PSYCHOLOGY (PSYC)

Courses

**PSYC 3020 Adolescence (4 Credits)**
Development, behavior, special problems, and characteristics of early and late adolescence. Prerequisites: PSYC 1001, PSYC 2070 or PSYC 2050 or PSYC 2051; must be a Psychology major/minor with sophomore standing.

**PSYC 3029 Imaging the Mind (4 Credits)**
Imaging Cognition is an introductory course to the basic theory and data analysis techniques used in functional magnetic resonance imaging (fMRI). It will cover basic brain anatomy, the basic physics of MRI, experimental design, data processing and the issues associated with data processing, and interpretation of fMRI data. Students in this course will receive hands-on experience in processing a data set from start to finish. They will apply different image preprocessing techniques, statistical design parameters, and statistical models to determine how these factors influence the outcome of the data and how these factors influence the interpretation of that data. In this manner, each student will be exposed individually to the decision issues and interpretation pitfalls involved in fMRI data analysis. In class, students will use the smart-to-the-seat classroom. Cross listed with PSYC 4255. Prerequisites: PSYC 1001 and PSYC 2031, must be a major or minor in psychology, must have at least sophomore standing.

**PSYC 3032 Introduction to Neural Networks (4 Credits)**
Introduction to basic principles and computational methods in artificial neural network modeling; neural models of cognitive and psychological processes examined and evaluated. Cross listed with PSYC 4254. Prerequisite: PSYC 1001, must be a major or minor in psychology, must have at least sophomore standing.

**PSYC 3035 Seminar: Cognitive Neuroscience (2 Credits)**
This seminar is for students in the cognitive neuroscience program. The goal of the seminar is to provide an opportunity for junior- and senior-level cognitive neuroscience majors to apply the knowledge and skills they have acquired in other courses to current cutting-edge topics in the field. Prerequisite: cognitive neuroscience concentration.

**PSYC 3050 Research Methods (4 Credits)**
Survey of research methods and research designs in psychology used to study behavior. Required for all students, especially those planning graduate work in psychology. Prerequisites: PSYC 1001, PSYC 2300, and INFO 1020.

**PSYC 3090 Infancy and Early Childhood (4 Credits)**
The objective of this course is to introduce the study of early development focusing on the prenatal and infant periods. This course considers the exciting changes that take place during pregnancy for both mom and fetus. This course considers biological, cognitive, social, and physical development. This course is part of the field of Developmental Science. The prominent theories and research in the field are considered. Questions developmental psychologists currently and historically study and the research they conduct to help answer these questions are explored. Prerequisite: PSYC 1001 and PSYC 2070 or PSYC 2050 or PSYC 2051. Must be either a major or minor in psychology. Must at least have sophomore standing.

**PSYC 3150 Senior Honors Research Seminar (1-5 Credits)**
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

**PSYC 3151 Senior Honors Research Seminar (1-5 Credits)**
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

**PSYC 3152 Senior Honors Research Seminar (1-5 Credits)**
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

**PSYC 3350 Cultural Psychology (4 Credits)**
This seminar examines how people's sociocultural context shapes their thoughts, feelings, and behaviors. To approach this question, we read and discuss classic as well as recent theoretical and empirical articles from the field of cultural psychology. Topics include defining culture; dimensions of cultural variation; culture-biology interactions; methodological considerations; cultural influences on cognition, emotion, the self, moral judgment, and health; cultural neuroscience; cultural approaches to race and ethnicity; and mechanisms of cultural influence. Throughout, this course emphasizes sociocultural diversity in psychological processes. Students are encouraged to develop empirically tractable ways of asking and answering questions relating to cultural psychology and to apply concepts of cultural psychology to their own research. Prerequisite: PSYC 1001, must be either a major or minor in psychology, must at least have sophomore standing.

**PSYC 3440 Gender and Society (4 Credits)**
Prerequisites: PSYC 1001, must be a psychology major or minor, must have at least sophomore standing.

