PSYCHOLOGICAL SCIENCES

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Psychological Sciences
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The Department of Psychological Sciences' undergraduate program offers the core preparation found across the nation's leading graduate schools of psychology, combined with advanced courses and research opportunities offered by the nation's leading scholars and teachers in psychological science. Programs of study may be tailored to graduate school and future careers in several major fields of psychology, as well as in medicine, law, business, technology, or education. At the undergraduate level, the department also oversees a Minor in Behavioral Medicine and Health Resilience (https://ga.rice.edu/programs-study/departments-programs/social-sciences/behavioral-medicine-health-resilience/behavioral-medicine-health-resilience-minor/).

An important feature of our doctoral program is its strong research orientation. Graduate students are expected to spend most of their time actively engaged in research and are expected to acquire a high level of research and statistical competence. Faculty research interests and PhD major concentrations for graduate students include:

- **Cognitive and Affective Neuroscience**: understanding the psychology and neuroscience behind basic mental activities (e.g., perceiving, attending, remembering) and higher forms of behavior (e.g., memory, language, social cognition, emotion, health);
- **Health Psychology and Behavioral Medicine Research**: understanding how behaviors, cognitions, and emotions impact mental and physical health; designing and testing evidence based interventions to reduce health risk and improve quality of life; examining biological factors underlying risk, resilience, and mechanisms of change;
- **Human-Computer Interaction and Human Factors**: understanding interactions between humans and other elements of a physical system, and the application of theories, principles, data, and other methods of design that optimize human well-being and overall system performance and usability;
- **Industrial-Organizational Psychology**: understanding human behavior in organizational and work situations, addressing research problems such as motivation at work, the aging workforce, discrimination in the workplace, job performance, and team training;
- **Psychometrics and Quantitative Psychology:** understanding specialized skills related to appropriate and innovative study design; statistical modeling and analysis; and interpretation of psychological measures, experiments, and interventions

The Master of Human-Computer Interaction and Human Factors (MHCIHF) (https://ga.rice.edu/programs-study/departments-programs/social-sciences/human-computer-interaction-human-factors/) degree program is a full-time, 2-year professional master's program that will expand students' knowledge of critical concepts and methods in psychology and how to apply those concepts to real-world problems. In this program, students will learn about findings and theories in critical areas of human-computer interaction and human factors, learn how to apply those concepts to solve real-world problems, learn how to design empirical studies to complement theoretical approaches, and develop quantitative skills that support these efforts. Graduates of the program will be well positioned to lead human factors and human computer interaction efforts across a broad range of industries, including IT/telecommunications, health care, defense, e-commerce, and energy.

The Master of Industrial-Organizational Psychology (MIOP) (https://ga.rice.edu/programs-study/departments-programs/social-sciences/industrial-organizational-psychology/) degree program is a full-time, 2-year professional master's program that offers students graduate-level training in an applied area of psychology for which there is a very high demand. Students are provided with scientific and practical knowledge about the nature of the psychology of work and the workplace, the future of work, and a deep set of methodological and statistical skills. Graduates of the program will be well positioned to work in a wide variety of corporate, nonprofit, and government settings, on projects ranging from medical safety to the promotion of inclusive cultures (and prevention of harassing ones). I-O psychologists are presently in extremely high demand according to the Bureau of Labor Statistics and *US News and World Report* (#2 in *USNWR* Best Science Jobs, 2020); Rice's existing I-O psychology doctoral program receives routine requests from employers seeking students with Master's-level training. As of March 2022, *US News and World Report* has also named Rice University's I-O Psychology graduate program as the best industrial-organizational

psychology program in the country. It was included among their Best Social Sciences and Humanities Schools annual list.

Bachelor's Program

- Bachelor of Arts (BA) Degree with a Major in Psychology (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/psychology-ba/)

Minor

- Minor in Behavioral Medicine and Health Resilience (https://ga.rice.edu/programs-study/departments-programs/social-sciences/behavioral-medicine-health-resilience/behavioral-medicine-health-resilience-minor/)

Master's Programs

- Master of Arts (MA) Degree in the field of Psychology*
- Master of Human-Computer Interaction and Human Factors (MHCIHF) Degree (https://ga.rice.edu/programs-study/departments-programs/social-sciences/human-computer-interaction-human-factors/human-computer-interaction-human-factors-mhcihf/)
- Master of Industrial-Organizational Psychology (MIOP) Degree (https://ga.rice.edu/programs-study/departments-programs/social-sciences/industrial-organizational-psychology/industrial-organizational-psychology-miop/)

Doctoral Program

- Doctor of Philosophy (PhD) Degree in the field of Psychology
  - and a Major Concentration in Cognitive and Affective Neuroscience (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/cognitive-affective-neuroscience-concentration-phd/)
  - and a Major Concentration in Health Psychology and Behavioral Medicine Research (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/health-psychology-behavioral-medicine-research-concentration-phd/)
  - and a Major Concentration in Human-Computer Interaction and Human Factors (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/human-computer-interaction-human-factors-concentration-phd/)
  - and a Major Concentration in Industrial-Organizational Psychology (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/industrial-organizational-psychology-concentration-phd/)
  - and a Major Concentration in Psychometrics and Quantitative Psychology (https://ga.rice.edu/programs-study/departments-programs/social-sciences/psychological-sciences/psychometrics-quantitative-psychology-concentration-phd/)

* *Although students are not normally admitted to a Master of Arts (MA) degree program, graduate students may earn the MA as they work towards the PhD.*

Department Chair

Margaret E. Beier

Associate Department Chair

Philip T. Kortum

Professors

Margaret E. Beier
Michael D. Byrne
Patricia DeLucia
Christopher P. Fagundes
Noni Gaylord-Harden
Michelle "Mikki" R. Hebl
Eden B. King
Philip T. Kortum
James LeBreton
Eduardo Salas

Associate Professors

Jing Chen
Marc Coutanche
Bryan T. Denny
Simon J. Fischer-Baum
Luz Garcini
Danielle D. King Jordan

Assistant Professors

Rebecca Brossoit
Alyssa (Allie) Sinclair
Erin Standen
Tianjun Sun

Professors Emeriti

Sarah A. Burnett
James L. Dannemiller
David M. Lane
Randi C. Martin
Stephan J. Motowidlo
James R. Pomerantz
David J. Schneider

Teaching Professor

Sandra V. Parsons

Assistant Teaching Professors

Özge Gürcanlı
Kim Orsten Hooge
Mark Maynard
D. Colette Nicolaou

Professor in the Practice

Seth Osborn

Lecturers

Chase L. Lesane-Brown
Kirsten Westmoreland
Rachel Zahn

Professors, Courtesy Appointments

Sora Jun

Marlon Mooijman
Scott Sonenshein
Daan Van Knippenberg
Rick K. Wilson
Siyu Yu
Jing Zhou

Associate Professor, Courtesy Appointment

D. Brent Smith

Adjunct Professors

Ryan Brown
John H. Byrne
Marcel de Dios
Judy R. Edworthy
Harris Eyre
Cary R. Jensen
Lynn M. Maher
S. Morton McPhail
Frederick L. Oswald
Deborah A. Pearson
Kevin C. Wooten

Adjunct Associate Professors

S. Camille Peres
Tatiana Schnur

Adjunct Assistant Professors

Claudia Ziegler Acemyan
Kirsten Adam
Roberta M. Diddel
Heidi Ham
Lauren Landon
Stephanie Leal
Jason Schneiderman
Eleanor "Lennie" Waite
Mihriban Whitmore

For Rice University degree-granting programs:
To view the list of official course offerings, please see Rice's Course Catalog (https://courses.rice.edu/admweb/!SWKSCAT.cat?p_action=cata).
To view the most recent semester's course schedule, please see Rice's Course Schedule (https://courses.rice.edu/admweb/!SWKSCAT.cat).

Psychology (PSYC)

PSYC 100 - AP/OTH CREDIT IN PSYCHOLOGY
Short Title: AP/OTH CREDIT IN PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Transfer Courses
Course Type: Transfer
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: Provides transfer credit based on student performance on the Advanced Placement Psychology exam. Approved PSYC 100 credit counts toward total credit hours required for graduation and the major, but does not count for distribution.

PSYC 101 - INTRODUCTION TO PSYCHOLOGY
Short Title: INTRODUCTION TO PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: Survey of topics, problems, and approaches in contemporary psychology. Includes the biological basis of behavior, sensation, perception, attention, learning and memory, thinking, language, abnormal behavior and therapies, personality, and individual differences. Required for psychology majors.

