Psychology Department Learning Goals and Outcomes

What are the biological mechanisms linking psychological stress to physical health? Does a jury’s verdict vary as a function of whether the defendant looks old or young for her age? When we concentrate harder to listen to someone in a noisy environment, is it then harder to remember what he has said? Do vulnerable children sometimes grow to become both bullies and victims? How can an astronaut’s adaptation to the weightlessness of space help older adults maintain their sense of balance and reduce the frequency of falls? Do we pay attention to different aspects of information that we encounter in the world as a function of our cultural background? Through coursework, research involvement, and applied experience, the Department of Psychology offers students the opportunity to explore questions like these. Students develop a strong scientific and research foundation for pursuing whatever aspects of experience and behavior pique their curiosity, and in the process they become thoughtful and discerning problem solvers. The program examines the most up-to-date psychological research and theory and also provides opportunities for direct involvement in clinical, mental-health, business, and educational applications of psychology.

The focus of the department is on basic scientific research and emphasizes a high level of undergraduate involvement. Our faculty conducts research in diverse areas including cognitive science, normal and abnormal development, social interaction, health and well-being, spatial orientation, sensation, perception, memory, emotion, life-span development and aging, and the effects of brain damage. Students can start to work on projects with psychology faculty as early as sophomore year and can obtain research and/or applied experience via: (1) informal volunteer work in a laboratory or professional setting; (2) registration in a formal course taught by a specific professor; or (3) an independent research project or honors thesis, some of which are funded by department grants. Psychology majors also study varied aspects of both basic and applied areas of the field. The two-semester clinical psychology practicum enables students to obtain supervised experience in actively helping roles as volunteers and assistants in social service, educational, and mental-health programs.

Knowledge Goals

- Acquire a broad overview of the philosophical origins and historical development of psychology as a science.
- Understand the basic concepts that characterize psychology as a field of scientific inquiry and appreciate the various subfields of the discipline that range from personality to cognitive neuroscience.
- Understand the overlap of psychological concepts and methods with diverse academic disciplines and professions spanning the reductionist continuum from the humanities to the physical sciences.
- Become familiar with the range of methods used to investigate behavior and experience.
- Develop an understanding and an appreciation of how learning and biology jointly shape behavior and experience.
- Understand the neural, developmental, social, and environmental bases of diversity among individuals.
- Develop competence in reading and evaluating original scientific papers.
● Become familiar with the basic concepts of statistics and develop skills for evaluating information from a statistical perspective and for using various statistical computer programs (e.g., SPSS, SAS, Excel) to analyze data.

● Apply behavioral/psychological mechanisms and principles to the understanding of everyday problems.

● Develop an awareness of the parameters, principles, and importance of ethical conduct in researching behavior and in applying our understanding to everyday problems.

**Core Skill Goals**

● Objectively observe and think critically about the world, including the behavior of self and others, the ethical conduct of scientific research, and the application of our understanding to everyday experience.

● Read and write about research articles accurately, abstract their essential ideas, and understand their implications and limitations.

● Acquire competence in interpreting graphical data to understand what is being compared/manipulated (independent variables) and what is being measured (dependent variables).

● Develop skills to critically evaluate the presentation of scientific ideas and research in the professional literature and in the popular media.

● Design and conduct empirical research, including critical analysis of relevant literature, formulation of a testable hypothesis, design of valid and reliable data collection methods, application of appropriate statistical analysis and interpretation of findings, and the written and oral communication of findings.

● Generate applications of theory and empirical research to personal experience and community problem-solving.

● Achieve decision-making competence by applying the methods and quantitative reasoning of psychology to critical life choices.

● Through participation in collaborative research projects, acquire effective skills of working with others in joint ventures.

**Social Justice/ Graduation Goals**

● Translate learning about theoretical, empirical, and applied findings into an appreciation of the everyday experience of self and others.

● Become familiar with the basic measurement and statistical tools that are essential for applying research to everyday life and for optimizing positive outcomes for both society and the individual.

● Understand and abide by the ethics of psychology, including the recognition of and respect for socio-cultural complexity and international diversity.

● Develop realistic ideas about how to pursue careers in psychology and related fields like law, medicine, and business.