101 Elementary Portuguese I
Spring. 3(3-0) R: No previous experience in Portuguese or approval of department.
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
R: Open only to doctoral students in Political Science or Political Science-Urban Studies.

201 Second-Year Portuguese I
Fall. 4(4-0) P: (PRT 101) Intermediate level review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Portuguese-speaking world.

202 Second-Year Portuguese II
Spring. 4(4-0) P: (PRT 201) Further review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Portuguese-speaking world.

310 Topics in Luso-Brazilian Language and Culture
Spring, 3(3-0) P: (PRT 202) Cultural issues related to Portuguese-speaking countries.

320 Advanced Portuguese
Fall, 3(3-0) P: (PRT 202) Conversation, reading, and writing to develop proficiency.

325 Special Problems in Psychiatry
Fall, Spring, Summer. 3(3-0) P: (PSC 325) Settings with child patients and their families. Subspecialty experiences in psychiatry in clinical settings with adults.

330 Special Problems in Psychiatry
Fall, Spring, Summer. 4(4-0) R: Open only to graduate-professional students in Colleges of Human and Osteopathic Medicine.

340 Topics in Luso-Brazilian Language and Culture
Spring. 3(3-0) P: (PRT 202) Cultural issues related to Portuguese-speaking countries.

460 Research Seminar in American Politics
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with International Medicine; Osteopathic Surgical Specialties; Pediatrics; Osteopathic Medicine; Family and Community Medicine. RB: Successful completion of the preclerkship requirements in College of Osteopathic Medicine Units I and II. A 24-week ambulatory care continuity experience involving 12 weeks in a multidisciplinary environment (family medicine, pediatrics, and internal medicine), 4 weeks in family medicine and 8 weeks in specialty areas (internal medicine, surgery, pediatrics, and obstetrics and gynecology). Didactic sessions are scheduled concurrently.

510 Special Problems in Psychiatry
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

591 Special Problems in Psychiatry
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

601 Introductory Psychology
Fall, Spring, Summer. 4(4-0) Mind and behavior from biological, individual, and social perspectives. Scientific and professional aspects of psychology.

602 Primary Care Ambulatory Clerkship
Fall, Spring, Summer. 1 to 16 credits. A student may earn a maximum of 16 credits in all enrollments for this course. RB: Open only to graduate-professional students in Colleges of Human and Osteopathic Medicine.

608 Psychiatry and Behavioral Science Clerkship
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: College of Osteopathic Medicine students must have passed all preclinical courses. R: Open only to graduate-professional students in Colleges of Human and Osteopathic Medicine. Supervised practice with in-patient, out-patient, emergency, and community mental health services.

610 Child Psychiatry Clerkship
Fall, Spring, Summer. 4 to 16 credits. A student may earn a maximum of 16 credits in all enrollments for this course. RB: (PSC 608) R: Open only to graduate-professional students in Colleges of Human and Osteopathic Medicine. Subspecialty experiences in psychiatry in clinical settings with children.

611 Child Psychiatry Clerkship
Fall, Spring, Summer. 4 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (PSC 608) R: Open only to graduate-professional students in Colleges of Human and Osteopathic Medicine. Subspecialty experiences in psychiatry in clinical settings with child patients and their families.
204 Lesbian, Bisexual, and Gay Studies: Psychological and Cultural Issues
Spring of odd years. 3(3-0) Interdepartmental with Women's Studies. Administered by Women's Studies Program. Nature, origins, and development of sexual orientation and sexual identity in the context of personality, culture, and society. Multicultural and feminist perspectives on the relationship between sexual orientation and gender, race, class, ethnicity, and religion.

209 Brain and Behavior
Fall, Spring. 3(3-0) P: (PSY 101)
Relation of structure and function of the nervous system to the biological bases of behavior.

235 Social Psychology
Fall, Spring, Summer. 3(3-0) P: (PSY 101)
Not open to students with credit in SOC 241.
Major topics, theories, and research findings in social psychology, particularly as viewed from a psychological perspective.

