PSYC - PSYCHOLOGY

PSYC401 Biological Bases of Behavior Laboratory (4 Credits)

Students will study some of the key concepts in neuroscience by combining behavioral experiments with electrode recordings from neurons controlling the behaviors. We will intensively examine concepts like creation of rhythmic behaviors (walking, flight), neurotransmitters' control of aggression, drug effects on synaptic activity, high-speed neural circuits for effective escape from predators, and CNS maps in the visual system for directing prey capture. Students will learn microsurgery and a broad range of neural recording techniques. We work with animals (invertebrates, cold-blooded vertebrates) every week. A strong biology background will be beneficial.

Prerequisite: PSYC300; and (PSYC202, NEUR200, or BSCI353). Restriction: Permission of instructor; and must be in Psychology program; and must have earned a minimum of 85 credits. Credit Only Granted for: PSYC401, NEUR405, BSCI455 or BSCI454.

PSYC403 Animal Behavior (3 Credits)

Reviews the theoretical framework underlying the study of animal behavior. The genetic, hormonal and physiological basis of behavior, and the relation to ecological and evolutionary processes will be discussed using examples that range from invertebrate animals to humans.

Prerequisite: PSYC202 or NEUR200.

PSYC404 Introduction to Behavioral Pharmacology (3 Credits)

Theoretical viewpoints on the interaction of drugs and behavior. Basic principles of pharmacology, the effects of drugs on various behaviors, experimental analysis of drug dependence and abuse, and neuropharmacology and behavior.

Prerequisite: PSYC202 or NEUR200. **Restriction:** Must be in Psychology program.

PSYC406 Neuroethology (3 Credits)

A merger between the disciplines of neuroscience and ethology (animal behavior) studies the behavioral functions of nervous systems using a comparative and evolutionary approach. Students will learn how the nervous system controls behavioral patterns in a variety of different organisms ranging from insects to mammals.

Prerequisite: PSYC301, PSYC202 or NEUR200.
Restriction: Must be in Psychology program.

PSYC407 Behavioral Neurobiology Laboratory (4 Credits)

In this lab course, you will collect behavioral and physiological data in humans using classic behavioral paradigms, design models of neural circuits that can explain those behaviors, record neural activity from the roach, and write lab reports describing your results and how they relate to patients with psychiatric illnesses.

Prerequisite: PSYC300; and (PSYC202 or NEUR200).

Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

PSYC409 Topics in Neurosciences Seminar (1 Credit)

Current research in neurosciences will be presented, read, and discussed. Emphasis will change each term.

Restriction: Permission of BSOS-Psychology department; and junior standing or higher.

standing of higher.

Repeatable to: 4 credits if content differs.

PSYC411 Introduction to Functional Magnetic Resonance Imaging (3 Credits)

An introduction to functional magnetic resonance imaging (fMRI). Students will be taught about formulating testable hypotheses with fMRI, utilizing basic methods in fMRI studies, and understanding existing limitations of fMRI studies in the literature.

Prerequisite: PSYC200 and PSYC300; and (PSYC202 or NEUR200). Restriction: Must be in a major within BSOS-Psychology department. Credit Only Granted for. NACS728F or PSYC411.

PSYC413 Music Cognition (3 Credits)

Overview of the psychological foundations of musical behavior, focusing on underlying perceptual, cognitive, and neural mechanisms. Students will read and discuss primary behavioral and neuroscience research on how people perceive, remember, enjoy, and use music across the lifespan.

Prerequisite: PSYC300.

Credit Only Granted for. PSYC413 or PSYC489X.

Formerly: PSYC489X.

PSYC414 Science of Sleep and Biological Rhythms (3 Credits)

Sleep is a powerful, inescapable, misunderstood, and mysterious presence in our lives. The course will begin with a review of the basics of sleep and biological rhythms with a focus on the underlying neurobiology. The bulk of the semester will be in-depth discussions of topics in sleep and circadian rhythms primarily chosen by the students. A few examples: narcolepsy, sleep in primitive cultures, lucid dreaming, racial and cultural differences in sleep and sleep disorders, the biology of sleep and circadian rhythms during adolescence, CNS control of dreaming, sleep and states of consciousness, sleeping to remember vs. sleeping to forget, legal ramifications of parasomnias, e.g. sleepwalking, and the relationships between sleep deprivation and obesity.

Prerequisite: PSYC301, PSYC202, or NEUR200; or permission of instructor.

Restriction: Must be in a major within the BSOS-Psychology department; and restricted to psychology majors during the registration period.

PSYC416 Development of Attachment in Infancy and Childhood: Theory, Research, Methods, and Clinical Implications (3 Credits)

Overview of the development of attachment during infancy and childhood, examining theory, research methods, research findings, and clinical implications. Students will observe videos of attachment assessments, lead class discussion of readings, make class presentations, and complete writing assignments.

Prerequisite: PSYC355; or permission of instructor.

Restriction: Must be in a major within the BSOS-Psychology department.

