

PSYCHOLOGY AND NEUROSCIENCE

Psychology and neuroscience are comprehensive and versatile majors, providing an educational foundation for advanced study in any field. Psychologists bring diverse and sophisticated methods to bear on understanding human behavior and the world in which we live. We offer a well-rounded education in all of the major subfields of psychology, with a wealth of opportunities for hands-on clinical and research experience, overseas study, and mentoring with professors. Undergraduate students are offered a broad range of opportunities to work closely with professors outside of the classroom, in their labs, in community agencies, and on individual honors and research projects.

Our majors have gone on to establish themselves in a range of professions. They've become scientists, physicians, lawyers, academics, clinicians, and teachers, among a host of other chosen professions. We've placed students in top jobs and graduate programs across the country.

- Pre-Psychology, B.A. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/pre-psychology-ba/>)
- Psychology, B.A. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/psychology-ba/>)
- Pre-Psychology, B.S. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/pre-psychology-bs/>)
- Psychology, B.S. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/psychology-bs/>)
- Pre-Neuroscience, B.S. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/pre-neuroscience-bs/>)
- Neuroscience, B.S. (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/psychology-neuroscience/neuroscience-bs/>)

Psychology (PSY)

PSY 1101 New Student Experience in Psychology and Neuroscience (1)
Cross-listed as NSC 1101

An introduction to the PSY and NSC majors including the faculty and degree requirements of their major, techniques for academic success, and professional and career options. Satisfies U1000 requirements, and is required of all first-year students with a declared major in Pre-PSY or Pre-NSC.

PSY 1305 Psychological Science: Understanding Human Behavior (3)
A survey course investigating the connections among mind, brain, and behavior.

PSY 1V9R Research (3)

Pre-requisite(s): Consent of the instructor
Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

PSY 2402 Statistics (4)

Pre-requisite(s): PSY 1305 and a C or better in either MTH 1320, MTH 1321, or STA 1380

An introduction to descriptive and inferential statistics used in behavioral science research. Emphasis is placed on techniques of data analysis through the use of computers.

PSY 2405 Research Methods in Psychology (4)

Pre-requisite(s): PSY 1305 and 2402

Research methods used in psychology, including various research designs, appropriate statistical analyses for the research designs, and writing reports using APA style.

PSY 2V9R Research (3)

Pre-requisite(s): Consent of the instructor

Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

PSY 3101 Peer Leadership and Mentoring (1)

Cross-listed as NSC 3101

Pre-requisite(s): PSY/NSC 1101 and PSY 1305 or NSC 1306, With grades of B or better

Instructor approval required. Application of leadership, mentoring, and pedagogical techniques, and the practice of student engagement in a classroom setting. May be repeated once for credit.

PSY 3111 Laboratory in Cognition (1)

Cross-listed as NSC 3111

See NSC 3111 for course information.

PSY 3120 Laboratory in Learning and Behavior (1)

Cross-listed as NSC 3120

See NSC 3120 for course information.

PSY 3123 Laboratory in Sensation and Perception (1)

Cross-listed as NSC 3123

See NSC 3123 for course information.

PSY 3308 Theories of Psychotherapy and Counseling (3)

Pre-requisite(s): PSY 1305 and 2402

The major schools and current trends in psychotherapy. Discussion also includes issues involving ethical practices and empirical aspects of psychotherapy.

PSY 3309 Introduction to Clinical Psychology (3)

Pre-requisite(s): PSY 1305 and 2402

Students will learn about models of training in clinical psychology and the basic tools used by clinical psychologists in research, assessment/diagnosis, and treatment.

PSY 3310 Social Psychology (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor

A study of individual behavior as affected by cultural and social stimuli.

PSY 3311 Cognition (3)

Cross-listed as NSC 3311

See NSC 3311 for course information.

PSY 3314 Industrial/Organizational Psychology (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor

A survey of personnel and organizational psychology. Topics include job satisfaction, leadership, formal organizational structures and issues relevant to the human relations field.

PSY 3318 Psychology of Memory (3)

Pre-requisite(s): NSC 1106-1306, PSY 1305 and 2402 or consent of instructor

An introduction to the study of human memory, including both laboratory studies and clinical data. This information will be related to major contemporary theories of memory, as well as to a range of phenomena including mnemonics, eyewitness testimony, retention of course content, and supranormal memory. Demonstrations and experiments will complement lecture material.

PSY 3320 Learning and Behavior (3)

Cross-listed as NSC 3320

See NSC 3320 for course information.

