

# PSYCHOLOGICAL AND BRAIN SCIENCES

## Courses

### PSYC 1010 General Psychology 3 Credits

This course introduces the science of mental processes and behavior by addressing a range of questions including: How is brain activity related to thought and behavior? What does it mean to learn and remember something? How do we see, hear, taste, and smell? How do we influence one another's attitudes and actions? What are the primary factors that shape a child's mental and emotional development? How and why do we differ from one another? What are the origins and most effective treatments of mental illness? Previously PY 0101.

### PSYC 1110 Lifespan Development 3 Credits

The course encompasses a developmental psychology approach to the growth of the individual from birth to old age, tracing motor, perceptual, language, cognitive, and emotional growth and emphasizing normal development. Psychology majors and students who have taken PSYC 2110 or PSYC 2150 may not take this course. Previously PY 0111.

### PSYC 1220 Psychology and the Law 3 Credits

Implicit psychological assumptions about human behavior and how it should be controlled form the basis for the legal system, particularly our criminal justice system, from its code to its enforcement. This course examines those assumptions in light of current psycho-legal theory and research. It covers the treatment of traditional psychiatric populations by the justice system in contrast to that received by non-psychiatric populations; clinical issues such as the insanity defense, predicting dangerousness, the validity of psychiatric examinations and lie detectors; and jury selection, eyewitness testimony, decision-making, sentencing, and parole. Previously PY 0122.

### PSYC 1610 Behavioral Neuroscience 3 Credits

**Attributes:** MSID Magis Core: Interdisciplinary

Understanding the brain is one of the last and most challenging frontiers of science. Our brain functioning determines what we see, hear, know, think, or feel. Starting with the molecular and cellular machinery of neurons and the anatomy of the nervous system, the course proceeds through the neural basis of sensation, perception, memory, emotion, language, sexual behavior, drug addiction, depression, schizophrenia, etc. The enormous strides made by neuroscience in the last several decades show every sign of continuing and increasing; this course provides the foundation upon which a thorough understanding of brain-behavior relationships can be built. Previously PY 0261.

### PSYC 2110 Child and Adolescent Development 3 Credits

**Prerequisite:** PSYC 1010.

Using a research-oriented approach, this course focuses on the principal themes, processes, and products of human development from conception through adolescence. Students who have taken PSYC 1110 or PSYC 2150 may not take this course. Previously PY 0211.

### PSYC 2120 Adult Development and Aging 3 Credits

**Prerequisite:** PSYC 1010.

This course examines the theoretical underpinning and current research related to a number of key issues in the field of adult development and aging including physical, cognitive, and social-emotional changes, diseases, and disorders, as well as successful aging and resiliency. Previously PY 0215.

### PSYC 2130 Cross-Cultural Perspectives on Lifespan Development 3 Credits

**Prerequisite:** PSYC 1110 or PSYC 2110 or PSYC 2150.

This course explores various developmental processes and cultural practices across the lifespan such as rites of passage, marriage, parenting, and gender equality from cultures across the globe. How do different cultures view various developmental milestones? What is similar across cultures? What is different? Ultimately, from a psychological perspective, what exactly is culture? And what variations in the course of development can be traced to the influence of culture? Previously PY 0217.

### PSYC 2150 Child and Adolescent Development with Lab 4 Credits

**Prerequisite:** PSYC 1010.

Although the content of this course is identical to PSYC 2110, it offers psychology majors the opportunity to participate in a laboratory experiential learning component in community partner preschool classrooms. Specific hands-on assignments complement course material. Students who have taken PSYC 1110 or PSYC 2110 may not take this course. Previously PY 0212.

### PSYC 2210 Social Psychology 3 Credits

**Attributes:** DEIE Diversity, Equality, and Inclusion Elective

**Prerequisite:** PSYC 1010.

This course surveys the major areas of concern in social psychology, emphasizing current issues and research in the fields of social influence and conformity, human aggression, prejudice, interpersonal attraction, propaganda, and persuasion. Students who have taken PSYC 1210 may not take this course. Previously PY 0221.