PSYC417 Data Science for Psychology and Neuroscience Majors (4 Credits)

A large number of industry and academic jobs require basic programming and data analysis skills. This class represents an introduction to both. Students will learn to program in R and will briefly be introduced to Python, the two most popular programming languages for data science. Common constructs shared by a variety of procedural programming languages will be emphasized. Basic statistics and probability theory will be reviewed from a computational perspective, and more advanced topics introduced. During the course, students will simulate toy data sets which they will then analyze knowing how the data came about, as well as work with real data. The class is highly hands-on with a large number of inclass lab and homework projects. Expect to work a lot and move quickly. Because of the hands-on nature of the class, the overall focus is more on application and execution rather than theory. However, some theory is covered at a high level so that students are aware of why they are doing something, rather than mindlessly writing code.

Prerequisite: PSYC200 and PSYC300; and (MATH120, MATH130, or MATH140).

Credit Only Granted for: PSYC489D or PSYC417.

Formerly: PSYC489D.

PSYC420 Experimental Psychology: Social Psychology Laboratory (4 Credits)

A laboratory course to provide a basic understanding of experimental methods in social psychology and experience in conducting research on social processes.

Prerequisite: PSYC300 and PSYC221.

Restriction: Must be in Psychology program or Social Data Science - Psychology Track; and must have earned a minimum of 85 credits.

PSYC424 Communication and Persuasion (3 Credits)

Effect of social communication upon behavior and attitudes. Theory and research concerning attitude change and social influence.

Prerequisite: PSYC221 and PSYC200.

PSYC425 Psychology and Law (3 Credits)

An introduction to the intersection of psychology and the criminal justice system, known as the field of legal psychology. The material covered will span the course of the criminal justice process and examine each aspect from a psychological perspective beginning with profiling and moving on to eyewitness memory and judgements through perpetrator memories and interrogation techniques. These aspects will be evaluated with a research lens as well as an applied outlook.

Prerequisite: PSYC100, PSYC200, and PSYC300.

Restriction: Must be in Psychology program or Social Data Science -

Psychology Track.

Credit Only Granted for: PSYC325 or PSYC425.

PSYC426 Psychology of Adolescents' Close Relationships: Parents, Peers, and Romantic Partners (3 Credits)

An examination of the development of close relationships during adolescence, including those with parents, peers, and romantic partners. We consider core developmental themes including nature and nurture, stability and change, and individual differences, and discuss theory, research, and clinical applications. Students gain observational skills through discussing extensive video examples of social interactions.

Prerequisite: PSYC355; or permission of the instructor.

Credit Only Granted for: PSYC426 or PSYC489B.

Formerly: PSYC489B.

PSYC431 Human and Animal Intelligence (3 Credits)

The study of intelligence touches upon a broad range of topics from cognition, animal behavior, philosophy, psychology, and linguistics. Through lectures, discussions, and critical evaluation of opposing arguments, we will investigate the construct of intelligence from an evolutionary perspective. An understanding of animal intelligence also has important applications for understanding cognition in general, the design of robotic controls, investigating human health, conserving endangered species, development of artificial intelligence, and assuring animal welfare.

Prerequisite: PSYC300.

Credit Only Granted for. PSYC431 or PSYC489R.

Formerly: PSYC489R.

PSYC432 Counseling Psychology: Theories, Research, and Practice (3 Credits)

Analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology

Prerequisite: PSYC200.

PSYC433 Basic Helping Skills: Research and Practice (4 Credits)

Theories and research regarding effective helping relationships, with a focus on applications to counseling and psychotherapy. Students will practice helping skills with each other and will conduct research projects evaluating their helping skills. Students should be willing to talk about personal issues in class. Attendance in labs is mandatory and contributes to the course grade; thus, students should only enroll in a lab section that they will be able to attend consistently.

Prerequisite: PSYC300.

Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits; and must not have completed or be concurrently enrolled in EDCP 310.

Credit Only Granted for. EDCP210, EDCP310, or PSYC433.

PSYC435 Temperament, Personality, and Psychopathology (3 Credits)

An advanced review of cutting-edge research in humans and animals aimed at understanding the psychological and biological mechanisms underlying stable individual differences in temperament and personality (T&P) and determining their role in adult and child psychopathology, with a major focus on anxiety disorders, depression, and addiction. We will discuss the developmental origins of T&P, measurement issues, fundamental dimensions, heritability, relevance to psychopathology and intervention (treatment and prevention), and broader implications for public policy.

Prerequisite: PSYC200.

PSYC436 Introduction to Clinical Psychology: From Science to Practice (3 Credits)

Critical analysis of clinical psychology, with particular emphasis on current developments and trends.

Prerequisite: PSYC300.

PSYC437 The Assessment and Treatment of Addictive Behaviors (3 Credits)

Explores the current research in assessment and treatment of addictive behaviors. Topics may include addictions in the areas of alcohol, drugs, nicotine, gambling, and eating.

Prerequisite: PSYC100; and 9 credits in PSYC courses.

PSYC438 Special Topics in Study Abroad IV (1-6 Credits)

Special topics course taken as part of an approved study abroad program.

Repeatable to: 15 credits if content differs.

