# Psychology (PSYC)

## COURSES

## PSYC 1315. INTRODUCTION TO PSYCHOLOGY. 3 Hours. (TCCN = PSYC 2301)

The fundamental methods and content of scientific psychology. Concentration on the understanding of basic principles.

## PSYC 2300. STATISTICS IN PSYCHOLOGY. 3 Hours.

This course covers descriptive and inferential statistics used in psychological research and assessment. It includes measurement, characteristics of distributions; measures of central tendency and variability; transformed scores; correlation and regression; probability theory; and hypotheses testing and inference. PSYC 2300 and PSYC 3300 can be taken concurrently. Prerequisite: PSYC 1315, MATH 1302 (or equivalent).

## PSYC 2317. BASIC CONCEPTS IN HUMAN SEXUALITY. 3 Hours. (TCCN = PSYC 2306)

The physiological, psychological, and sociological aspects of human sexuality. Offered as BIOL 2317, HEED 2317, PSYC 2317, and GWSS 2317. Credit will be granted for one of these courses only. Students seeking certification in Health Education must enroll in HEED 2317. Students seeking credit toward their science requirement must enroll in BIOL 2317. May not be used for biology grade point calculation or biology credit toward a BS degree in biology, microbiology, medical technology, psychology, or sociology.

## PSYC 3200. EXPERIENCING RESEARCH IN PSYCHOLOGY. 2 Hours.

This is a practical, project-based course that focuses on laboratory and field experience in designing, conducting, and reporting psychology research. It includes all stages of the research process including the formulation of research hypotheses, review and evaluation of published literature, choice of research design and measurement variables, data collection and analysis, and presentation of results in oral and written reports. Prerequisite: PSYC 2300 and PSYC 3300.

## PSYC 3300. RESEARCH METHODS IN PSYCHOLOGY. 3 Hours.

This course covers experimental designs and research methodologies commonly used in the field of psychology. It includes strategies for identifying meaningful hypothesis, conducting literature reviews, implementing research practices, and interpreting and evaluating statistical conclusions and empirical research findings. Challenges related to sociocultural factors will also be analyzed. PSYC 2300 and PSYC 3300 can be taken concurrently.

## PSYC 3301. PSYCHOLOGY OF HUMAN RELATIONS. 3 Hours.

Workplace applications of topics including person perception, social influence, group processes and dynamics, interpersonal relations, teamwork, leadership, workplace discrimination, diversity, stress, and burnout.

## PSYC 3302. BUSINESS PSYCHOLOGY. 3 Hours.

A survey of the fields of industrial and organizational psychology, focusing on the application of psychological theory to understanding and solving problems in the workplace. Topics include recruitment, employee selection and training, the effects of attitudes, motivation, group dynamics and leadership, job satisfaction, productivity and morale.

#### PSYC 3303. DRUGS AND BEHAVIOR. 3 Hours.

A survey of the psychoactive agents, their therapeutic uses, and social abuses. Alcohol, nicotine, caffeine, narcotics, hallucinogens, stimulants, and tranquilizers. Offered as BIOL 3303, HEED 3303, and PSYC 3303; credit will be granted only once. May not be used for biology grade point calculation or biology credit toward a B.S. degree in biology, microbiology, or medical technology. Students seeking certification in health education must enroll in HEED 3303.

#### PSYC 3304. ANALYSIS & MANAGEMENT OF BEHAVIOR. 3 Hours.

Behavioral control techniques for remediation and prevention of problem behaviors and for optimization of normal behaviors in real life settings. Contrasting therapeutic approaches, the ethics of behavior control, and the impact of behaviorism on society. Prerequisite: PSYC 1315 or permission of the instructor.

#### PSYC 3305. PSYCHOLOGY OF EMPLOYEE TRAINING. 3 Hours.

An introduction to theories, research, and techniques related to training needs analysis, program design and delivery, and training evaluation in organizational settings.

#### PSYC 3306. PSYCHOLOGY OF CREATIVITY AND CREATIVE THINKING. 3 Hours.

Research and theory relevant to the traits, attitudes, and abilities which are related to creative functioning with emphasis on the conceptual-cognitive components of creative formation and problem solving. Methods of stimulating creative behavior in individuals and in groups. Relevant research findings provide the substance of the course. Prerequisite: PSYC 1315.

#### PSYC 3310. DEVELOPMENTAL PSYCHOLOGY. 3 Hours.

Human development and growth from conception through old age, concerned with the physical, behavioral, and social aspects. Prerequisite: PSYC 1315.

## PSYC 3312. SOCIAL & PERSONALITY DEVELOPMENT. 3 Hours.

A review of psychological theory and research on age trends and individuals differences in personality and social development. Topics include emotional development, aggression, identity and achievement, attachment, gender role development, and familial and extrafamilial influences on development. Prerequisite: PSYC 1315.

## PSYC 3314. PSYCHOLOGY OF PERSONALITY. 3 Hours.

A broad survey of major theories, assessment methods, and representative research in the field of personality. The theoretical approaches considered include the psychoanalytic, neo-Freudian, trait, biological, humanistic, behavioral social/learning, and cognitive approaches. Prerequisite: PSYC 1315.

