

**Psychophysiology Laboratory**  
**PSY 501B**  
**Some Wednesdays 3-5 pm**  
**Spring 2025**

**Instructor:** John JB Allen (jallen@arizona.edu)

**Laboratory Assistants:**

Kelly Chen: kgchen@arizona.edu

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**Laboratory Location:** We will begin our meetings in room 323 Psychology and then move to the laboratory (room 409 Psychology) for hands-on demonstrations as needed.

**Meeting Times and Important Dates**

<u>Lab Mtg</u>	<u>Topic/Report Due</u>
Feb 5 3:00-4:00	Lab Introduction & Tour
Feb 19 3:00-5:00	Skin Conductance (3/17)
Mar 19 3:00-5:00	Cardiovascular/EMG (3/7)
Apr 9 3:00-5:00	EEG (4/21)
Apr 23 3:00-5:00	ERP (5/5)

**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, to be submitted by the due date (above) on D2L. These four reports 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. Tassinari, & 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 at all lab sessions. Please review the 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/code-academic-integrity>

And the University's policies regarding plagiarism:

<https://lib.arizona.edu/research/write-cite/plagiarism>

**Accessibility and Accommodation**

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu>) to establish 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>