

Psychology

Professor Cormack

Associate Professors Holson (Chair of the Department), Samuels

Degree Offered: B.S. in Psychology

The program in psychology is designed to provide students with a scientific foundation in the methods and basic data in psychology and to prepare students for further work in all specializations within the field. Students acquire the fundamentals of learning and memory, intelligence, perception, feelings and emotions, attention, thought, language and communication, the development of all these processes and their pathology, the application of psychology to other fields, as well as techniques for measuring and studying psychological variables. Students conduct laboratory experiments on the psychological and physiological bases of behavior. The department has a modern animal care facility for laboratory classes and research. There are many opportunities for independent research.

Undergraduate Program

Bachelor of Science in Psychology

Minimum credit hours required—130

In addition to the general degree Requirements (page 54), the following courses are required:

- PSY 121 (3); 205 (4); 471 or 472 (1)
- Two courses (with associated labs) chosen from among PSY 301 (4), 305 (4), 309 (4)
- 15 additional credit hours in psychology
- BIOL 111 (4), 112 (4), and at least six (6) upper-division credits in Biology, exclusive of BIOL 471 or 472
- MATH 283 (3) or 483 (3)
- CS 111 (4)
- Electives to complete 130 credit hours

Students intending to major in psychology should complete PSY 121 and 205 by the end of their sophomore year. They are advised to complete the biology and mathematics requirements as early as possible since material from these courses will be used in upper-division courses.

Sample Curriculum for the Bachelor of Science in Psychology

Semester 1

- 3 PSY 121 (general)
- 3 ENGL 111 (college English)
- 4 MATH 131 (calculus)
- 4 CHEM 121 & 121L (general)

14 Total credit hours

Semester 2

- 4 PSY 205 (experimental)
- 3 ENGL 112 (college English)
- 4 MATH 132 (calculus)
- 4 CHEM 122 & 122L (general)

15 Total credit hours

Semester 3

- 3 PSY 212 (drugs and behavior)
- 3 PSY 323 (developmental)
- 5 PHYS 121 & 121L (general)
- 4 BIOL 111 (general)
- 3 MUS 105 (fundamentals)

18 Total credit hours

Semester 4

- 3 PSY 209 (social)
- 3 MATH 283 (statistics)
- 5 PHYS 122 & 122L (general)
- 4 BIOL 112 (general)
- 3 Elective

18 Total credit hours

Semester 5

- 4 PSY 301 (perception)
- 3 HIST 151 (world history I)
- 3 BIOL 331 (cell biology)
- 3 PHIL 231 (introduction)
- 4 CS 111 (introduction)

17 Total credit hours

Semester 6

- 4 PSY 305 (learning, memory, and cognition)
- 3 HIST 152 (world history II)
- 4 BIOL 351 (physiology)
- 3 ENGL 341 (technical writing)
- 3 Elective

17 Total credit hours

Semester 7

- 4 PSY 309 (physiological)
- 3 PSY 330 (abnormal)
- 9 Electives

16 Total credit hours

Semester 8

- 1 PSY 472 (seminar)
- 3 PSY 400 (history)
- 11 Electives

15 Total credit hours

Minor in Psychology

Minimum credit hours required—20

The following courses are required:

- PSY 121 (3), 205 (4)
- PSY 301 (4) or PSY 305 (4) or PSY 309 (4)
- Additional nine (9) credit hours in psychology

Psychology Courses

The following courses may be used to fulfill the Social Science portion of the General Degree Requirements, page 54.

PSY 121, General Psychology, 3 cr, 3 cl hrs

The study of behavior. Includes perception, motivation, learning, personality, social processes, and physiological processes. [NMCCNS PSYC 1113: General Education Area IV]

PSY 205, Experimental Psychology, 4 cr, 3 cl hrs, 2 lab hrs

Prerequisite: PSY 121; a lab usage fee is charged

Basic concepts and research methodology in the study of behavior; emphasis on experimental design, control, and laboratory methods.

PSY 209, Social Psychology, 3 cr, 3 cl hrs

Prerequisite: PSY 121

Study of the manner by which the behavior of one individual is influenced by the behavior and other characteristics of others. Includes social perception and cognition, attitudes, prejudice, interpersonal attraction, cooperation, group behavior, and aggression.

PSY 212, Drugs and Behavior, 3 cr, 3 cl hrs

Prerequisite: PSY 121

An overview of the design and interpretation of psychopharmacological research; emphasis on self-administered drugs as well as addictions and treatment.