### PSYC 2220 Stereotyping, Prejudice, and Discrimination 3 Credits

**Attributes:** DEIE Diversity, Equality, and Inclusion Elective, PJST Peace and Justice Studies, UDIV U.S. Diversity

**Prerequisite:** PSYC 1010.

This course will familiarize students with basic and applied social psychological research on stereotyping, prejudice, discrimination, and minority experience. After considering the cognitive and motivational factors that contribute to stereotyping and prejudice, students will proceed to examine prejudice in the "real world," exploring literature on discrimination-related policies, effects of stereotyping, prejudice, and identity on achievement and status, and prejudice reduction programs. The course will take a primarily empirical approach, focusing on the ways in which scientific methods and empirical evidence can inform our understanding of these emotionally-charged and socially consequential issues. Previously PY 0222.

### PSYC 2230 Personality Psychology 3 Credits

**Prerequisite:** PSYC 1010.

In what ways do you differ from other people, and in what ways are you similar? How did you come to be that way? The psychology of personality examines how individual differences in tendencies toward attitudes, behavior, and cognition cohere into stable constellations that people recognize as personality. Topics will include personality assessment, personality development, personality stability and change, biological and contextual influences on personality, emotion and motivation, and psychological adjustment. Although we will explore the major historical perspectives in personality research, the course will focus primarily on current empirical research and modern theories of personality. Previously PY 0232.

**PSYC 2310 Psychopathology and Clinical Science** 3 Credits  
**Attributes:** HSSS Health Studies: Social Science  
**Prerequisite:** PSYC 1010.

This advanced course in abnormal behavior offers an in-depth analysis of current research and theories of psychopathology. It examines the biological and psychological antecedents of abnormal behavior. The course emphasizes oral and written analysis. Students who have taken PSYC 1310 may not take this course. Previously PY 0231.

**PSYC 2330 Gender and Mental Health** 3 Credits  
**Attributes:** WSGF Women, Gender, and Sexuality Studies: Gender Focused  
**Prerequisite:** PSYC 1010.

This course will explore the relationship between gender and mental health. Topics to be discussed include gender identity, gender differences in development throughout the lifespan, the impact of social and societal gender expectations on functioning, as well as gender differences in the response to trauma and victimization. The course will also include an in-depth examination of sex differences in clinical disorders such as depression, anxiety, eating disorders, PTSD, and personality disorders. Previously PY 0233.

**PSYC 2340 Theories in Psychotherapy** 3 Credits  
**Prerequisite:** PSYC 1310 or PSYC 2310.

This course explores similarities and differences across a wide range of psycho-therapeutic endeavors by means of lectures and videos. The course covers traditional psychoanalytic techniques and more recent innovations. Previously PY 0234.

**PSYC 2360 Human Neuropsychology** 3 Credits  
**Attributes:** HSST Health Studies: Science and Technology  
**Prerequisites:** PSYC 1010 or PSYC 1610.

Human neuropsychology is a branch of psychology that focuses on functional structures and systems of the human brain and how they support various higher-order psychological processes (e.g., learning, attention, executive functioning, higher-order thinking, memory, language, emotion, and motor skills). This course thus concentrates on the brain-behavior relationships beyond the cellular-molecular level, with an emphasis on typical lifespan development and common neuropathological syndromes (e.g., strokes, dementia, and traumatic brain injury) in relation to functional structures and systems of the human brain. Assessment and treatment interventions of neuropsychological disorders are addressed within this context. Previously PY 0236.

**PSYC 2370 Community Mental Health** 3 Credits  
**Attributes:** HSSS Health Studies: Social Science  
**Prerequisite:** PSYC 1010 or PUBH 1101.

This course provides an overview of the social and psychological foundations of community behavioral and mental health practice. Using psychological knowledge of healthy human development across the lifespan, major community mental health issues will be explored. Particular emphasis will be placed on identifying risk and protective factors relevant to the development of effective preventative and remedial interventions to address important community behavioral and mental health problems such as individuals living with chronic mental illness, depression and anxiety, addiction, as well as attention to the issues related to specific populations such as the LGBTQ community, individuals living in violent neighborhoods, veterans and military families, immigrants, and the elderly. Previously PY 0237.

