

PSYCHOLOGY COURSE DESCRIPTIONS

PSY 141: INTRODUCTION TO PSYCHOLOGY I (4)

Survey of major topic areas of modern psychology: historical foundations, methods of research, biological bases, child behavior, states of consciousness, psychological disorders and their treatment, learning, and memory. An emphasis is placed upon understanding how reliable knowledge of human behavior is achieved. Open to first-year students.

PSY 142: INTRODUCTION TO PSYCHOLOGY II (4)

Continued survey of major topic areas of modern psychology: sensation and perception, adolescent and adult development, thinking and language, personality, motivation and emotion, and social processes. An emphasis is placed upon understanding how reliable knowledge of human behavior is achieved. Open to first-year students. Prerequisite: PSY 141.

PSY 144: THE DEVELOPMENT OF HUMAN BEHAVIOR (4)

Focuses on the definition and understanding of processes basic to the development of complex human behaviors. Particular attention to the powerful developmental factors during the first six years of life and their relevance for later behavior. Open to first-year students.

PSY 202: LEARNING (4)

In-depth study of classical and operant conditioning principles including reinforcement, extinction, punishment, and stimulus control in humans as well as other organisms. Students conduct laboratory experiments on learning principles. Not open to first-year students. Prerequisite: PSY 141. Corequisite: 202L. Course fee required.

PSY 202L: LABORATORY FOR LEARNING (2)

This laboratory covers fundamental principles of operant conditioning, including superstitious behavior, positive reinforcement, extinction, interval and ratio schedules, stimulus discrimination and generalization, secondary reinforcement, and chaining. Each student conducts eight experiments using a white rat that she is assigned at the beginning of the semester. In addition to completing all laboratory experiments, each student has the responsibility of caring for her rat on a daily basis. Lab fee required. Corequisite: PSY 202.

PSY 204: SOCIAL PSYCHOLOGY (4)

This course addresses the foundations of modern social psychology; social interactions and social processes; nature and characteristics of social groupings; types of social groupings; social change and stability; and development and change of attitudes. The course will also have practical application as found in current research on group influences and reactions in experimental and natural settings. Prerequisite: PSY 141 or PSY 142.

PSY 205: RESEARCH DESIGN I (4)

Basic research provides the central subject matter for the sciences. Students are introduced to the fundamentals of research methods used in psychology. Topics covered include experimental design, techniques of experimental control, data analysis, and report preparation. Students design and present a comprehensive research proposal. Prerequisite: PSY 141.

PSY 206: PSYCHOLOGY APPLIED TO TEACHING (4)

Presents information on how basic principles of learning and motivation are applied in classroom situations. Considerations of technological developments relevant for all levels of instruction.

Prerequisite: PSY 141.

PSY 208: ANALYSIS OF BEHAVIORAL DATA (4)

Students gain hands-on experience in selecting, calculating, and interpreting results of the statistical tests most commonly used in behavioral research. The course covers basic statistical concepts, concentrating on using statistics to test research hypotheses. Emphasis is placed on learning to choose an appropriate statistical test for a given research design. Prerequisite: q.

PSY 210: RESEARCH DESIGN II: PRACTICAL RESEARCH SKILLS (4)

This seminar-based course focuses on the development of skills necessary to conduct valid, reliable research in the behavioral sciences. In addition to text-based materials in research techniques, the course provides each student the opportunity to design, conduct, and present the results of a full-scale research project on the subject of her choice. Prerequisite: PSY 205.

PSY 228: INTRODUCTION TO NEUROSCIENCE (4)

A beginning-level course that will serve as a prerequisite for advanced courses in neuroscience. Fundamentals of the structure and function of the nervous system on both a small and large scale are covered. Sensory systems are also covered in detail. Also listed as BIOL 228. Prerequisite: PSY 141

PSY 228L: LABORATORY FOR INTRODUCTION TO NEUROSCIENCE (2)

The first part of the course covers experimental methodology, neural staining, membrane properties, brain anatomy, and behavioral observation. During the second part of the course, students will conduct research projects in areas covered in the lecture class. An oral presentation and paper will be required. Corequisite: PSY 228.

PSY 250: SPECIAL TOPIC - APPLIED STATISTICS IN PSYCHOLOGY (4)

Students will gain hands-on experience in selecting, calculating, and interpreting the results of the most commonly used statistical tests in behavioral research. The course covers basic statistical concepts, concentrating on the use of statistics to test research hypotheses. Emphasis is placed on learning to choose an appropriate statistical test for a given research design.

PSY 250: SPECIAL TOPIC - EEG IN CLINICAL PRACTICE (4)

Students will learn to recognize and describe normal and abnormal EEG patterns and to correlate clinical neurological history with EEG finds. Topics include long-term monitoring of epilepsy, neonatal EEG, somatosensory-evoked potentials, nerve conduction studies, polysomnography (sleep studies), and intraoperative monitoring. Prerequisite: BIOL/PSY 228 or PSY 317.

