Psychological Sciences

General Information

Psychology Academic Advising Office
Undergraduate psychology majors and other students interested in majoring or minoring in Psychological Sciences should meet with an Academic Advisor in the Psychology Academic Advising Office (Stadler 322) to receive specific information on degree requirements and course offerings, discuss questions about career options, and receive information about graduate work in Psychology. All students are encouraged to see a Psychology Academic Advisor regularly throughout their collegiate careers. It is especially important for all students who are within one calendar year of graduation to meet with a Psychology Academic Advisor. Students can make an appointment by e-mailing: psy_advising@umsl.edu or calling 314-516-5391.

Career Outlook
The undergraduate major in Psychological Sciences can provide the foundation for further training in psychology at the graduate level, the background necessary for graduate training in other fields such as the health professions, social work or counseling, or the liberal arts background necessary for entry level positions in many fields such as business, communication, and human services and mental health positions. To function specifically as a psychologist, a graduate degree is required. For more career information please schedule an appointment with an Academic Advisor in the Psychology Academic Advising Office (Stadler 322; 314-516-5391; psy_advising@umsl.edu). For additional information, visit the American Psychological Association website at www.apa.org.

Facilities
The department has several human experimental laboratories furnished with a wide range of psychophysiological equipment. The department also operates four facilities (Community Psychological Services (CPS), the Center for Trauma Recovery (CTR), the Center for Behavioral Health (CBH), and Children’s Advocacy Services of Greater St. Louis (CASGSL)) which provide training opportunities for students in Psychology, as well as psychological treatment and assessment services for citizens of the region.

Program Overview
The Department of Psychological Sciences offers a broad-based curricular plan leading to a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree in Psychological Sciences as well as minors in Psychological Sciences and Child Advocacy Studies. In addition the department offers a B.A. degree Applied Psychology in Child Advocacy Studies. There are several certificates that can be earned through the department including, an undergraduate certificate in Trauma Studies, Neuroscience and Child Advocacy Studies (CAST). The department also offers a terminal Master of Arts in Psychology, with a specialization in Behavioral Neuroscience. The department offers two options within its Ph.D. Program: Clinical Psychology or Behavioral Neuroscience.

Graduate School Preparation
Students interested in applying to graduate school in Psychology are strongly encouraged to become involved in a research project with a Psychology faculty member by securing enrollment in PSYCH 3390.

Directed Studies. These positions are available on a limited and competitive basis. No enrollments in PSYCH 3390 are possible without special Instructor permission. Those invited to participate must obtain a special consent form from the instructor in order to enroll. Contact the Psychology Academic Advising Office for more information on such positions (psy_advising@umsl.edu).

Degrees
- Applied Psychology of Child Advocacy Studies BA
- Psychological Sciences BA
- Psychological Sciences BS
- Psychology MA, Behavioral Neuroscience Emphasis
- Psychology PhD, Behavioral Neuroscience Emphasis
- Psychology PhD, Clinical Community Psychology Emphasis
- Psychology PhD, Industrial and Organizational Psychology Emphasis

Minors
- Child Advocacy Studies Minor
- Psychology Minor

Certificates
- Child Advocacy Studies Undergraduate Certificate
- Neuroscience Undergraduate Certificate
- Trauma Studies Undergraduate Certificate
- Workplace and Organizational Science Undergraduate Certificate
- Psychology Clinical-Respecialization Graduate Certificate

Psychology Courses

PSYCH 1000 Choosing a Career in Psychology: 1 semester hour
Prerequisite: Psychology Major or consent of instructor. This course is an orientation to the field of psychology for majors and for students who are considering declaring the major. This course is to be completed by native and transfer Psychology majors during their first semester of study at UMSL. Students will be engaged in activities that will help them to develop and identify their professional goals, learn about the various specialties and careers available within the field of psychology, understand the education and skills necessary for various careers, learn the requirements for a psychology major, become familiar with minors that are available at UMSL, think about a possible choice of minor or certificate, and become acquainted with the interest areas of UMSL faculty in Psychology and related fields. All Psychology majors must complete this course during the first semester at UMSL with a grade of C- or higher.

PSYCH 1003 General Psychology (MOTR PSYC 100): 3 semester hours
A survey of the basic concepts, theories, and pivotal findings over the past 100 years in the science of Psychology, with special emphasis on contemporary concepts and findings that focus on the relation of the brain to normal and pathological behaviors. All Psychology majors must complete this course with a grade of C- or higher.
**PSYCH 2003 Careers in Health and Medicine: 1 semester hour**
In this course, students will learn about occupations in such fields as medicine, the allied health professions, health non-profit organizations, and global healthcare delivery. Students will understand the education and skills necessary for various careers and for application to medical, professional, and graduate schools, and will become familiar with majors, certificates and minors that are available at UMSL. They will learn about employment opportunities in the healthcare industry in St. Louis metropolitan area, and will be introduced to members of the local community who give guest lectures. Students will gain practical experience by shadowing a healthcare professional in their job.

**PSYCH 2040 Attraction: An Evolutionary Approach: 3 semester hours**
Prerequisites: PSYCH 1003. This course examines the topics of interpersonal and sexual attraction in a scientific context through the milieu of popular media outlets as well as published empirical literature from the fields of Psychology, Anthropology, Ecology, Economics, and Gender Studies. Specific topics include attraction cues, jealousy, monogamy, infidelity, the economics of sex, and the long-term and short-term mating strategies of men and women. We will also investigate the technological and media manipulation of sexual cues, as well as conflicts between the sexes, religion and sex, the peopling of the earth, the fundamentals of evolved psychological mechanisms, identifying adaptive problems and potential solutions, gender roles, parental investment, issues of kinship, and inter- and intra-sexual competition.