**PSYC 2390 Psychology of Diversity** 3 Credits  
**Prerequisite:** PSYC 1010.

Diversity is an important and enriching factor in all our lives. This course will examine various aspects of diversity (e.g., discrimination, stereotypes, racism, sexism, sexuality, gender identity, obesity, ageism, stigma) and how these aspects interact with each other. The relationships between these aspects and mental health will also be discussed. After developing an initial understanding of issues, we will discuss methods of responding to social inequality and explore areas of specific interests of students through student-led presentations and discussions. Previously PY 0239.

**PSYC 2510 Cognitive Psychology** 3 Credits  
**Prerequisite:** PSYC 1010 or PSYC 1610.

How can we study the mind? This course surveys topics in cognitive psychology, including attention, memory, thought, imagery, language, problem solving, and decision making. Through lectures, readings, demonstrations, and exercises, students learn about how we think and about scientific explorations of the mind. Previously PY 0251.

**PSYC 2520 Learning and Applied Behavior Analysis** 3 Credits  
**Prerequisite:** PSYC 1010 or PSYC 1610.

This course focuses on the environmental determinants of behavior and behavior change. The first two-thirds of the course highlight current concepts and research in Pavlovian and operant conditioning, reinforcement, discrimination, extinction, punishment, avoidance learning, etc. The remaining third of the course emphasizes applied behavior analysis (aka: behavior modification); that is, how these learning concepts and principles can be successfully applied to education, parenting, therapy, medicine, and everyday life. Previously PY 0252.

**PSYC 2540 Psycholinguistics** 3 Credits  
**Attributes:** MSJR Magis Core: Social Justice Race-Focused  
**Prerequisite:** PSYC 1010.

This course explores the phenomenon of language in the mind and brain, including: How do children learn their first language(s) and why is it such a different experience for an adult to learn a language? What about second language acquisition? What are language disorders? Is spoken language processed differently from written language? What about sign languages? Class will include discussions, presentations, and hands-on analysis of language data. Previously PY 0254.

**PSYC 2620 Sensation and Perception** 3 Credits  
**Prerequisite:** PSYC 1010 or PSYC 1610.

How do we see, hear, touch, taste, and smell? What about individual differences? This course explores basic sensory mechanisms and perceptual processing, including color, depth, pattern, and motion perception. An experiential learning component facilitates student comprehension of individual differences in sensation and perception. Students will also complete an integrative final project to reinforce their understanding of the vast range of sensory and perceptual concepts addressed throughout the course. Previously PY 0262.

**PSYC 2740 Drugs, Brain and Behavior** 3 Credits  
**Attributes:** HSSS Health Studies: Social Science, MSID Magis Core: Interdisciplinary  
**Prerequisite:** PSYC 1010 or PSYC 1610.

This survey course discusses the psychopharmacological properties of the more significant drugs used for research and by society in general. Drug classes include alcohol and nicotine, depressants and stimulants, tranquilizers, opium derivatives, and hallucinogenic compounds. The course emphasizes drug action sites in the central nervous system as well as behavioral alteration in controlled and uncontrolled environments. Previously PY 0274.

**PSYC 2745L Drugs and Behavior Field Experience Lab 1 Credit**

As an optional supplement to PSYC 2740 in fall or spring, this field experience lab includes an observational research study in Fairfield and abroad in Ireland. During initial lab meetings, students will read primary literature and develop a research question about social behaviors in pubs in both locations. After collecting data in Fairfield, students will travel to Ireland to continue their research, analyze major findings, and present results. The course will also include interactive discussions with faculty and students in Neuropharmacology labs abroad. Upon return to Fairfield, a formal paper or research poster will be submitted. Enrollment by permission only.

**PSYC 2810 Statistics for the Behavioral Sciences 4 Credits**

**Attributes:** EVAP Environmental Studies: Applied Professional Skills

**Corequisite:** PSYC 2810L.

**Prerequisite:** PSYC 1010 or PSYC 1610.

This introductory course in statistical methodology and analysis includes descriptive statistics such as frequency distributions, central tendency, variability, and correlation as well as an introduction to probability, sampling theory, and tests of significance including the t-test, chi-squared, ANOVA, and non-parametric statistics. This course is open to majors in the behavioral, biological, and physical sciences. The lab complements the course by giving students supervised computation and problem-solving exercises. Note: This course does not fulfill any core requirements. Previously PY 0201.