PSYC440 Experimental Psychology: Cognitive Processes and Legal Applications (4 Credits)

A survey of the content, models, and methods in cognitive psychology with an emphasis on attention and encoding, recall, recognition, judgment, signal detection theory, and applying cognitive theories to situations in the legal system. Students integrate scientific theories with real-life legal situations. Course topics include research methodology in assessing and addressing cognitive mechanisms and how this understanding may help eyewitness and victim recall and recognition, perpetrator recall, assessing scientific theories of repression, and real life examples.

Prerequisite: PSYC100, PSYC200, PSYC300 and PSYC341.

Restriction: Must be in Psychology program or Social Data Science - Psychology Track; and must have earned a minimum of 85 credits.

PSYC442 Psychology of Language (3 Credits)

Introductory survey of the psychology of language, focusing on the cognitive processes that enable us to produce and understand language. Topics include speech perception, speech production, syntactic processing, language development, language disorders, and the brain bases of language.

Prerequisite: PSYC300 and PSYC341. **Restriction:** Must be in Psychology program.

PSYC447 Diversity in Organizations (3 Credits)

Overview and active discussion of issues related to diversity and discrimination in organizations from several different perspectives, including: the person(s) being stigmatized, the person(s) doing the stigmatizing, the bystander(s) witnessing stigmatization of others, and the organization. Course readings address each of these perspectives, along with an introductory unit that outlines key concepts of diversity.

Prerequisite: PSYC300.

Credit Only Granted for: PSYC489E or PSYC447.

Formerly: PSYC489E.

PSYC450 Applying Psychology to the Workplace: Industrial Organizational Psychology Laboratory (4 Credits)

In this laboratory course, students use data analytic techniques, along with psychology theories and principles, to solve problems and provide recommendations to mock organizations. Along with learning theories in industrial-organizational psychology and statistical analysis, students will improve personal presentation skills that promote effective communication of information.

Prerequisite: PSYC300.

PSYC460 Psychological Foundations of Personnel Selection and Training (3 Credits)

An examination of issues and processes involved in the design and evaluation of personnel selection and training programs in a variety of organizational settings: job, person and organizational analysis; organizational choice; development of predictors; evaluation of instructional and training systems; criteria for performance evaluation, promotion and training.

Prerequisite: PSYC361 and PSYC200.

PSYC464 Psychology of Leaders in Work Organizations (3 Credits)

The psychological assumptions and implications of various theories of management and leadership. Selections and training; development of careers; influence processes; change of managerial behavior; and the impact of the larger environment, nature of product or service, and organization structure on managerial behavior.

Prerequisite: PSYC200 and PSYC361.

PSYC468 Field Experience and Special Assignments in Honors (1-3 Credits)

An individual experience arranged by the honors student and his or her supervisor. A proposal submitted to the honors faculty in the semester preceding registration for the course should state the activities anticipated and the method of evaluation.

Prerequisite: Must have permission of supervisor and honors faculty.

Restriction: Permission of BSOS-Psychology department.

Repeatable to: 6 credits.

PSYC469 Honors Thesis Proposal Preparation (3 Credits)

Development of honors thesis proposal by preliminary research and literature review. Presentation of formal proposal to the thesis committee.

Restriction: Permission of BSOS-Psychology department.

Repeatable to: 3 credits.

PSYC478 Independent Study in Psychology (1-3 Credits)

Restriction: Permission of BSOS-Psychology department; and must have earned a minimum of 9 credits in Psychology; and must have earned a minimum GPA of 3.0 in Psychology; and minimum cumulative GPA of 2.8.

Repeatable to: 9 credits.

PSYC479 Special Research Problems in Psychology (1-3 Credits)

Restriction: Permission of BSOS-Psychology department; and must have earned a minimum of 9 credits in Psychology; and must have earned a minimum GPA of 3.0 in Psychology; and minimum cumulative GPA of 2.8.

Repeatable to: 9 credits.

PSYC488 Advanced Psychology I (Honors) (3 Credits)

Seminar covering topics in sensation, perception, learning, and motivation.

Prerequisite: PSYC200.

Restriction: Permission of BSOS-Psychology department.

PSYC489 Advanced Special Topics in Psychology (3 Credits)

Treatment of a specialized topic in psychology.

Prerequisite: PSYC300.

Repeatable to: 9 credits if content differs.

PSYC498 Advanced Psychology II (Honors) (1 Credit)

Seminar covering topics of current interest in psychology. **Prerequisite:** Permission of BSOS-Psychology department.

Repeatable to: 3 credits.

PSYC499 Honors Thesis Research (3 Credits)

Prerequisite: PSYC469; and must have permission of thesis advisor.

PSYC601 Quantitative Methods I (4 Credits)

A basic course in quantitative/mathematical analysis and statistical methods in psychology with an emphasis on conceptual understanding. Topics include issues in measurement, probability theory, statistical inference and hypothesis testing, parameter estimation, bivariate regression, and correlation.

Prerequisite: PSYC200; or students who have taken courses with comparable content may contact the department.

PSYC602 Quantitative Methods II (4 Credits)

A continuation of PSYC 601. Topics include experimental design, analysis of variance, analysis of covariance, multiple regression, and general linear models.