PSY 3321 Abnormal Psychology (3)

An introduction to historical and modern views of abnormal behavior and a survey of the field of psychological disorders. For non-majors only.

PSY 3323 Sensation and Perception (3)

Cross-listed as NSC 3323

See NSC 3323 for course information.

PSY 3330 Psychopathology (3)

Pre-requisite(s): NSC 1106-1306 and PSY 1305

The paradigms and processes involved in understanding the etiology, course, treatment, and prevention of psychological disorders. For majors only.

PSY 3333 Biopsychology of Health Disparities (3)

Pre-requisite(s): PSY 1305

The study of the biopsychosocial factors leading to socioeconomic health disparities.

PSY 3335 Child Psychopathology (3)

Pre-requisite(s): PSY 1305

Introduction to the field of abnormal child and adolescent psychology, including the causes, maintenance, and treatment of children's behavioral, social-emotional, and cognitive disorders from a developmental perspective.

PSY 3341 A Survey of Human Development (3)

A survey of the field of developmental psychology. Consideration is given to the development of human behavior from conception to death. For nonmajors only.

PSY 3350 Developmental Psychology (3)

Pre-requisite(s): NSC 1106-1306 and PSY 1305

Social, emotional, cognitive, and psychological growth and development. For majors only.

PSY 3355 Drugs and Behavior (3)

Pre-requisite(s): NSC 1306 or consent of instructor

A study of the major drugs used to modify mood and behavior examination of tolerance, dependence, addiction, and treatment. Substances studied include alcohol, anti-psychotic medications, sedatives, stimulants, analgesics, hallucinogens, and other psychoactive substances.

PSY 3360 Psychology of Gender (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor

Introduction to the psychology of gender, with focus on interconnections of social and cultural processes with biological and psychological factors. Additional emphasis on psychological and sociological origins and implications of gender differences as well as similarities.

PSY 3370 Affective Neuroscience (3)

Cross-listed as NSC 3370

See NSC 3370 for course information.

PSY 3375 Sleep (3)

Cross-listed as NSC 3375

Pre-requisite(s): NSC 1306

The psychology and neuroscience underlying healthy sleep, the effects of sleep deprivation on medical outcomes, changes in sleep across the lifespan, sleep disorders, and solutions for improving sleep.

PSY 3380 Forensic Psychology (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor

Psychology as it relates to criminal and civil law.

PSY 3399 Positive Psychology and Well-Being (3)

Pre-requisite(s): PSY 1305 and 2402

Positive psychology theory, research, and interventions.

PSY 3406 Comparative Psychology (4)

Pre-requisite(s): NSC 1106-1306, PSY 1305 and 2402 or consent of instructor

A phylogenetic comparison of animal behavior. Class and field studies stress evolution and the function of behavior. The laboratory consists of four overnight or day field trips which emphasize studies of animal populations, their relationships to local environments, habitat analysis, and ecological research methods.

PSY 3V90 Community Internship in Psychology (1-3)

Pre-requisite(s): PSY 3321 or 3330 or consent of instructor

A contracted number of forty, eighty, or one hundred-ten hours of volunteer work during the semester in a community agency dealing with behavioral problems for the one, two, or three semester hours credit respectively. The course may be repeated once. No change in number of credit hours permitted after contract is made.

PSY 3V9R Research (3)

Pre-requisite(s): Consent of the instructor

Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

PSY 4119 Laboratory in Clinical Neuroscience (1)

Cross-listed as NSC 4119

See NSC 4119 for course information.

PSY 4130 Advanced Laboratory in Neural Science (1)

Cross-listed as NSC 4130

See NSC 4130 for course information.

PSY 4302 Human Development (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor

Research related to human growth and development.

PSY 4312 Behavioral Medicine (3)

Cross-listed as MH 4312, NSC 4312

See NSC 4312 for course information.

PSY 4315 Psychological Assessment and Psychometrics (3)

Pre-requisite(s): PSY 2402

Commonly employed psychological tests and the statistical techniques used to develop and validate these tests.

PSY 4317 Literature of Behavioral Neuroscience (3)

Cross-listed as NSC 4317

See NSC 4317 for course information.

PSY 4319 Clinical Neuroscience (3)

Cross-listed as NSC 4319

See NSC 4319 for course information.

PSY 4324 Research on the Senses and Perception (3)

Cross-listed as NSC 4324

See NSC 4324 for course information.

PSY 4325 Sports and Exercise Psychology (3)

Pre-requisite(s): PSY 1305 or consent of instructor
Examines psychological theories and research related to sport and exercise behavior, providing a broad overview of the major topics in the area.