**PSYCH 2200 Drugs and Behavior: 3 semester hours**
Prerequisite: PSYCH 1003. The course is an introduction to psychopharmacology and the relationship among drugs, and how these impact the brain and behavior. The emphasis is on physiological mechanisms underlying the behavioral responses to psychotherapeutic substances, illicit psychoactive drugs, commonly used substances (alcohol, nicotine, caffeine), and drug-like substances produced naturally in the body.

**PSYCH 2201 Psychological Statistics: 4 semester hours**
Prerequisites: PSYCH 1003 and satisfaction of the University’s mathematical skills requirement. (With Laboratory) This course serves as an introduction to statistical concepts and methods used in Psychological measurement and the analysis and interpretation of social sciences data. Topics include descriptive statistics, frequency distributions centrality, variability, and correlational measures; as well as an introduction to statistical inference, sampling fundamentals, significance testing and effect size, t-test, and analysis of variance. All Psychology majors must complete this course with a grade of C- or higher before registering for PSYCH 2219.

**PSYCH 2205 Human Sexuality: Psychological Perspectives: 3 semester hours**
Prerequisites: PSYCH 1003. This course is a comprehensive overview of human sexuality from the standpoint of the behavioral science of Psychology. This course includes a study of sexual anatomy and physiology, intersex classifications, sex and gender differences, sexual orientation, interpersonal and interpersonal aspects of human sexuality, classification and treatment of sexual dysfunction and sexual disorders, sexual victimization, and the methods employed for the scientific examination of human sexual behavior.

**PSYCH 2211 Introduction to Biological Psychology: 3 semester hours**
Prerequisites: PSYCH 1003 and 3 hours of BIOL chosen from either BIOL 1012, or BIOL 1102, or BIOL 1831. Students with career goals that include graduate study in Psychology are urged to complete the BIOL 1831 prerequisite for this course. This course introduces psychology students to behavioral neuroscience and neuropsychology. Course topics include basic neuroanatomy and neurophysiology, neurodevelopment, sensory and motor systems, and the integration of subcortical and cortical networks. All are covered with an emphasis on behavioral outcomes of normal and pathological functioning of the brain. All psychology majors must complete this course with a grade of C- or higher.

**PSYCH 2219 Research Methods in Psychological Science: 3 semester hours**
Prerequisites: PSYCH 2201 and ENGL 3100. This course is a comprehensive overview of research methods in the psychological sciences. Topics may include technical scientific writing in current APA format, critical evaluation of research literature, the application of statistical methods, and mastery of the ethical principles guiding psychological sciences research. Course and laboratory work involve designing and evaluating research questions, formulating research hypotheses, designing and conducting original research studies, and presenting research results. All psychology majors must complete this course with a grade of C- or higher.

**PSYCH 2220 Psychology of Gender: 3 semester hours**
Same as GS 2230. Prerequisite: PSYCH 1003. Evaluation of psychological theories and research regarding physiological, cognitive, and personality gender differences and similarities, gender related problems in adjustment, and gender specific clinical interventions.

**PSYCH 2245 Abnormal Psychology: 3 semester hours**
Prerequisite: PSYCH 1003. This course examines the historical views and current perspectives on the possible antecedents, symptoms, and treatments of major psychological disorders, including anxiety, dissociative, mood, somatoform, eating, schizophrenia and substance-related disorders. Major diagnostic categories and criteria, individual and social factors of maladaptive behavior, methods of clinical assessment, research strategies, and types of therapy will also be covered. All psychology majors must complete this course with a grade of C- or higher.

**PSYCH 2250 Social Psychological Science: 3 semester hours**
Prerequisite: PSYCH 1003. This course examines the scientific study of the way people think, feel, and behave in social situations. The content focuses on understanding how people influence, and are influenced by, real or imagined others. Specific topics may include the self, social judgments, attitudes and persuasion, helping behavior, prejudice, aggression, attraction, conformity and obedience, and group processes.

**PSYCH 2268 Lifespan Developmental Psychology (MOTR PSYC 200): 3 semester hours**
Prerequisites: PSYCH 1003. This survey course examines development over the lifespan with an emphasis on the developmental tasks and challenges of each age period.
PSYCH 2270 Developmental Psychology: Infancy, Childhood and Adolescence: 3 semester hours
Prerequisites: PSYCH 1003. This course systematically examines theories and research concerning the physical, social, emotional, and cognitive development of children from conception through adolescence. It will provide students with a basic knowledge of infant, child, and adolescent development; its subject matter; its approaches to gathering and evaluating evidence about the causes of behavior; and the ways in which our knowledge is applied to enhance the development and the quality of life of children. It is intended for Psychology majors and students with career interests in research, education, and/or the treatment of children. All Psychology majors taking this course instead of PSYCH 2250, must complete it with a grade of C- or higher.

PSYCH 2285 American Culture and Minority Mental Health: 3 semester hours
Prerequisites: PSYCH 1003. Provides an examination of the relationship between American culture and mental health. The focus is on the lives of American minority groups, with specific attention given to how racism, prejudice, and minority status currently reveal themselves within a mental health framework. An eclectic, multidisciplinary approach that draws from clinical and social psychology will be utilized.

