

Psychophysiology Laboratory
PSY 401B/501B
Some Wednesdays 3-5 pm
Spring 2021

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

Laboratory Teaching Assistant: Yaohui Ding (yaohuiding@email.arizona.edu)

Laboratory Location: Due to the Covid-19 pandemic, the didactic sessions will be online. **However**, if it is deemed safe by the university and the psychology department, we will have four in-person lab sessions. Even then, your participation is still voluntary as we will also offer a video demonstration of how each lab is done, in lieu of the in-person lab session.

Meeting Times and Important Dates

<u>Lab Mtg</u>	<u>Topic/Report Due</u>
Feb 3 3:00-4:00	Lab Introduction & Virtual Tour
Feb 10 3:00-5:00	Skin Conductance (3/3)
Mar 3 3:00-5:00	Cardiovascular/EMG (3/24)
Mar 24 3:00-5:00	EEG (4/14)
Apr 14 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. 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)

COVID-19 RELATED INFO AND POLICIES

1. The lab sessions are scheduled to be conducted in a **flex in-person** modality.
2. **Face coverings are required** while on campus: Per UArizona's Administrative Directive, face coverings that cover the nose, mouth, and chin are required to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). Any student who

violates this directive will be asked to immediately leave the learning space, and will be allowed to return only when they are wearing a face covering. Subsequent episodes of noncompliance will result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied. The student will not be able to return to the learning space until the matter is resolved.

3. **Physical distancing is required** in the lab: During our in-person lab meetings, we will respect CDC guidelines, including restricted seating to increase physical distancing and appropriately-worn face coverings.
4. For more information about UA's policies on Covid-19, please visit the following link.
<https://covid19.arizona.edu/>

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) 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>