## PSYC 3315. SOCIAL PSYCHOLOGY. 3 Hours.

The theories and research dealing with individual behavior in the social environment. Social influence processes, interpersonal attraction, group behavior, aggression, conformity, and attitude formation and change. Prerequisite: PSYC 1315.

#### PSYC 3317. INTRODUCTION TO CLINICAL AND COUNSELING PSYCHOLOGY. 3 Hours.

The student is introduced to psychodiagnostic procedures and the basic approaches of counseling and psychotherapy. Prerequisite: PSYC 1315.

## PSYC 3318. ABNORMAL PSYCHOLOGY. 3 Hours.

Major forms of psychopathology. Classification, etiology, and treatment of major disorders. Prerequisite: PSYC 1315.

## PSYC 3319. PSYCHOLOGY OF ADOLESCENCE. 3 Hours.

A topical study of adolescent behavioral and psychological development with emphasis on theory, methods of inquiry, and practical implications. Prerequisite: PSYC 1315.

#### PSYC 3320. BEHAVIOR AND MOTIVATION. 3 Hours.

Theory and research involving relation of motivation and emotion to learning theory, social behavior, personality, and development. Prerequisite: PSYC 1315.

#### PSYC 3322. BRAIN AND BEHAVIOR. 3 Hours.

An introduction to the anatomical structures and physiological processes that determine behavior. Topics include the acquisition and processing of sensory information, the neural control of movement, and the biological bases of complex behaviors (such as learning, memory, sex, language, and addiction), as well as the basic functioning of the nervous system. Offered as BIOL 3322 and PSYC 3322. Credit will be granted only once. BIOL 3322 prerequisite: BIOL 1441, BIOL 1442. PSYC 3322 prerequisite: BIOL 1441 or PSYC 1315.

## PSYC 3325. DATA SCIENCE IN PSYCHOLOGY. 3 Hours.

This course is a survey of the benefits and challenges of data science in psychological research. The course includes discussions on advances in data collection and analysis, the applications and career opportunities within various psychology disciplines, and the best practices concerning ethics, privacy, security, and responsible conduct of research. Statistical concepts and techniques will be introduced using simple computing tools, such as Excel or code from programming languages, such as Python. Prerequisite: PSYC 2300 (or equivalent).

## PSYC 3326. ANIMAL BEHAVIOR. 3 Hours.

A survey of research and theory comparing behavior at various phyletic levels. Offered as BIOL 3326 and PSYC 3326. Credit will be granted for only one of these courses. Prerequisite: BIOL 1441, BIOL 1442.

## PSYC 3334. COGNITIVE PROCESSES. 3 Hours.

Current theory and research in cognitive processes such as memory, information processing, concept formation, and problem solving. Prerequisite: PSYC 1315.

## PSYC 3356. EVOLUTIONARY PSYCHOLOGY. 3 Hours.

A consideration of how evolution has influenced social, cognitive and developmental processes in humans. Comparisons between humans and other species, and between different human cultures will be included. Topics such as mate selection, marriage and family practices, child rearing, social relations, language, thinking, neuropsychology, learning and related topics will be considered. Methods of gathering data and theory about evolutionary processes will be stressed. Prerequisite: PSYC 1315.

## PSYC 3357. CYBERPSYCHOLOGY BASIC CONCEPTS. 3 Hours.

Cyberpsychology is a branch of psychology that studies the way people interact with technology and the impacts of technology on the way people feel, think, and behave both online and offline. This course provides a broad survey of the impacts of digital media (e.g., social media) on people's perception, learning, motivation, and decision making. Theories from neuroscience (e.g., large-scale networks), evolution (e.g., evolutionary mismatch), social (e.g., identity fusion), and health (e.g., anxiety) are incorporated for understanding the basic guiding principles of human behavior in the digital environment. Offered as PSYC 3357 and PSYC 5346.

#### PSYC 3358. CYBERPSYCHOLOGY APPLICATIONS. 3 Hours.

This is a project-based course that focuses on developing and testing digital interventions based on persuasion theories. Course topics include persuasion research, associative learning, consumer behavior, emotional and motivational strategies, social media, mental health, personality, social engineering, and political activism. This course is designed to introduce psychological vulnerabilities to technologically savvy students with hopes of aspiring them to invent technologies that improve the quality of life. Offered as PSYC 3358 and PSYC 5347.

#### PSYC 3359. POLITICAL PSYCHOLOGY FOR THE INTERNET. 3 Hours.

This course provides a comprehensive review of the psychology of political behavior on digital platforms. The course covers the foundational approaches to political psychology, including the evolutionary, personality, and developmental roots of political attitudes, to contemporary challenges to governance, including populism, hate speech, conspiracy beliefs, inequality, climate change, and terrorism. This course will focus on the application of psychological factors (affect, emotions, heuristics) that influence political behavior (voting, attitudes, beliefs) with emphasis on internet-mediated political strategies. Offered as PSYC 3359 and PSYC 5349.