PSYC 102 - QUANTITATIVE ANALYSIS FOR SOCIAL SCIENCES: PSYCHOLOGY LAB
Short Title: PSYCHOLOGY STATISTICS LAB
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Laboratory
Credit Hours: 0
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: This lab companion course to SOSC 302: Quantitative Analysis for the Social Sciences involves psychology-specific applications of statistical analysis. The lab focuses on the use of software to analyze data from research in psychological sciences. Students who enroll in this lab section must also enroll in SOSC 302 during the same semester.

PSYC 202 - INTRODUCTION TO SOCIAL PSYCHOLOGY
Short Title: INTRO TO SOCIAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: Overview of topics in social psychology. Includes conformity and social influence, attitude formation and change, aggression, altruism, relationships, liking and loving, and prejudice and stereotyping, as well as applications to other disciplines (e.g. law, marketing, the workplace, etc.). Required for psychology majors.

PSYC 203 - INTRODUCTION TO COGNITIVE PSYCHOLOGY
Short Title: INTRO TO COGNITIVE PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: An introduction to topics in cognitive psychology, including perception, attention, language, memory, and decision making. Required for psychology majors.

PSYC 231 - INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY
Short Title: INDUS & ORGANIZATIONAL PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: An overview of the principles, techniques, and theories of psychology applied in the industrial setting.

PSYC 238 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study
Credit Hours: 1-4
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.

PSYC 260 - UNDERGRADUATE PROFESSIONAL ISSUES IN PSYCHOLOGY
Short Title: UNDERGRAD PROF ISSUES IN PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: This seminar will provide students interested in psychology with an opportunity to explore psychology as a major and a career. Through guest lecturers, group discussions, and class projects, students will learn about diverse fields and potential career paths in psychology. Instructor Permission Required.

PSYC 308 - MEMORY
Short Title: MEMORY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Critical review of traditional and contemporary approaches to the study of remembering and forgetting. Graduate/Undergraduate Equivalency: PSYC 524.

PSYC 309 - PSYCHOLOGY OF LANGUAGE
Short Title: PSYCHOLOGY OF LANGUAGE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Study of human and other animal communication. Includes the structure of human language, word meaning and semantic memory, psychological studies of syntax, bilingualism, language and thought, and language errors and disorders. Cross-list: LING 309.

PSYC 310 - PSYCHOLOGY OF AGING
Short Title: PSYCHOLOGY OF AGING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202 or PSYC 203
Description: This course focuses on the psychology of aging through a biological, cognitive, and socio-emotional framework. Topics to be covered include how mental capacities change over time, especially memory processing, differences between normal and pathological aging, neurobiological changes with age, dementias such as Alzheimer's disease, and individual differences in aging. There will be an emphasis on discussion of recent literature and developing research ideas in the field of psychology of aging.

PSYC 311 - VISUAL COGNITION
Short Title: VISUAL COGNITION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: This course provides an overview of how visual perception intersects with attention, memory, and concepts. Topics may include: object recognition, face recognition, scene recognition and reading; visual attention; visual working memory; applied visual cognition (e.g., interface design, TSA screening).

PSYC 315 - INTRODUCTION TO SEMANTICS
Short Title: INTRODUCTION TO SEMANTICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Introduction to basic approaches to the study of meaning in linguistics and related fields. Includes the cognitive representation of meaning, lexical categorization, conceptual structures, metaphor/metonymy, meaning change, pragmatic inference, and the relation of language and mind. Cross-list: LING 315. Recommended Prerequisite(s): LING 200 or ANTH 200.

PSYC 321 - DEVELOPMENTAL PSYCHOLOGY
Short Title: DEVELOPMENTAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202 or PSYC 203
Description: Study of behavioral changes with age in both human and nonhuman species. Recommended Prerequisite(s): PSYC 202 and PSYC 203.

PSYC 325 - LANGUAGE ACQUISITION
Short Title: LANGUAGE ACQUISITION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202 or PSYC 203 or LING 200 or ANTH 200
Description: Language Acquisition examines how we go from making a few sounds as infants to being able to read and discuss Shakespeare. The course explores how language develops by engaging with major theories, analyzing real data, and evaluating competing explanations. Students will generate hypotheses, interpret developmental patterns, and think critically about the methods and challenges involved in researching how humans learn language. Cross-list: LING 325.

PSYC 329 - PSYCHOLOGICAL TESTING
Short Title: PSYCHOLOGICAL TESTING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 339 or SOSC 302
Description: Offers a detailed examination of psychological test development and analysis. Topics include an exploration of different forms of psychological tests (e.g. intelligence, attitudes, personality, clinical), reliability and validity of tests, and practical issues in testing such as test bias (e.g. gender differences).

PSYC 330 - PERSONALITY THEORY AND RESEARCH
Short Title: PERSONALITY THEORY & RESEARCH
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: Examination of those aspects of personality emphasized by major theorists past and present.

PSYC 331 - PSYCHOLOGY OF GENDER
Short Title: PSYCHOLOGY OF GENDER
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Overview of research and theory on gender in psychology. Cross-list: SWGS 331.

PSYC 332 - PSYCHOPATHOLOGY
Short Title: PSYCHOPATHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202 or PSYC 203
Description: Study of the diagnosis and treatment of mental disorders.

PSYC 333 - MULTICULTURAL PSYCHOLOGY
Short Title: MULTICULTURAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: This seminar examines psychological research and theories that address important issues in the lives of diverse individuals. Readings, discussions, and films will be used to explore the acculturation process; stereotyping, prejudice, discrimination and racism; racial/ethnic identity development; and multicultural competence. Students are required to participate in a service learning project. Recommended Prerequisite(s): PSYC 202 and PSYC 321.

PSYC 339 - STATISTICAL METHODS-PSYCHOLOGY
Short Title: STATISTICAL METHODS-PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 4
Restrictions: Enrollment is limited to students with a major in Cognitive Sciences or Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100 or PSYC 203
Description: Introduction to quantitative and computer methods applicable to the analysis of experimental and correlational data. Required for psychology majors. Psychology and Cognitive Science Majors only or Permission of Instructor(s).

PSYC 340 - RESEARCH METHODS - PSYCHOLOGY
Short Title: RESEARCH METHODS - PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 4
Restrictions: Enrollment is limited to students with a major in Cognitive Sciences or Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and (PSYC 339 or SOSC 302)
Description: A continuation of PSYC 339/SOSC 302, with emphasis on individual student experiments and the writing of research reports. Required for psychology majors. Psychology and Cognitive Science Majors only or Permission of Instructor(s).

PSYC 342 - COMPUTER APPLICATIONS IN PSYCHOLOGY
Short Title: COMPUTER APPLICATIONS IN PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: The use of computers in psychological research and in usability engineering. The emphasis will be on dynamic HTML and JavaScript. Topics will include designing and running web-based psychology experiments and the use of web-based video. Graduate/Undergraduate Equivalency: PSYC 504. Mutually Exclusive: Cannot register for PSYC 342 if student has credit for PSYC 504.

PSYC 345 - HEALTH PSYCHOLOGY
Short Title: HEALTH PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: Contemporary theory and research in health psychology, including topics such as health behaviors, stress and coping, pain and its management, heart disease, psychoneuroimmunology, chronic illness, and dying. Recommended Prerequisite(s): PSYC 340, PSYC 202, and PSYC 303.

PSYC 346 - STRESS AND HEALTH ACROSS THE LIFESPAN
Short Title: STRESS/HEALTH ACROSS LIFESPAN
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This is an introductory course on psychobiological processes in animals and humans as they pertain to the development of stress responses and disease. In this course, we will review models of stress as well as the physiological processes implicated in bodily diseases. We will also review behavioral, psychological and pharmacological variables involved in stress processes. Recommended Prerequisite(s): PSYC 345

PSYC 351 - PSYCHOLOGY OF PERCEPTION
Short Title: PERCEPTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and PSYC 203
Description: An introductory survey of sensation and perception. Emphasis on demonstrations of perceptual phenomena, theories of visual perception (cognitive and ecological), and real-world applications. Topics include the philosophy of perception; motion, depth, and color; illusions; perceptual organization; measurement and methods; and perceptual development. Graduate/Undergraduate Equivalency: PSYC 521. Graduate/Undergraduate Equivalency: PSYC 521.

PSYC 353 - PSYCHOLOGY OF EMOTION AND MOTIVATION
Short Title: PSYC OF EMOTION & MOTIVATION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and PSYC 202
Description: Study of motives and emotions as causes of human behavior; includes biological motives, aggression, emotions and emotional expression, and individual differences in motivation. Recommended Prerequisite(s): PSYC 203.

PSYC 354 - INTRODUCTION TO SOCIAL AND AFFECTIVE NEUROSCIENCE
Short Title: INTRO TO SOC/AFFECTIVE NEURO
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: Overview of social and affective neuroscience research, including examination of the neurobiological mechanisms supporting social cognition; inter-personal processes; emotion and motivation; and emotion regulation. These topics will be examined in both healthy and affectively-disordered populations, with links made to the fields of health psychology and clinical neuroscience.

