

**FS/Ph 9. Freshman Seminar: The Science of Music.** *6 units (2-0-4); first term.* This course will focus on the physics of sound, how musical instruments make it, and how we hear, including readings, discussions, demonstrations, and student observations using sound analysis software. In parallel we will consider what differentiates music from other sounds, and its role physically and culturally. Students will do a final project of their choice and design, with possibilities including a book review, analysis of recordings of actual musical instruments, or instrument construction and analysis. *Freshmen only; limited enrollment.* Instructor: Politzer. Instructor's webpage: <http://theory.caltech.edu/~politzer>