

Spring 2023
UNC Department of Psychology and Neuroscience
Undergraduate Courses

For the complete list of undergraduate Psychology courses, please refer to the [Undergraduate University Catalog](#)

For the complete list of undergraduate Neuroscience courses, please refer to the [Undergraduate University Catalog](#)

First-Year Seminars (FYS)

PSYC 058H: First-Year Seminar: The Psychology of Mental States and Language Use (3)

Instructor: Dr. Jennifer Arnold

Honors version. Examines how language use is affected by one's reasoning about the mental activities of others. We will examine the development of language, adult language use, and the language of autistic individuals, who are known to have difficulty reasoning about others' minds. This seminar will follow a discussion format. Honors version available.

Lower-Level Undergraduate Courses (PSYC 100-399)

PSYC 101: General Psychology (3)

Instructor: Dr. Jeannie Loeb (001), Dr. David Penn (002), Dr. Frederick Wiss (01F)

A survey of major principles of psychology and an introduction to scientific modes of thought about behavior. Students participate in ongoing psychological research in the department. PSYC 101 is a prerequisite for all psychology courses.

PSYC 115. Reasoning with Data: Navigating a Quantitative World (3)

Instructor: Dr. Linda Green

Students will use mathematical and statistical methods to address societal problems, make personal decisions, and reason critically about the world. Authentic contexts may include voting, health and risk, digital humanities, finance, and human behavior. This course does not count as credit towards the psychology or neuroscience majors.

NSCI 175: Introduction to Neuroscience (3)

Instructor: Dr. Rachel Penton (001), Dr. Shveta Parekh (002)

Neuroscience is a field that seeks to understand the structure and function of the nervous system and brain. This course provides a broad overview of the field. Topics include current methods used in neuroscience, the function of nerve cells, neuroanatomy of the mammalian brain, neuroplasticity, and diseases of the brain.

PSYC 180: Social Media, Technology, and the Adolescent Brain (3)

Instructor: Dr. Rosa Li (001 & 002)

In this course, we will learn about current evidence, theory, and controversies with regards to how technology use may affect adolescent development. Questions such as how technology is changing adolescents' social relationships, impacting their mental health, and interacting with the developing brain to influence social, emotional, and cognitive development will be explored.

PSYC 210: Statistical Principles of Psychological Research (3)

Instructor: Dr. Patrick Harrison (001), Dr. Natasha Parikh (002)

Prerequisite: PSYC 101

Consideration of the methodological principles underlying psychological research, descriptive and inferential techniques, and the manner by which they may be employed to design psychological experiments and analyze behavioral data. Three lecture hours and one laboratory hour a week.

PSYC 220: Biopsychology (3)

Instructor: Dr. Daniel Christoffel (001), Gillian Barkell (002)

Prerequisite: PSYC 101

Introductory course which surveys the biological bases of behavior. Topics may include nerve cells and nerve impulses, sensory systems, wakefulness and sleep, reproductive behaviors, and cognitive functions. This course would be an appropriate foundational course for Advanced Biopsychology.

NSCI 221: Neuropsychopharmacology. (3)

Instructor: Dr. Rachel Penton (001)

Prerequisite: NSCI 175 or both PSYC 101 and PSYC 220

This course provides an introduction to the scientific study of psychopharmacology, with emphasis on drugs of abuse and psychotherapeutic drugs. Previously offered as NSCI/PSYC 320.

NSCI 222: Learning (3)

Instructor: Dr. Sara Estle (001)

Prerequisite: PSYC 101 or NSCI 175

Topics in Pavlovian and operant (instrumental) conditioning, learning theory, higher order cognitive learning, and application of those principles to mental-health related situations.

NSCI 222H: Learning (3)

Instructor: Dr. Todd Thiele (001)

Prerequisite: PSYC 101 or NSCI 175

Topics in Pavlovian and operant (instrumental) conditioning, learning theory, higher order cognitive learning, and application of those principles to mental-health related situations. Honors version.

NSCI 225: Sensation and Perception (3)

Instructor: Dr. Vicki Chanon (001), Dr. Sara Estle (002)

Prerequisite: PSYC 101 or NSCI 175

Topics in vision, audition, and the lower senses. Receptor mechanisms, psychophysical methods, and selected perceptual phenomena will be discussed.