PSYC 362 - COGNITIVE NEUROSCIENCE: EXPLORING THE LIVING BRAIN
Short Title: COGNITIVE NEUROSCIENCE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Survey of theory and research on how mental processes are carried out by the human brain, with an emphasis on relating measures of brain activity to cognitive functioning, methods surveyed included electro physiological recording techniques, functional imaging techniques and methods that involve lessoning or disrupting neural activity. Cross-list: NEUR 362.

PSYC 364 - COGNITIVE NEUROSCIENCE LAB
Short Title: COGNITIVE NEUROSCIENCE LAB
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 362 (may be taken concurrently) or NEUR 362 (may be taken concurrently)
Description: The objective is to equip the students of PSYC/NEUR 362 the tools on how to apply cognitive neuroscience techniques to health or clinical topics and to investigate sensorimotor and cognitive measures in a human model. The prereq may be taken the same semester as this class. Instructor Permission Required. Cross-list: NEUR 364. Graduate/Undergraduate Equivalency: PSYC 564. Mutually Exclusive: Cannot register for PSYC 364 if student has credit for PSYC 564.

PSYC 366 - METHODS IN SOCIAL COGNITIVE AND AFFECTIVE NEUROSCIENCE
Short Title: METHODS IN SOC COG AFF NEURO
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 202 or PSYC 203) and (PSYC 354 (may be taken concurrently) or PSYC 362 (may be taken concurrently) or NEUR 362 (may be taken concurrently))
Description: This course will give students hands-on training in the research methods of social cognitive and affective neuroscience. Students will learn about the theoretical underpinnings of these allied fields; acquire, preprocess, and analyze human functional neuroimaging data (i.e. using fMRI); and interpret and write-up results. PSYC 354 or PSYC 362 may be taken concurrently.

PSYC 370 - INTRODUCTION TO HUMAN FACTORS AND ERGONOMICS
Short Title: INTRO TO HUMAN FACTORS & ERGO
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Distribution Group: Distribution Group II
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Application of principles of psychology and human performance to the design of modern systems.

PSYC 375 - NEUROPSYCHOLOGY OF LANGUAGE AND MEMORY
Short Title: NEUROPSYC OF LANGUAGE/MEMORY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203 and (PSYC 309 or LING 309 or LING 200 or ANTH 200) and (PSYC 362 or NEUR 362 or NEUR 380 or BIOE 380 or PSYC 380 or BIOC 380)
Description: An introduction to the neural basis of language and memory, covering patient-based and neuroimaging approaches. Topics include the neural basis of speech perception, language comprehension, language production, short-term memory, working memory, sematic and episodic memory, and domain-specific memory (e.g., verbal, spatial, and emotional memory).

PSYC 380 - FUNDAMENTAL NEUROSCIENCE SYSTEMS
Short Title: NEUROSYSTEMS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This course will provide a broad overview of the brain's neural systems that subserve perception, learning, and behavior. The course will be highly integrative with thematic content including functional organization of the nervous system, neural encoding and decoding, sensory systems, motor systems, and high-level concept processing. Cross-list: NEUR 380. Recommended Prerequisite(s): PSYC 101. Mutually Exclusive: Cannot register for PSYC 380 if student has credit for PSYC 584.

PSYC 409 - METHODS IN HUMAN-COMPUTER INTERACTION
Short Title: METHODS HUMAN-COMP INTERACTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and PSYC 203
Description: Introduction to methods for developing and testing user interfaces to computer systems. The focus is on web-based applications. Graduate/Undergraduate Equivalency: PSYC 609. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 409 if student has credit for PSYC 609.

PSYC 411 - HISTORY OF PSYCHOLOGY
Short Title: HISTORY OF PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: Survey of evolution of psychological theory from the Greeks to the present. Includes development of scientific approaches to the study of human thought and behavior. Graduate/Undergraduate Equivalency: PSYC 511. Mutually Exclusive: Cannot register for PSYC 411 if student has credit for PSYC 511.

PSYC 420 - ELECTION SYSTEMS, TECHNOLOGIES, AND ADMINISTRATION
Short Title: ELECTION SYSTEMS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): POLI 395 or PSYC 340
Description: This multidisciplinary course will consider how elections are conducted to enhance participation, to accurately measure the will of the electorate, and to be sufficiently rigorous to convince all parties that the results are legitimate. This course will consider the design and evaluation of election technologies, ranging from voter registration through the polling booth and vote tabulation. This course will consider three questions: how do individual voters interact with the voting technology, how are voting technologies engineered to be accurate and secure, and how do the social aspects of voting fulfill democratic goals for elections? A central requirement for this course will be group research projects, many operating in our community, built around the November election. Cross-list: COMP 435, POLI 420.

PSYC 430 - COMPUTATIONAL MODELING OF COGNITIVE PROCESSES
Short Title: COMP MODELING OF COG PROCESSES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: A survey of computational approaches to modeling cognitive processes. The emphasis will be on recent production system models, but other approaches will also be covered. The course will involve evaluation of existing models and hands-on experience in modeling. Graduate/Undergraduate Equivalency: PSYC 543. Recommended Prerequisite(s): PSYC 203 and one of PSYC 340 or CSCI 340; recommend one of: COMP 140, COMP 160, DSCI 101, or CMOR 220 Mutually Exclusive: Cannot register for PSYC 430 if student has credit for PSYC 543.

PSYC 431 - ADVANCED INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY SEMINAR
Short Title: ADVANCED I/O PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 231
Description: An emphasis on reading original published research. Topics covered include personnel selection, training, motivation, job attitudes, and groups. Instructor Permission Required.

PSYC 432 - BRAIN AND BEHAVIOR
Short Title: BRAIN AND BEHAVIOR
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and PSYC 203 and PSYC 362
Description: An in-depth examination of the neural basis of higher mental functions in humans, including perception, attention, memory, motor skill, and language. Claims and controversies in cognitive neuroscience will be discussed. Recommended Prerequisite(s): PSYC 339 and PSYC 340.

PSYC 433 - OCCUPATIONAL HEALTH PSYCHOLOGY
Short Title: OCCUPATIONAL HEALTH PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 100 or PSYC 101
Description: Occupational health psychology (OHP) is an interdisciplinary subfield of Industrial-Organizational Psychology that examines ways to improve the quality of life of workers by protecting and promoting their health, safety, and well-being. This course will cover theory, research findings, and practical applications of OHP science. Topics include workplace stress, occupational burnout, the work-life interface, workplace safety, employee sleep, and organizational interventions. Recommended Prerequisite(s): PSYC 231 OR PSYC 345 Repeatable for Credit.
Course URL: N/A (http://N/A/)

PSYC 435 - POLLUTION AND PSYCHOLOGICAL DEVELOPMENT
Short Title: POLLUTION & PSYCHOLOGICAL DEV
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: In this course, we will consider research on the effects of various pollutants and toxic substances on the cognitive, social, and emotional development of children. Expert guest speakers will contribute to the course as well. Recommended Prerequisite(s): PSYC 339 and PSYC 340.

PSYC 436 - ADVANCED ORGANIZATIONAL PSYCHOLOGY
Short Title: ADVANCED ORGANIZATIONAL PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 231 and PSYC 431
Description: Contemporary theory and research in organizational psychology, including topics such as motivation, leadership, job satisfaction, occupational stress, social cognition in work organizations, and group processes. Graduate/Undergraduate Equivalency: PSYC 636. Mutually Exclusive: Cannot register for PSYC 436 if student has credit for PSYC 636.

PSYC 438 - GROUP DYNAMICS
Short Title: GROUP DYNAMICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This course examines current psychological theory and literature concerning intra- and inter-group phenomena within organizational contexts. This course will cover topics such as the unique methodological challenges of studying group-level phenomena; individual-, group-, and organizational-level inputs; group processes; and the assessment of group-level outcomes. Graduate/Undergraduate Equivalency: PSYC 551. Recommended Prerequisite(s): PSYC 339 and PSYC 340 and should be majoring in Psychology or Business. Mutually Exclusive: Cannot register for PSYC 438 if student has credit for PSYC 551.

PSYC 439 - ADVANCED STATISTICAL METHODS FOR PSYCHOLOGY UNDERGRADUATES
Short Title: ADV STATISTICAL METHODS-PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 339 or SOSC 302
Description: This course is intended as a second course in statistics for psychology and the social sciences. It builds on PSYC 339/SOSC 302. Advanced factorial ANOVA designs, mixed between- and within-subject designs, and multiple regression will be covered. This course is primarily for advanced psychology undergraduates contemplating enrollment in graduate school.