## PSYC 4081. VOLUNTEER RESEARCH IN PSYCHOLOGY. 0 Hours.

Volunteer research hours (0 credit hours) Participation in a group research project on a selected topic as designated by the directing professor. Maybe repeated. Intended for advanced undergraduate majors. Prerequisite: Instructor permission; other prerequisites may be implemented at the discretion of each individual laboratory research mentor.

## PSYC 4161. READINGS IN PSYCHOLOGY. 1 Hour.

Topics arranged on an individual basis. Performance may be assessed by oral exam, written test, or review paper as arranged. Prerequisite: permission of the instructor.

## PSYC 4181. RESEARCH IN PSYCHOLOGY. 1 Hour.

Research problems arranged on an individual basis, to be conducted by the student, and written in publishable journal format. Prerequisite: permission of the instructor.

## PSYC 4191. UNDERGRADUATE TEACHING EXPERIENCE. 1 Hour.

Teaching effectively requires mastering the content of your discipline, but also numerous other skills. This course will prepare undergraduate students to be challenging, inspiring, engaging teachers and/or communicators of psychological topics by providing hands-on experience as teaching assistants. Prerequisite: Students must complete Introduction to Psychology (PSYC 1315) and PSYC 4391 (Undergraduate Teaching Experience) before enrolling in this course. Students must have a minimum GPA of 3.5 and be a psychology major (other majors may be approved with instructor permission). Students must have earned a B or better in the class for which they will serve as a TA and instructor approval is required.

## PSYC 4261. READINGS IN PSYCHOLOGY. 2 Hours.

Topics arranged on an individual basis. Performance may be assessed by oral exam, written test, or review paper as arranged. Prerequisite: permission of the instructor.

## PSYC 4281. RESEARCH IN PSYCHOLOGY. 2 Hours.

Research problems arranged on an individual basis, to be conducted by the student, and written in publishable journal format. Prerequisite: permission of the instructor.

## PSYC 4291. UNDERGRADUATE TEACHING EXPERIENCE. 2 Hours.

Teaching effectively requires mastering the content of your discipline, but also numerous other skills. This course will prepare undergraduate students to be challenging, inspiring, engaging teachers and/or communicators of psychological topics by providing hands-on experience as teaching assistants. Prerequisite: Students must complete Introduction to Psychology (PSYC 1315) and PSYC 4391 (Undergraduate Teaching Experience) before enrolling in this course. Students must have a minimum GPA of 3.5 and be a psychology major (other majors may be approved with instructor permission). Students must have earned a B or better in the class for which they will serve as a TA and instructor approval is required.

#### PSYC 4301. PRINCIPLES OF NEUROSCIENCE. 3 Hours.

An in depth understanding of the mechanisms underlying the function of the nervous system. Topics include cellular mechanisms of neural communication, neuroanatomy and neurophysiology of sensory, motor, and autonomic systems, cellular mechanisms of learning and memory, and neuropathological conditions that contribute to neurological disorders. Course offered as BIOL 4301 and PSYC 4301. Credit will be granted only once. Prerequisite: PSYC 3322 (BIOL 3322) or permission of instructor.

## PSYC 4309. NEUROPHARMACOLOGY. 3 Hours.

A survey of how drugs affect the nervous system. General topics will include cellular and molecular foundations of neuropharmacology, receptors and modulation of neural signaling. The specific role of neurotransmitter systems (i.e. acetylcholine, dopamine, norepinephrine, serotonin, and opiate) will be explored. Offered as BIOL 4309 and PSYC 4309; credit will be granted only once. Prerequisite: one or more of the following courses or permission of instructor: BIOL 1441 or PSYC 3322/BIOL 3322 or BIOL 3301.

#### PSYC 4315. HORMONES AND BEHAVIOR. 3 Hours.

A study of the interaction between hormones and behavior. Specific topics covered include; examination of the hormonal influences on sex determination, reproductive behaviors, parental behavior, dominance and aggression, responses to stressful stimuli, homeostasis, and learning and memory. This course uses a comparative approach and draws examples of neuroendocrine function from throughout the animal kingdom including fish, birds, reptiles, and mammals (including humans). Offered as PSYC 4315 and BIOL 4315. Credit will be granted only once. Prerequisite: PSYC 3322/ BIOL 3322 or BIOL 1441 or BIOL 3301.

## PSYC 4327. BEHAVIORAL GENETICS. 3 Hours.

Genetic influences on behavioral phenotypes. Research strategies, quantitative methods, and pharmacogenetic approaches to the brain; sociality and altruism; the personality, emotionality and intelligence; psychopathology; chromosomal abnormalities; forensic implications of genetic counseling. Offered as BIOL 4327 and PSYC 4327; credit will be granted only once. Students seeking credit toward the science requirement must enroll in BIOL 4327. Prerequisite: PSYC 1315 or BIOL 1441.