Prerequisite: PSYC601.

PSYC603 Introduction to Industrial and Organizational Psychology (3 Credits)

Advanced survey of industrial-organizational psychology, including selection, training, motivation, group processes, leadership, organizational psychology, and organizational theory. Readings stressed and seminar time will be used for lectures, discussion and integration of the reading materials.

Credit Only Granted for: PSYC603 or PSYC730.

Formerly: PSYC730.

PSYC604 Fundamentals of Social Psychology (3 Credits)

A survey of classic and contemporary theories, research and methods in social psychology.

Credit Only Granted for: PSYC604 or PSYC640.

Formerly: PSYC640.

PSYC605 Multilevel Modeling (3 Credits)

Students are provided with an introduction to multilevel modeling techniques (also termed "hierarchical linear models," "mixed effects models," and "random coefficients models"), with an emphasis on applications. Specific topics that are covered include conceptualization and specification of multilevel models, interpretation of parameter estimates, and application in computer programs using existing datasets. Applications will include a) individuals nested within groups; b) repeated measures/idiographic analysis; c) dyadic studies; d) dailydiary studies; and e) growth-curve modeling. Readings and examples will be drawn from clinical psychology, cognitive psychology, developmental psychology, educational psychology, and social psychology. Students are encouraged to use their own research data for course assignments.

 $\label{lem:control_control_control} \textbf{Credit Only Granted for:} \ \mathsf{PSYC798A} \ \mathsf{or} \ \mathsf{PSYC605}.$

Formerly: PSYC798A.

PSYC606 Human Biopsychology (3 Credits)

An introductory graduate level course in human psychobiology designed for graduate students with little specific training in this area. Introduction to the comparative and evolutionary approach to the study of human behavior, the biobehavioral basis of human sexuality and social behavior, the physiological basis of higher cortical functions in humans including language, memory, and spatial perception, and an introduction to neuropharmacology.

Credit Only Granted for: PSYC606 or PSYC660.

Formerly: PSYC660.

PSYC607 Advanced Topics in Human-Learning and Cognitive Psychology (3 Credits)

A systemic review of major topic areas in the field of human learning and cognition, with emphases on information processes, mental representations, memory, reasoning, problem solving, and language. **Credit Only Granted for.** PSYC607 or PSYC671.

Formerly: PSYC671.

PSYC610 Historical Viewpoints and Current Theories in Psychology (3 Credits)

Origins of psychology in philosophy and the sciences; the development of psychology as a science in the nineteenth and twentieth centuries. A review of current theoretical perspectives and research in relation to the enduring issues in psychology. The role of culture, science, and technology in the development of psychological ideas.

Credit Only Granted for: PSYC610 or PSYC688.

Formerly: PSYC688.

PSYC611 Advanced Developmental Psychology (3 Credits)

Systematic exploration of contemporary and classic theories of development focusing on the assumptions they make and research they generate.

PSYC612 Affective Science Perspectives on Temperament & Personality (3 Credits)

Scientific requirements for a personality theory. Postulates and relevant research literature for several current personality theories.

PSYC614 Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences (3 Credits)

Multidisciplinary exploration of the current state of our scientific understanding of emotional states and traits, their biological roots, and their relevance to psychiatric disease. We will cover foundational knowledge in neuroscience and genetics, strengths and weaknesses of widely used methods, classic and cutting-edge empirical work, and ongoing conceptual debates. We will also discuss crucial discrepancies between the ways in which scientists and laypeople conceptualize emotions. In addition to human neuroimaging and genomic-association studies, we will explore biological research that affords causal insights, including animal models, acute pharmacological challenges, neurofeedback, and brain stimulation approaches, and case studies of patients with circumscribed neural insults.

PSYC619 Research Team in Clinical Psychology (1-3 Credits)

Participation in ongoing faculty-student research teams focusing on discussion of research topics, presentation and critique of original research proposals, and development of thesis and dissertation research studies.

Repeatable to: 6 credits.

PSYC622 Research Methods in Clinical Psychology (3 Credits)

Examines issues and strategies in conceptual systems, designs and methodologies of current research in clinical and community psychology. Readings include critical analyses of published research. Course requirements include preparation of a research proposal for a thesis level study.

Restriction: Permission of instructor.

Credit Only Granted for. PSYC622 or PSYC718.

Formerly: PSYC718.

PSYC623 Child Development & Psychopathology (3 Credits)

Examines the scientific and clinical literature relevant to developmental aspects of behavior across the lifespan and normal and pathological behavior in children and adolescents. Issues in developmental psychology and developmental psychopathology and consideration of processes initiated in childhood that manifest as pathology in adulthood are also considered.

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

PSYC624 Adult Psychopathology (3 Credits)

Examines the scientific and clinical literature relevant to normal and pathological behavior in adults and associated nosological systems for categorizing psychopathology. Issues relevant to etiology, differential diagnosis, and treatment planning are also considered.

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

Credit Only Granted for. PSYC624 or PSYC719.

Formerly: PSYC719.

