics will be through lectures that will attempt to provide a path through the readings by situating them in a broader context. And the third way will be through three writing assignments distributed through the term—the first two about five double-spaced pages, the third somewhat longer—that will provide you with an opportunity to engage with these topics, and your own experiences of listening to music, in greater detail.

Schedule

Week 1 (9/28)
Introduction to the course. An overview (or a review) of music fundamentals, and a discussion of music as a system for human communication.

Week 2 (10/3–10/5)
Pitch perception and timbre. The focus for these meetings will be on becoming acquainted with the process of pitch perception, with a specific emphasis on the areas of the brain that support this process. Some attention will be given to two aspects of pitch perception demonstrated by subgroups of the population: absolute pitch, and amusia.

Week 3 (10/10–10/12)
Rhythm and meter. Although music psychology tends to focus on pitch perception, there is good evidence that situating pitches in time—which is where rhythm and meter come in—is crucial for musical understanding. Rhythmic processes engage the motor system, and a consideration of the motor system leads us to the topics of grounded cognition, rhythmic entrainment, and the mirror neuron system.

Paper #1 due 10/14/22

Week 4 (10/17–10/19)
Analogical thought and musical understanding. Although analogy—which involves finding structural relationships between different domains as a way to guide the process of reasoning—might seem to be
quite some distance from musical experience, there is good evidence that it is actually essential, at a very basic level, for musical understanding. Thus this week’s topic.

**Week 5 (10/24–10/26)**
Processes of categorization and musical understanding. If analogy provides a means to connect sound with other aspects of experience, categorization—understood as a basic cognitive capacity broadly evident across the animal kingdom—is one of the basic ways we organize our understanding of sound sequences.

**Week 6 (10/31–11/2)**
Music and emotion. Music and the emotions are often linked, so much so that for some people emotional responses to music—the way music might make us feel happy, or sad, or energized—are the reason why they listen to music in the first place. As with many things, emotional responses to music are quite complex and quite variable: the piece that makes you happy might make someone else sad, or leave someone else cold. Armed with the knowledge we’ve assembled in previous weeks, we’ll try to unpack this.

**Paper #2 due 11/4/22**

**Week 7 (11/7–11/9)**
Music and metaphor. Imagine making the claim that a piece of music doesn’t just make you feel blue, but that it is blue. Such a claim is an example of a metaphor, and research over the past three decades has shown that metaphors are an important way we organize our understanding of many of the things in the world around us, including music.

**Week 8 (11/14–11/16)**
Music and movement. Although getting up and bopping around to Beethoven is a response that will meet little approval in some contexts (such as Mandel Hall), for many people one of the primary ways to interact with music is through movement. These movements can include vague gestures, detailed dance steps, and everything in between. Such movements provide interesting keys to the nature of musical organization.

**Week 9 (11/28–11/30)**
Music and communication. Much depends on how one means “communication,” but there is strong evidence that music is a mode of communication—indeed, language—that provides a way for humans to interact with one another. Indeed, the independence of music from language suggests one reason why every known human culture has both music and language.

**Paper #3 due 12/5/22**

All the materials for the class—assignments, prompts for the papers, readings, recordings, videos (as needed)—will be available on the Canvas site for the class, which will also be the portal for submitting your short papers. I will generally try to make these materials available well in advance of when they will be needed. That said, it will occasionally be necessary to make adjustments to assignments, so please check the Canvas announcements for updates.

Because life is not complicated enough, please know that—because I’m chair of the Department of Music—I have two offices: Goodspeed 206 (which is where I will have office hours—the phone number is 2-8788) and Goodspeed 313 (which is where I spend countless hours answering emails—the phone number is 2-8500). If you can’t find me check with Claire Franksen at the third-floor desk—she usually knows where to find me.
Attendance in all class meetings is required (as is adequate preparation for these meetings), and late work will not be accepted for grade.

ACCOMMODATIONS: The University of Chicago is committed to ensuring the full participation of all students in its programs. Please speak with me privately about any disabilities that may require accommodations. As a first step, please consult with the Office of Student Disability Services (http://disabilities.uchicago.edu/) so that we can develop an appropriate plan (via an Accommodation Determination Letter) together. Student Disability Services is located at 5501 South Ellis Avenue.

TECHNOLOGY: Although I like my technology as well as the next person, it can oftentimes be distracting. With that in mind, we will try to have a (mostly) device-free classroom, save for projecting images or playing recordings, or when we really need to consult an electronic document.

🗖 Policies:

Late assignments are not accepted for grade.

Your final grade will be determined on the basis of the following distribution:

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<tr>
<th>Assignment</th>
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<td>Paper #1</td>
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<td>Paper #2</td>
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<td>Paper #3</td>
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<td>Participation (includes 1 visit to office hours)</td>
<td>30%</td>
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