#### PSYC 4332. THEORIES OF HUMAN LEARNING AND MEMORY. 3 Hours.

A comprehensive survey of theories and research concerning basic learning and memory processes and their application to a variety of areas, e.g., eyewitness memory, false memory syndrome, autobiographical memory, memory decline in aging. Theoretical and background perspectives include associative mechanism, information processing approaches, and neurophysiological bases for encoding, storage, and retrieval. Prerequisite: PSYC 1315, and Junior Standing.

## PSYC 4335. COGNITIVE DEVELOPMENT. 3 Hours.

Theories and phenomena concerning development of all aspects of human cognition across the life span. Prerequisite: C or better in PSYC 3300.

## PSYC 4338. COGNITIVE NEUROSCIENCE. 3 Hours.

Theory and research on the relationship between the brain and human cognition. Normal functioning and comparisons between normal and disordered states (e.g., Alzheimer's disease, amnesia, localized brain injury, age changes). Prerequisite: PSYC 4332 or PSYC 3334.

#### PSYC 4339. PSYCHOLOGY OF JUDGMENT AND CHOICE. 3 Hours.

Research and theory on the errors of intuitive judgment and how formal decision methods improve choices. Prerequisite: C or better in PSYC 2300.

#### PSYC 4350. SPORT PSYCHOLOGY. 3 Hours.

The course will provide an overview of the growing field of Sport Psychology, which involves applying psychological science to sports. Topics such as maximizing sports performance, elite performance and personality, motivation techniques in sports, leadership skills in sports, etc., will be covered.

#### PSYC 4357. HEALTH PSYCHOLOGY. 3 Hours.

This course provides a broad introduction to health psychology and its interface with the medical world. The course provides a balanced presentation of the important issues in the field, as well as specific content topics that are especially relevant today to better understand health and illness. Offered as BIOL 4357, HEED 4357, and PSYC 4357. Students seeking science requirement credit must enroll in BIOL 4357; students seeking Certification in Health must enroll in HEED 4357. Prerequisite: PSYC 1315 or BIOL 1333 or BIOL 1441 or BIOL 2457; junior standing recommended.

## PSYC 4359. SELECTED TOPICS IN PSYCHOLOGY. 3 Hours.

Topics pertinent to the field of psychology. Topic, format, and prerequisites to be determined by the instructor. May be repeated for credit as different topics are offered. Prerequisite: to be determined by the instructor.

#### PSYC 4361. READINGS IN PSYCHOLOGY. 3 Hours.

Topics arranged on an individual basis. Performance may be assessed by oral exam, written test, or review paper as arranged. Prerequisite: permission of the instructor.

#### PSYC 4381. RESEARCH IN PSYCHOLOGY. 3 Hours.

Research problems arranged on an individual basis, to be conducted by the student, and written in publishable journal format. Prerequisite: permission of the instructor.

## PSYC 4391. FOUNDATIONS OF UNDERGRADUATE TEACHING EXPERIENCE. 3 Hours.

Teaching effectively requires mastering the content of your discipline, but also numerous other skills. This course will prepare undergraduate students to be challenging, inspiring, engaging teachers and/or communicators of psychological topics by covering important professional issues, including: planning a syllabus, structuring a lecture, navigating class discussions, communicating effectively with different types of classes, responding to student input, dealing with classroom incivilities, responding to student assignments, using technology, and responding to student work. This course will also assist students through the process of teaching as learning through addressing cognitive theories underlying the learning process. Prerequisite: Students must complete Introduction to Psychology (PSYC 1315) before enrolling in this course. Students must have a minimum GPA of 3.5 and be a psychology major (other majors may be approved with instructor permission). Students must have earned a B or better in the class for which they will serve as a TA and instructor approval is required.

#### PSYC 4398. HONORS THESIS. 3 Hours.

Students may take this course only at the invitation of the department. Consists of a research project of a type and level which would be publishable in one of the psychological journals. Particular emphasis is placed on independent work by the student. Prerequisite: departmental invitation.

## PSYC 4410. ADVANCED TOPICS IN DEVELOPMENTAL PSYCHOLOGY. 4 Hours.

This course will cover current topics in Developmental Psychology using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Developmental Psychology. Completion of the course is essential for students who are interested in pursuing a career in Developmental Psychology research. Prerequisites: C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 3310. Junior standing recommended.

#### PSYC 4411. ADVANCED TOPICS IN PERSONALITY. 4 Hours.

This course will cover current topics in Personality using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Personality. Completion of the course is essential for students who are interested in pursuing a career in Personality research. Prerequisites: C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 3314. Junior standing recommended.

#### PSYC 4412. ADVANCED TOPICS IN SOCIAL PSYCHOLOGY. 4 Hours.

This course will cover current topics in Social Psychology using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Social Psychology. Completion of the course is essential for students who are interested in pursuing a career in Social Psychology research. Prerequisites: C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 3315. Junior standing recommended.

#### PSYC 4415. INTERNSHIP IN PSYCHOLOGY. 4 Hours.

Provides the student with an opportunity to apply academic experience to practical situations by serving for a specified number of hours as participantobserver in an off-campus activity. The activity will be reflected in the title on the transcript. Internships must be arranged with an internship supervisor and/or faculty member in the semester prior to enrolling for this course. Prerequisite: C or better in PSYC 2300 and PSYC 3300.