PSYC 440 - RESEARCH SEMINAR: INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY
Short Title: RESEARCH IN I/O PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 231
Description: An examination of selected topics in industrial/organizational psychology, focusing on published and ongoing research by contemporary scholars. Topics will vary. Instructor Permission Required.

PSYC 441 - HUMAN-COMPUTER INTERACTION
Short Title: HUMAN-COMPUTER INTERACTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Study of the design and evaluation of interactive computing systems for human use and the major phenomena surrounding them. Graduate/Undergraduate Equivalency: PSYC 541. Mutually Exclusive: Cannot register for PSYC 441 if student has credit for PSYC 341/PSYC 541.

PSYC 445 - ADVANCED SEMINAR IN HEALTH PSYCHOLOGY
Short Title: ADV SEM IN HEALTH PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment limited to students with a class of Junior or Senior. Enrollment is limited to students with a major in Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202 and PSYC 332 and (PSYC 339 or SOSC 302) and PSYC 340
Description: Consideration of research on psychological factors and health, with special consideration to the role of health beliefs in people's practice and nonpractice of health, illness, and sick-role behaviors. Topics will vary. Repeatable for credit with Permission of Department.

PSYC 452 - EMOTION REGULATION
Short Title: EMOTION REGULATION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Review of contemporary psychology research on emotion regulation, including conceptual foundations, neurobiological bases, individual differences, involvement in psychopathology, and links to translational research approaches relevant to health psychology. Graduate/Undergraduate Equivalency: PSYC 552. Mutually Exclusive: Cannot register for PSYC 452 if student has credit for PSYC 552.

PSYC 453 - MOTIVATION AND BEHAVIOR CHANGE
Short Title: MOTIVATION AND BEHAVIOR CHANGE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and PSYC 203
Description: This course explores the cognitive and neural foundations of motivated behavior, then applies these insights to interventions that promote positive behavior change in daily life (e.g., for financial decision making, health and well-being, education, and environmental sustainability). Topics include reward learning, motivation and emotion, value-based decision making, future thinking, and social influence. Students will apply course insights to personal goals and reflect on the process of behavior change. Recommended Prerequisite(s): PSYC 202 or PSYC 354 or PSYC 362

PSYC 455 - ADVANCED SEMINAR IN CLINICAL PSYCHOLOGY
Short Title: ADV SEM IN CLINICAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and (PSYC 202 or PSYC 203)
Description: Topics will vary. Repeatable for credit with Permission of Department.

PSYC 461 - REASONING, DECISION MAKING, PROBLEM SOLVING
Short Title: DECISION MAKING/PROB SOLVING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203 and (PSYC 339 or SOSC 302 or STAT 180 or STAT 280 or STAT 300 or STAT 305 or STAT 310 or STAT 315 or DSCI 301 or ECON 307)
Description: Study of the higher mental processes. Includes problem solving, judgment, decision making, and reasoning. Graduate/Undergraduate Equivalency: PSYC 527. Mutually Exclusive: Cannot register for PSYC 461 if student has credit for PSYC 360/PSYC 527.

PSYC 462 - NON-TRADITIONAL INTERFACES
Short Title: NON-TRADITIONAL INTERFACES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Advanced coverage of human computer interfaces that are not necessarily graphical in nature. The course covers haptic, gesture, locomotion, auditory, voice olfactory, taste interfaces. Impoverished GUIs (small screen) are investigated, as are interactive voice response systems and complex interfaces that are multi-model. Graduate/Undergraduate Equivalency: PSYC 662. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 462 if student has credit for PSYC 662.

PSYC 463 - MEDICAL HUMAN FACTORS
Short Title: MEDICAL HUMAN FACTORS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Advanced coverage of the human factors that are specific to medical systems. Topics include medical decision making and diagnosis errors, surgical human factors, medical robots, surgical simulators, and general medical equipment design. Macro-ergonomics of hospital systems, electronic medical records and computerized physician order entry systems are also covered. Graduate/Undergraduate Equivalency: PSYC 663. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 463 if student has credit for PSYC 663.

PSYC 464 - USABILITY ASSESSMENT
Short Title: USABILITY ASSESSMENT
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This course covers all of the aspects of specifying, planning, executing, and reporting usability assessments on products, services and systems. Formative and summative assessments are covered, as are "discount" usability methods. This course is project based, with students performing usability assessments as part of an engineering team that is developing products for deployment. Graduate/Undergraduate Equivalency: PSYC 664. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 464 if student has credit for PSYC 664.

PSYC 465 - OLFACTORY PERCEPTION
Short Title: OLFACTORY PERCEPTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 101 or PSYC 100
Description: Overview of theories and research related to olfaction. Special topics include olfactory memory, the effect of emotion and cognition on olfaction, olfaction as a channel of communication, sensory integration, and ERP and fMRI studies on olfaction and its relationship with other sensory systems. Graduate/Undergraduate Equivalency: PSYC 565. Mutually Exclusive: Cannot register for PSYC 465 if student has credit for PSYC 565.

PSYC 466 - HUMAN ELECTROPHYSIOLOGY
Short Title: HUMAN ELECTROPHYSIOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This course provides an introduction to human electrophysiology, and how electrophysiology methods can inform the study of human cognition. The lecture component of the course will cover important theories underlying electrophysiology methods (EEG, ERPs, oscillations) and a practical overview of designing, executing, and interpreting EEG experiments. The lab component of the course will give students hands-on experience collecting and analyzing human EEG data. Graduate/Undergraduate Equivalency: PSYC 566. Recommended Prerequisite(s): PSYC 340 (RESEARCH METHODS) or equivalent, PSYC 362 (COGNITIVE NEUROSCIENCE) or equivalent Mutually Exclusive: Cannot register for PSYC 466 if student has credit for PSYC 566.

PSYC 467 - HUMAN FACTORS IN CYBERSECURITY
Short Title: HUMAN FACTORS IN CYBERSECURITY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Introduction to the human factors that are specific to cybersecurity. Topics will include the security-usability tradeoff, usable authentication, privacy and forensics, security in automated vehicles, internet of things, security warnings, security training and awareness, and so on. Graduate/Undergraduate Equivalency: PSYC 667. Mutually Exclusive: Cannot register for PSYC 467 if student has credit for PSYC 667.

PSYC 468 - HUMAN FACTORS IN ARTIFICIAL INTELLIGENCE
Short Title: HUMAN FACTORS IN AI
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Introduction to the human factors that are specific to artificial Intelligence (AI). Topics will include societal impacts of AI, trustworthy AI, fair and responsible AI, transparent and explainable AI, privacy and security in AI, ethics in AI, human-AI teaming, future trends and challenges, and so on. Graduate/Undergraduate Equivalency: PSYC 668. Recommended Prerequisite(s): PSYC 370 and PSYC 441 Mutually Exclusive: Cannot register for PSYC 468 if student has credit for PSYC 668.

PSYC 470 - ENGINEERING PSYCHOLOGY
Short Title: ENGINEERING PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 370
Description: This is an advanced human factors course aimed at students who have taken a basic course in human factors or human-computer interaction and are looking for greater depth. Graduate/Undergraduate Equivalency: PSYC 540. Mutually Exclusive: Cannot register for PSYC 470 if student has credit for PSYC 540.

PSYC 475 - STEREOTYPING AND PREJUDICE
Short Title: STEREOTYPING AND PREJUDICE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 202
Description: Consideration of modern research on stereotypes of, prejudice against, and discrimination toward racial, gender, and stigmatized groups. Recommended Prerequisite(s): PSYC 203 and 340.

PSYC 477 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Laboratory, Lecture, Seminar, Lecture/Laboratory
Credit Hours: 1-4
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.

PSYC 480 - ADVANCED TOPICS
Short Title: ADVANCED TOPICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 101 or PSYC 100) and (PSYC 202 (may be taken concurrently) or PSYC 203)
Description: Topics will vary. Please see individual instructor for prerequisite requirements. Repeatable for different topics. Repeatable for Credit.

PSYC 485 - UNDERGRADUATE SUPERVISED RESEARCH
Short Title: UG SUPERVISED RESEARCH
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Research
Credit Hours: 1-6
Restrictions: Enrollment is limited to students with a major in Cognitive Sciences or Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Supervised empirical research. Research paper required. Sponsorship by faculty member required. Instructor Permission Required. Recommended Prerequisite(s): PSYC 339, PSYC 340. Repeatable for Credit.

PSYC 487 - FUNCTIONAL HUMAN NEUROANATOMY
Short Title: FUNCTIONAL NEUROANATOMY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): PSYC 203
Description: Anatomy and function of major structures and circuits of the human central nervous system in health and disease. Gross structure and function of the human brain, spinal cord, and cranial nerves are emphasized. Students will gain both an appreciation of the brain's three-dimensional architecture and a thorough understanding of the functions of major brain systems. Additionally, there is a focus on how sensory signals are processed from a succession of lower centers on up through successive cortical regions. Materials include human brain samples as well as images of human brain sections, 3-D models and animations, as well as CT, PET and MRI images. Instructor Permission Required. Graduate/Undergraduate Equivalency: PSYC 587. Mutually Exclusive: Cannot register for PSYC 487 if student has credit for PSYC 587.