**PSYC 2810L Statistics Lab 0 Credits**

**Attributes:** EVAP Environmental Studies: Applied Professional Skills

**Corequisite:** PSYC 2810.

**PSYC 2820 Research Methods in Psychology 4 Credits**

**Attributes:** MWID Magis Core: Writing in the Discipline

**Prerequisite:** PSYC 2810.

Building on PSYC 2810, this course teaches students to read, evaluate, design, conduct, and report psychological research. The course emphasizes critical thinking and effective oral and written communication. Students work through several different research projects. Previously PY 0202.

**PSYC 2900 Special Topics (Shell) 3 Credits**

**Prerequisite:** PSYC 1010 or PSYC 1610.

This intermediate level course focuses on a specific issue or topic in one of the major areas of psychology, including but not limited to social, cognitive, clinical, developmental, or biological psychology. In successive offerings, the content of this course will vary considerably. Thus, students may take more than one section of the course provided the content is different. Previously PY 0281.

**PSYC 3380 Psychological Testing 3 Credits**

**Prerequisites:** PSYC 1010, PSYC 2810.

This course offers an introduction to the principles of psychological test construction, administration and interpretation, and reviews the roles that these tests have in broad clinical assessment and research. Specific evaluation of test reliability and validity are applied to test construction and to various published tests of intelligence, achievement, personality, and neuropsychological functioning. Previously PY 0238.

**PSYC 3610 Cognitive Neuroscience 3 Credits**

**Prerequisite:** PSYC 1610.

This course provides an introduction to cognitive neuroscience: the study of how the brain enables a variety of cognitive processes. We will begin with a review of the human nervous system and an in-depth examination of the variety of cognitive neuroscience tools employed to understand the structure and function of the human brain. We will then cover the neural processes that support sensation, perception, attention, memory, motor control, language, executive control, and emotional and social functioning. Along the way, we will discuss various diseases, disorders, and illusions from the cognitive neuroscience perspective.

**PSYC 3720 Hormones and Behavior 3 Credits**

**Prerequisite:** BIOL 1173 or PSYC 1610.

This upper level course in psychology will provide students with an overview of behavioral neuroscience, with an emphasis on behavioral endocrinology (hormones and behavior). Topics include the description of major classes of hormones, the techniques used in behavioral neuroscience, and the discussion of hormone-mediated behaviors including male and female reproductive behaviors, stress and fear, memory and cognition, parental behaviors, ingestive behaviors, and circadian rhythms. After weekly mini-review sessions of the relevant text, this course will emphasize primary research (journal) articles with student-led discussions. Previously PY 0272.

**PSYC 3740 Pharmacology and Mental Disorders 3 Credits**

**Attributes:** HSST Health Studies: Science and Technology

**Prerequisites:** PSYC 1610 or PSYC 2740; or the approval of the instructor, must have taken at least one 2000-level PSYC course.

Building on a foundational knowledge of Behavioral Neuroscience and Drugs and Behavior, this course provides a more in-depth exploration of the field of Psychopharmacology, focusing on more advanced principles of pharmacology, chemical signaling in the brain, and current treatments for anxiety, mood disorders, schizophrenia and other select conditions (e.g., ADHD, substance use disorder). We will consider the neural systems and disease mechanisms that are thought to underlie various mental disorders. The student will also learn about the drug discovery and development process including leading examples of experimental therapeutics currently in clinical development.

**PSYC 3950 Supervised Research: Psychology 3 Credits**

**Prerequisite:** PSYC 1010 or PSYC 1610.

The course provides research training experience in a supervised setting in which students work closely with a faculty mentor on various research projects. Such work may include assisting in designing and running lab research, data analysis, field experience, and library research. This hands-on experience enhances students' understanding of issues in research design and analysis and prepares them for more advanced research opportunities should they choose to pursue them (e.g., independent research). Student researchers are expected to spend a minimum of 10 hours per week in their faculty mentor's lab. Enrollment by permission only. Previously PY 0295.

**PSYC 3955 Supervised Research: Behavioral Neuroscience 3 Credits****Prerequisite:** PSYC 1010 or PSYC 1610.

The course provides research training experience in a supervised setting in which students work closely with a faculty mentor on various research projects. Such work may include assisting in designing and running lab research, data analysis, field experience, and library research. This hands-on experience enhances students' understanding of issues in research design and analysis and prepares them for more advanced research opportunities should they choose to pursue them (e.g., independent research). Student researchers are expected to spend a minimum of 10 hours per week in their faculty mentor's lab. Enrollment by permission only. Previously PY 0295.