**PSYC 3666 Brain Development & Cognition (4 Credits)**
Examines what the brain tells us about development and what development tells us about the brain. Topics include subcortical and cortical developments to the acquisition of language and drawing. Prerequisites: PSYC 2050 or PSYC 3031 or BIOL 3640 and 15 quarter hours in psychology, junior or senior standing.
PSYC 3701 Topics in Psychology (1-4 Credits)

PSYC 3702 Psychology of Sexual Minorities (4 Credits)
This class is a thorough review of the state of the development, psychological and other social science knowledge of gay, lesbian, bisexual, transgendered, and other sexual minority individuals. The course will employ a developmental approach in examining the lives of GLBT persons, their special needs, concerns, and vulnerabilities. Topics explored will include the psychology of sexual orientation identity, homophobia, heterosexism, and hate crimes, GLBT adolescents, romantic relationships, couples, parenting, and families. Prerequisite: PSYC 1001.

PSYC 3760 Field Experiences in Psychology (1-2 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, 21 years old by October 1, psychology major, and permission of instructor. Corequisite: PSYC 3759.

PSYC 3761 Field Experiences in Psychology (3-5 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. This class has a service learning component. Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, PSYC 3760, PSYC 3759, 21 years old by October 1, psychology major, and permission of instructor.

PSYC 3762 Field Experiences in Psychology (1-5 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. This class has a service learning component. Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, PSYC 3760, PSYC 3759, PSYC 3761, 21 years old by October 1, psychology major, and permission of instructor.

PSYC 3991 Independent Study (1-10 Credits)
Maximum of 5 hours per quarter not to exceed a total of 10 quarter hours.

PSYC 3992 Directed Study (1-10 Credits)

PSYC 3999 Psychology Senior Assessment (0 Credits)
This course involves a required assessment of graduating psychology majors' knowledge of the discipline based on coursework taken one quarter prior to graduation. Prerequisites: at least any five of the following courses required for the major: PSYC 1001 or equivalent, PSYC 2300, 3050 or 2751-2752, PSYC 2500 or 2510 or 2520 or 2530, PSYC 2060 or 2040 or 3030, PSYC 2050 or PSYC 3055; PSYC 2031 or 2130, PSYC 2031 or 2150 or at least 163 total credit hours or at least 30 credits of psychology hours.

PSYC 4002 Proseminar in Memory and Cognition (5 Credits)
Theory/research on thinking, problem solving, language, creative thought, other aspects of knowing process.

PSYC 4011 Proseminar in Emotion (5 Credits)
Social/physiological aspects of emotions, including motivation, physiological processes, basic emotions, cognitive appraisal, cross-cultural issues, empathy, effects of emotions.

PSYC 4020 Proseminar in Personality (5 Credits)
Personality structure/dynamics, theory and findings, interrelationships between personality and socio-cultural determinants of behavior.

PSYC 4021 Proseminar in Social Psychology (5 Credits)
Major theoretical issues and empirical research in social psychology; topics include cultural, social structure, cognitive consistency, social neuroscience, social cognition, person perception, the self, social influence, attitudes, relationships, emotion, coping.

PSYC 4031 Developmental Proseminar: Cognition & Perception (5 Credits)
Problems/theories in developmental psychology including Piagetian theory, language, emotional, perceptual, personality development, learning, biological bases of behavior, genetic influences.

PSYC 4032 Developmental Proseminar: Social-Emotional (5 Credits)
Problems/theories in developmental psychology including Piagetian theory, language, emotional, perceptual, personality development, learning, biological bases of behavior, genetic influences.

PSYC 4033 Developmental Proseminar: Biological (5 Credits)
This course provides an overview of major biological processes during development and their effects on physical, cognitive, and social development. Specific topics will include: history, concepts, and central themes of developmental psychology; theoretical and biological models of human development (e.g., developmental psychobiological systems view); brain development and plasticity; behavioral genetics; sleep and circadian rhythms; sexual differentiation and hormonal influences on behavior; stress and the HPA axis; effects of nutrition and toxic substances.

PSYC 4043 Clinical Approaches: Community (5 Credits)
Community psychology; major theoretical/conceptual issues, assessment/intervention techniques.