PSYCH 2299 Directed Readings in Psychology: 3 semester hours
Prerequisites: PSYCH 1003 or SOC 1010, or consent of instructor. This course will provide an intellectual forum for discussing classic and contemporary theories and research in psychology on a selected topic. Students can retake the course as long as the topic is different.

PSYCH 2400 Sports Psychology: 3 semester hours
Prerequisites: PSYCH 1003. This course examines psychological, biological, and social aspects of sport and human performance. Course topics may include performance enhancement, mental skills training, motivation, group dynamics, as well as physiological responses to stress and anxiety in sport.

PSYCH 2500 Human Motivation: 3 semester hours
Prerequisite: PSYCH 1003. This course approaches human motivation through a biopsychosocial perspective, including theories of motivation, individual motivation, and how motivation differs. Application will include real-life workplace and educational psychology contexts.

PSYCH 3205 Evolutionary Psychology: 3 semester hours
Prerequisites: PSYCH 2211. Evolutionary Psychology refers to a fundamentally unique approach to studying and thinking about human and animal behavior through considerations of 1. The challenges and stressors encountered in ancestral environments, 2. The proximate physical, psychological, and anatomical methods that evolved to meet these adaptive problems, and 3. How adaptive or maladaptive these mechanisms are in current environments. Special emphasis will be placed on the evolution of brain structures, cognitive processes, and social behaviors. The content for this course is not new; Evolutionary Psychology involves looking at the science of Psychology through a unique lens, shaped by its tenets. Although appreciation for this approach to psychological research is increasing, it remains controversial in psychology circles. We will discuss the state of this aspect of Psychology as well.

PSYCH 3232 Psychology of Trauma: 3 semester hours
Same as GS 3232. Prerequisites: PSYCH 1003. This course examines responses to potentially traumatic events (e.g., child abuse and neglect, physical and sexual assault, intimate partner violence, community and gun violence, war, natural disasters). Trauma exposure, posttraumatic growth, the development of trauma-related difficulties including PTSD, assessment and intervention are examined with attention to gender, cultural and lifespan issues.

PSYCH 3280 Psychology of Death and Dying: 3 semester hours
Same as GERON 3280. Prerequisite: PSYCH 1003 or consent of the instructor. An exploration of end-of-life issues integrating the scholarly, social, and individual dimensions of death and dying. This course provides a solid grounding in theory and research, as well as practical application to students' lives.

PSYCH 3290 Traumatic Stress in Childhood and Adolescence: 3 semester hours
Same as CAST 3290. Prerequisites: PSYCH 2270 (majors) or PSYCH 2268 or ED PSY 2212 or approval from the instructor. This course is an exploration of the biopsychosocial impact of community, family, and individual trauma and stressors experienced during infancy, childhood, and adolescence. It introduces students to relevant theoretical frameworks, cultural considerations, and advocacy strategies.

PSYCH 3295 Selected Projects in Field Placement: 3 semester hours
Prerequisites: 15 credit hours of psychology and consent of instructor. This course provides for selected options in field work placement experiences on campus or in various local agencies with training and supervision by faculty. It may be repeated once for credit.

PSYCH 3299 Special Readings in Psychology: 1-3 semester hours
Prerequisites: PSYCH 1003 and consent of instructor. This course entails independent readings and a writing project selected in consultation with a supervisory faculty member. Instructor approval must be obtained before enrolling. This course may be taken only once.

PSYCH 3318 Industrial and Organizational Psychology: 3 semester hours
Same as MGMT 3623. Prerequisites: PSYCH 2201 or MATH 1105 (or equivalent). This course introduces students to psychological research and theories pertaining to human behavior in the work setting. Topics covered may include: selection, performance appraisal, training, leadership, motivation, job satisfaction, and organizational design.

PSYCH 3340 Clinical Problems of Childhood: 3 semester hours
Prerequisites: PSYCH 2245 or PSYCH 2270. This course will address the clinical disorders and difficulties of children, as well as the causes and the treatment of these disorders. Topics addressed may include autism, childhood schizophrenia, conduct disorders, learning disabilities, ADHD, mood disorders, health-related disorders, anxiety disorders, and child maltreatment. Treatments designed for specific use with children, including behavioral, drug and community mental health approaches will be addressed. This course is recommended for those going on to graduate work in psychology.

PSYCH 3346 Introduction to Clinical Psychology: 3 semester hours
Prerequisite: PSYCH 1003, PSYCH 2245; and three additional hours of Psychology. This course provides a conceptual framework for research, description and understanding of clinical phenomena. Assessment, interviewing, the clinical use of tests and psychological approaches to treatment are also addressed.

PSYCH 3390 Directed Studies: 1-6 semester hours
Prerequisite: Consent of instructor. Directed reading and research. May be repeated for a maximum total of ten hours.
PSYCH 3500 Health Psychology: 3 semester hours
Prerequisite: PSYCH 1003 and three additional hours of Psychology.
Health Psychology involves the discipline and principles of psychology and behavior in understanding how the mind, body, and behavior interact in health and disease. Class topics include theoretical foundations of health and illness, health promotion and primary prevention of illness, health enhancing and health damaging behaviors, psychosomatic illness, stress, and coping, pain management, and a variety of specific behavior-related medical illnesses (e.g., heart disease, eating disorders, cancer, AIDS).

PSYCH 3820 Cross-Cultural Psychology: 3 semester hours
Prerequisites: PSYCH 1003 and 9 hours of Psychology. The purpose of this course is to present students with a broad theoretical and applied overview of cross-cultural psychology. To this end, the course presents an orientation to the definitions, concepts, theories, and methodologies of cross-cultural psychology. Included is an examination of cultural and ecological factors and their influences on perceptual and cognitive processes, personality, language, and other psychological variables.