236 Personality
Fall, Spring, Summer. 3(3-0) P: (PSY 101)
Theories of personality, assessment techniques, and research on personality functioning and individual differences in interpersonal behavior. Emphasis on normal behavior.

244 Developmental Psychology: Infancy Through Childhood
Fall, Spring, Summer. 3(3-0) P: (PSY 101)
Physical, cognitive, emotional, and social development from infancy through childhood.

246 Sensitivity to Children I
Fall. 3(2-2) P: (PSY 101) R: To receive credit PSY 246 and PSY 247 must be completed satisfactorily except by prior arrangement with instructor. Not open to students who have completed more than 6 credits of PSY 490 and PSY 491 combined. First course of a two-semester sequence. Theoretical and technical background and direct involvement in a major psychological innovation or research project.

295 Data Analysis in Psychological Research
Fall, Spring, Summer. 3(3-0) P: (PSY 101) and (MTH 110 or MTH 114 or MTH 116 or MTH 124 or MTH 106) or (MTH 132 or MTH 152H or MTH 201 or STT 200 or STT 201) Not open to sophomores in Psychology. Open only to juniors in Psychology.
Descriptive and inferential statistics as applied to the analysis of psychological research. Measurement, control, and research design with psychological variables. Data analysis. Interpreting research findings. Relations between research and theory.

310 Psychology and Biology of Human Sexuality
Spring of odd years. 3(3-0) Interdepartmental with Zoology. P: (PSY 101 or concurrently) and (BS 110 or concurrently or BS 111 or concurrently or LBS 144 or concurrently or LBS 145 or concurrently or LBS 148H or concurrently or LBS 149H or concurrently) Not open to students with credit in FCE 445.

320 Health Psychology
Fall, Spring. 3(3-0) P: (PSY 101)
Social, psychological, and biological factors affecting health, illness, and use of health services. Stress and coping processes, lifestyles, and illness management.

325 Affect and Self Esteem
Fall, Spring. 3(3-0) P: (PSY 101)
Psychological study of affect as a mediator of stress, self esteem, and powerlessness. Development of psychological health, personal identity, and interpersonal competence through principles of affect.

330 Personality from a Psychoanalytic Perspective
Fall, Spring. 3(3-0) P: (PSY 101)
A Freudian framework, including psychosocial development, dreams, unconscious processes, defense mechanisms, prejudice, discrimination, cults, inability to sleep, anxiety, depression, schizophrenia, sexual problems, and love.

344 Developmental Psychology: Adolescence Through Youth (W)
Spring, Summer. 3(3-0) P: (PSY 244)
Theory and research in physical, cognitive, emotional, and social development from puberty to early adulthood.

371 Psychological Innovations and Research I
Fall, Spring, Summer. 4(2-4) P: (PSY 101) R: Approval of department. To receive credit PSY 371 and PSY 372 must be completed satisfactorily except by prior arrangement with instructor. Not open to students who have completed more than 6 credits of PSY 490 and PSY 491 combined. First course of two-semester sequence. Theoretical and technical background and direct involvement in a major psychological innovation or research project.

372 Psychological Innovations and Research II
Fall, Spring, Summer. 4(2-4) P: (PSY 371) Second course of a two-semester sequence. Theoretical and technical background and direct involvement in a major psychological innovation or research project.

395 Research Design and Measurement in Psychological Research
Fall, Spring, Summer. 3(2-2) P: (PSY 295) SA: PSY 304
Validity and reliability concepts in psychological measurement and causal inference. Experimental design in psychological research.

401 Memory and Skill (W)
Fall of even years. 3(3-0) P: (PSY 200 and PSY 295) and completion of Tier I writing requirement. Human learning, memory, and skilled performance. Effects of attention, practice, and knowledge on cognitive and perceptual motor skills.

402 Sensation and Perception (W)
Fall of even years. 3(3-0) P: (PSY 295) and (PSY 200 or PSY 209) and completion of Tier I writing requirement. Biological and psychological approaches to the study of the extraction, representation, and interpretation of sensory information. Review of major methodologies. Emphasis on vision.