PSYC 4045 The Developing Brain (4 Credits)
This course presents an overview of current research and methods in the field of developmental cognitive/affective/social neuroscience. The course examines what the brain tells us about development and what development tells us about the brain. Topics include sensitive periods for neuroplasticity, pediatric neuroimaging methods, attention, language, affective and social development. Cross-listed with course 3045. Prerequisite: Instructor permission.
PSYC 4050 Cultural Psychology (5 Credits)
This seminar examines how people's sociocultural context shapes their thoughts, feelings and behaviors. To approach this question, we read and discuss classic as well as recent, theoretical as well as empirical articles form the field of cultural psychology. Topics include: (1) defining culture; (2) dimensions of cultural variation; (3) culture-biology interactions; (4) methodological considerations; (5) cultural influences on cognition, emotion, the self, moral judgment, and health; (6) cultural neuroscience; (7) cultural approaches to race and ethnicity; and (8) mechanisms of cultural influence. Throughout, this course emphasizes sociocultural diversity in psychological processes. Students are encouraged to develop empirically tractable ways of asking and answering questions relating to cultural psychology and to apply concepts of cultural psychology to their own research.

PSYC 4055 The Neuroscience and Psychology of Parenthood and Parent-Child Relationships (4 Credits)
This course explores the theory, research and issues relevant to parenthood and parent-child relationships. The course overviews the evolutionary, neurobiological, and psychological perspective of parent-child relationships with a focus on the understanding of recent advances in neuroscience research. Topics include neuroplasticity of parental brain, maternal vs. paternal biology for parenting, and social and biological determinants of parent-child relationships. Emphasis is placed on discussion of current research, evaluation of the findings, and proposals and ideas of new research in the field. The goal is not to memorize facts but rather to learn to think like a developmental cognitive/social neuroscientist. Cross-listed with course PSYC 3055. Prerequisite: Instructor permission.

PSYC 4060 History and Systems of Psych (5 Credits)
General nature of scientific progress throughout history as relates to evolution of psychology as scientific/academic discipline; history explored by asking whether prevailing Zeitgeist, the appearance of the "Great Mind," or some combination of both factors was responsible for pivotal changes seen throughout psychology's history.

PSYC 4085 Stress & Health (5 Credits)
This course will serve as an introduction to the field of psychoneuroimmunology, with a focus on stress and development. The first section of the course will review basic immunology including immune system components and functions, and relations between the immune system and other systems. The later portion of the course will focus on effects of stress for different disease mechanisms (infection, allergy, cancer etc).

PSYC 4235 Teaching Psychology (1-5 Credits)
Experiential approach to learning techniques for teaching psychology.

PSYC 4241 Seminar-Discourse Processes (5 Credits)

PSYC 4249 Prosem in Reading and Language (5 Credits)

PSYC 4254 Intro to Neural Network Models (4 Credits)
Cross listed with PSYC 3032.

PSYC 4255 Imaging the Mind (4 Credits)
Imaging Cognition is an introductory course to the basic theory and data analysis techniques used in functional magnetic resonance imaging (fMRI). It will cover basic brain anatomy, the basic physics of MRI, experimental design, data processing and the issues associated with data processing, and interpretation of fMRI data. Students in this course will receive hands-on experience in processing a data set from start to finish. They will apply different image preprocessing techniques, statistical design parameters, and statistical models to determine how these factors influence the outcome of the data and how these factors influence the interpretation of that data. In this manner, each student will be exposed individually to the decision issues and interpretation pitfalls involved in fMRI data analysis. In class, students will use the smart-to-the-seat classroom. Cross listed with PSYC 3029.

PSYC 4256 Seminar:Cognitive Neuroscience (5 Credits)
It will cover basic brain anatomy, the basic physics of MRI, experimental design, data processing and the issues associated with data processing, and interpretation of fMRI data. Students in this course will receive hands-on experience in processing a data set from start to finish. They will apply different image preprocessing techniques, statistical design parameters, and statistical models to determine how these factors influence the outcome of the data and how these factors influence the interpretation of that data. In this manner, each student will be exposed individually to the decision issues and interpretation pitfalls involved in fMRI data analysis. In class, students will use the smart-to-the-seat classroom. Cross listed with PSYC 3029.

PSYC 4257 Psychophys & Neuroscience Lab (5 Credits)

PSYC 4258 Social Neuroscience (5 Credits)

PSYC 4260 Psychophysiology (5 Credits)
This course will serve as an introduction to the field of psychophysiology, with a focus on autonomic psychophysiology (e.g., measures of the electrodermal and the cardiovascular system). Such measures uniquely allow researchers to answer questions about mind-body interactions, emotions, cognition, and health, among others. The first section of the course will review theory of psychophysiology and relevant physiological systems as well as introduce students to the basics of psychophysiological measurement. The second section of the course will be hands-on, allowing students either to write a study proposal involving psychophysiological measurement or to use the psychophysiology lab to design and execute their own study using physiological measures.

