A look at the development, representation and evolution of two of humanity’s most formidable generative systems: language and music. Languages are made up of words arranged into sentences; songs of notes arranged into melodies; both are “finite systems” with infinite possibilities. Each begins to emerge early in life – children start practicing syllables by the time they are five months old, and typically start singing during the second year of life. Is it a coincidence that the most musical creatures – humans, songbirds, whales and dolphins – are among the creatures that have the richest systems for communication? Or that the only creatures that can dance in time – humans, songbirds, and at least one elephant – are all vocal mimics? Is music just a form of language? Or is language just a form of music? Or are the two just fellow travelers? Readings will be drawn from a broad range of disciplines, including psychology, linguistics, music theory, evolutionary biology, and neuroscience. Requirements will include substantial weekly reading, a brief once-a-week reaction paper, and two to three class presentations.

Preliminary Calendar

24-Jan Introduction What is language, what is music, and what is the relation between the two?
31-Jan Innateness I Argument for Innateness in Language
7-Feb Innateness II Is there a music instinct?
14-Feb Domain-Specificity Language, music, and their relation to other aspects of cognition
21-Feb President's Day no class
28-Feb Learning Language and music as acquired skills
7-Mar Critical Periods How important is learning early?
14-Mar Spring Break no class
21-Mar Universals Universals in Language and Music
28-Mar Culture, Variability, and History What differs, between languages and cultures, and how have those differences been shaped over history?
4-Apr Computation and Representation Statistics and rules in language and music
11-Apr Parsing The on-line understanding of language and music
18-Apr Individual Differences and Expertise What does it take to become proficient?
25-Apr Brain The neural substrates of language and music
2-May Evolution The origins of language and music
9-May Coda Language versus music, redux

A more detailed syllabus will be available on the course Blackboard site.