

Music 160F Syllabus
Sound Color: Timbre and Music
University of California, Santa Barbara
Fall 2010

Professor: John Hajda
 Music 2312, jhajda@music.ucsb.edu
 Office Hours: M 10-11, Tu 10-11, W 11-noon or by appointment

Class Meetings: M W F, 1-1:50 p.m., Phelps 1160

Readings: Assigned as necessary. Distributed in class or online via direct link or E-res.

Description: "Sound color" refers to the quality or timbre of musical sound, whether instrumental, vocal, or synthetic. This course investigates timbre's special perceptual and cognitive qualities, as well as its unique expressive power in music. Qualitative and quantitative approaches will be used, and examples will be drawn from Western and non-Western folk, traditional and classical musical traditions.

The first half of this course will cover the basics of music perception and cognition, psychoacoustics and instrumental and vocal timbre research. This will provide the basis for the second half of the course, which will cover the use of timbre in music from around the world, as well as other academic-theoretical approaches to timbre. While this is not an orchestration class, the methods and material learned in this class will have applications in orchestration.

Prerequisite: No course prerequisites, although students are expected to be able to read Western music notation, should know certain music fundamentals such as intervals and scales and should be familiar with basic algebra and trigonometry and be able to compute simple mathematical, especially algebraic, equations.

Schedule of topics:

Week	Dates	Topics/Special notes
1	Sept. 24-29	Introduction and syllabus review; Introduction to empirical research and psychoacoustics
2	Oct. 1-6	Psychoacoustics
3	Oct. 8-13	Resonance; Source-filter model; Driver-generator-resonator model
4	Oct. 15-20	Vocal timbre
5	Oct. 22-27	Instrumental timbre
6	Oct. 29-Nov. 3	Midterm; Cultural manifestations of timbre
7	Nov. 5-10	Cultural manifestations of timbre
8	Nov. 12-17	Guest lecture: Laura Emmery, UCSB doctoral candidate in music theory; Cultural manifestations of timbre
9	Nov. 19-24	Cultural manifestations of timbre; Participate in graduate student projects
10	Nov. 29-Dec. 3	Student research project presentations; Review for final exam

Participation as class research subjects: Each student will be required to participate as a research subject for graduate students who are completing final projects in Music 260F. This participation will

constitute 10% of the student's final grade. If there are no final projects, then the final exam will be worth 60%.

Midterm: Friday, October 29

Final Exam: Thursday, December 9, 4-7 p.m., Music 1207. This exam will cover material from the entire quarter, although the majority of questions will be taken from material that will be presented after the midterm.

UCSB Holidays: Thursday, November 11 (Veterans Day), Thursday-Friday, November 25-26. No class or office hours that day.

Professor's Scheduled Absences: Professor Hajda is scheduled to be away on the following days:
Tuesday, November 9 – office hours cancelled
Friday, November 12 – Guest lecturer Laura Emmery will give a research presentation. Material from this presentation will be on the final exam.

Units and Grading: 3 units; Letter grades only.

Grading:	Class Attendance	10%
	Research subject	10%
	Midterm	30%
	Final exam	50%

Policy on Class and Midterm/Final Exam Attendance: Students are expected to attend all regularly scheduled class meetings. Attendance will be taken at the beginning of each class. Any student who misses the first three class sessions will be dropped from the course.

Starting on the fourth class meeting on October 1, students will receive 0.4% credit for attendance for each regular class meeting—excluding the midterm and final exam days—up to a cumulative total of 10%. Effectively, this means that a student may have one unexcused absence from a regular class meeting without penalty. All other absences from class must be excused by the professor *before* the day of that class.

Students are required to take the midterm and final exams on the days for which they are scheduled – see the “Midterm” and “Final Exam” sections above. If a student knows that s/he is going to miss a midterm or exam for a valid reason (e.g. illness, family emergency), s/he must notify the professor *before* the day of the midterm or exam in question and make arrangements for a make-up midterm or exam. A penalty will be applied for any unexcused absences from exams.

Modifications to the above syllabus may be announced by the professor at any time.