PSY 4327 Theories of Personality (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor
Major theories of personality.

PSY 4330 Advanced Principles of Neural Science (3)

Cross-listed as NSC 4330
See NSC 4330 for course information.

PSY 4339 Psychology of Religion (3)

Pre-requisite(s): PSY 1305 or consent of instructor
Psychological processes in religious experience and related phenomena with a focus on religious development through the life cycle and the major psychological interpretations.

PSY 4355 Psychology and Aging (3)

Pre-requisite(s): PSY 1305 or consent of instructor
Normal and abnormal changes in behavior that occur between early maturity and later maturity, with emphasis on changes in sensation and perception, intelligence, learning, and personality, as well as other areas of a more social psychological nature such as social roles and the impact of environmental change on older people.

PSY 4371 Advanced Research in Psychology (3)

Pre-requisite(s): Consent of instructor
An in-depth laboratory research experience in psychology as supervised by a faculty mentor.

PSY 4380 Psychology of Personal Relationships (3)

Pre-requisite(s): PSY 1305 and 2402; and upper-level standing
Classic and contemporary theories and research pertaining to personal and social relationships.

PSY 4385 Psychology of Film (3)

Pre-requisite(s): PSY 1305 and upper-level standing, or consent of instructor
The psychological aspects of film, as related to content, audience, and individual viewers. Also covers the portrayal of mental illness and mental health care professionals.

PSY 4394 Introduction to Systematic Reviews and Meta-Analysis (3)

Pre-requisite(s): PSY 4400 or consent of instructor
Intermediate course focusing on qualitative and quantitative integration of research.

PSY 4395 History of Psychology (3)

Pre-requisite(s): PSY 1305 and 2402 or consent of instructor
A survey of the history of psychology stressing significant persons and theories with some emphasis on contemporary and emerging trends.

PSY 4400 Advanced Statistics I (4)

Pre-requisite(s): PSY 2402 or STA 2381 or equivalent; and upper-level standing
Logical nature of statistical reasoning. Sets, probability, density functions, random variables and their distributions, estimation and hypothesis testing.

PSY 4V96 Special Topics in Psychology I (1-4)

Pre-requisite(s): Consent of instructor
Course may be repeated once with change in content.

PSY 4V9R Research (3)

Pre-requisite(s): Consent of the instructor
Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

Neuroscience (NSC)**NSC 1101 New Student Seminar in Psychology and Neuroscience (1)**

Cross-listed as PSY 1101
See PSY 1101 for course information.

NSC 1106 Introduction to Neuroscience Laboratory (1)

Pre-requisite(s): NSC 1306 or concurrent enrollment
Laboratory experiments illustrating procedures in neuroanatomy, behavioral neuroscience, animal learning and behavior, and human sensation and perception.

NSC 1306 Introduction to Neuroscience (3)

An introduction to the biological bases of human and animal behavior. Emphasis is placed upon neuroanatomical, neurophysiological, and behavioral methodologies which contribute to an understanding of brain-behavior relationships.

NSC 1V9R Research (3)

Pre-requisite(s): Consent of the instructor
Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

NSC 2306 Research Methods in Neuroscience (3)

Pre-requisite(s): NSC 1306 with a grade of B or better
An introduction to fundamental principles, techniques, and procedures that underlie neuroscience research.

NSC 2V9R Research (3)

Pre-requisite(s): Consent of the instructor
Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

NSC 3101 Peer Leadership and Mentoring (1)

Cross-listed as PSY 3101
See PSY 3101 for course information.

NSC 3111 Laboratory in Cognition (1)

Cross-listed as PSY 3111
Pre-requisite(s): NSC 3311 or concurrent enrollment
Laboratory experiments illustrating methods and procedures in cognitive psychology.

NSC 3120 Laboratory in Learning and Behavior (1)

Cross-listed as PSY 3120
Pre-requisite(s): NSC 3320 or PSY 3320 or concurrent enrollment
Laboratory experiments illustrating methods and procedures in learning and behavior.

NSC 3123 Laboratory in Sensation and Perception (1)

Cross-listed as PSY 3123
Pre-requisite(s): NSC 3323 or PSY 3323 or concurrent enrollment
Laboratory experiments illustrating methods and procedures in sensation and perception.

NSC 3311 Cognition (3)

Cross-listed as PSY 3311
Pre-requisite(s): NSC 1106-1306, and either PSY 2402 or MTH 1321; or consent of instructor
Introduction to the structures and processes involved in human cognition, including thinking, problem solving, language, attention, and memory.