NSCI 225H: Sensation and Perception (3)

Instructor: Dr. Peter Gordon (001)

Prerequisite: PSYC 101 or NSCI 175

Topics in vision, audition, and the lower senses. Receptor mechanisms, psychophysical methods, and selected perceptual phenomena will be discussed. Honors version.

PSYC 230: Cognitive Psychology (3)

Instructor: Dr. Vicki Chanon (001)

Prerequisite: PSYC 101

Topics in attention; memory; visual, auditory, and other forms of information processing; decision making; and thinking.

PSYC 242: Introduction to Clinical Psychology (3)

Instructor: Dr. Desiree Griffin (001), Yexinyu Yang (002)

Prerequisite: PSYC 101

Overview of clinical psychology: history, scientific basis, and major activities and concerns, including assessment, psychotherapy, and other psychological interventions, community psychology, ethics, and professional practice. Students may not receive credit for both PSYC 242 and 505.

PSYC 245: Psychopathology (3)

Instructor: Dr. Desiree Griffin (001), Emily Carrino (002)

Prerequisite: PSYC 101

Major forms of behavior disorders in children and adults, with an emphasis on description, causation, and treatment.

PSYC 245H: Psychopathology (3)

Instructor: Dr. Donald Baucom (001)

Prerequisite: PSYC 101

Major forms of behavior disorders in children and adults, with an emphasis on description, causation, and treatment. Honors version.

PSYC 250: Child Development (3)

Instructor: TBD (001)

Prerequisite: PSYC 101

Study of the development of social and intellectual behavior in normal children and the processes that underlie this development. Emphasis is typically on theory and research.

PSYC 260: Social Psychology (3)

Instructor: Dr. Steven Buzinski (001), Joseph Leshin (002), Jieni Zhou (003), Mallory Feldman (005), Taylor West (006), Connor O'Fallon (007)

Prerequisite: PSYC 101

Introductory survey of experimental social psychology covering attitudes, interpersonal processes, and small groups.

PSYC 270: Laboratory Research in Psychology (3)

Instructor: Dr. Patrick Harrison (001), Dr. Natasha Parikh (002)

Prerequisites: PSYC 101

Experiments in biological, behavioral, cognitive, developmental, personality, and social psychology will be discussed, prepared, performed, and reported. One lecture hour and four laboratory hours per week.

NSCI 278: Molecular Imaging of the Brain (3)

Instructor: Dr. Sabrina Robertson (001 & 002)

Prerequisites: NSCI 175 and PSYC 210 or STOR 155

Students will design novel experiments to examine and visualize sex differences in the nervous system. Students will learn how to handle brain slices, neuroanatomy, microscopy, immunohistochemistry and imaging analysis techniques by studying neuronal diversity in the norepinephrine system of mice. Students will have the opportunity to develop and test hypotheses, write a research proposal, and present their work in poster form. Students may only receive credit for one of: NSCI 274, 276, 278 and 279. Majors only.

NSCI 279: Microglia Laboratory: Examining Morphology and Cytokines (3)

Instructor: Dr. Shveta Parekh (001 & 002)

Prerequisites: NSCI 175 and PSYC 210 or STOR 155

In this laboratory course, students will utilize molecular biology techniques (e.g., immunohistochemistry and immunoassays) while developing and testing hypotheses regarding how environmental or experimental conditions alter microglia. Students will work in teams to design an experiment, and then collect, analyze, and report data. Students may only receive credit for one of: NSCI 274, 276, 278 and 279. Neuroscience majors only.

PSYC 301: Pedagogy Course for Psychology & Neuroscience Undergraduate Learning Assistants (3)

Instructor: Ross Ramsey (001)

Prerequisites: Application process

This course gives an overview of teaching methods that facilitate the acquisition of knowledge and understanding as well as entails hands-on experience in the classroom. Common misconceptions of learning as well as legal and ethical considerations related to working closely with an undergraduate population will also be covered. Departmental application and approval required.

NSCI 326: Neuroscience Career Development, Networking & Applications in the Working World (3)

Instructor: Dr. Sabrina Robertson (001)

Prerequisites: NSCI 175

This course provides students interested in the neuroscience field an opportunity to gain valuable networking, job application and interviewing skills. Over the course of the semester students will meet with neuroscience professionals and create application packages. Students will learn from individuals in neuroscience related jobs about the diverse careers options available and strategies for navigating the job market successfully. Students will explore advances in neuroscience research and how they relate to industry, research, etc.