#### PSYC 4420. EXPERIMENTAL ANALYSIS OF BEHAVIOR. 4 Hours.

A laboratory course examining basic principles of behavior control and analysis with single animals and automated testing apparatus. Emphasis is placed on individualized, self-paced instruction and creative experimentation. Prerequisite: C or better in either PSYC 3304 or PSYC 4310. C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 3304.

## PSYC 4421. ADVANCED TOPICS IN NEUROSCIENCE. 4 Hours.

This course will cover current topics in Neuroscience using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Neuroscience. Completion of the course is essential for students who are interested in pursuing a career in Neuroscience research. Prerequisites: C or better in BIOL 3322 or PSYC 3322 required.

#### PSYC 4430. ADVANCED TOPICS IN CLINICAL COUNSELING. 4 Hours.

This course will cover current topics in Clinical and Counseling using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Clinical and Counseling. Completion of the course is essential for students who are interested in pursuing a career in Clinical and Counseling research. Prerequisite: PSYC 3317; PSYC 3318; C or better in PSYC 2300, PSYC 3200, and PSYC 3300; junior standing recommended.

#### PSYC 4431. ADVANCED TOPICS IN COGNITIVE SCIENCE. 4 Hours.

This course will cover current topics in Cognitive Psychology using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Cognitive Psychology. Completion of the course is essential for students who are interested in pursuing a career in Cognitive I Psychology research. May be repeated for credit as specific topics vary. Prerequisite: C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 3334. Junior standing recommended.

## PSYC 4432. ADVANCED TOPICS IN HEALTH. 4 Hours.

This course will cover current topics in Health Psychology using an interactive, participatory format that includes a lecture portion and a laboratory section. The course will focus on specific content topics that are especially relevant today to better understand and use advanced concepts in Health Psychology. Completion of the course is essential for students who are interested in pursuing a career in Health Psychology research. May be repeated for credit as specific topics vary. Prerequisite: C or better in PSYC 2300, PSYC 3200, PSYC 3300, and PSYC 4357. Junior standing recommended.

## PSYC 5110. PROFESSIONAL DEVELOPMENT. 1 Hour.

The philosophy and methods of conducting a university class for undergraduates are examined. Specific tips and suggestions for managing course materials, lectures, audiovisual aids, grading, etc. will be presented. The role of the university instructor as a researcher as well as a teacher will be elaborated. Specific topics will include the ethics and regulation of research, service as a journal referee, corresponding with peers, participating in a research team, manuscript preparation, presentation at professional conferences, and submitting material for publication. Prerequisite: admission to the graduate program in psychology or permission of the instructor. Graded F, P. Prerequisite: Admission to the graduate program in psychology or permission of the instructor.

#### PSYC 5127. INDUSTRIAL AND ORGANIZATIONAL INTERNSHIP. 1 Hour.

This course is preparation for and supervision of internship activities in an organization or organizations in an area related to area of interest or training. No credit will be given for previous experience or activities. Course may be repeated for credit. Prerequisite: Consent of instructor.

#### PSYC 5151. READINGS IN PSYCHOLOGY. 1 Hour.

Independent readings under the supervision of an individual faculty member. Students wishing to conduct research should sign up for PSYC 5191, PSYC 5291, or PSYC 5391. May be repeated for credit with consent of the Graduate Advisor. Graded A/B/C/D/F/I/P/W. Prerequisite: consent of the instructor.

## PSYC 5191. RESEARCH IN PSYCHOLOGY. 1 Hour.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 5227. INDUSTRIAL AND ORGANIZATIONAL INTERNSHIP. 2 Hours.

This course is preparation for and supervision of internship activities in an organization or organizations in an area related to area of interest or training. No credit will be given for previous experience or activities. Course may be repeated for credit. Prerequisite: Consent of instructor.

#### PSYC 5251. READINGS IN PSYCHOLOGY. 2 Hours.

Independent readings under the supervision of an individual faculty member. Students wishing to conduct research should sign up for PSYC 5191, PSYC 5291, or PSYC 5391. May be repeated for credit with consent of the Graduate Advisor. Graded A/B/C/D/F/I/P/W. Prerequisite: consent of the instructor.

#### PSYC 5291. RESEARCH IN PSYCHOLOGY. 2 Hours.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 5307. RESEARCH METHODS. 3 Hours.

This course considers basic and advanced aspects of methodology used in psychological research, including experimental design, methodologies that combine disciplinary approaches (e.g., biomedical, behavioral, and field and laboratory approaches).

#### PSYC 5309. HEALTH PSYCHOLOGY. 3 Hours.

A survey of current theory and research in health psychology, including basic research in health and behavior, biobehavioral contributions to illness and disability, and fundamental relationships among the brain, bodily function, and behavior that may affect health and well-being. It will also include clinical and translational topics including patient interventions in medically-ill populations, pain management, and disease prevention.

