PSYC 4100: Advanced Laboratory in Psychological Science

3 Credit Hours

Prerequisite: PSYC 2500 and PSYC 3000

In this course, students integrate research design and statistical concepts to develop an understanding of how research is conducted within the field of psychological science. Students learn the importance of the scientific method and gain hands-on experience with conducting and analyzing scientific research. Topics include selecting appropriate experimental and non-experimental designs to address different research questions, selecting appropriate statistical analyses based on the chosen research design, and practicing written and oral communication of the scientific process. These concepts will be applied to areas within psychological science with a focus on cognitive psychology, learning and behavior, perception, and physiological psychology.

PSYC 4345: Learning and Behavior

3 Credit Hours

Prerequisite: PSYC 2500 and PSYC 3000

This course offers an introduction to the various learning mechanisms that influence the establishment, maintenance, and/or reduction of behaviors in both humans and nonhuman animals. The course focuses on linking processes and theories of classical and operant conditioning to everyday behaviors.

PSYC 4400: Directed Study in Psychology

1-3 Credit Hours

Prerequisite: PSYC 2500; approval of the instructor and department chair; minimum of 3.0 GPA. This course is offered to students interested in investigating special topics and seminars external to regular course offerings. May include original research projects. A maximum of 6 hours of PSYC 4400 may be used towards satisfying the upper division major requirements. A maximum of 9 hours of PSYC 4400 is permitted overall.

PSYC 4410: Physiological Psychology

3 Credit Hours

Prerequisite: PSYC 2500

This course addresses the relationship between our underlying physiological systems and behavior. The topics investigated include neural communication, the anatomy of the nervous system, and the biological bases of sleep, reproductive behavior, stress, learning and memory, and mental disorders.