PSYC625 Clinical Assessment: Psychometric Principles, Testing and Behavior (3 Credits)

An examination of fundamental principles of psychological assessment; application of these principles to the development of evidence-based assessments of clinical conditions and associated behaviors; and application of evidence-based assessments to the evaluation and understanding of clinical conditions evaluated and treated in therapeutic settings.

Restriction: Permission of BSOS-Psychology department.

Credit Only Granted for: PSYC625 or PSYC721.

Formerly: PSYC721.

PSYC628 Advanced Topics in Clinical Psychology (1-3 Credits)

Examines selected topics in clinical/community psychology, public policy and health care planning.

Restriction: Permission of instructor.

Repeatable to: 9 credits if content differs.

Credit Only Granted for: PSYC628 or PSYC719.

Formerly: PSYC719.

PSYC629 Clinical Laboratory (1-3 Credits)

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

Repeatable to: 15 credits.

Credit Only Granted for: PSYC629 or PSYC632.

Formerly: PSYC632.

PSYC630 Behavioral and Cognitive Behavioral Intervention for Adults (3 Credits)

Introduces students to the process of therapy with particular focus on behavioral focus on behavioral and cognitive behavioral internentions. Syllabus focuses on theory, research, client diversity, ehtics, and practical aspects of conducting therapy.

Prerequisite: PSYC680.

Restriction: Permission of instructor.

Credit Only Granted for: PSYC630 or PSYC728.

Formerly: PSYC728.

PSYC632 Behavioral and Cognitive Behavioral Intervention for Children and Adolescents (3 Credits)

Introduces students to the process of therapy with particular focus on behavioral and cognitive behavioral interventions in children and adolescents. Syllabus focuses on theory, research, client diversity, ethics and practical aspects of conducting therapy.

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

Formerly: PSYC789A.

PSYC638 Externship in Professional Psychology (1-3 Credits)

Approved appointment as an extern in a mental health setting.

Repeatable to: 6 credits if content differs.

PSYC639 Internship in Professional Psychology (1 Credit)

This seminar combines involvement with a program approved appointment as an intern in a mental setting with a supervisory review of the training experience.

Repeatable to: 6 credits if content differs.

PSYC642 Biological Considerations in Clinical Psychology (3 Credits)

Behaviors are based partially in the bilogy of the human organism. This course begins with an examination of the nature-nurture issue on psychology, particularly as it applies to clinical psycology. Genetic underpin nings of behavior their neuroanatomical neurochemical expressions will be explored. This course will also examine psychopsychiological meas ures and the role of psychoparmacology and other biological interventions in treatment.

PSYC643 Ethics and Foundations of Assessment and Clinical Intervention (3 Credits)

An overview of the ethical and professional issues involved in psychological research, instruction, and practice, with special attention to advocacy and ethical decision making regarding a variety of primary, secondary, and tertiary clinical/community interventions.

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

Credit Only Granted for. PSYC643 or PSYC719.

Formerly: PSYC719.

PSYC644 Basic Foundation of Clinical Interventions (3 Credits)

General introduction to behavior theory and the basic behavioral principles that underlie behavior therapy. Provides an introduction to the philosophical, theoretical and empirical contributions of basic behavior analysis as they relate to behavior therapy, including examples of how behavior therapy is disconnected from its roots.

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

PSYC650 Culture and Diversity in Mental Health (3 Credits)

Review literature regarding the role of culture and diversity in mental health and how culture and diversity are integrated into research and are related to mental health and mental health service utilization. Examine principles and concepts of multicultural and cross-cultural psychology to acquire an increased understanding of diverse underrepresented groups and topics to consider when involved with research and/or clinical work with individuals having diverse backgrounds (e.g., cultures, ethnicities, genders, sexual orientations, and socioeconomic status).

Restriction: Must be enrolled in the Clinical Psychological Science MPS program.

PSYC651 Writing and Critical Thinking (3 Credits)

A capstone experience to integrate knowledge learned throughout the program and improve critical thinking and research writing skills. This will be done through the production of a major research paper in an area relevant to the current or future career goals of the student and by emphasizing critical thinking skills.

Restriction: Must be enrolled in and have successfully completed all courses in the first 4 terms of the Clinical Psychological Science MPS program.

PSYC652 Analytical Thinking: Statistical Methods at Work (3 Credits)

Personal and organizational growth begins with asking and answering great questions. Correspondingly, this course begins with demonstrations of how to translate business questions into research questions.

Statistical methods used to answer business questions are taught first conceptually, then computationally using statistical software. This course emphasizes interpreting results, the regression model, and other issues salient to business research, such as handling large datasets. Students will be provided with a simulated dataset that they will use in learning how to frame and answer business questions using the techniques covered in this course. At the conclusion of this course, students will be required to provide an executive-level presentation on the business question, their findings, and resulting implications.

Additional Information: Students will be taught how to conduct analyses in R, SPSS, SAS, Stata, and excel; students are encouraged to practice analyses on at least two of these programs.