**PSYC 3980 Psychology Teaching Practicum 3 Credits****Prerequisite:** PSYC 1010 or PSYC 1610.

This practicum experience, open to advanced psychology majors, affords students an opportunity to explore teaching psychology as a profession. Under the direct supervision of a faculty mentor, students engage the issues of curriculum development, methods of classroom instruction, selection and use of media resources, test construction, and strategies for the academic and practical motivation of students. Interns observe participating faculty engaged in the profession of teaching and share in some instructional activities. Enrollment by permission only. Previously PY 0291.

**PSYC 4210 Senior Seminar: Current Issues in Social Psychology 3 Credits**

This seminar engages with current issues in social psychological research. Although the specific topics covered in the course will change from semester to semester, the course will be structured to present an overview of each topic domain (through review articles and seminal empirical articles) followed by more contemporary readings on the topic and a discussion of current debates and open issues. Throughout the course, students will focus on applying insights from social psychological research to "real world" issues such as increasing individual well-being, supporting and maintaining healthy social relationships, creating more just and equitable communities, and improving judgment and decision-making. Open to senior psychology majors. Permission of instructor is required for junior psychology majors. Previously PY 0321.

**PSYC 4220 Senior Seminar: Health Psychology 3 Credits****Attributes:** HSSS Health Studies: Social Science

This course provides an in-depth survey of the discipline of health psychology, framed within the context of sociocultural factors such as ethnicity, gender, and socioeconomic status. Among the topics covered: stress, coping behaviors, biomedical and biopsychosocial models of health and illness, health behaviors, patient-provider communication. The students explore new ways to integrate theory and research with the advances in the science and practice of health psychology and present their work in a final independent project. Open to senior psychology majors. Permission of instructor is required for junior psychology majors and non-majors. Previously PY 0322.

**PSYC 4310 Senior Seminar: Clinical Child and Adolescent Psychology 3 Credits****Prerequisites:** PSYC 1110 or PSYC 2110 or PSYC 2150.

This course provides a survey of the theory and research in the field of clinical psychology related to children and adolescents. More specifically, the seminar explores: the diagnostic characteristics of the major types of child psychological disorders, the etiology of each disorder from the different theoretical perspectives, and effective approaches to treatment and prevention. Open to senior psychology majors. Permission of the instructor required for junior psychology majors. Previously PY 0331.

**PSYC 4320 Senior Seminar: Current Issues in Clinical Psychology 3 Credits**

This course provides an in-depth exploration of current research and practice in the field of clinical psychology. Factors that contribute to the etiology, maintenance, identification and treatment of psychological distress will be discussed. The course will also include an in-depth examination of clinical disorders including mood, anxiety, psychotic, eating, traumatic stress, and personality disorders. Treatment, resilience and coping will also be discussed. Open to senior psychology majors. Permission of the instructor required for junior psychology majors. Previously PY 0332.

**PSYC 4510 Senior Seminar: False Memories 3 Credits**

Can people repress memories for childhood trauma? How accurate are eyewitnesses at reporting what they saw? Although most of the time, our memories serve us quite well, many of the strategies and mechanisms that help us remember accurately can also lead to errors. This course examines various types of memory distortions and what they can tell us about the mechanisms of memory. Through readings and class discussions, students will explore research addressing confusions between real and imagined memories, the reliability of eyewitness recollections, children's suggestibility, as well as clinical issues such as repression and dissociation from a cognitive perspective. Open to senior psychology majors. Permission of instructor is required for junior psychology majors. Previously PY 0351.

**PSYC 4610 Senior Seminar: Current Issues in Behavioral Neuroscience 3 Credits****Prerequisite:** PSYC 1610.

This senior seminar will provide students with an overview of current research in behavioral neuroscience, with particular emphasis on behavioral endocrinology (hormones and behavior). After a brief overview of a particular topic, including discussion of brain areas involved and techniques used to examine them, this course will emphasize current research articles in neuroscience. Specifically, how is behavioral neuroscience used to examine mechanisms behind certain behaviors and to treat anomalies? Areas of focus include clinical conditions (Alzheimer's, autism, post-partum depression) and addictive behaviors/drugs of abuse (alcohol, cannabis, anabolic androgenic steroids). Open to senior psychology majors and behavioral neuroscience majors. Permission of the instructor required for junior psychology and behavioral neuroscience majors and non-majors. Previously PY 0361.