PSYC 4262 Affective Neuroscience (4 Credits)
Affective neuroscience is the study of emotions in the brain. In this course, we explore how new frontiers in emotion research, from brain scans to psychoactive drugs to monkey colonies, have changed the way we think about emotions and moods. We aim to learn how scientists ask these new questions: how and what can we learn about emotion from animal models, patient studies, genetic studies, brain scans, and drugs? We learn and debate different theories about what emotions are: when are emotions helpful and harmful? Why do we have them? How many are there? Can we control how we feel? Finally, we learn how to think about emotions scientifically: What kind of evidence matters? How do emotion scholars talk about their work? What kind of questions can we ask, and what kind can we hope to answer?
PSYC 4265 Social Perception and Communication (5 Credits)
The way that people look and communicate evoke immediate and sometimes automatic responses from other people. Accordingly, this course includes topics such as facial structure and function, nonverbal communication, social categorization, behavioral mimicry, and thin-slices.

PSYC 4270 Seminar-Social Cognition (5 Credits)
Theory research in cognitive social psychology, including social knowledge structures, categorization of social information, social memory, judgment and inference, cognition-emotion links, effects on social behavior.

PSYC 4295 Research Design & Inference (5 Credits)

PSYC 4300 Correlation and Regression (5 Credits)
Theory/computational methods of major parametric/ nonparametric correlation techniques.

PSYC 4330 Analysis of Variance (5 Credits)
Complex analysis of variance, other quantitative methodologies. Prerequisite: PSYC 4300 or instructor’s permission.

PSYC 4350 Structural Equation Modeling for the Social Sciences (5 Credits)
This advanced course covers the basics of structural equation modeling and how this flexible approach to statistical analysis can be applied in the social sciences. Specific techniques that will covered will include testing for mediation, path analysis, confirmatory factor analysis, and the analysis of longitudinal data, as well as other related topics. There will be an emphasis on applying these techniques to students’ own research through hands-on demonstrations and homework assignments and an emphasis on interpreting and critiquing structural equation models in published research. A course on correlational methods and regression is a pre/co-requisite.

PSYC 4355 Multilevel Modeling for the Psychological Sciences: Theory and Applications (5 Credits)
This advanced course covers the basics of multilevel (hierarchical) linear modeling and how this flexible approach to statistical analysis can be applied to theory and data in the psychological sciences. Specific techniques that will be covered include the analysis of nested data, family and dyadic data, and longitudinal data as well as mediation and moderation. There will be an emphasis on applying these techniques to students’ own research through hands-on demonstrations and homework assignments. There will also be an emphasis on interpreting and critiquing multilevel modeling analyses in published research. Courses on analysis of variance as well as correlational methods and regression are pre/corequisites.

PSYC 4411 Child Assessment-Cognition (2-5 Credits)
PSYC 4413 Child Assessment-Personality (5 Credits)
Overview of evidence-based psychological assessment (emotional, behavioral, and social) of children and adolescents with a focus on integrating theory, research, and clinical practice.

PSYC 4511 Prosem in Psychopathology (5 Credits)
Theories of behavioral/personality disorders on children; survey of clinical/experimental literature.

PSYC 4512 Prosem in Psychopathology (5 Credits)

PSYC 4518 Readings in Family Therapy (5 Credits)
This course will survey major historical and contemporary theories from the field of family therapy. Basic family therapy techniques will be covered, and integrated with other modes of therapy (e.g. individual, marital). In the second half of the course, students will work with families and receive group supervision.

PSYC 4525 Prosem in Develop Neuropsy (5 Credits)
Normal brain development, functional neuroanatomy, clinical conditions that can affect brain functioning in children, adults.

PSYC 4526 Prosem in Cog Neuroscience (5 Credits)
This is a graduate-level introduction to cognitive neuroscience. It covers basic theories of cognition and their neurological support.

PSYC 4540 Adv Topics in Cognitive Devel (5 Credits)
Varying topics; theory/research in cognitive development including Piagetian work. Prerequisite: graduate status or instructor’s permission.