## PSYC 5310. DATA SCIENCE IN PSYCHOLOGY. 3 Hours.

To live in the modern world is to leave digital data traces that provide insights into an individual's habits, choices, social networks, interests, and a range of personal identity markers (such as political views). The rapid growth of this data presents researchers with new avenues to evaluate and understand human cognition and human behavior, while simultaneously raising concerns of privacy, bias, and ethics. For researchers in psychology, "big data" also provides an additional methodological angle to complement existing research methodologies. This course surveys data science approaches to research, focusing on implications and opportunities in psychology. Topics include collecting, accessing, and analyzing data, as well as the tools and technologies commonly used in processing human-generated data. The course will also introduce construct creation where data is used to model and predict cognitive constructs and anticipate changes to those constructs. Additional emphasis will be on the skills needed by individual researchers as well as the broader implications of wearables and immersive environments (such as VR and AR) that capture psychophysiological data on the future of research in psychology.

## PSYC 5313. COGNITIVE PSYCHOLOGY. 3 Hours.

Surveys current experimental and clinical research and theory relating the brain and cognition. Emphasizes selected areas i.e., perception, attention, memory, language, and thinking.

#### PSYC 5316. ORGANIZATIONAL TEAM PERFORMANCE. 3 Hours.

This course integrates research on group dynamics with practical applications to develop, assess, and enhance team performance in organizations. Major topics include group formation/development, power, intra- and inter-group relations, creativity, evaluation, cohesion, process management, leadership, and more. Students will practice process facilitation of work teams as well as team leadership and membership skills throughout the course.

## PSYC 5321. PERSONALITY PSYCHOLOGY. 3 Hours.

A survey of contemporary topics in personality psychology, including personality assessment, strategies for studying personality, temporal stability and cross-situational consistency in behavior, and personality influence on social behavior.

## PSYC 5322. SOCIAL PSYCHOLOGY. 3 Hours.

A survey of contemporary topics in social psychology, including interpersonal attraction, altruism and aggression, attribution and social cognition, social influence, group dynamics, and social motivation.

## PSYC 5323. GROUP PROCESSES. 3 Hours.

Survey of the major topics in group dynamics. Among the issues covered will be performance, motivation, goal setting, decision-making, creativity, social influence, memory, leadership, teamwork, and collective behavior.

#### PSYC 5324. APPLIED RESEARCH DESIGN. 3 Hours.

Basic aspects of organizational research methods will be covered including: research ethics, the scientific method, inductive and deductive reasoning, research questions, hypotheses, study designs, manipulation of variables, and various measures and methods used in organizational research. The history of Industrial and Organizational research will also be covered.

#### PSYC 5325. ORGANIZATIONAL BEHAVIOR. 3 Hours.

Survey of theory and research related to human behavior in organizations. Topics include job performance, motivation, job satisfaction, organizational commitment, work stress, organizational justice, leadership, groups and teams, and organizational theory.

#### PSYC 5326. EMPLOYEE SELECTION. 3 Hours.

Principles and techniques of employee selection, placement, and classification will be examined. Job analysis and competency modeling will be covered with a focus on the legal aspects of selection and promotion. The use of various methods and measures of job relevant individual differences will be examined within the context of predicting performance criteria.

## PSYC 5327. INDUSTRIAL AND ORGANIZATIONAL INTERNSHIP. 3 Hours.

This course is preparation for and supervision of internship activities in an organization or organizations in an area related to area of interest or training. No credit will be given for previous experience or activities. Course may be repeated for credit. Prerequisite: consent of instructor.

#### PSYC 5328. EMPLOYEE ATTITUDES AND BEHAVIORS. 3 Hours.

Theory and research concerning the determinants, consequences, and measurement of job satisfaction and related constructs such as involvement, commitment and work motivation will be covered. Attitudes, opinions, and beliefs will be examined in relation to the behavioral intentions of individuals at work. Organizational interventions designed to improve and enhance employee motivation, attitudes and behaviors will be evaluated.

#### PSYC 5329. PERFORMANCE MANAGEMENT SYSTEMS. 3 Hours.

Principles and techniques of the performance appraisal and feedback process will be covered. Different sources of performance information will be evaluated. Mentoring and procedures for communicating performance evaluation information and improving job performance via development and training will be examined. Theories and techniques used to design, conduct, and evaluate training programs will be evaluated.

## PSYC 5330. ADVANCE EMPLOYEE TRAINING AND DEVELOPMENT. 3 Hours.

Theoretical advancements, empirical research findings, and practical applications of psychological concepts related to employee training and development. This course focuses on the entirety of the employee training process, including topics and issues related to training needs analysis, program design and implementation, and the evaluation of training effectiveness.

## PSYC 5331. PERCEPTION AND ATTENTION. 3 Hours.

Survey of methods and findings dealing with perception; emphasis will be upon behavioral rather than physiological considerations; particular topics include signal detection theory, form and pattern recognition, and attentional mechanisms.