PSYC653 The Business of Evaluation: Research Methods at Work (3 Credits)

Students will learn about the strengths and weaknesses of commonly employed research methods in business settings, including: longitudinal research, survey and interview (including focus groups) design, and sampling and weighting. Students will design and launch a research study that will answer a pressing business question.

Prerequisite: PSYC652.

Additional Information: Course builds from work completed in PSYC 652. Students are also expected to commit to a two-term long project. Students will work with a non-profit organization or local business to ask and answer a business question for the organization. Students will conclude this project in PSYC 654.

PSYC654 Advanced Analytical Thinking: Statistical Methods at Work II (3 Credits)

Students will delve deeply into issues of interpreting and questioning analytic results. Students will learn how to creatively present empirical results in ways that grab the attention of, and are clear to, a variety of stakeholders. Students will present group projects in two presentations, one to the rest of the class (technical audience) and one to an expert panel of practitioners. Finally, this course will introduce students conceptually to a number of advanced statistical methods, such as meta-analysis and structural equation modeling.

Prerequisite: PSYC652 and PSYC653.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC655 Talent Development (3 Credits)

In this course, students will learn how to design and implement effective employee training programs as well as how to encourage informal learning in organizations. This course will review current theories in adult learning (e.g., ADDIE model, action learning, peer feedback/coaching), several popular assessment tools (e.g., MBTI), and best practices for evaluating training programs. Issues relevant to leadership identification and development, including succession planning, will also be covered. As part of this course, students will work in teams to design and deliver a brief training module and practice giving and receiving feedback. Additionally, students will complete, and facilitate a debriefing on, a 360-degree feedback assessment.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC656 Business Fundamentals and Legal Issues facing Organizations (3 Credits)

This course provides an overview of the fundamentals of business, including both issues of finance and legal issues faced by organizations. Topics will include finance, accounting, and marketing. Students will learn core business concepts, about how each major business function enables organizations to run, and how to talk to and understand the leaders of organization. Additionally, this course will provide an overview of common legal challenges organizations face. In addition to introducing students to employment law, this course will review professional ethics standards for IO psychology. This course will use case study methodology to hone students' understanding of the ethical and legal issues faced in day-to-day organizational life.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC657 Managing Strategic Organizational Change (3 Credits)

In this course, students will learn to think about organizations as systems and will explore catalysts of organizational change. Issues of strategy, market pressure, competition, workforce planning, and stakeholder buy-in will be discussed. Finally, students will learn about methods for planning, leveraging, and managing organizational change. Case study methodology will be used to deepen learning on the challenges faced during organizational change and how to guide organizations through change, planned or not.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC660 Performance Management, Compensation, and Benefits (3 Credits)

This course draws together content on organizational behavior, selection, assessment, development, employee relations, and compensation, among other topics. Students in this course will learn about how to align organizational reward systems, including selection, development, performance appraisal, feedback, and compensation systems. This course will pull from current organizational research and theory on issues ranging from work motivation, employee retention, and feedback processes to issues of organizational strategy and culture.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC661 Practicum in IO Psychology (3 Credits)

In this practicum, students will work on IO-related tasks in an organization and will have the opportunity to apply what they have learned in class to real-world problems. Students will write a reflection paper reviewing what skills they have applied - and developed - while completing this practicum.

Prerequisite: PSYC603, PSYC652, PSYC653, and PSYC654.

Restriction: Must be in the Master of Professional Studies in Industrial/ Organizational Psychology Program.

PSYC669 Professional Issues in Counseling Psychology (1 Credit)

Introduction to counseling psychology, including history and development of the field, and current professional and scientific issues. Exploration of career, research, and professional development opportunities.

Prerequisite: Must be in the Counseling Psychology program.

Cross-listed with: EDCP669.

Repeatable to: 3 credits if content differs.

Formerly: EDCP695.

PSYC678 Seminar in Psycholinguistics (3 Credits)

Contemporary psycholinguistic theories of language acquisition and use. Phonological, semantic and syntactic aspects of language.

Prerequisite: PSYC671. Repeatable to: 6 credits.

PSYC679 Seminar in Cognitive Development (3 Credits)

Advanced coverage of research methodology and research issues in various areas of cognitive development such as categorization, spatial understanding, language acquisition, and memory. Emphasis on interrelationships among developmental changes across the life-span. Utility of a developmental perspective in analyzing the components of cognition.

Prerequisite: PSYC611 or PSYC671.

Repeatable to: 6 credits.

PSYC682 Counseling Psychology Didactic Practicum in Group Interventions (3 Credits)

In depth examination of theories and techniques of group interventions; supervised experience in group counseling.

Prerequisite: For Counseling Psychology majors only.

Cross-listed with: EDCP682. Formerly: EDCP718.

PSYC683 Counseling Psychology Didactic-Practicum in Couples and Family Interventions (3 Credits)

In depth examination of theories and techniques of couples and family counseling, and supervised experience in couples/family counseling.

Restriction: Permission of instructor.

Credit Only Granted for: PSYC683 or PSYC729.

Formerly: PSYC729.

PSYC685 Counseling Psychology Didactic Practicum in Counseling Supervision (3 Credits)

In depth examinatin of theories and techniques of counseling supervision, supervised experience in the process of supervising counselors.

