

**Psychophysiology Laboratory**  
**PSY 401B/501B**  
**Some Wednesdays 3-5 pm**  
**Room 321 Psychology**  
**Spring 2019**

**Supervising Instructor:** John JB Allen (John.JB.Allen@Arizona.edu)

**Laboratory Teaching Assistant:** Michael Medrano (michae18@email.arizona.edu)

**Laboratory Location:** Although didactic sessions will begin in room 321, we will then move to the laboratory for demonstrations. This is also where you will collect data. The *Psychophysiology Laboratory*, room 409 Psychology, is a research laboratory, but times will be made available for class members to conduct experiments, under the supervision of the teaching assistant.

**Meeting Times and Important Dates**

<u>Lab Mtg</u>	<u>Topic/Report Due</u>
Jan 23 4:00-5:00	Lab Introduction & Tour
Feb 13 3:00-5:00	Skin Conductance (2/27)
Mar 13 3:00-5:00	Cardiovascular/EMG (3/27)
Apr 3 3:00-5:00	EEG (4/17)
Apr 17 3:00-5:00	ERP (5/1)

**Course Objective:** *Psychophysiology Laboratory* must be taken concurrently with PSY 401A/501A, *Psychophysiology Seminar*. The objective of the laboratory is to provide a pragmatic "hands-on" experience in psychophysiological recording and analysis. The laboratory will involve learning the many facets of psychophysiological signal acquisition and analysis.

**Learning Outcomes:** Four experiments (listed below) will be conducted, each involving different response systems, offering you the opportunity to gain experience acquiring, analyzing, and interpreting autonomic and electrocortical psychophysiological measures.

**Evaluation** For each experiment, students will be required to write an APA-style method and results section. These four papers will form the basis of your grade for the lab. Each will be graded on a 10 point scale and a rubric will be provided.

**Experiments to be conducted**

- Experiment 1: Skin-conductance Guilty Knowledge Technique
- Experiment 2: Electrocardiographic (EKG) responses to stress/emotion
- Experiment 3: Frontal electroencephalographic (EEG) spectral changes
- Experiment 4: Event-related brain potentials (ERPs)

**Readings:**

Readings will be provided as required in addition to the following, which should be read in advance of the first laboratory session (available from [reading list for downloads](#) on class website):

Greene, W.A., Turetsky, B., & Kohler, C. (2000). . In J.T. Cacioppo, L.G. Tassinary, & G.G. Berntson, G.G. (Eds.). *Handbook of Psychophysiology* (2nd edition; pp. 951-977). Cambridge, UK: Cambridge University Press. (NOTE THIS IS AN OLDER EDITION OF THE TEXT)

**Absences**

It is imperative that you be present all lab sessions. Please review university policy about accommodations for sincerely held religious beliefs. Absences pre-approved by the Dean of Students will be honored.

<http://policy.arizona.edu/human-resources/religious-accommodation-policy>

**Late Assignments**

No late work will be accepted except in the most extreme of cases. This will be handled at the discretion of the instructor. If you anticipate not being able to make a deadline due to extreme and extraordinary circumstances, please let us know.

**Academic Dishonesty**

Please do not cheat. Cheating will be investigated and reported to Dean of Students resulting in a failing grade for this course as well as other potential consequences (expulsion, mark on transcript, revocation of your degree, etc.) Familiarize yourself with the Academic Integrity policy here: <https://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity>

And the University's policies regarding plagiarism:

<http://www.library.arizona.edu/help/tutorials/plagiarism/>

**Course Materials**

Please ask me and/or Dr. Allen before using any of the course materials for any purpose other than studying for this class. This includes but is not limited to lectures, slides, experiment protocols, and syllabus.

**Students with Disabilities**

If you anticipate issues related to the format or requirements of this course, please meet with the instructor. We would like to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; [drc.arizona.edu](http://drc.arizona.edu)) and notify us of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations

**Other university classroom policies:****Non-Discrimination and Anti-Harassment Policy**

<http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

**Threatening Behavior by Students**

<http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>