#### PSYC 5333. BEHAVIORAL NEUROSCIENCE. 3 Hours.

A survey of biological and physical processes underlying behavior. Emphasis on neural, hormonal, and genetic determinants of behavior. Topics include regulatory behaviors, reward and nociceptive systems, differentiation and sociosexual behaviors, limbic and cortical functions.

#### PSYC 5334. HUMAN PHYSIOLOGY. 3 Hours.

This course will provide a comprehensive review of the human physiology that is categorized in 15 sections and 84 chapters. Some of them will be covered by different courses, such as Neuroscience, Immunology, and Endocrinology. Students are expected to learn how the human body works and what the underlying mechanisms that control the physiological responses are. In case of damage to these systems, what will happen to the body as a whole and what will be the impact on behaviors?.

## PSYC 5337. ANIMAL COGNITION AND BEHAVIOR. 3 Hours.

A survey of theory and data on how animals learn and represent the world and the evolutionary processes that influence their individual and social behavior.

#### PSYC 5341. DECISION MAKING. 3 Hours.

Factors that influence categorical and numerical judgments, choices, and preference decisions. Comparison of human decision behavior with various quantitative theories.

## PSYC 5342. LEADERSHIP IN ORGANIZATIONS. 3 Hours.

This course focuses on leadership theory and the applicability to modern organizations. Various approach to studying and understanding leadership, as well as the evolution of leadership theory over time will be discussion. Discussed approaches will include trait, situational, skill, contextual, style, cultural, and emerging theories of leadership. Additionally, this course will focus on designing effective leadership development programs.

#### PSYC 5343. ELECTRONIC HUMAN RESOURCE MANAGEMENT. 3 Hours.

A survey of theory and research related to the use of technology in organizational employment practices, including topics such as web-based recruitment, technology-based interviewing, online testing, cybervetting, e-training, e-performance monitoring, virtual teams, cyberdeviance, and telework.

## PSYC 5345. HUMAN LEARNING AND MEMORY. 3 Hours.

Survey of current approaches to the study of human learning and memory.

## PSYC 5346. CYBERPSYCHOLOGY BASIC CONCEPTS. 3 Hours.

Cyberpsychology is a branch of psychology that studies the way people interact with technology and the impacts of technology on the way people feel, think, and behave both online and offline. This course provides a broad survey of the impacts of digital media (e.g., social media) on people's perception, learning, motivation, and decision making. Theories from neuroscience (e.g., large-scale networks), evolution (e.g., evolutionary mismatch), social (e.g., identity fusion), and health (e.g., anxiety) are incorporated for understanding the basic guiding principles of human behavior in the digital environment. Offered as PSYC 3357 and PSYC 5346.

#### PSYC 5347. CYBERPSYCHOLOGY APPLICATIONS. 3 Hours.

This is a project-based course that focuses on developing and testing digital interventions based on persuasion theories. Course topics include persuasion research, associative learning, consumer behavior, emotional and motivational strategies, social media, mental health, personality, social engineering, and political activism. This course is designed to introduce psychological vulnerabilities to technologically savvy students with hopes of aspiring them to invent technologies that improve the quality of life. Offered as PSYC 3358 and PSYC 5347.

## PSYC 5349. POLITICAL PSYCHOLOGY FOR THE INTERNET. 3 Hours.

This course provides a comprehensive review of the psychology of political behavior on digital platforms. The course covers the foundational approaches to political psychology, including the evolutionary, personality, and developmental roots of political attitudes, to contemporary challenges to governance, including populism, hate speech, conspiracy beliefs, inequality, climate change, and terrorism. This course will focus on the application of psychological factors (affect, emotions, heuristics) that influence political behavior (voting, attitudes, beliefs) with emphasis on internet-mediated political strategies. Offered as PSYC 3359 and PSYC 5349.

#### PSYC 5351. READINGS IN PSYCHOLOGY. 3 Hours.

Independent readings under the supervision of an individual faculty member. Students wishing to conduct research should sign up for PSYC 5191, PSYC 5291, or PSYC 5391. May be repeated for credit with consent of the Graduate Advisor. Graded P/F/R. Prerequisite: consent of the instructor.

## PSYC 5389. CONTEMPORARY PROBLEMS IN PSYCHOLOGY. 3 Hours.

Topics vary. May be repeated for credit with consent of Graduate Advisor.

#### PSYC 5391. RESEARCH IN PSYCHOLOGY. 3 Hours.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 5405. ADVANCED STATISTICS I. 4 Hours.

Basic descriptive and inferential statistics used in psychological research.

#### PSYC 5407. MULTIVARIATE DATA ANALYSIS. 4 Hours.

Statistical aspects of complex experimental designs used in psychological research. Prerequisite: PSYC 5405.

## PSYC 5410. APPLIED STATISTICS I. 4 Hours.

Provides training in advanced statistical techniques for both research and organizational applications. Theory will be discussed in context of analytic design, but course emphasizes practical applications of statistical methods, including issues gathering and managing organizational data and conducting analyses in industry settings. Relevant statistical software packages will be incorporated. Students will develop expertise in presenting advanced quantitative analyses to both corporate and scientific audiences and in using data to guide decision-making.