PSYCH 3995 Undergraduate Teaching Internship in Psychology: 1 semester hour
Prerequisites: PSYCH 1003 and 6 additional credits in Psychological Sciences (9 credits minimum), and instructor consent. This course prepares students to work as learning assistants, tutors, or peer mentors for courses within the Department of Psychological Sciences. Students will develop general pedagogical skills. Specific teaching assistant duties will be determined by the instructor of record for the associated course. This course may be repeated for up to 3 total credit hours.

PSYCH 4250 Stereotyping, Prejudice, and Discrimination: 3 semester hours
Prerequisites: PSYCH 2219 and PSYCH 2250, or consent of instructor. This course will provide an intellectual forum for discussing classic and contemporary theories and methodologies focused on understanding stereotyping, prejudice, and discrimination. Using a social psychological framework, students will assess psychology's current understanding of why people use and apply stereotypes in their everyday thinking and behavior. Students will also explore such topics as social categorization, stereotype activation, contemporary forms of prejudice, the social context of prejudice, the consequences of prejudice and discrimination, the stigmatized target's perspective, coping with prejudice, and techniques for reducing prejudice and discrimination.

PSYCH 4300 Introduction to Psychopharmacology: Drugs and Mental Illness: 3 semester hours
Prerequisites: PSYCH 1003, PSYCH 2211 or PSYCH 2200; PSYCH 2245. The course is designed to provide an introduction to drugs used to treat anxiety disorders, major depression, schizophrenia, and other psychopathologies. The emphasis will be on understanding neural mechanisms related to psychological disorders and to the effectiveness of current drug treatments.

PSYCH 4305 Developmental Psychology: Cognitive Development of Children: 3 semester hours
Prerequisites: PSYCH 1003, PSYCH 2270, and junior standing, or consent of instructor. Data and theory concerned with how children's thinking changes over time. Discussion will include domain-general versus domain-specific theories, social and cultural influences on cognition, gains in memory, attention, problem solving, and metacognition, conceptual development, children's naive theories, schooling, and various definitions and measures of intelligence.

PSYCH 4311 Psychology of Nonverbal Behavior: 3 semester hours
Prerequisites: PSYCH 2250 and ENGL 3100. This writing-intensive course examines the psychological perspective on the role of nonverbal behavior in social settings. Primary concerns of the course will include an analysis of the functions of nonverbal behavior (e.g., providing information, regulating interaction, expressing intimacy, exercising influence, and managing impressions), factors influencing nonverbal expression (e.g., culture, personality, relationships), and various theoretical views on nonverbal communication. Applications to various problems and settings in everyday life will also be pursued.

PSYCH 4314 Behavioral Neuroscience: 3 semester hours
Prerequisites: PSYCH 2211 or BIOL 1831 or consent of instructor. This neuroscience course focuses on behavioral outcomes of brain function and dysfunction. Course emphasis will be on modern research methods with animal models and humans. Topics discussed may include the classic findings in the field, but the emphasis will be on recent findings from human neuropsychology, neuroimaging, cognitive neuroscience, neuropharmacology, and neuroendocrinology.

PSYCH 4330 Hormones, The Brain and Behavior: 3 semester hours
Prerequisites: 9 hours of psychology or biology, including at least one of the following: PSYCH 2200, PSYCH 2211, or PSYCH 4300 or consent of instructor. Historically, hormones have been studied for their role in reproduction, including reproductive physiology and sexual behaviors. It is now clear, however, that the endocrine system actively interacts with brain regions unrelated to reproduction with the result that sex hormones and neuropeptide hormones influence a wide range of behaviors including mood, anxiety, stress responses, cognition, memory, violence, attachment, aging, weight control and athletic prowess. Emphasis of the class is on hormonal contribution both to reproductive and non-reproductive behaviors with special attention paid to gender behavioral differences. This course may be taken for graduate credit with permission of the instructor.

PSYCH 4340 Introduction to Human Neuroanatomy: 3 semester hours
Prerequisites: Grade of B- or above in PSYCH 2211, and nine hours of psychology or biology or consent of instructor. This course is an intensive introduction to brain anatomy. It will explore the structure and function of the human nervous system with the goal of preparing students for advanced study in neuroscience-related fields. Topics will include a review of core concepts from cellular neuroscience, neuroimaging and neuroanatomical techniques, sensory and motor systems, and the anatomical basis of cognitive functions. Based on an understanding of typical brain structure and function, the anatomical and physiological basis of various neurological disorders is explored.

PSYCH 4349 Human Learning and Memory: 3 semester hours
Prerequisites: PSYCH 2211 and six additional hours of psychology; or consent of instructor. This course focuses on the basic forms of learning and memory such as habituation, sensitization, conditioning, and skill/procedural memory, as well as more complex forms of learning and memory such as semantic memory, episodic autobiographical memory, short-term and working memory, and social learning. Students will learn about the neurobiological basis of learning and memory on both cellular and system levels. In addition, students will study how factors such as emotion and age affect learning and memory as well as the relevance of learning and memory for clinical and legal environments.
PSYCH 4350 Emotions and the Brain: 3 semester hours
Prerequisites: PSYCH 2211 and six additional hours of psychology; or consent of instructor. Emotions play an important role in everyday life. But what exactly is an emotion? And what happens in your body when you experience an emotion? More specifically, what happens in your brain? Doesn't the limbic system have something to do with emotions? What are the differences and similarities between emotions (such as anger) and motivations (such as hunger)? What happens in your body and brain when you fall in love? And how do emotions influence cognition, such as attention and memory? Conversely, does cognition influence our emotions as well? These are some of the questions that we will answer in this course. Given that many mental disorders involve emotional disturbances, this course is not only relevant for students who are interested in the fundamental knowledge of emotions, but also for students who are interested in clinical psychology.