403 Laboratory in Cognitive Psychology (W)
Fall, Spring. 3(2-2) P: (PSY 200 and PSY 295) and completion of Tier I writing requirement. SA: PSY 302
Rationale, methods, data analysis, and interpretation of experimental research in cognitive psychology.

405 History of Modern Psychology (W)
Spring, 3(3-0) P: (PSY 295) and completion of Tier I writing requirement. Open only to juniors or seniors in the Department of Psychology. Themes, periods, and contributions of the leading psychologists. Psychological systems such as behaviorism, cognition, and psychoanalysis. Evolution of psychological concepts. Social context.

409 Psychobiology of the Life Span (W)
Spring of odd years. 3(3-0) P: (PSY 209 or ZOL 402) and completion of Tier I writing requirement. Current research on the development and aging of the brain. Aging and behavior.

410 Neurobiology of Learning and Memory (W)
Fall. 3(3-0) P: (PSY 209 or ZOL 402) and completion of Tier I writing requirement. SA: PSY 308
Neural mechanisms responsible for learning and memory.
411  |  Hormones and Behavior (W)
Spring of even years. 3(3-0) P: (PSY 209 or ZOL 402) and completion of Tier I writing requirement. Current research on biological mechanisms that control motivation in humans and non-human species.

413  |  Laboratory in Behavioral Neuroscience (W)
Fall. 4(2-4) Interdepartmental with Zoology. P: (PSY 209 or ZOL 402) and (PSY 295 or concurrently or STT 201) and completion of Tier I writing requirement. SA: PSY 309 Theory and laboratory experience in the study of behavioral neuroscience. Relationship among hormones, brain, and behavior.

424  |  Child and Family Psychopathology (W)
Fall, Spring, Summer. 3(3-0) P: (PSY 244 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology or students in the Psychology disciplinary minor. Description, etiology, and developmental patterns of behavior problems of children, adolescents, and their families. Child and family interventions.

440  |  Attitudes and Social Cognition (W)
Fall of even years. 3(3-0) P: (PSY 235 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology. Psychological research on the cognitive foundations of social behavior. Attribution, stereotyping, impression formation, social memory, and persuasion.

442  |  Interpersonal Behavior and Groups (W)
Spring of even years. 3(3-0) P: (PSY 235 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology. Major theories and research findings in the social psychology of group processes and interpersonal relationships.

443  |  Special Problems in Psychology
Fall, Spring, Summer. 1 to 6 credits. R: Approval of department. Each student will participate in a psychological project under direction of a faculty member on an experimental, theoretical, or applied problem.

455  |  Organizational Research Techniques (W)
Spring. 3(3-0) P: (PSY 255 and PSY 395) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology or in the Interdisciplinary Studies in Social Science major. Quantitative psychological research techniques applied to human resource problems in organizations. Survey research, job analysis, training needs analysis, evaluation and selection, and test validation.

463  |  Introduction to Cognitive Science
Spring. 3(3-0) Interdepartmental with Linguistics: Philosophy. Administered by Department of Linguistics and Germanic, Slavic, Asian and African Languages. RB: (PHL 462 or LIN 401 or CSE 440 or PSY 200) Cognitive processing of information by animals, humans, and computers. Relevant issues in philosophy, linguistics, psychology, neuropsychology, and artificial intelligence.

475  |  Personality Theories (W)
Spring of odd years. 3(3-0) P: (PSY 236) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology. Major personality theories of development, structure, and dynamics. Implications for behavioral disorders and therapy.

490  |  Neurobiology
Fall, Spring. 3(3-0) P: (PSY 255 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors with at least 9 credits in psychology. Students are limited to a combined total of 9 credits in PSY 490 and PSY 491. Students who completed PSY 246, PSY 247 are limited to a combined total of 6 credits in PSY 490 and PSY 491. Approval of department.

491  |  Participation in Psychological Project
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P: (PSY 295) R: Open only to juniors or seniors with at least 9 credits in psychology. Students are limited to a combined total of 9 credits in PSY 490 and PSY 491. Each student will participate in a psychological project under direction of a faculty member.

492  |  Special Topics in Psychology
Fall, Spring. 1 to 3 credits. P: (PSY 101 and PSY 295) Special topics supplementing regular course offerings proposed by faculty.