PSYC 488 - SUPERVISED READING
Short Title: SUPERVISED READING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Independent Study
Credit Hours: 1-6
Restrictions: Enrollment is limited to students with a major in Cognitive Sciences or Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Supervised reading of books and empirical papers on a topic of mutual interest to students and faculty. Term paper required. Sponsorship by faculty member required. Instructor Permission Required. Recommended Prerequisite(s): PSYC 339 and PSYC 340. Repeatable for Credit.

PSYC 495 - SUMMER INTERNSHIP
Short Title: SUMMER INTERNSHIP
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Provides enrollment for various department summer internships. Instructor Permission Required. Repeatable for Credit.

PSYC 499 - HONORS THESIS
Short Title: HONORS THESIS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Independent Study
Credit Hours: 1-6
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): (PSYC 339 or SOSC 302) and PSYC 340
Description: Sponsorship by faculty member required. Students must apply for the Honors Program. Instructor Permission Required. Repeatable for Credit.

PSYC 502 - ADVANCED PSYCHOLOGICAL STATISTICS I
Short Title: ADVANCED PSYC STATISTICS I
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 4
Restrictions: Enrollment is limited to students with a major in Human-Comp Inter & Humn Factrs, Industrial-Organizational Psyc or Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Introduction to inferential statistics, with emphasis on analysis of variance. Students who do not meet registration requirements as Graduate and Psychology, MIOP (Master in Industrial-Organizational Psychology), or MHCIHF (Master in Human-Computer Interaction and Human Factors) Majors must receive instructor permission to register. Cross-list: STAT 509.

PSYC 503 - ADVANCED PSYCHOLOGICAL STATISTICS II
Short Title: ADVANCED PSYC STATISTICS II
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 502 or STAT 509
Description: A continuation of PSYC 502, focusing on multiple regression. Other multivariate techniques and distribution-free statistics are also covered. Cross-list: STAT 510.

PSYC 504 - COMPUTER APPLICATIONS IN PSYCHOLOGY
Short Title: COMPUTER APPLICATIONS IN PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: The use of computers in psychological research and in usability engineering. The emphasis will be on dynamic HTML and JavaScript. Topics will include designing and running web-based psychology experiments and the use of web-based video. Graduate/Undergraduate Equivalency: PSYC 342. Mutually Exclusive: Cannot register for PSYC 504 if student has credit for PSYC 342.

PSYC 507 - RESEARCH METHODS
Short Title: RESEARCH METHODS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Graduate-level treatment of a wide range of laboratory and field research methodologies.

PSYC 511 - HISTORY AND SYSTEMS OF PSYCHOLOGY
Short Title: HISTORY & SYSTEMS OF PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Survey of the evolution of psychological theory from the Greeks to the present. Includes development of scientific approaches to the study of human thought and behavior. Graduate/Undergraduate Equivalency: PSYC 411. Mutually Exclusive: Cannot register for PSYC 511 if student has credit for PSYC 411.

PSYC 520 - FOUNDATIONS OF COGNITIVE PSYCHOLOGY
Short Title: FOUNDATIONS OF COGNITIVE PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: An introduction to the basic topics in cognitive psychology, including perception, memory, psycholinguistics, concept formation, problem solving, and decision making.

PSYC 521 - PSYCHOLOGY OF PERCEPTION
Short Title: PERCEPTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: An introductory survey of sensation and perception. Emphasis on demonstrations of perceptual phenomena, theories of visual perception (cognitive and ecological), and real-world applications. Topics include the philosophy of perception; motion, depth, and color; illusions; perceptual organization; measurement and methods; and perceptual development. Graduate/Undergraduate Equivalency: PSYC 351. Graduate/Undergraduate Equivalency: PSYC 351.

PSYC 522 - INFORMATION PROCESSING AND ATTENTION
Short Title: INFO PROCESSING & ATTENTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: An exploration of topics in attention, including information overload, selective attention, response conflict, and automatic/unconscious and controlled/conscious processes. The neural mechanisms underlying these processes will also be discussed.

PSYC 524 - MEMORY
Short Title: MEMORY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Overview of issues and research in remembering and forgetting. Graduate/Undergraduate Equivalency: PSYC 308.

PSYC 525 - PSYCHOLINGUISTICS
Short Title: PSYCHOLINGUISTICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Study of the psychology of language. Includes the study of speech production, reading, syntax, meaning, bilingualism, language and thought, and language errors and disorders.

PSYC 527 - REASONING, DECISION MAKING, PROBLEM SOLVING
Short Title: DECISION MAKING/PROB SOLVING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: The study of higher mental processes. Includes problem solving, judgment, decision making, and reasoning. Graduate/Undergraduate Equivalency: PSYC 461. Mutually Exclusive: Cannot register for PSYC 527 if student has credit for PSYC 461.

PSYC 529 - COGNITIVE RESEARCH SEMINAR
Short Title: COGNITIVE RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: A weekly student-staff seminar on current and recent research about mental phenomena. Repeatable for Credit.

PSYC 530 - FOUNDATIONS OF I-O PSYCHOLOGY
Short Title: FOUNDATIONS OF I-O PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Graduate-level introduction to the study of human behavior in the work setting.

PSYC 531 - HF/HCI RESEARCH SEMINAR
Short Title: HF/HCI RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to students with a major in Human-Comp Inter & Humn Factrs or Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: A weekly student-staff seminar on various human factors and human-computer interaction topics. Repeatable for Credit.

PSYC 532 - HEALTH RESEARCH SEMINAR
Short Title: HEALTH RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: A weekly student-staff seminar on current and recent health and emotion-related research. Repeatable for Credit.

PSYC 533 - I-O PSYCHOLOGY RESEARCH SEMINAR
Short Title: I-O PSYCHOLOGY RESEARCH SEM
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to students with a major in Human-Comp Inter & Humn Factrs, Industrial-Organizational Psyc or Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: A weekly student-staff seminar on various industrial-organizational psychology topics. Repeatable for Credit.

PSYC 535 - HUMAN FACTORS/ERGONOMICS
Short Title: HUMAN FACTORS/ERGONOMICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Human-Comp Inter & Humn Factrs, Industrial Engineering, Industrial-Organizational Psyc or Psychology. Enrollment is limited to Graduate level students. Enrollment limited to students in a Doctor of Philosophy, Master of Industrial Eng, Master of Industrial-Org Psyc or Mst Humn-Comp Inter Humn Factr degrees.
Course Level: Graduate
Description: Broad overview of the science and profession of human factors/ergonomics. Emphasis is on discussion of literature and presentations of recommendations to applied problems.

PSYC 540 - FOUNDATIONS OF ENGINEERING PSYCHOLOGY
Short Title: ENGINEERING PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Human-Comp Inter & Humn Factrs or Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This is an advanced human factors course aimed at students who have taken a basic course in human factors or human-computer interaction and are looking for greater depth. Graduate/Undergraduate Equivalency: PSYC 470. Mutually Exclusive: Cannot register for PSYC 540 if student has credit for PSYC 470.

PSYC 541 - HUMAN-COMPUTER INTERACTION
Short Title: HUMAN-COMPUTER INTERACTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Study of the design and evaluation of interactive computing systems for human use and the major phenomena surrounding them. Graduate/Undergraduate Equivalency: PSYC 441. Mutually Exclusive: Cannot register for PSYC 541 if student has credit for PSYC 341/ PSYC 441.

PSYC 543 - COMPUTATIONAL MODELING OF COGNITIVE PROCESSES
Short Title: COMP MODELING OF COG PROCESSES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: A survey of computational approaches to modeling cognitive processes. The emphasis will be on recent production system models, but other approaches will also be covered. The course will involve evaluation of existing models and hands-on experience in modeling. Graduate/Undergraduate Equivalency: PSYC 430. Mutually Exclusive: Cannot register for PSYC 543 if student has credit for PSYC 430.