Cross-listed with: EDCP685.

Restriction: Must be in the Counseling Psychology program.

Formerly: EDCP745.

PSYC686 Didactic Practicum in Career Counseling (3 Credits)

In depth examination of approaches to issues in career interventions; supervised experience in career counseling and assessment.

Credit Only Granted for: PSYC681 or PSYC686.

Formerly: PSYC681.

PSYC688 Ethicial and Legal Issues in Counseling Psychology (1 Credit)

Exploration of ethical standards and legal issues in the profession of counseling psychology.

Restriction: Must be in the Counseling Psychology program.

Repeatable to: 3 credits if content differs.

PSYC689 Seminar in Counseling Psychology (3 Credits)

Special topics in counseling psychology. Examples of topics include multicultural counseling, the counseling relationship, counseling and victimology, psychology treatment and health.

Prerequisite: For Counseling Psychology majors only.

Cross-listed with: EDCP689.

Repeatable to: 12 credits if content differs.

Formerly: EDCP789.

PSYC690 Research in Counseling Psychology I (3 Credits)

Critical analysis of strategies, methodological, conceptual, and content trands

Prerequisite: For Counseling Psychology majors only.

Cross-listed with: EDCP690.

Formerly: EDCP778.

PSYC691 Research in Counseling Psychology II (3 Credits)

Critical analysis of trends and issues in counseling psychology science.

Restriction: Permission of instructor.

Credit Only Granted for. PSYC691 or PSYC718.

Formerly: PSYC718.

PSYC692 Assessment in Counseling Psychology I (3 Credits)

Broad introduction to the construction of psychological tests and measures, and experience in test interpretation, with consideration of historical, legal, ethical, and cultural issues surrounding the assessment process.

Prerequisite: PSYC680.

Credit Only Granted for. PSYC692 or PSYC721.

Formerly: PSYC721.

PSYC693 Assessment in Counseling Psychology II (3 Credits)

Supervised experience in administration, scoring, and interpreting major psychodiagnostic instruments used by counseling psychologists, as well as writing integrative assessment reports. Emphasis on hypothesis testing approach to assessment and on the counseling interview as an assessment tool.

Prerequisite: PSYC692.

Credit Only Granted for. PSYC693 or PSYC722.

Formerly: PSYC722.

PSYC695 Ethical and Professional Issues in Counseling Psychology (3 Credits)

Exploration of ethical and professional issues in Counseling Psychology. **Restriction:** Must be in the Counseling Psychology program. Also offered as: EDCP605

Credit Only Granted for. EDCP669, EDCP688, EDCP695, PSYC688, or PSYC695

Formerly: EDCP669 and EDCP688.

PSYC698 Advanced Didactic Practicum in Counseling Psychology (3 Credits)

In depth examination of approaches to or theories abouth intervention, and supervised experience in the application of those approaches or theories. Each practicum focuses on a particular approach, e.g., psychodynamic, cognitive-behavioral, cross-cultural.

Prerequisite: For Counseling Psychology majors only.

Cross-listed with: EDCP698.

Repeatable to: 12 credits if content differs.

Formerly: EDCP776.

PSYC699 Diversity and Multiculturalism in Counseling Psychology (1 Credit)

Exploration of knowledge, attitudes, and skills for providing counseling psychological services to culturally diverse populations.

Restriction: Must be in the Counseling Psychology program.

Repeatable to: 3 credits if content differs.

Formerly: EDCP696.

PSYC700 Theories and Strategies of Counseling Psychology (3 Credits)

Introduction to the professional field, examination of pertinent scientific and philosophical backgrounds, and survey of the major theories, principles, and training models in counseling. Correlated laboratory analogue experiences in dydactic and group interrelationships.

Prerequisite: For Counseling Psychology majors only.

Cross-listed with: EDCP700. **Formerly:** EDCP789J.

PSYC707 Theory of Decision and Choice (3 Credits)

A study of algebraic and probabilistic models for decision and choice behavior, and related experimental procedures. Topics include: measurement of preference, subjective utility models for certain and uncertain outcomes, normative strategies, decision making styles, and group decision making.

Prerequisite: PSYC602.

Restriction: Permission of instructor.

PSYC708 Seminar in Psychometric Theory (3 Credits)

Study of the current practices, trends, or recent developments in psychometric theory.

Prerequisite: PSYC602; or permission of instructor.

Repeatable to: 9 credits if content differs.

PSYC709 Seminar in Mathematical Models (3 Credits)

Special topics in mathematical psychology. A discussion of quantitative representations of psychological processes in one or more substantive areas of psychology.

Prerequisite: PSYC602; or permission of instructor. **Repeatable to:** 9 credits if content differs.

PSYC725 Teams at Work (3 Credits)

Theory and research regarding the formation, management, and functioning of teams in the workplace; including team composition, team rewards, team-task and team-organization relationships and fit, team productivity, and the selection for and training of teams. International use of teams at work.

Prerequisite: PSYC602; or permission of instructor. **Credit Only Granted for.** PSYC725 or PSYC747.