493  |  Issues in Psychology (W)
Fall. 3(3-0) P: (PSY 101 and PSY 295) and completion of Tier I writing requirement. Current information, research, and practice in psychology.

498H  |  Development of Research Proposal
Fall, Spring. Summer. 3(0-6) R: Approval of department. Independent research with faculty supervision. Literature survey, naturalistic observation, and experimental investigation. Preparation of the proposal for the Senior Honors Thesis.

801  |  Sensation and Perception
Fall of odd years. 3(3-0) R: (PSY 401) or approval of department. R: Open only to graduate students in Psychology. Biological and psychological approaches to the study of extraction, representation, and interpretation of sensory information. Review of major methodologies. Emphasis on vision.

802  |  Basic Cognitive Processes
Fall. 3(3-0) R: Open only to graduate students in the Department of Psychology or Interdepartmental Graduate Specializations in Cognitive Science or approval of department. SA: PSY 810 Advanced exploration of methods used to study human cognition as applied to sensory processes, perception, attention, memory, and control of action.

803  |  Higher Order Cognitive Processes
Spring. 3(3-0) R: Open only to graduate students in the Department of Psychology or Interdepartmental Graduate Specializations in Cognitive Science or approval of department. SA: PSY 810 Advanced exploration of inductive and deductive reasoning, categorization, analogy, decision making, and problem solving.

804  |  Molecular and Developmental Neurobiology
Fall, Spring. 4(4-0) R: Open only to graduate students in Cognitive Science or approval of department. Neurobiology. Administered by Program in Neuroscience. R: Bachelor’s degree in a Biological Science or Psychology. R: Open only to graduate students in the Neuroscience major. Nervous system specific gene transcription and translation. Maturation, degeneration, plasticity and repair in the nervous system.

805  |  History of Psychology
Spring. 4(4-0) R: Open only to graduate students in Psychology. Scientific, cultural, philosophical, and personal influences in the development of psychology. Persisting issues.

806  |  Advanced Neuroscience Techniques Laboratory
Spring. 3(0-9) Interdepartmental with Neuroscience; Pharmacology and Toxicology; Psychology; Zoology. Administered by Program in Neuroscience. R: (PHM 827) R: Open only to doctoral students in the Neuroscience major. Methods and underlying principles of neuroscience research.
Psychology—PSY

865 Research Methods in Applied Psychology
Fall. 3(3-0) RB: (PSY 815) R: Open only to graduate students in the Department of Psychology major.
Human resource issues and applied research. Measurement problems and issues. Planning, conducting, analyzing, and disseminating applied research.

867 Nature and Practice of Cognitive Science
Spring. 3(3-0) Interdepartmental with Zoology, Linguistics; Philosophy, Computer Science and Engineering. Administered by Department of Zoology. RB: Undergraduate course work in behavioral biology, cognitive psychology, philosophy, linguistics, or artificial intelligence.
Survey of how different disciplines explore the cognitive processes underlying intelligent behavior.

870 Ecological-Community Psychology
Fall. 3(3-0) RB: (PSY 815 or concurrently) R: Open only to graduate students in Psychology. Theory, methodology and research in experimental ecological approaches to community psychology. Identifying researchable problems and funding. The dynamics of research teams.

871 History and Theory in Ecological-Community Psychology
Fall. 3(3-0) RB: (PSY 815 or concurrently) R: Open only to graduate students in Psychology. Theoretical perspectives, contemporary problems, philosophies of science, and ethical issues facing the ecological psychologist.

872 Field Research in Psychology
Spring. 3(2-2) RB: (PSY 815) R: Open only to graduate students in Psychology. Unobtrusive, observational, and interview measures. Policy analysis, proposal preparation, and research design.

873 Community Interventions
Spring. 3(2-2) RB: (PSY 815 and PSY 870) R: Open only to graduate students in Psychology. Entry and operational issues in community interventions and research. Group dynamics, community politics, intervention integrity.

890 Special Problems in Psychology
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open only to graduate students in Psychology. Supervised student research on an experimental, theoretical, or applied problem.

