



THE UCLA HERB ALPERT SCHOOL OF MUSIC



**MUSIC MIND & BRAIN
MUSIC INDUSTRY 103**

SYLLABUS

SPRING TERM, 2013-2014 ACADEMIC YEAR

**Professor: Mark Jude Tramo, MD PhD
Location: Schoenberg Music Building, Room 1345
Time: April 2 - June 4, 2013, Wednesdays 6:30 – 9:30 PM
Course Website:**

<http://www.registrar.ucla.edu/schedule/detslect.aspx?termsel=14S&subareasel=MUS+IND&idxcrs=0103+>
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UPPER DIVISION COURSES

MUS IND 103. Music and Brain (4)

Seminar, three hours/wk; outside study, nine hours/wk.

This seminar takes an interdisciplinary approach to understanding brain mechanisms mediating music perception, performance, and cognition. Students' natural interest in music serves as springboard for learning basic concepts about how the brain works. The seminar focuses on specific themes such as harmony perception, rhythm perception and production, and creativity. The course is designed to help students understand methodologies currently used to investigate mind-brain correlates. Fundamental principles in neurophysiology, psychophysiology, and neuroanatomy that are relevant to basic research in cognitive neuroscience and auditory neuroscience are emphasized. After three foundational lectures by Professor Tramo, student study-groups present key papers from the literature as a team. There will be guest professors from neuroscience, music, and the music industry. Every week, there are written homework assignments that are based on the lectures. The final examination is take-home based on the homeworks and lectures. There is letter grading based on attendance/punctuality (20%), homework score (30%), final exam score (30%), presentation/participation (20%).

STUDENTS

Arts & Architecture

Ethnomusicology

Avinash Malaviya – Soph; Double Major = Life Sci - Neurosci; Instr = vocal/piano,
Seminar = Functional Neuroanatomy of Pitch Perception

Music

Yoorian Shin – Sr; Minor = Music Industry; Perf = Piano/Violin; Public Policy

Music History

Anh Le – Sr, Biology, Minor = Music History; piano

Kevin Nguyen – Jr, Chemistry/Biochemistry; Minor = Music History; Instr = piano,
guitar Seminar = Absolute vs. Relative Pitch Perception: Psychoacoustics
& Neuroanatomy

Aria Fariborzi – Jr.; Microbiol/Molecular Biology; Minor = Music History; Instr = piano, violin; Seminar: Magnetoencephalographic (MEG) Studies of Rhythm Perception

Letters & Sciences

Humanities - Art History

Juliana Ostro – Sr, piano; Seminar – Emotion, Brain & Music

Humanities – Comparative Literature

Stephanie Gorman – Sr, Art/Science Club, vocal/dance

Humanities – Philosophy

Keenan Park – Sr, piano, sax (Scribe)

Humanities – Linguistics

Kate Danker (Neurolinguistics) – Jr, vocals/percussion (Scribe); Seminar – Functional Neuroanatomy of Pitch Perception in Old World Monkeys

Life Sciences – Neuroscience

Olivia Hitchcock – Jr, guitar; Seminar – Split-Brain Studies of Harmony Perception

Clair (Lingxi) Xiong – Jr, violin

Life Sciences - Psychology

Omri Raccah – Jr, Cognitive Science, guitar; Seminar – A Neurocomputational Model of Harmony Perception

Sierra Kaslow – Sr, Psychology, guitar

Ruby Chang – Cognitive Science – Jr, flute, guitar, violin, perc

Gazelle Moinzadeh – Jr, Psychology

Michelle Do – Psychobiology, Soph, piano

Life Sciences – Human Biol & Society

Sameen Naqvi – Sr, Middle Eastern/NAfrican; piano, guitar; Seminar – Electroencephalographic Correlates of Positive vs. Negative Emotions Evoked by Music

Lindsay Valenti – Sr, (piano); Seminar – Music, Health & Medicine

Life Sciences – Microbiol Immunol & Molec Genetics

Prisca Lu – Sr, piano; Seminar – Functional Neuroanatomy of Melody Perception

Aria Fariborzi – Jr, piano, violin (Scribe)

Life Sciences – Integrative Biology & Physiology

Derek Podimatis - Jr, sax, piano, guitar, digital sound; Neural Coding of Pitch and Harmony

Life Sciences – Ecology & Evolutionary Biology

Anh Le – Biology, Sr, piano (Music Hx) (Scribe) (Rhythm Perception and Multimodal Integration in Infants)

Life Sciences – Molecular Biology

Caitlin Lopez, Jr, trumpet (Scribe); Seminar – Cognitive Psychology of Tonal Information Processing in Music

Social Sciences – Anthropology

Megan Aguilin, Sr

Social Sciences – Communication

Cheechee Lin, Fr, piano, perc; Seminar – Neural Coding of Pitch

Business - Economics

Hyun Kyu Park, Soph, guitar

Natural Sciences

Physics

Rob Loughran – Jr, piano, guitar; Seminar – Neural Coding of Pitch

Chemistry – Biochemistry

Kevin Nguyen (Music Hx), Jr, piano, guitar