Formerly: PSYC747.

PSYC732 Selection and Classification Issues in Organizations (3 Credits)

Consideration of societal, organizational and individual demands for appropriate use of individual differences in (primarily) initial placement of employees. Recruitment, and selection issues, the role of governmental regulations, and the role of individual factors in individual behavior are considered. Extensive coverage given to fundamental psycho-metric problems and the development of individual and organizational criteria of effectiveness.

Prerequisite: PSYC603; and (PSYC602; or students who have taken courses with comparable content may contact the department). Or permission of instructor.

PSYC737 Research Methods for Social and Organizational Psychology (3 Credits)

Conducting and evaluating research are among the most important activities undertaken in social and organizational psychology. Effectively accomplishing these tasks requires understanding fundamental principles and practices relevant to theory development (constructing and improving explanatory accounts for phenomena), research design (techniques and methods used to collect observations/data), and measurement (processes and techniques by which observations are assessed, quantified, and documented). This course aims to develop the requisite knowledge and critical thinking skills necessary to make informed decisions when performing and interpreting research in social and organizational psychology. Significant emphasis is placed on developing student thesis research and proposals.

Prerequisite: PSYC603 or PSYC604; or permission of instructor.

PSYC738 Seminar in Industrial/Organizational Psychology (3 Credits)

An occasional advanced seminar covering specialized topics.

Prerequisite: PSYC603; or permission of instructor. **Repeatable to:** 99 credits if content differs.

PSYC739 The Psychology of Workplace Change and Innovation (3 Credits)

Organizational change and innovation research and theory, current impetuses for organizational change (e.g., economic, demographic, and technological trends) and specific workplace innovations (e.g., employee ownership, QWL, CAD/CAM, etc.)

Prerequisite: PSYC603; or permission of instructor.

PSYC748 Seminar in Social Psychology (3 Credits)

A seminar on selected topics in social psychology.

Repeatable to: 15 credits if content differs.

PSYC749 Current Research in Social Psychology (1-3 Credits)

Repeatable to: 12 credits if content differs.

PSYC758 Seminar in the Neural Bases of Sensory Processes (3 Credits)

Selected topics in vision and the other senses. **Prerequisite**: PSYC605; or permission of instructor.

Repeatable to: 9 credits if content differs.

PSYC759 Seminar in Neural Bases of Perceptual Processes (3 Credits)

Selected topics in perceptual phenomena and their physiological bases.

Prerequisite: PSYC605; or permission of instructor.

Repeatable to: 9 credits if content differs.

PSYC768 Conditioning and Learning (3 Credits)

Alternate years. The literature on the experimental analysis of behavior, with examination of basic experiments and contemporary theories related to them.

Prerequisite: PSYC622.

PSYC778 Seminar in Learning and Memory (3 Credits)

An advanced topical seminar covering the areas of human learning and memory. Acquisition processes, storage and retrieval processes, and attention and information processing.

Prerequisite: PSYC671.

Repeatable to: 6 credits if content differs.

PSYC779 Seminar in Human Performance Theory (3 Credits)

An examination of human-machine interactions with emphasis on theories and research which focus on human performance capabilities and skills. Topics selected from information processing, communications, human computer interaction, decision making, environmental constraints and automation.

Restriction: Permission of instructor. **Repeatable to:** 6 credits if content differs.

Formerly: PSYC735.

PSYC788 Special Research Problems (1-4 Credits)

Supervised research on problems selected from the areas of experimental, industrial, social, quantitative, or mental health psychology.

PSYC789 Special Research Problems (1-4 Credits)

PSYC798 Graduate Seminar (1-4 Credits)
Repeatable to: 12 credits if content differs.

PSYC799 Master's Thesis Research (1-6 Credits)

PSYC818 Research Issues in Personality Or Development (3 Credits)

Experimental design and methodology and statistical treatment of data appropriate to personality or developmental research; critical analysis of major current areas of research including methodologies, findings and implications. The course will focus on either personality research or developmental research in a given semester.

Prerequisite: PSYC602 and PSYC601. And PSYC611 or PSYC612; or students who have taken courses with comparable content may contact the department.

Repeatable to: 9 credits.

PSYC819 Seminar in Personality and Development (3 Credits)

An advanced seminar covering specialized topics.

Repeatable to: 9 credits.

PSYC859 Special Topics in Perception (3 Credits)

Intensive study of selected topics in perception. **Prerequisite:** PSYC605; or permission of instructor.

Repeatable to: 6 credits.

PSYC878 Current Research in Language and Cognition (3 Credits)

Seminar will cover current research and methodological issues in language and cognition. Specialized topics include: computer models of cognitive behavior; cross-cultural studies in language and thought; mathematical and analytical techniques for assessing structures; and others.

Prerequisite: PSYC671. Repeatable to: 6 credits.

PSYC888 Research Methods in Psychology (1-3 Credits) PSYC889 Research Methods in Psychology (1-3 Credits)

PSYC898 Pre-Candidacy Research (1-8 Credits)

PSYC899 Doctoral Dissertation Research (1-8 Credits)