PSYC 4545 Memory Dvlpmt:Nature & Nurture (5 Credits)
Theory & research in the field of memory development, with particular emphasis on neurobiological perspectives of memory development. Considers the role of biology (nature), as well as the socio-cultural context (nurture) in which memory develops. Specific topics in memory development will include: early memory development & infantile amnesia, infant visual recognition memory, procedural memory, episodic memory, autobiographical memory, and trauma & memory development. Since the course covers topics in systems level neuroscience (i.e., a class in behavioral or cognitive neuroscience). Classes that fulfill this prerequisite include PSYC 4255, PSYC 4256, PSYC 4257, PSYC 4525 or PSYC 4526 or instructor approval.

PSYC 4565 Systems of Psychotherapy (5 Credits)
The course provides an introduction to evidence-based treatment for children and adolescents. Conceptual and empirical underpinnings of youth therapies are examined. Treatments for three prominent child and adolescent disorders - disruptive behavior problems, depression, and anxiety disorders - are highlighted. Demonstration and practice of specific treatment components is included.

PSYC 4566 Systems of Psychotherapy II (5 Credits)
Conceptual/empirical foundations of interventions for clinical problems, including (but not limited to) parasuicidality, Borderline Personality Disorder, and substance abuse.

PSYC 4571 Multicult Issues & Ment Health (5 Credits)
Theory, research, and practice issues related to the mental health of racial/ethnic minority and other diverse groups.
PSYC 4579 Research Design (5 Credits)
PSYC 4587 Workshop in Marital Therapy (4 Credits)
PSYC 4612 Marital Conflict (1-10 Credits)
PSYC 4620 Advan in Couples Intervention (5 Credits)
PSYC 4625 Marital/Couples Thrpy-Div Popl (5 Credits)
This course will cover the complexities in couples research and intervention that are the focus of current investigations in labs around the world.
The major issues revolve around the role that marital problems play in the development, maintenance and treatment of a variety of child and adult problems and vice versa. These will include, adult sexual problems, alcohol and drug use and abuse, anxiety disorders, depression, medical problems, and that marital discord and destructive conflict are generic risk factors for a wide range of child and adult mental health problems and that marital health is a protective factor.
PSYC 4660 Perception: A Cognitive Neuroscience Approach (4 Credits)
An introduction to human perception with a strong emphasis on visual perception. This course evaluates the current understanding of how neural activity in the brain allows people to perceive basic sensory features (e.g., brightness, color, size, position, depth, movement, loudness and pitch) as well as recognize and discriminate complex perceptual patterns (e.g., 2D-shapes, 3D-objects, faces, and scenes). The underlying mechanisms are discussed on the basis of behavioral, neurophysiological, and computational evidence.
PSYC 4668 Clinical Psychopharmacology (4 Credits)
This course offers an in-depth examination of medications used to treat mental disorders, including the neurobiology of these medications. Different options available for each disorder will be discussed, along with issues related to the effective use of psychiatric medications. Prerequisites: Instructor approval required.
PSYC 4920 Ethics-Psych & Rsch Practice (2 Credits)
Ethical issues on psychological research. Teaching, practice.
PSYC 4925 Clinical Ethics and Professional Issues in Psychology (3 Credits)
Ethical topics related to clinical psychology; professional topics in clinical psychology such as supervision and consultation. Instructor permission required.
PSYC 4930 Psychology Practicum-Clinical (1-5 Credits)
On-the-job training in clinical psychology. May be repeated for a maximum of 24 quarter hours. Prerequisite: Admission to doctoral program.
PSYC 4931 Psychology Practicum-Teaching (1-5 Credits)
On-the-job training in teaching psychology. May be repeated for a maximum of 24 quarter hours. Prerequisite: Admission to doctoral program.
PSYC 4932 Psychology Practicum-Research (1-5 Credits)
On-the-job training in research psychology. May be repeated for a maximum of 24 quarter hours. Prerequisite: Admission to doctoral program.
PSYC 4934 Practicum: DCN Neuropsychology (1-10 Credits)
PSYC 4992 Directed Study (1-10 Credits)
PSYC 5991 Masters Independent Study (1-10 Credits)
PSYC 5995 Masters Independent Research (1-10 Credits)
PSYC 6981 APA Internship (8 Credits)
1 Year APA approved Internship in clinical psychology - the course is not graded.
PSYC 6991 Ph.D Independent Study (1-10 Credits)
PSYC 6995 Ph.D Independent Research (1-10 Credits)