**PSYC 4650 Neuroanatomy and Behavior 3 Credits****Corequisite:** PSYC 4650L.**Prerequisite:** PSYC 1610.

This hands-on laboratory course in behavioral neuroscience will introduce students to comparative neuroanatomy using rat, sheep, and human brain specimens. Students will participate in animal handling, brain sectioning, small animal surgeries, and drug administration, and will gain experience with rodents on a number of behavioral assays, including tests for spatial memory and reproductive behaviors. In small group exercises, students will become proficient in critiquing and presenting scientific literature, and will help in all stages of an experiment, from design to data collection to analysis and the writing up and presentation of results. In addition, students may work on a service-learning project with a community partner during the semester. Enrollment by permission only. Previously PY 0365.

**PSYC 4650L Neuroanatomy and Behavior Lab 1 Credit****Corequisite:** PSYC 4650.

**PSYC 4710 Senior Seminar in Neuroscience of Human Memory 3 Credits**

Memory is a critical component of the human experience. We frequently rely on our ability to store and retrieve information, whether it be to login to our computer, remembering that you need submit a paper by noon, or reminiscing about a favorite vacation. This course will explore the neural underpinnings of different types of human memory, including long-term memory, memory failure, working memory, and implicit memory. We will also consider diseases of memory, how memory interacts with other cognitive processes, how memory differs across species, and the intersection of neuroscience, memory, and the law. Prerequisites. Open to junior and senior psychology and behavioral neuroscience majors or by permission.

**PSYC 4900 Special Topics: Senior Seminar 3 Credits**

In this seminar, students undertake an in-depth study of a current topic in psychology, using mostly primary sources. Coursework emphasizes discussion and writing. Open to junior and senior psychology and behavioral neuroscience majors or by permission of instructor. Previously PY 0381.

**PSYC 4950 Independent Research: Psychology 1-4 Credits**

This course involves a limited number of upper-division students (usually seniors) in all aspects of an advanced research project. Students must obtain the consent of the professor with whom they will work prior to registering for this course. Frequently a research proposal is required prior to acceptance into this course; early planning is essential. Enrollment by permission only. Previously PY 0395.

**PSYC 4955 Independent Research: Behavioral Neuroscience 1-4 Credits**

This course involves a limited number of upper-division students (usually seniors) in all aspects of an advanced research project. Students must obtain the consent of the professor with whom they will work prior to registering for this course. Frequently a research proposal is required prior to acceptance into this course; early planning is essential. Enrollment by permission only. Previously PY 0395.

**PSYC 4981 Internship in Applied Psychology 1-3 Credits**

Senior psychology majors gain practical, career-related experience in a variety of supervised field settings through the internship program. Student interns choose from a wide selection of placements in traditional psychology-related programs: mental health, social service, school psychology, early child and special education, probation, and hospital administration. Intern placements in related disciplines include human factors engineering, human resource development, advertising, and public relations. Internships emphasize the integration of learning, both cognitive and experiential. Interns may register for one or two semesters, depending on the availability of appropriate placement sites and qualified supervisors. Interns spend a minimum of 10 hours per week in on-site work and complete the required academic component specified by the faculty coordinator. Enrollment by permission only. Previously PY 0391.

**PSYC 4982 Internship in Applied Psychology 1-3 Credits**

Senior psychology majors gain practical, career-related experience in a variety of supervised field settings through the internship program. Student interns choose from a wide selection of placements in traditional psychology-related programs: mental health, social service, school psychology, early child and special education, probation, and hospital administration. Intern placements in related disciplines include human factors engineering, human resource development, advertising, and public relations. Internships emphasize the integration of learning, both cognitive and experiential. Interns may register for one or two semesters, depending on the availability of appropriate placement sites and qualified supervisors. Interns spend a minimum of 10 hours per week in on-site work and complete the required academic component specified by the faculty coordinator. Enrollment by permission only. Previously PY 0392.