PSYCH 4356 Cognitive Processes: 3 semester hours
Prerequisite: Nine hours of psychology or consent of instructor. This course is an overview of the major topics in cognitive psychology, including perception, visual imagery, attention, memory, knowledge representation and retrieval, language, problem solving, reasoning, judgment, decision making, and intelligence.

PSYCH 4365 Psychological Testing and Assessment: 3 semester hours
Prerequisites: Grade of C- or above in PSYCH 2201, or consent of instructor. This course covers the uses, construction, and evaluation of psychological tests and assessments. Students will learn about tests designed to measure personality, intelligence, and other individual differences, including issues related to test use in specific settings. Examination of professionally-developed tests and hands-on learning exercises will be key aspects of the course.

PSYCH 4372 Introduction to Social Neuroscience: 3 semester hours
Prerequisites: PSYCH 2250 and PSYCH 2211, or consent of instructor. This course introduces current theory and research in social neuroscience with a focus on mechanisms underlying mind and behavior interactions using a multi-level integrative analysis. It examines how organismic processes are shaped, modulated, and modified by social factors and vice versa. This course may be taken for graduate credit with permission of the instructor.

PSYCH 4374 Introduction to Clinical Neuropsychology: 3 semester hours
Prerequisites: PSYCH 2211 and PSYCH 2245, or consent of instructor. This course is an introduction to current theory and practice of clinical neuropsychology with a focus on neuropsychological findings concerning relationships between the brain and behavior. Particular attention is devoted to function, neuroanatomy, neurological syndromes, patterns of brain impairment associated with various medical diseases, and methods of neuropsychological assessment and intervention.

PSYCH 4376 Mental Health and Aging: 3 semester hours
Same as GERON 4376. Prerequisites: PSYCH 2245 or consent of instructor. This course provides a survey of theory and research in mental health issues for older populations, focusing on psychological and social aspects of mental health and functioning. The course details approaches to understanding healthy aging, along with the prevalence, etiology, assessment and treatment of psychological disorders in older adults. The course also provides an overview of health care and community-based delivery systems for behavioral health, and allows students to explore information about careers in aging.

PSYCH 4392 Selected Topics in Psychology: 1-3 semester hours
Prerequisite: Twelve hours of psychology and consent of instructor. A seminar of selected issues and methods in psychology. May be repeated once for credit.

PSYCH 4398 Child Maltreatment: A Multidisciplinary Approach: 3 semester hours
Same as SOC WK 4398 and CAST 4398. Prerequisites: CAST 3290 or PSYCH 3290 (may be taken concurrently), or consent of instructor. This course, with its interdisciplinary emphasis, focuses on the systemic response to the primary domains of child maltreatment by multidisciplinary teams and child advocacy centers. Risk factors, cultural considerations, and mandated reporting of child abuse and neglect are emphasized. Students will begin to develop professional skills pertaining to child maltreatment, using a variety of experiential learning modalities.

PSYCH 4500 Physiology & Pharmacology of Aging: 3 semester hours
Same as GERON 4500. Prerequisites: Junior/senior undergraduate or graduate standing, or consent of the instructor or program director. This course examines functional health in advancing age and the impacts of common disease processes on the aging body. Symptom presentations, diagnostic considerations, treatment and management issues are discussed. A special emphasis is placed on pharmacology, especially how the aging body responds to different medication types, risks for drug-drug interactions, and challenges associated with polypharmacy. The course emphasizes a "whole person" approach to health and well-being, and targets the learning needs of those wishing to work with older adults in health, social and community service settings.

PSYCH 4999 Integrated Psychology: 2 semester hours
Prerequisites: Consent of instructor. This capstone course serves as a review of the primary sub-fields of psychology. An advanced general psychology textbook will guide the class through important contemporary topics in behavioral neuroscience, learning and memory, cognition, psychopathologies and their treatments, and developmental and social psychology. The Major Field Aptitude Test in Psychology will serve as the final exam for the course. This course is restricted to Psychology majors and must be taken during majors' final semester of study. Students are expected to have already completed their application to graduate. All Psychology majors must complete this course with a grade of C- or higher.

PSYCH 5340 Human Neuroanatomy: 3 semester hours
Prerequisites: Admission to graduate program in psychology or consent of instructor. This course provides an overview of brain anatomy for graduate students in psychology and related disciplines. It explores the structure and function of the human nervous system both in health and disease. The course will cover core concepts from cellular neuroscience, neuroimaging and neuroanatomical techniques, sensory and motor systems, and the anatomical basis of cognitive functions.

PSYCH 5400 Seminar: Special Topics in Behavioral Neuroscience: 1 semester hour
Prerequisites: Admission to the graduate program in behavioral neuroscience or consent of the instructor. A seminar of selected contemporary topics in behavioral neuroscience. The class will meet weekly to discuss a journal article in the field with special focus on the methodologies used in neuroscience research. May be repeated for a total of 3 credit hours, provided the subject matter is different.