899 Master's Thesis Research
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 35 credits in all enrollments for this course. R: Open only to graduate students in Psychology. Master's thesis research.

926 Scientific and Professional Ethics
Spring of even years. 3(3-0) R: Open only to graduate students in Psychology. Ethical issues in human and animal research. Ethical decisions involving issues of gender, ethnicity, and cultural diversity in psychological practice.

950 Advanced Child and Family Interventions
Fall. 3(3-0) RB: (PSY 854) or approval of department. R: Open only to graduate students in Psychology, Marriage and Family Therapy, and Counseling Psychology. Intervention approaches with children, families and couples. Psychodynamic, experiential, and family systems perspectives. Empirical basis for interventions.

952 Psychodynamic Theory, Research and Intervention Across the Life Span
Fall of odd years. 3(3-0) RB: (PSY 853 and PSY 854). Graduate courses in behavior disorders. Psychodynamic theories. Research on psychodynamic theoretical concepts and interventions. Intervention concepts, techniques, and types.

953 Social Systems: Theory, Research, and Intervention Across the Life Span
Fall of even years. 3(3-0) R: Open only to graduate students in Psychology. Theories. Current research, and intervention strategies for communities, families, couples, and groups across the life span.

954 Cognitive-Behavioral Theory, Research, and Intervention Across the Life Span
Spring of even years. 3(3-0) RB: Course(s) in behavioral disorders. Theories, techniques, and empirical bases of behavioral and cognitive-behavioral psychotherapy.

961 Training and Organizational Development
Spring of odd years. 3(3-0) RB: (PSY 860) R: Open only to graduate students in Psychology. Theory and research on identification, development, and evaluation of training activities in organizations. Analysis of organizational functioning and change.

962 Work Motivation and Job Satisfaction
Fall of odd years. 3(3-0) RB: (PSY 860) R: Open only to graduate students in Psychology. General theories of human motivation, attitudes, and affect. Specific theories of work motivation and job satisfaction.

970 Advanced Topics in Ecological and Community Psychology
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in Psychology. Contemporary ecological and community psychology issues. Program evaluation, systems analysis. Empowerment, social support, and homelessness.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 75 credits in all enrollments for this course. R: Open only to doctoral students in Psychology or Psychology-Urban Studies. Doctoral dissertation research.

RADIOLOGY—RAD

Department of Radiology
College of Human Medicine

401 Quantitative Human Biology
Spring. 3(2-0) Interdepartmental with Biomedical Engineering, Materials Science and Engineering; Human Anatomy. Administered by College of Engineering. P: (MTH 235 and PHY 184) and (PSL 250 or concurrently) and (CEM 411 or CEM 151) and (ANTR 350 or concurrently) RB: (CSE 131 or concurrently or CSE 231 or concurrently or PSL 410) Qualitative description and quantitative engineering analysis of selected, tractable human-biological systems. Multi-disciplinary problem-solving among medical and engineering professionals.

552 Medical Neuroscience
Spring. 4(3-2) Interdepartmental with Neurology and Ophthalmology; Physiology; Human Anatomy. Administered by Department of Neurology and Ophthalmology. R: Graduate-professional students in the Colleges of Human Medicine and Osteopathic Medicine. SA: ANT 552. Correlation of normal structure and function of the human nervous system with clinical testing, classical lesions, and common diseases.

553 Introduction to Radiology
Spring. 1(1-0) R: Graduate-professional students in colleges of Human and Osteopathic Medicine or approval of department. Principles of medical diagnostic radiology; means of generating diagnostic images, and anatomical and physiological changes that result in such images.

590 Independent Study
Fall, Spring, Summer. 1 to 3 credits. R: Approval of department. Special aspects of radiology. Imaging as a diagnostic tool in patient management.

609 Radiology Clerkship
Fall, Spring, Summer. 4 to 8 credits. A student may earn a maximum of 32 credits in all enrollments for this course. R: Completion of two years of graduate-professional program in College of Human Medicine or College of Osteopathic Medicine. Diagnostic imaging consultation. Participation in image interpretation and observation in hospital or out-patient radiology setting.