NSC 3320 Learning and Behavior (3)

Cross-listed as PSY 3320

Pre-requisite(s): NSC 1106-1306, and either PSY 2402 or MTH 1321 or consent of instructor

An examination of human and animal learning and behavior within a nature-nurture framework.

NSC 3323 Sensation and Perception (3)

Cross-listed as PSY 3323

Pre-requisite(s): NSC 1106-1306, and either PSY 2402 or MTH 1321 or consent of instructor

An introduction to the anatomical, physiological, motivational, and cognitive factors which determine conscious sensory and perceptual experience.

NSC 3370 Affective Neuroscience (3)

Cross-listed as PSY 3370

Pre-requisite(s): NSC 1306 and 1106

Explores the underlying neural circuits important for normal and abnormal emotional behavior and experience. Focus on neuroimaging studies of human disorders for which there is a critical mass of data regarding the neural underpinnings of psychopathology.

NSC 3375 Sleep (3)

Cross-listed as PSY 3375

See PSY 3375 for course information.

NSC 3381 Neuroscience and the Law (3)

Pre-requisite(s): NSC 1306 and (PSY 2405 or NSC 2306)

Examines neuroscience methods and research related to criminal and civil law and society at large, providing a broad overview of the major topics in the area.

NSC 3390 Developmental Neuroscience (3)

Pre-requisite(s): NSC 2306 or PSY 2405 and instructor approval

An overview of the molecular and cellular processes involved in nervous system development, including neural proliferation, synaptogenesis, and neurodevelopmental disorders.

NSC 3V9R Research (3)

Pre-requisite(s): Consent of the instructor

Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.

NSC 4119 Laboratory in Clinical Neuroscience (1)

Cross-listed as PSY 4119

Pre-requisite(s): Credit or concurrent enrollment in either NSC 4319 or PSY 4319

Laboratory experiments illustrating methods and procedures in clinical neuroscience.

NSC 4130 Advanced Laboratory in Neural Science (1)

Cross-listed as PSY 4130

Pre-requisite(s): NSC/PSY 4330 or concurrent enrollment

Laboratory experiments illustrating methods and procedures in Behavioral Neuroscience.

NSC 4312 Behavioral Medicine (3)

Cross-listed as PSY 4312

Pre-requisite(s): NSC 1106 and 1306 or consent of instructor

Topics include the role of mind, brain, and behavior in health, disease and wellness; the history, philosophy, and current status of health care systems; physiological and behavioral analyses of stress; psychoneuroimmunology; behavioral factors in cardiovascular disease, cancer, drug abuse, and weight management.

NSC 4317 Literature of Behavioral Neuroscience (3)

Cross-listed as PSY 4317

Pre-requisite(s): NSC 1106-1306 and PSY 2402 or consent of instructor

An intensive introduction to the scientific literature in behavioral neuroscience. Students will be exposed to the contemporary literature through an examination of fundamental contributions in several areas. Preparation of a serious paper in a specific area of current research interest is required.

NSC 4319 Clinical Neuroscience (3)

Cross-listed as PSY 4319

Pre-requisite(s): NSC 1106 and 1306, and either PSY 2405 or MTH 1321 or consent of instructor

A survey of current neuroscientific contributions to the understanding of the etiology of various mental disorders. The course covers basic principles of neural science followed by an examination of motivation and emotions within a neuroscience framework.

NSC 4324 Research on the Senses and Perception (3)

Cross-listed as PSY 4324

Pre-requisite(s): NSC 1106-1306 and PSY 2402 or consent of instructor

A study of individual problems in perception through directed reading, independent research, and/or laboratory work.

NSC 4330 Advanced Principles of Neural Science (3)

Cross-listed as PSY 4330

Pre-requisite(s): NSC 1106-1306 and PSY 1305, or consent of instructor

A study of the structure and function of the human nervous system as related to behavior.

NSC 4356 Neuropharmacology (3)

Pre-requisite(s): NSC 1306

The pharmacology of major drugs that work primarily on the nervous system, with an emphasis on pharmacodynamics (receptor subtypes, locations, and functions).

NSC 4371 Advanced Research in Neuroscience (3)

Pre-requisite(s): Consent of instructor

An in-depth laboratory research experience in neuroscience as supervised by a faculty mentor.

NSC 4V96 Special Topics in Neuroscience (1-4)

Pre-requisite(s): Consent of instructor

May be repeated once with change of topic.

NSC 4V9R Research (3)

Pre-requisite(s): Consent of the instructor

Undergraduate research undertaken with the supervision of a faculty member. May be taken for a maximum of 6 hours.