PSYCH 5407 Psychopharmacology: 3 semester hours
Prerequisite: 12 units of graduate-level. An examination of the effects of drugs on the brain and on behavior. Primary emphasis is on those drugs used in the treatment of affective disorders, schizophrenia and anxiety.
PSYCH 5465 Seminar: Behavioral Neuroscience: 3 semester hours
Prerequisites: Graduate standing or permission of instructor. Behavioral neuroscience is the study of the relation of the brain to behavior. The field has emerged as the new face of psychology; there are few subfields in psychology that have not been influenced by findings from animal labs, and from human studies employing physiological recordings, neuroimaging and psychotherapeutic drugs. This course will serve as an introduction for graduate students in psychology of brain morphology and function with an emphasis on normal and pathological behaviors.

PSYCH 5468 Seminar: Cognitive and Affective Processes: 3 semester hours
Prerequisites: Admission to the Graduate Program in Psychology or consent of instructor. This course is an introduction to classic and contemporary theories, methodologies, and theoretical perspectives used in the field of cognitive and affective psychology. Both basic research and applications of cognitive and affective psychology including the effect of culture are discussed. Special attention is paid to the interaction between cognition and emotion, including cognitive processing of emotional information and various forms of emotion regulation.

PSYCH 6410 Gender, Sexuality, and Mental Health: 3 semester hours
Same as GS 6410. Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will focus on contemporary theory and research on gender and sexuality as they pertain to mental health issues. Gender differences and similarities in the presentation, etiology, and treatment of sexual health problems and other mental illnesses will be discussed.

PSYCH 6415 Seminar in Health Psychology & Behavioral Medicine: 3 semester hours
Prerequisites: Consent of instructor. This course analyzes research, theory, and clinical applications in the interrelationships of behavior, psychological states, physical health and disease. Discussion includes theoretical foundations of health and illness, biopsychosocial factors affecting health and illness, diagnostic issues, prevention, interdisciplinary treatment applications, health and public policy, and research issues. Critical evaluation of theory and empirical support for clinical applications will be discussed.

PSYCH 6441 Aging and Health Behavior: 3 semester hours
Same as GERON 6441. Prerequisite: Graduate standing. This course examines sociocultural influences on health care practices of older adults. The role of social support and other social resources in the health behavior of older adults is emphasized. Topics include self care decisions, formal service utilization, family caregiving, and planned interventions for older adults.

PSYCH 6448 Multicultural Issues in Clinical Psychology: 3 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. A survey of theoretical perspectives utilized in the treatment of various cultural groups. Their relationship to and implications for the treatment of members of various cultural groups will be explored. Strategies and ethical concerns in diagnosis, test interpretation, and treatment are considered.

PSYCH 6466 Seminar: Developmental Psychology: 1-3 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. A critical examination of contemporary problems in developmental psychology.

PSYCH 7403 Psychopathology: 3 semester hours
Prerequisite: Admission to Clinical Psychology program or permission of instructor. A critical examination of the clinical-experimental literature in psychopathology. Etiologies of cognitive/affective functions and dysfunctions are explored, and implications for therapeutic interventions are considered.

PSYCH 7404 Introduction to Clinical Assessment I: 4 semester hours
Prerequisites: Admission to Clinical Psychology program. Fundamentals of clinical assessment with emphasis on interviewing and the measurement of cognitive functioning. This course includes a laboratory.

PSYCH 7406 Introduction to Clinical Assessment II: 4 semester hours
Prerequisites: PSYCH 7404. This course addresses theory and techniques of personality assessment including clinical interviewing, objective and projective assessment, and integrative report writing.

PSYCH 7412 Social Psychology: 3 semester hours
Prerequisites: Admittance to psychology doctoral program or consent of instructor. A review of key areas in contemporary theory and research in social psychology.

PSYCH 7421 Quantitative Methods I: 4 semester hours
Prerequisites: Admission to the Graduate Program in Psychology or consent of instructor. A comprehensive study of univariate statistical concepts and analyses used in psychological research. Topics include descriptive statistics, normal distributions, z, t, F, chi-square statistics, and distributions. Correlation, simple and multiple regression, factorial and repeated measures analysis of variance, significance testing and effect size are also examined.

PSYCH 7422 Quantitative Methods II: 4 semester hours
Prerequisites: PSYCH 7421 and consent of instructor. (With laboratory) A comprehensive study of the use of multivariate statistics in data analysis. Topics include the general linear model, multiple regression, factor analysis, and multivariate analysis of variance.

PSYCH 7423 Quantitative Methods III: 3 semester hours
Prerequisites: PSYCH 7422 and PSYCH 7429 and consent of instructor. A selective study of the use of multivariate statistics in data analysis. Topics include structural equation modeling, multilevel modeling, and analysis of longitudinal data.

PSYCH 7429 Psychometric Theory: 3 semester hours
Prerequisites: PSYCH 7421, PSYCH 7422 and consent of instructor. A consideration of classical and modern theories of psychological testing. Topics include test reliability, validity and construction.

PSYCH 7430 Introduction to Clinical Skills: 1 semester hour
Prerequisites: Admission to doctoral program in Clinical Psychology. An introduction to processes and procedures involved in psychotherapy.

PSYCH 7431 Clinical Supervision: 1-3 semester hours
Prerequisite: Admission to Clinical Psychology Program. Supervised experience in clinical practice. May be repeated six times for credit.

PSYCH 7432 Ethics and Professional Issues: 3 semester hours
Prerequisites: Admission to Clinical Psychology program. A study of issues in professional development, clinical supervision, risk management, and ethical standards as they relate to teaching, research, and professional practice.