PSYC 330: Introduction to Cognitive Science (3)

Instructor: Dr. Vicki Chanon (001)

Prerequisites: PSYC 101

Recommended preparation, PSYC 210 or another quantitative reasoning course. An introduction to the interdisciplinary study of the mind, intelligent behavior, information processing, and communication in living organisms and computers.

[Upper-Level Undergraduate Courses \(PSYC 400-699\)](#)**NSCI 422: Genetics of Brain Diseases (3)**

Instructor: Dr. William Snider (001)

Prerequisites: An introductory course in neuroscience, PSYC 220 or NSCI 175

This course will explore the manifestations and causes of important neurological and psychiatric diseases. A major focus will be the impact of advances in genetics and genomics on our understanding of brain disorders. Diseases having a major impact on society including autism, schizophrenia and Alzheimer's Disease will be studied in detail. The course will provide excellent preparation for further study of brain disorders in the setting of psychology, medicine, public health, or public policy. Course credits count towards a major in Psychology and a minor or major in Neuroscience.

NSCI 427: Neurobiology of Aging (3)

Instructor: Dr. Kelly Giovanello (001)

Prerequisites: NSCI 175 or PSYC 220

This course will survey clinical and experimental literature regarding the neurobiology of aging, considering different theories of aging, how aging is studied in the laboratory, and recent findings. Biochemical, molecular, physiological, and behavioral changes associated with both "normal" and pathological aging will be considered.

PSYC 430: Human Memory (3)

Instructor: Dr. Neil Mulligan (001)

Prerequisites: PSYC 101, and NSCI 222 or PSYC 230

This course explores classic and current issues in the study of human memory. Topics include working memory, encoding and retrieval processes, implicit memory, reconstructive processes in memory, eyewitness memory, developmental changes in memory, neuropsychology and neuroscience of memory and memory disorders, memory improvement, and the repressed/recovered memory controversy.

NSCI 434: Cognitive Neuroscience (3)

Instructor: Dr. Joseph Hopfinger (001)

Prerequisites: One of the following: NSCI 175, NSCI 222, NSCI 225, PSYC 220, or PSYC 230

Introduction to cognitive neuroscience. Higher mental processes including attention, memory, language, and consciousness will be covered, with an emphasis on the neural mechanisms that form the substrates of human cognition.

NSCI 490: Glial Neuroscience (3)

Instructor: Dr. Kate Reissner (001)

Prerequisites: NSCI 175 or PSYC 220

This upper-level NSCI seminar will provide an in-depth examination of structure and function of glia, and will explore the fundamental roles that glia play in the healthy and diseased brain. The course will utilize a blend of didactic instruction with active learning, and emphasis on critical analysis and discussion of primary literature. Focus will be placed on research methods as well as findings and results. Guest speakers responsible for fundamental studies will visit class remotely to provide historical context and firsthand accounts of the papers we study.

NSCI 490: Animal Behavior (3)

Instructor: Dr. Sylvia Fitting (002)

Prerequisites: NSCI 175, or PSYC 101 and PSYC 220

Description: The primary function of this course is to survey the wide variety of experimental methods used in animal studies to assess various behavioral outcomes, including learning and memory, attention, anxiety, depression, and drug seeking. This then will be combined with readings on how changes in brain circuitry can affect behavioral outcomes, such as drugs of abuse or other disease states.

PSYC 490: Culture and Development (3)

Instructor: Dr. M. Dalal Safa (001)

Prerequisites: PSYC 101, PSYC 210 or 215, PSYC 250 or 260

An examination of research and theory pertaining to the intersections of culture, ethnicity-race, and development. Specifically, this course focuses on identifying limitations and advances in psychological and developmental sciences toward our understanding of ethnic-racial minoritized and immigrant youth development in culturally bounded contexts (e.g., families, schools, and neighborhoods) within and outside the U.S. The course is recommended for students interested in engaging in rich dialogue and self-reflection.

PSYC 490: Autism Spectrum Disorder (3)

Instructor: Dr. Sara Estle (002)

Prerequisites: NSCI 175 or PSYC 101

Autism Spectrum Disorder (ASD) is characterized by difficulty in communication and social interaction. This course will examine scientific advancements in diagnosis, causes, and interventions for ASD. Additional topics include neurodiversity and inclusion.