PSYC 546 - PSYCHONEUROIMMUNOLOGY
Short Title: PSYCHONEUROIMMUNOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Psychoneuroimmunology research

PSYC 547 - FOUNDATIONS OF HEALTH PSYCHOLOGY
Short Title: FOUNDATIONS-HEALTH PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Foundations of Health Psychology research

PSYC 548 - INTERVENTIONS
Short Title: INTERVENTIONS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course will prepare students to conduct high-impact research across the translational continuum in the social, psychobiological, and behavioral sciences. In this course, students will gain a thorough grounding in the conduct of Randomized Controlled Trials (RCTs) and develop competence in the planning, design, and execution of clinical trials involving behavioral interventions. After taking this course, students will be able to plan and conduct longitudinal observational studies and clinical trials that have the potential to change practice guidelines, health care policies, and third-party coverage for health-related outcomes. The first two weeks of the course will cover causal inference in experimental and observational studies and address various implications of counterfactual thinking. The remainder of the course will provide training in planning, designing, and conducting translational research with a focus on randomized controlled trials of health-related behavioral interventions. Each student will develop and write a research grant proposal that will serve as the course "Final." Recommended Prerequisite(s): This course has no specific course prerequisites. It is designed to be most useful to students with knowledge of basic (i.e., undergraduate level statistics and research methods) that are pertinent to the social, behavioral, and biomedical sciences.
Course URL: canvas.rice.edu/courses/33575 (http://canvas.rice.edu/courses/33575/)

PSYC 549 - PSYCHOPATHOLOGY, DEVELOPMENT, & AGING
Short Title: PSYCHOPATHOLOGY,DVLPMNT& AGING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course will take a developmental approach to understand psychopathology and aging. We will seek to evaluate the the factors contributing to psychopathology that emerge across the lifespan. We will adopt a biopsychosocial model to address the roots of normal and abnormal adult development, & aging. This course will begin with an overview of the field; we will then work toward a sophisticated understanding anxiety disorders, aging & cognitive disorders, mood disorders, factitious and dissociative disorders, and personality disorders. Although we will cover nosological models of psychopathology, we will primarily focus on etiology.

PSYC 550 - FOUNDATIONS OF SOCIAL PSYCHOLOGY
Short Title: FOUNDATIONS OF SOCIAL PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Review of theories of social psychology with an emphasis on current empirical research.

PSYC 551 - GROUP DYNAMICS
Short Title: GROUP DYNAMICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 530
Description: This course examines current psychological theory and literature concerning intra- and inter-group phenomena within organizational contexts. This course will cover topics such as the unique methodological challenges of studying group-level phenomena; individual-, group-, and organizational-level inputs; group processes; and the assessment of group-level outcomes. Graduate/Undergraduate Equivalency: PSYC 438. Mutually Exclusive: Cannot register for PSYC 551 if student has credit for PSYC 438.

PSYC 552 - EMOTION REGULATION
Short Title: EMOTION REGULATION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Review of contemporary psychology research on emotion regulation, including conceptual foundations, neurobiological bases, individual differences, involvement in psychopathology, and links to translational research approaches relevant to health psychology. Graduate/Undergraduate Equivalency: PSYC 452. Mutually Exclusive: Cannot register for PSYC 552 if student has credit for PSYC 452.

PSYC 560 - PSYCHOLOGY PRESENTATIONS
Short Title: PSYCHOLOGY PRESENTATIONS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Practicum on oral psychology presentation.

PSYC 561 - TEACHING IN PSYCHOLOGY
Short Title: TEACHING IN PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Assistance in the teaching of undergraduate and occasionally graduate courses in psychology. Repeatable for Credit.

PSYC 563 - COGNITIVE PSYCHOLOGY INTERNSHIP
Short Title: COGNITIVE PSYC INTERNSHIP
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hours: 1-9
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Supervised internship in cognitive psychology. Instructor Permission Required. Repeatable for Credit.

PSYC 564 - COGNITIVE NEUROSCIENCE LAB
Short Title: COGNITIVE NEUROSCIENCE LAB
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: The objective is to equip the students of PSYC/NEUR 362 the tools on how to apply cognitive neuroscience techniques to health or clinical topics and to investigate sensorimotor and cognitive measures in a human model. Cross-list: NEUR 564. Graduate/Undergraduate Equivalency: PSYC 364. Mutually Exclusive: Cannot register for PSYC 564 if student has credit for PSYC 364.

PSYC 565 - HUMAN OLFACTION
Short Title: HUMAN OLFACTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Overview of theories and research related to olfaction. Special topics include olfactory memory, the effect of emotion and cognition on olfaction, olfaction as a channel of communication, sensory integration, and ERP and fMRI studies on olfaction and its relationship with other sensory systems. Graduate/Undergraduate Equivalency: PSYC 465. Mutually Exclusive: Cannot register for PSYC 565 if student has credit for PSYC 465.

PSYC 566 - HUMAN ELECTROPHYSIOLOGY
Short Title: HUMAN ELECTROPHYSIOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course provides an introduction to human electrophysiology, and how electrophysiology methods can inform the study of human cognition. The lecture component of the course will cover important theories underlying electrophysiology methods (EEG, ERPs, oscillations) and a practical overview of designing, executing, and interpreting EEG experiments. The lab component of the course will give students hands-on experience collecting and analyzing human EEG data. Graduate/Undergraduate Equivalency: PSYC 466. Recommended Prerequisite(s): PSYC 340 (RESEARCH METHODS) or equivalent, PSYC 362 (COGNITIVE NEUROSCIENCE) or equivalent Mutually Exclusive: Cannot register for PSYC 566 if student has credit for PSYC 466.

PSYC 571 - FIRST-YEAR PROJECT
Short Title: FIRST-YEAR PROJECT
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Research
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Individual research project undertaken in the first year of the graduate program. Repeatable for Credit.

PSYC 572 - SECOND-YEAR PROJECT
Short Title: SECOND-YEAR PROJECT
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Research
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Individual research project undertaken during the second year of the graduate program. Repeatable for Credit.

PSYC 573 - NON-THESIS GRADUATE RESEARCH
Short Title: NON-THESIS GRADUATE RESEARCH
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Research
Credit Hours: 1-15
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Individual research prior to achieving candidacy. Repeatable for Credit.

PSYC 575 - ADVANCED COGNITIVE NEUROSCIENCE: ATTENTION AND PERCEPTION
Short Title: ATTENTION AND PERCEPTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Overview of neuropsychological and cognitive neuroscience approaches to higher mental functions including sensation and perception, attention, motor control, and neuroplasticity. Other topics include basic neuroanatomy, experimental and clinical investigative methods, and the historical and philosophical context of contemporary neuroscience. Cross-list: NEUR 501.
Course URL: neuroscience.rice.edu (http://neuroscience.rice.edu)

PSYC 576 - ADVANCED COGNITIVE NEUROSCIENCE: HIGHER MENTAL FUNCTIONS
Short Title: HIGHER MENTAL FUNCTIONS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Overview of neuropsychological and neuroimaging approaches to higher mental functions, including language, memory, executive functions, reasoning, and numerical processing. Cross-list: NEUR 502.
Course URL: neuroscience.rice.edu (http://neuroscience.rice.edu)

PSYC 577 - INTRODUCTION TO FUNCTIONAL NEUROANATOMY
Short Title: FUNCTIONAL NEUROANATOMY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2-3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Anatomy and function of components of the nervous system with an emphasis on the central nervous system. Usually taught at the Texas Medical Center. Instructor Permission Required.

PSYC 578 - COGNITIVE NEUROPSYCHOLOGY: THEORIES AND METHODS
Short Title: COGNEURO: THEORIES AND METHODS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course explores different approaches in the field of Cognitive Neuropsychology. Topics include single-case studies, case series, voxel-lesion symptom mapping and computational neuropsychology. We will discuss how to do research with each of these techniques, how to draw inferences from neuropsychological data and critiques of the methodology.

PSYC 580 - DEVELOPMENTAL COGNITIVE NEUROSCIENCE
Short Title: DEVELOPMENTAL COG NEUROSCIENCE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Seminar focusing on the neural/biological bases of both normal and abnormal human development through a survey of recent research in developmental cognitive neuroscience. Topics include perceptual, motive, cognitive, and language development as well as experimental research methods for studying the developing brain.

PSYC 581 - VISION SCIENCE
Short Title: VISION SCIENCE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Advanced graduate seminar in the psychology of vision, covering the neural, psychophysical, and phenomenological approaches to visual perception.

PSYC 582 - EARLY SENSORY, PERCEPTUAL AND ATTENTIONAL DEVELOPMENT
Short Title: EARLY SENSORY PERCEPTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This is a survey course for graduate students interested in the development of sensory systems, perception, and attention. There will be original empirical and theoretical readings from the literature on the development of these functions primarily during infancy. Neurobiological underpinnings for these functions will be debated and discussed.

PSYC 583 - THEORY, CONTENT, AND EXECUTION IN COGNITIVE NEUROSCIENCE
Short Title: COGNEURO THEORY/CONTENT/EXECUT
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 2
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: The particular combination of issues in cognitive neuroscience in any one course will vary depending on the background and needs of the students registered for that course and the nature of the important articles in journals covering these areas. Instructor Permission Required. Repeatable for Credit.