PSYCH 7433 Clerkship in Clinical Psychology: 1 semester hour
Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised training in an affiliated agency or organization following completion of two years of course work. (May be repeated 3 times).
**PSYCH 7434 Foundations of Clinical Interventions: 3 semester hours**  
Prerequisites: Admission to Clinical Psychology program. This course focuses on conceptual and methodological issues that are central to the development, evaluation and application of interventions in clinical psychology. Topics include efficacy and effectiveness research, introduction to theories of behavior change, and applications with specific populations.

**PSYCH 7439 Summer Supervision: 1 semester hour**  
Prerequisites: PSYCH 7431. Supervised experience in clinical practice at all graduate year levels during the summer months. Can be repeated for credit.

**PSYCH 7442 Seminar: Cognitive and Behavioral Interventions: 3 semester hours**  
Prerequisites: PSYCH 7434. This course focuses on the theory and practice of cognitive-behavioral interventions in the field of clinical psychology.

**PSYCH 7447 Trauma and Recovery: 3 semester hours**  
Prerequisites: Graduate Trauma Studies Certificate. A comprehensive seminar on the psychological effects associated with exposure to potentially traumatic events. The course will include information on the history of trauma studies; definitions of stressful and traumatic events; common responses to these events; theoretical models for conceptualizing traumatic responses; information on specific types of traumatic events; and issues in treatment.

**PSYCH 7449 Research Methods and Project Development in Applied Psychology: 1-3 semester hours**  
Prerequisite: Admission to the Graduate Program in Psychology or consent of instructor. This course focuses on the basics of conducting research in Industrial-Organizational Psychology. Topics include: philosophy of science; reliability and validity; experimental, quasi-experimental, and non-experimental designs; power; meta-analysis; survey/item analyses; and cross-cultural methods. In addition, the course includes group supervision of initial research that leads to thesis or dissertation proposals. Can be taken up to three times for a total of 6 credit hours.

**PSYCH 7450 Clinical Internship I: 1-9 semester hours**  
Prerequisite: Consent of advisor. Formal, one year, full-time internship providing student with in-depth supervised training within a site approved by the American Psychological Association. This course is repeated in the fall and spring semesters of the internship year.

**PSYCH 7451 Clinical Internship II: 1-9 semester hours**  
Prerequisite: PSYCH 7450 and consent of advisor. Formal, one-year, full-time internship providing student with in-depth supervised training within a site approved by the American Psychological Association. (Taken in the final summer of the internship).

**PSYCH 7454 Seminar: Personnel Psychology: 3 semester hours**  
An analysis of theories and research in personnel and industrial psychology. Topics include testing, assessment centers, performance appraisal, and interviewing.

**PSYCH 7455 Seminar: Organizational Psychology: 3 semester hours**  
An analysis of theories and research in organizational psychology. Topics include theories of motivation, leadership, job design, group process decision-making, organizational effectiveness, and the relation between organizations and their environment.

**PSYCH 7457 Seminar: Special Topics in Industrial Psychology: 3 semester hours**  
A seminar of selected issues and methods in personnel psychology.

**PSYCH 7458 Seminar: Special Topics in Organizational Psychology: 3 semester hours**  
A seminar of selected issues and methods in organizational psychology.

**PSYCH 7459 Practicum in Industrial/Organizational Psychology: 1-4 semester hours**  
Supervised experience in personnel or human resource management.

**PSYCH 7461 Summer Research in I/O Psychology: 1 semester hour**  
Prerequisites: Admission to I/O program. Supervised experience on research topics in I/O psychology at all graduate year levels during the summer months. Can be repeated for credit.

**PSYCH 7466 Seminar Series in Industrial/Organizational Psychology: 1 semester hour**  
Prerequisites: Open only to students in the I/O Psychology Graduate Program. A seminar series involving speakers, presentations, and discussions focusing on applied and theoretical perspectives, techniques, and research in the field of Industrial/Organizational Psychology. May be taken up to 6 times for credit.

**PSYCH 7469 I/O Professional Issues and Ethics: 3 semester hours**  
Prerequisite: Consent of Instructor. In this course students learn the ethical standards as they relate to teaching, research and professional practice in industrial organizational psychology. Other professional and career issues are also discussed.

**PSYCH 7472 Special Topics in Psychology: 1-3 semester hours**

**PSYCH 7474 Clinical Research in Applied Settings: 3 semester hours**  
Prerequisites: PSYCH 7421 and PSYCH 7422. This course provides information on the design and implementation of research in applied settings (e.g., human service agencies). Topics include program evaluation, consultation models, risk factor analysis, presentation and health promotion, and quality control.

**PSYCH 7476 Seminar in Developmental Psychopathology: 3 semester hours**  
Prerequisites: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course focuses on the major theories, issues, and research related to the development of psychological disorders of childhood and adolescence. Etiologies, descriptions, and classifications of representative child and adolescent disorders will be covered.

**PSYCH 7478 Directed Research in Industrial/Organizational Psychology: 1-4 semester hours**  
Independent study of an issue in industrial/organizational psychology through the application of research techniques.

**PSYCH 7479 Directed Readings in Industrial/Organizational Psychology: 1-4 semester hours**  
Independent literature review of a topic in industrial/organizational psychology.