## PSYC 5411. APPLIED STATISTICS II. 4 Hours.

Provides additional training in advanced statistical techniques for both research and organizational applications. Theory will be discussed in context of analytic design, but course emphasizes practical applications of statistical methods, including issues gathering and managing organizational data and conducting analyses in industry settings. Relevant statistical software packages will be incorporated. Students will develop expertise in presenting advanced quantitative analyses to both corporate and scientific audiences and in using data to guide decision-making. Prerequisite: PSYC 5405 or PSYC 5410, or equivalent.

#### PSYC 5600. ADVANCED RESEARCH. 6 Hours.

Supervised research. May be repeated for credit. Graded P/F/R. Prerequisite: permission of instructor.

#### PSYC 5698. THESIS. 6 Hours.

Graded P/F/R. Can only be taken up to 4 times. Prerequisite: 12 hours of advanced psychology and an approved thesis proposal.

## PSYC 6191. RESEARCH IN PSYCHOLOGY. 1 Hour.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 6291. RESEARCH IN PSYCHOLOGY. 2 Hours.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 6300. SEMINAR IN PSYCHOLOGY. 3 Hours.

Offered each semester. Topics vary. May be repeated for credit. Prerequisite: consent of instructor.

## PSYC 6318. SOCIAL AND PERSONALITY DEVELOPMENT. 3 Hours.

Theory and research on social and emotional development with an emphasis on the interaction between individual needs and abilities and societal expectations and demands.

## PSYC 6320. NEUROPHARMACOLOGY. 3 Hours.

Survey of the basis of behavioral pharmacology including mechanisms and theories of drug actions, techniques and strategies of research, common psychoactive drugs, and the uses of drugs in clinical practice.

## PSYC 6335. ANIMAL BEHAVIOR. 3 Hours.

Phylogenetic approach to some basic problems in behavior, with special emphasis on unlearned behavior.

## PSYC 6336. COMPARATIVE PSYCHOLOGY. 3 Hours.

Theory and data about all aspects of behavior stressing similarities and differences across species.

## PSYC 6338. NEURAL AND COGNITIVE MODELING. 3 Hours.

Principles of neural network and dynamical systems modeling; application of these principles to the simulation of cognitive processes in both brains and machines; models of associative learning, pattern recognition and classification, and individual and group behavior. Prerequisite: consent of instructor.

#### PSYC 6346. EVOLUTIONARY PSYCHOLOGY. 3 Hours.

Evolutionary processes influence behavior and thinking of humans and nonhuman species. Sociosexual behavior, aggression, cognition, and information processing from an evolutionary perspective will be among the topics covered.

#### PSYC 6347. ENVIRONMENTAL PSYCHOLOGY. 3 Hours.

Survey of the current literature on the impact of various features of the physical environment on human behavior. Topics covered include crowding, privacy, territoriality, personal space, noise, the natural environment, residential, educational and work environments, urban and community design, and pollution and resource management. Designed to be of interest to graduate students in architecture, urban affairs, environmental science and engineering, geology, sociology, as well as those in psychology.

## PSYC 6349. PSYCHOMETRIC THEORY. 3 Hours.

Introduction to test construction. Topics include reliability theory, test validation, and item analysis. Prerequisite: C or better in PSYC 5405 and PSYC 5407.

## PSYC 6391. RESEARCH IN PSYCHOLOGY. 3 Hours.

Independent research under the supervision of an individual faculty member; may be repeated for credit with consent of Graduate Advisor. Graded Pass/Fail. Prerequisite: consent of the instructor.

#### PSYC 6399. DISSERTATION. 3 Hours.

Graded R/F. Prerequisite: approved dissertation proposal.

#### PSYC 6699. DISSERTATION. 6 Hours.

Graded R/F/P/W. Prerequisite: approved dissertation proposal.

#### PSYC 6999. DISSERTATION. 9 Hours.

Graded P/F/R. Prerequisite: approved dissertation proposal.

#### PSYC 7399. DOCTORAL DEGREE COMPLETION. 3 Hours.

This course may be taken during the semester in which a student expects to complete all requirements for the doctoral degree and graduate. Enrolling in this course meets minimum enrollment requirements for graduation, for holding fellowships awarded by The Office of Graduate Studies and for full-time GTA or GRA positions. Students should verify that enrollment in this course meets other applicable enrollment requirements. To remain eligible in their final semester of study for grants, loans or other forms of financial aid administered by the Financial Aid Office must enroll in a minimum of 5 hours as required by the Office of Financial Aid. Other funding sources may also require more than 3-hours of enrollment. Additional hours may also be required to meet to requirements set by immigration law or by the policies of the student's degree program. Students should contact the Financial Aid Office, other sources of funding, Office of International Education and/or their graduate advisor to verify enrollment requirements before registering for this course. This course may only be taken once and may not be repeated. Students who do not complete all graduation requirements while enrolled in this course must enroll in a minimum of 6 dissertation hours (6699 or 6999) in their graduation term. Graded P/F/R.