PSYC 585 - FUNCTIONAL MAGNETIC RESONANCE IMAGING LABORATORY
Short Title: FMRI LABORATORY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Laboratory course that provides comprehensive introduction to the practical aspects of planning conducting and analyzing Blood Oxygen Dependent Functional Magnetic Resonance Imaging (BOLD fMRI) data. BOLD fMRI is a methodology that allows non-invasive measurements of the neural processing underlying human perception/cognition. Course taught at Baylor College of Medicine for Advanced fMRI.

PSYC 586 - SOCIAL AND AFFECTIVE NEUROSCIENCE
Short Title: SOCIAL AND AFFECTIVE NEURO
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Review of the field of social and affective neuroscience, including conceptual foundations and methodology. Review and discussion of contemporary research on the neurobiological supporting social cognition and emotion in both healthy and affectively-disordered populations.

PSYC 587 - FUNCTIONAL HUMAN NEUROANATOMY
Short Title: FUNCTIONAL NEUROANATOMY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Anatomy and function of major structures and circuits of the human central nervous system in health and disease. Gross structure and function of the human brain, spinal cord, and cranial nerves are emphasized. Students will gain both an appreciation of the brain's three-dimensional architecture and a thorough understanding of the functions of major brain systems. Additionally, there is a focus on how sensory signals are processed from a succession of lower centers on up through successive cortical regions. Materials include human brain samples as well as images of human brain sections, 3-D models and animations, as well as CT, PET and MRI images. Graduate/Undergraduate Equivalency: PSYC 487. Mutually Exclusive: Cannot register for PSYC 587 if student has credit for PSYC 487.

PSYC 590 - ADVANCED TOPICS IN NEUROSCIENCE
Short Title: ADVANCED TOPICS - NEUROSCIENCE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 595 - HUMAN-COMPUTER INTERACTION AND HUMAN FACTORS PROFESSIONAL MASTER'S INTERNSHIP
Short Title: HCI&HF PROF MASTERS INTERNSHIP
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hour: 1
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 503
Description: Supervised internship in Human-Computer Interaction and Human Factors Professional Master's Program. Instructor Permission Required. Repeatable for Credit.

PSYC 600 - HCI & HF PROFESSIONAL MASTER'S CAPSTONE PROJECT
Short Title: HCI&HF PROF MASTER'S CAPSTONE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Research
Credit Hours: 6
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 503
Description: This course allows students to integrate all of the knowledge they have gained in their HCI/HF professional master's coursework in the form of a capstone project in the area of human-computer interaction and human factors. The capstone may be either research focused or application focused. Department Permission Required.

PSYC 601 - MULTIVARIATE STATISTICS
Short Title: MULTIVARIATE STATISTICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course provides an overview of a wide range of concepts and skills for conducting data analysis on multivariate data sets encountered in psychology. Issues involve preparing the data set, selecting and conducting the appropriate analysis, interpreting the output from statistical programs, and presenting complex analyses and results in a clear manner.

PSYC 602 - PSYCHOMETRICS
Short Title: PSYCHOMETRICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Test theory, including reliability, validity, item response theory, and generalizability theory. In addition, the course offers hands-on experience with analysis software and discussion of practical issues such as test bias, item writing, and scale construction.

PSYC 609 - METHODS IN HUMAN-COMPUTER INTERACTION
Short Title: METHODS HUMAN-COMP INTERACTION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Introduction to methods for developing and testing user interfaces to computer systems. The focus is on web-based applications. Graduate/Undergraduate Equivalency: PSYC 409. Mutually Exclusive: Cannot register for PSYC 609 if student has credit for PSYC 409.

PSYC 620 - ADVANCED TOPICS IN COGNITIVE PSYCHOLOGY
Short Title: ADV TOPICS - COGNITIVE PSYC
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 621 - TOPICS IN MEMORY
Short Title: TOPICS IN MEMORY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 622 - TOPICS IN PSYCHOLINGUISTICS
Short Title: TOPICS IN PSYCHOLINGUISTICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: In-depth, consideration of specialized topics in the psychology of language. Topics vary from year to year. Repeatable for Credit.

PSYC 624 - SOCIAL/ORGANIZATIONAL PSYCHOLOGY RESEARCH SEMINAR
Short Title: SOCIAL/ORG PSYC RESEARCH SEM
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in social/organizational psychology. Repeatable for Credit.

PSYC 625 - COGNITIVE NEUROSCIENCE RESEARCH SEMINAR
Short Title: COGNEURO RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in cognitive neuroscience. Instructor Permission Required. Repeatable for Credit.

PSYC 626 - HUMAN FACTORS/HUMAN-COMPUTER INTERACTION RESEARCH SEMINAR
Short Title: HF/HCI RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in human factors/human-computer interaction. Instructor Permission Required. Repeatable for Credit.

PSYC 627 - INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY RESEARCH SEMINAR
Short Title: I/O PSYC RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 1-3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in industrial/organizational psychology. Instructor Permission Required. Repeatable for Credit.

PSYC 628 - MEMORY RESEARCH SEMINAR
Short Title: MEMORY RESEARCH SEMINAR
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hour: 1
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in human memory. Repeatable for Credit.

PSYC 629 - PSYCHOLINGUISTICS RESEARCH SEMINAR
Short Title: PSYCHOLINGUISTICS SEMINAR
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Seminar
Credit Hour: 1
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Weekly seminar to discuss recent research in psycholinguistics. Repeatable for Credit.

PSYC 630 - ADVANCED TOPICS IN I/O
Short Title: ADVANCED TOPICS IN I/O
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 530
Description: Topics will vary. Repeatable for different topics. Repeatable for Credit.

PSYC 631 - FOUNDATIONS OF INDIVIDUAL DIFFERENCES
Short Title: INDIVIDUAL DIFFERENCES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Applied psychologists attempt to build theoretical and empirical models that effectively explain how variation in individual differences (e.g., cognitive ability, personality, motivation, interests) relates to variation in practically relevant outcomes (e.g., training effectiveness, job performance, response to clinical treatment). This course covers major theoretical and methodological approaches to this end.

PSYC 632 - LEADERSHIP
Short Title: LEADERSHIP
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Examination of the major psychological approaches to the study of leadership. Emphasis is on theory and practice in formal organizations.

PSYC 634 - PERSONNEL PSYCHOLOGY
Short Title: PERSONNEL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 530
Description: Examination of the theory, research, and applications in personnel selection, including job analysis, job performance, evaluation of performance, validation of selection methods, and training.

PSYC 635 - MULTILEVEL MODELING IN PSYCHOLOGICAL RESEARCH
Short Title: MULTILEVEL MODELING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Psychological data often have a nested structure (e.g., students within classrooms, time points within individuals). Multilevel modeling of such data yields results that are more appropriate and interpretable than traditional statistical methods. Students will gain both practical and conceptional knowledge of this popular methodology.

PSYC 636 - ORGANIZATIONAL PSYCHOLOGY
Short Title: ORGANIZATIONAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 530
Description: Contemporary theory and research in organizational psychology, including topics such as motivation, leadership, job satisfaction, occupational stress, social cognition in work organizations, and group processes. Graduate/Undergraduate Equivalency: PSYC 436. Mutually Exclusive: Cannot register for PSYC 636 if student has credit for PSYC 436.

PSYC 637 - META-ANALYSIS IN PSYCHOLOGICAL RESEARCH
Short Title: META-ANALYSIS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Meta-analysis is a popular tool for statistically aggregating effects across related psychological studies. Course topics traverse a wide range of issues, including developing and using a coding sheet, fixed- vs. random-effects models, analysis moderator effects, correcting for statistical artifacts, dealing with dependent outcomes and outliers, and detecting publication bias.

PSYC 638 - STRUCTURAL EQUATION MODELING
Short Title: STRUCTURAL EQUATION MODELING
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Structural equation modeling attempts to provide improved estimates of construct-level relationships. It also allows for complex hypothesis testing (e.g., mediation between groups, longitudinal) to find an appropriate balance between model parsimony and model fit. This course introduces students to basic concepts and applications of this popular research method.

PSYC 639 - INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY INTERNSHIP
Short Title: I/O PSYCHOLOGY INTERNSHIP
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hours: 1-9
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Supervised internship in organizational and/or personnel psychology. Instructor Permission Required. Repeatable for Credit.

PSYC 640 - TOPICS IN HUMAN-COMPUTER INTERACTION
Short Title: TOPICS IN HCI
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 641 - SPECIAL TOPICS IN HUMAN-COMPUTER INTERACTION
Short Title: SPECIAL TOPICS IN HCI
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 1-6
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 649 - HUMAN FACTORS/HUMAN-COMPUTER INTERACTION INTERNSHIP
Short Title: HF/HCI PSYC INTERNSHIP
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hours: 1-9
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Supervised internship in engineering psychology. Instructor Permission Required. Repeatable for Credit.