**PSYCH 7483 Directed Research: 1-10 semester hours**

**PSYCH 7484 Directed Readings: 1-10 semester hours**

**PSYCH 7485 Seminar in Clinical Science: 1-3 semester hours**  
Prerequisites: Graduate standing in Clinical Psychology. This course discusses professional identity as a clinical scientist and development of programmatic research. Readings include theories and methodologies within clinical psychology, with group supervision of proposals for program research milestones. May be repeated once for credit.
PSYCH 7487 Thesis Research Project: 1-6 semester hours
Prerequisites: Admission to the doctoral program in clinical psychology. Supervised original research project of a clinically-related topic.

PSYCH 7488 Specialty Examination Research: 1-6 semester hours
Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised original review and analysis of a clinically related topic.

PSYCH 7491 MA Thesis Research: 1-10 semester hours
Prerequisite: Graduate standing and consent of instructor.

PSYCH 7492 Ph D Thesis Research: 1-10 semester hours
Prerequisite: Graduate standing and consent of instructor.

Child Advocacy Studies Courses

CAST 1000 Introduction to Child Advocacy Studies: 3 semester hours
This survey course explores how child-serving systems have evolved, the functions they serve, and the roles they play in the lives of children and families. Key legislation, concepts, theories, and historical and contemporary approaches will be examined to highlight the types of advocacy relevant to children and the career paths associated with them. Students will examine skills needed for success as a child advocate, including collaboration and secondary traumatic stress prevention.

CAST 2100 Communication in Child Advocacy: 3 semester hours
This course introduces the concept of child advocacy communication. Students will use critical thinking to develop interpersonal and multidisciplinary communication skills necessary for success in the field. Students will demonstrate skills through verbal persuasion, team decision making, professional documentation, and oral discourse; with a specific focus on public speaking.

CAST 2200 Policy and Global Issues in Child Advocacy: 3 semester hours
Prerequisites: CAST 1000. This course reviews the history and implications of key national and international policies related to child advocacy. Students will explore the components of policy-making and strategies for effective policy advocacy. Students will also engage in advocacy efforts with policy-makers on behalf of children.

CAST 2300 Ethics and Values in Child Advocacy: 3 semester hours
Prerequisites: CAST 1000. This course explores the ethical, legal and professional issues related to child advocacy. Students will study the codes of ethics from a range of multidisciplinary perspectives and apply ethical decision making processes to case studies. The values inherent in a variety of child-serving sectors will be considered, as well as the conflict resolution practices aimed at resolving tensions between professionals.

CAST 3290 Traumatic Stress in Childhood and Adolescence: 3 semester hours
Same as PSYCH 3290. Prerequisites: PSYCH 2270 (majors) or PSYCH 2268 or ED PSY 2212 or approval from the instructor. This course is an exploration of the biopsychosocial impact of community, family, and individual trauma and stressors experienced during infancy, childhood, and adolescence. It introduces students to relevant theoretical frameworks, cultural considerations, and advocacy strategies.

CAST 3650 Culture and Child Advocacy: 3 semester hours
This course will examine how history, cultural experiences, spirituality, and values impact the identity formation of children and youth. Special consideration will be given to the impact of historical trauma on youth and its implications for contemporary child-serving sectors. Primary sources will include indigenous and other underrepresented group writings.

CAST 4398 Child Maltreatment: A Multidisciplinary Approach: 3 semester hours
Same as PSYCH 4398 and SOC WK 4398. Prerequisites: CAST 3290 or PSYCH 3290 (may be taken concurrently), or consent of instructor. This course, with its interdisciplinary emphasis, focuses on the systemic response to the primary domains of child maltreatment by multidisciplinary teams and child advocacy centers. Risk factors, cultural considerations, and mandated reporting of child abuse and neglect are emphasized. Students will begin to develop professional skills pertaining to child maltreatment, using a variety of experiential learning modalities.

CAST 4498 Forensic Investigation of Child Abuse: 3 semester hours
Prerequisites: CAST 4398 or PSYCH 4398 or SOC WK 4398. This course is designed for students across multiple disciplines where knowledge of child abuse investigation and advocacy is necessary. It focuses on the investigative and prosecutorial responses of multidisciplinary team professionals involved with child abuse cases to expand the student’s knowledge and skills about the most effective response to child abuse investigations. The course also includes critical thinking and competency-based skills training, such as conducting a cursory interview, participating in peer review, making case presentations, and producing investigative documentation.

CAST 4598 Child Abuse Assessment and Intervention: 3 semester hours
Prerequisites: CAST 4398 or PSYCH 4398 or SOC WK 4398. This course provides students from a variety of disciplines with knowledge and skills to intervene effectively and empathically with families who may experience child abuse and neglect. It uses experiential learning to develop critical thinking and skills in trauma-focused screening, assessment, and crisis intervention for vulnerable children and their families who are involved with child serving systems, such as law enforcement, child protective services, prosecution, and physical and mental health.

CAST 4698 Internship in Child Advocacy Studies: 3 semester hours
Prerequisites: CAST 4398 or PSYCH 4398 or SOC WK 4398. This course is designed for students across multiple disciplines where knowledge and skills to intervene effectively and empathically with families who may experience child abuse and neglect. It uses experiential learning to develop critical thinking and skills in trauma-focused screening, assessment, and crisis intervention for vulnerable children and their families who are involved with child serving systems, such as law enforcement, child protective services, prosecution, and physical and mental health.

CAST 4700 Field Education Seminar in Child Advocacy Studies: 1 semester hour
Prerequisites: Consent of CAST director and concurrent enrollment in an approved CAST field education course. In this course, students will synthesize their learning from the Child Advocacy Studies (CAST) certificate courses with their field experiences.