Advanced Research Methods in Auditory Cognitive Neuroscience
(PSYC / NS&B 398)

Instructor: Psyche Loui

Office Hours: TR 4:15 – 5:15pm or by appointment in Judd 002
Meeting hours: TR 10:30 – 11:50
Class location: Allbritton 113

Lab location: Judd 023
Lab Manager: Jan Iyer

Description
This course provides in-depth training on the methods of auditory cognitive
neuroscience. We will review contemporary studies in auditory cognitive neuroscience,
specifically in speech, language, and music. Students will design and implement a
group project, learn to analyze the data, and write up the results in an end-of-term
paper.

Course Registration
Enrollment in this course is by Permission Of Instructor during the pre-registration
period. If you would like to enroll, please send an email to ploui@wesleyan.edu with
your name, class year, major, previous relevant courses you have taken, and a brief
explanation on why you want to take the course. To secure your place in the course,
please be sure to come to the first day of class.

Course Materials
Readings, experimental software, and other course material will be posted on the course
website on Moodle throughout the course.
Additionally, experimental software, tutorial packages, and data will be posted in the
lab Dropbox folder (MIND Lab Wes).

Projects
Emotion and reward
Imagination and creativity
Training brain plasticity
Empathy in social interactions

Course schedule (Note: Approximate schedule only; actual schedule will depend on
progress of projects)
9/2 – 9/9        Assignment of group projects
9/9 – 9/25       Literature review and meta-analysis
9/25 – 10/14     Experiment design and piloting
10/14 – 11/20    Data collection and analysis
11/20 – 12/12    Final write-up (group paper)

Course expectations
You will receive a key to the lab. At the end of the semester, in order to receive your
grade you must return the key, or make other arrangements with the instructor.
You are expected to spend around 10 hours per week on projects in the lab. This does not include time spent in class.

**Evaluation**
Your final grade will be based on the following:
- 20% Attendance and participation
- 20% Literature review and meta-analysis
- 20% Data collection
- 40% Project (Proposal 10% + Design and Analysis 10% + Paper 20%).

Please read the Wesleyan Honor Code and abide by it closely (www.wesleyan.edu/studentaffairs/honorboard/honorcode.html).

**Example readings for literature review**

**Disability Resources**
Wesleyan University is committed to ensuring that all qualified students with disabilities are afforded an equal opportunity to participate in and benefit from its programs and services. To receive accommodations, a student must have a documented disability as defined by Section 504 of the Rehabilitation Act of 1973 and the ADA Amendments Act of 2008, and provide documentation of the disability. Since accommodations may require early planning and generally are not provided retroactively, please contact Disability Resources as soon as possible.