NSCI 493: Internship in Psychology (3)

Instructor: Dr. Steven Buzinski (001)

Prerequisites: PSYC 101 and completion of application process

Required preparation, minimum of two other neuroscience courses and junior/senior standing. Designed for highly motivated neuroscience majors interested in exploring professional opportunities in neuroscience-related areas. Students complete hands-on internships at community sites for approximately 120 hours across the semester. Students also attend a weekly one-hour class with other interns. This course is only for those students who have been accepted into the Karen M. Gil Internship Program: <https://psychology.unc.edu/gil-internship/>

PSYC 493: Internship in Psychology (3)

Instructor: Dr. Steven Buzinski (001)

Prerequisites: PSYC 101 and completion of application process

Required preparation, minimum of two other psychology courses and junior/senior standing. Designed for highly motivated psychology majors interested in exploring professional opportunities in psychology-related areas. Students complete hands-on internships at community sites for approximately 120 hours across the semester. Students also attend a weekly one-hour class with other interns. This course is only for those students who have been accepted into the Karen M. Gil Internship Program: <https://psychology.unc.edu/gil-internship/>

PSYC 517: Addiction (3)

Instructor: Dr. Stacey Daughters (001)

Prerequisites: PSYC 101

PSYC 245 and 270 recommended but not required. This course will provide students with a comprehensive overview of the etiology and treatment of addiction, along with exposure to real-life stories of addiction.

PSYC 525: Psychological Archival Data Science (3)

Instructor: Dr. Eric Youngstrom (001)

Prerequisites: PSYC 270 and PSYC 245 or PSYC 500

This course addresses techniques in answering new questions with existing data. Students will learn about data from multiple perspectives: different data source and types, intended audiences, and visualization, analysis, and presentation formats. This will make students more savvy consumers as well as producers of data.

PSYC 559: Applied Machine Learning in Psychology (3)

Instructor: Dr. Oscar Gonzalez

Prerequisites: PSYC 101 and either PSYC 210 or 215

As opposed to hypothesis-driven data analysis, machine learning takes an exploratory and predictive approach to data analysis. This course introduces machine learning approaches in psychology to identify important variables for prediction and uncover complex patterns in datasets, such as nonlinearity, interactions, or clusters. Classes include theoretical lectures and hands-on examples.

PSYC 564: Interpersonal Relationships (3)

Instructor: Dr. Sara Algoe (001)

Prerequisites: PSYC 101, 260, and either PSYC 210 or 215

PSYC 270 Recommended. This advanced course will comprehensively cover the social psychological literature on normally developing interpersonal relationships, with implications for relationships with family, friends, co-workers, and romantic partners. This is a research-intensive course with a major aspect involving an independent research project to facilitate learning by doing.

PSYC 570: The Social Psychology of Self-Regulation (3)

Instructor: Dr. Paschal Sheeran (001), Dr. Steve Buzinski (002)

Prerequisites: PSYC 101, PSYC 210, PSYC 260

PSYC 270 recommended. Surveys cutting-edge research across the field of social psychology and how it matters for everyday life. Topics include morality, mind perception, judgment and decision making, happiness, affective forecasting, emotion, relationships, negotiation, personality, free will, stress/health, and religion. Clear communication of research also emphasized through figures, presentations, and papers.

PSYC 601: Psychology and Law (3)

Instructor: Dr. Neil Mulligan (001)

Prerequisites: PSYC 101 and 210 or 215

Examines the legal system from the perspective of psychology methods and research, with a focus on criminal law. Discusses dilemmas within the law and between the legal system and psychology.

PSYC 602: Evolutionary Psychology (3)

Instructor: Dr. Charlie Wiss (001)

Prerequisites: PSYC 101

Major topics of general psychology are examined from an evolutionary perspective with an emphasis on empirical studies asking why much current human behavior and experience would have been adaptive for our early ancestors.

PSYC 694H: Honors in Psychology II (3)

Instructor: Dr. Keely Muscatell (001)

Prerequisites: PSYC 693H

Admission to the psychology honors program required. To be taken as the second course in the two-semester honors sequence. Students conduct research under the direction of a faculty advisor and receive classroom instruction in research-related topics.

NSCI 694H: Honors in Neuroscience II (3)

Instructor: Dr. Charlotte Boettiger (001)

Prerequisites: NSCI 693H

To be taken as the second course in the two-semester honors sequence. Students conduct research under the direction of a faculty advisor and receive classroom instruction in research-related topics. Admission to the neuroscience honors program required.