PSY 301, Perception, 4 cr, 3 cl hrs, 2 lab hrs

Prerequisites: PSY 205; a lab usage fee is charged

Experimental and theoretical study of sensory mechanisms and perceptual processes.

PSY 305, Cognitive Psychology, 4 cr, 3 cl hrs, 2 lab hrs

Prerequisites: Psychology 205 passed with a C- or better; a lab usage fee is charged.

A study of research findings, major issues and theories of mental processes. Topics include attention, learning, memory, imagery, concept formation, language and its development, thinking, problem solving and decision making. The laboratory is designed to give students the opportunity to explore the experimental bases of cognitive processes.

PSY 309, Behavioral Neuroscience, 4 cr, 3 cl hrs, 2 lab hrs

Prerequisites: Psychology 205 passed with a C- or better; Biology 111, 112; a lab usage fee is charged

Study of the neural and other physiological bases of behavior. Functional neuroanatomy of sensory and motor systems, motivation and drives, learning and emotion. Clinical correlates of neurological abnormalities are emphasized. Laboratory concentrates on the neuroanatomy of sheep, rat and human brain.

PSY 311, Tests and Measurements, 3 cr, 3 cl hrs

Prerequisite: PSY 121

Design, administration, interpretation, and evaluation of psychological and educational tests. Includes measurement theory as well as practical techniques.

PSY 312, Psychopharmacology, 3 cr, 3 cl hrs

Prerequisites: PSY 212; BIOL 111, 112

Behavioral and pharmacological techniques for the study of drugs acting on the nervous system. Topics include sites of drug action, CNS toxicity, psychotherapeutics, and experimental designs employed in psychopharmacological research.

PSY 323, Psychology of Child and Adolescent Development, 3 cr, 3 cl hrs

Prerequisite: PSY 121

The development of human behavior from conception to adolescence. Includes cognitive, social, behavioral, and physical development.

PSY 324, Psychology of Adult Development and Aging, 3 cr, 3 cl hrs

Prerequisite: PSY 121

The development of human behavior from early adulthood to old age. Cognitive, social, behavioral, emotional, and physical development. Life tasks, careers, physical and emotional health, leisure, dying, and death.

PSY 330, Abnormal Psychology, 3 cr, 3 cl hrs

Prerequisite: PSY 121

An introduction to psychopathology. Includes the etiology, diagnosis, treatment, and prognosis of behavioral disorders.

PSY 350, Psychobiology of Sex, 3 cr, 3 cl hrs

Prerequisite: PSY 121 or consent of instructor

Sexual reproduction in a broad evolutionary context. Topics include sexual and asexual reproduction, sexual selection, the endocrinology of mammalian reproduction, development of the reproductive system and sexually differentiated behaviors, sex differences in the brain, and human behavioral sex differences.

PSY 362, Animal Behavior, 3 cr, 3 cl hrs

Prerequisites: PSY 121 or consent of instructor

General overview of ethological and physiological approaches to the study of animal behavior. (Same as BIOL 362)

PSY 376, Mass Violence and Aggression, 3 cr, 3 cl hrs

Prerequisite: Upper-division standing or consent of the instructor

This course examines the nature and dynamics of mass violence and aggression, and their impact on politics and societies. Through lectures and readings the students explore and compare political, sociological and psychological dimensions of genocides, state terror, and ethnic cleansing. (Same as HIST 376)

PSY 389, Special Topics in Psychology, cr and hrs to be arranged**PSY 391, Directed Study, hrs and cr to be arranged**

Prerequisite: Upper-division standing in psychology

Supervised individual work in psychology. May be repeated for more than one semester's work.

PSY 400, History of Psychology, 3 cr, 3 cl hrs

Prerequisite: Nine hours in psychology

Study of central questions and concepts of psychology from their origins in classical philosophy and medicine to modern times.

PSY 472, Senior Seminar, 1 cr, 1 cl hr each semester

Prerequisite: Upper-division standing or consent of instructor

Review and discussion of current research in psychology.

Faculty Research Interests

Cormack—Psychophysics, Visual Perception, Sensory Mechanisms

Holson—Developmental Neurobiology, Neurotoxicology, Behavioral Teratology

Samuels—Cognitive Development, Reasoning and Problem Solving, Memory, Brain Injury and Rehabilitation