PSYC 651 - TOPICS IN SOCIAL PSYCHOLOGY
Short Title: TOPICS IN SOCIAL PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit.

PSYC 655 - ADVANCED TOPICS IN HEALTH PSYCHOLOGY
Short Title: ADV TOPICS - HEALTH PSYCHOLOGY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Topics will vary. Repeatable for Credit. Repeatable for Credit.

PSYC 660 - PROFESSIONAL ISSUES
Short Title: PROFESSIONAL ISSUES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Discussion of selected topics on professional matters. Includes grant writing, licensing, and ethics in psychology.

PSYC 662 - NON-TRADITIONAL INTERFACES
Short Title: NON-TRADITIONAL INTERFACES
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Advanced coverage of human computer interfaces that are not necessarily graphical in nature. The course covers haptic, gesture, locomotion, auditory, voice olfactory, taste interfaces. Impoverished GUIs (small screen) are investigated, as are interactive voice response systems and complex interfaces that are multi-model. Graduate/Undergraduate Equivalency: PSYC 462. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 662 if student has credit for PSYC 462.

PSYC 663 - MEDICAL HUMAN FACTORS
Short Title: MEDICAL HUMAN FACTORS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Advanced coverage of the human factors that are specific to medical systems. Topics include medical decision making and diagnosis errors, surgical human factors, medical robots, surgical simulators, and general medical equipment design. Macro-ergonomics of hospital systems, electronic medical records and computerized physician order entry systems are also covered. Graduate/Undergraduate Equivalency: PSYC 463. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 663 if student has credit for PSYC 463.

PSYC 664 - USABILITY ASSESSMENT
Short Title: USABILITY ASSESSMENT
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course covers all of the aspects of specifying, planning, executing, and reporting usability assessments on products, services and systems. Formative and summative assessments are covered, as are "discount" usability methods. This course is project based, with students performing usability assessments as part of an engineering team that is developing products for deployment. Graduate/Undergraduate Equivalency: PSYC 464. Recommended Prerequisite(s): PSYC 370. Mutually Exclusive: Cannot register for PSYC 664 if student has credit for PSYC 464.

PSYC 665 - SEMINAR IN GENES AND COGNITION
Short Title: SEMINAR IN GENES AND COGNITION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This seminar will consist of reading and discussing papers on molecular genetic studies of various cognitive functions broadly construed. This will include studies of genes and attention, genes and working memory, and genes and executive function. Will also include readings on genes and disordered cognition (e.g., ADHD, Alzheimer's).

PSYC 667 - HUMAN FACTORS IN CYBERSECURITY
Short Title: HUMAN FACTORS IN CYBERSECURITY
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Introduction to the human factors that are specific to cybersecurity. Topics will include the security-usability tradeoff, usable authentication, privacy and forensics, security in automated vehicles, internet of things, security warnings, security training and awareness, and so on. Graduate/Undergraduate Equivalency: PSYC 467. Mutually Exclusive: Cannot register for PSYC 667 if student has credit for PSYC 467.

PSYC 668 - HUMAN FACTORS IN ARTIFICIAL INTELLIGENCE
Short Title: HUMAN FACTORS IN AI
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Introduction to the human factors that are specific to artificial Intelligence (AI). Topics will include societal impacts of AI, trustworthy AI, fair and responsible AI, transparent and explainable AI, privacy and security in AI, ethics in AI, human-AI teaming, future trends and challenges, and so on. Graduate/Undergraduate Equivalency: PSYC 468. Mutually Exclusive: Cannot register for PSYC 668 if student has credit for PSYC 468.

PSYC 671 - METHODS IN COGNITIVE NEUROSCIENCE
Short Title: METHODS COGNITIVE NEUROSCIENCE
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Explores issues in functional neuroimaging and provides hands-on experience with experimental design, data acquisition, and analysis. Examines hemodynamic (PET, FMR), electrophysiologic (EEG, MEG), and other (e.g. neural stimulation, event-related optical) methods of measuring functional activation in the human brain related to cognitive operations. This course is usually offered at the University of Texas Medical School.

PSYC 677 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study
Credit Hours: 1-4
Restrictions: Enrollment is limited to Graduate or Visiting Graduate level students.
Course Level: Graduate
Description: Topics and credit hours vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.

PSYC 681 - PERCEPTUAL ORGANIZATION
Short Title: PERCEPTUAL ORGANIZATION
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Seminar
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Prerequisite(s): PSYC 581
Description: Advanced graduate course. Perceptual organization, primarily in human vision but in other senses too. We examine theoretical issues underlying perceptual organization; principal phenomena; methods used to reveal perception of structure; neural basis of perception organization; theories of perceptual organization; and remaining problems in the field.

PSYC 699 - GRADUATE CAPSTONE EXPERIENCE IN I-O PSYCHOLOGY
Short Title: CAPSTONE EXPERIENCE IN I-O
Department: Psychological Sciences
Grade Mode: Standard Letter
Course Type: Internship/Practicum
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: This course is required for the Master of IO Psychology (MIOP Degree). It is a multi-semester, hands-on applied experience that can take the form of either an internship, an applied research experience, or a portfolio of work that reflects the integration of I-O science and practice. Instructor Permission Required. Repeatable for Credit.

PSYC 700 - THESIS RESEARCH
Short Title: THESIS RESEARCH
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Research
Credit Hours: 1-15
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Research for the master's thesis. Repeatable for Credit.

PSYC 800 - DISSERTATION RESEARCH
Short Title: DISSERTATION RESEARCH
Department: Psychological Sciences
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Research
Credit Hours: 1-15
Restrictions: Enrollment is limited to students with a major in Psychology. Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Research for the doctoral dissertation. Repeatable for Credit.

Description and Code Legend

Note: *Internally, the university uses the following descriptions, codes, and abbreviations for this academic program. The following is a quick reference:*

Course Catalog/Schedule

- Course offerings/subject code: PSYC

Home School Description and Code

- Social Sciences: SS

Home Department (or Program) Descriptions and Codes

- Psychological Sciences: PSYS

Undergraduate Degree Description and Code

- Bachelor of Arts degree: BA

Undergraduate Major Description and Code

- Major in Psychology: PSYC

Undergraduate Degree Program Option Description and Code*

- Degree Program Option (BA degree): BA-SOCS

Undergraduate Minor Description and Code

- Minor in Behavioral Medicine and Health Resilience: BMHR

Graduate Degree Descriptions and Codes

- Master of Arts degree: MA
- Master of Human-Computer Interaction and Human Factors degree: MHCIHF
- Master of Industrial-Organizational Psychology degree: MIOP
- Doctor of Philosophy degree: PhD

Graduate Degree Program Descriptions and Codes

- Degree Program in Human-Computer Interaction and Human Factors (MHCIHF degree): HCIF
- Degree Program in Industrial-Organizational Psychology (MIOP degree): IOPS
- Degree Program in Psychology (MA and PhD degrees): PSYC

Graduate Major Concentration Descriptions and Codes

- Major Concentration in Cognitive and Affective Neuroscience (PhD degree): PCAN
- Major Concentration in Health Psychology and Behavioral Medicine Research (PhD degree): PHBM
- Major Concentration in Human-Computer Interaction and Human Factors (PhD degree): PHCI
- Major Concentration in Industrial-Organizational Psychology (PhD degree): PIOP
- Major Concentration in Psychometrics and Quantitative Psychology (PhD degree): PPQP

Graduate Degree Program Option Description and Code*

- Degree Program Option - Thesis (MA degree): MA-THESIS

CIP Code and Description [1]

- **HCIF** Major/Program: CIP Code/Title: *30.3101 - Human Computer Interaction*
- **IOPS** Major/Program: CIP Code/Title: *42.2804 - Industrial and Organizational Psychology*
- **PSYC** Major/Program: CIP Code/Title: *42.0101 - Psychology, General*
- **PCAN** Major Concentration: CIP Code/Title: *42.2706 - Behavioral Neuroscience*
- **PHBM** Major Concentration: CIP Code/Title: *30.1001 - Biopsychology*
- **PHCI** Major Concentration: CIP Code/Title: *11.0105 - Human-Centered Technology Design*
- **PIOP** Major Concentration: CIP Code/Title: *42.2804 - Industrial and Organizational Psychology*
- **PPQP** Major Concentration: CIP Code/Title: *42.2708 - Psychometrics and Quantitative Psychology*
- **BMHR** Minor: CIP Code/Title: *42.2810 - Health/Medical Psychology*

* *Systems Use Only: this information is used solely by internal offices at Rice University (such as OTR, GPS, etc.) and primarily within student information systems and support.*

[1] Classification of Instructional Programs (CIP) 2020 Codes and Descriptions from the National Center for Education Statistics: https://nces.ed.gov/ipeds/cipcode/.