PSY 271: INTIMATE RELATIONSHIPS (4)

This course is designed to acquaint students with psychological processes involved in the development, formation, maintenance, and dissolution of relationships. Several theoretical perspectives on relationships will be reviewed with a focus on how these different theoretical perspectives enrich the study of intimate relationships. Several types of relationships may be discussed (sibling relationships,

parental relationships, relationships with in-laws), but we will focus primarily on romantic relationships because of the focus of social psychologists on these types of relationships. Prerequisite: PSY 141.

PSY 272 EVOLUTIONARY PSYCHOLOGY (4)

This course examines evolutionary psychology including a brief historical review of key themes in psychology and evolutionary biology. Concepts and principles of human evolution will be developed in the context of classic and contemporary issues in social psychology, cognitive psychology, developmental psychology, and personality psychology. Topics covered include problems of survival, long-term mating, sexuality, parenting, kinship, cooperation, aggression and warfare, conflict between the sexes, status, prestige, and social dominance.

PSY 273 HUMAN SEXUALITY (4)

This course is an overview of the scientific study of human behavior including psychological and physiological components of sexuality. It is a survey of current thinking in the field and will place emphasis on future directions for research on human sexuality. Topics include cross-cultural perspectives of sexuality, developmental and social perspectives of sex, sexuality throughout the life cycle, and evolutionary perspectives of sexuality.

PSY 290: INDEPENDENT STUDY IN PSYCHOLOGY (2 or 4)

An opportunity to explore lower-level topics within psychology of special interest to a student. Students may suggest programs of reading, laboratory, research, or clinical activity to individual faculty for their approval and guidance.

PSY 312: TESTS AND MEASUREMENTS (4)

Survey of modern techniques for evaluation of human behavior, including intelligence, ability, aptitude, and personality tests, and test construction. Students receive practice in administration, scoring, and interpretation of tests. Prerequisite: PSY 205.

PSY 315: MOTIVATION AND EMOTION (4)

Physiological bases of motivation and emotion, basic systems such as aggression and sex, emotional expression, and the roles of learning, cognition, and social factors in human motivation and emotion. Prerequisite: PSY 141.

PSY 315L: LABORATORY FOR MOTIVATION AND EMOTION (2)

This laboratory covers basic methodology used to measure motivational and emotional processes, e.g., psychophysiological measurements and standardized testing instruments. Students work in small groups to design and conduct a research project dealing with a topic of their choosing in motivation and emotion. A final oral presentation and APA-style research paper is required. This laboratory is recommended but not required.

PSY 316: SENSATION AND PERCEPTION (4)

How the nervous system detects and codes information from external and internal environments (including sensation of visual, auditory, chemical, and tactile stimuli, as well as feedback from internal organs, muscles, and joints) and how innate and learned factors interact as the brain selects, organizes,

and interprets our sensations to create meaning from the physical world. This course has an integrated laboratory component. Prerequisite: PSY 141.

PSY 317: BIOLOGICAL PSYCHOLOGY (4)

Relationships between behavior and underlying physiological mechanisms are examined. Basic anatomy of the nervous system, characteristics of sensory systems, neuro- and endocrine-interactions, and neural developmental processes are discussed. This course has an integrated laboratory component. Prerequisite: PSY 141. Also listed as BIO 317.

PSY 318: HUMAN MEMORY (4)

An in-depth survey of the field of cognitive psychology. Information processing, perception, memory development, and models of human memory are covered. Topics also covered: language development, reading, language comprehension, semantics, decision making, judgment, reasoning, problem solving and current computer applications of cognitive advances. Prerequisites: q and PSY 141.

PSY 319: COGNITIVE PSYCHOLOGY (4)

This course will cover the major approaches to the scientific study of human thinking from the information-processing and connectionist perspectives. Topics include: perception, attention, memory, knowledge, language, reasoning, creativity, and problem solving. Prerequisite: PSY 141.

PSY 323: ANIMAL BEHAVIOR (4)

Also listed and described as BIOL 323.

PSY 323L: LABORATORY FOR ANIMAL BEHAVIOR (2)

Also listed and described as BIOL 323L.

PSY 324: CHILD NEUROPSYCHOLOGY (4)

In this course we study brain-behavior relationships as they apply to the developing human organism. Central nervous system development from the human embryo through late adolescence will be examined in order to understand the neurological mechanisms involved with the learning process and to understand ways in which particular brain areas function or malfunction. Readings will include current research literature. Prerequisite: BIOL/PSY 228 or PSY 317 with permission.

PSY 326: PSYCHOLOGY APPLIED TO HEALTH (4)

Focuses on health issues from the standpoint of biological, psychological, and social factors acting together and on recently developed cognitive-behavioral strategies for promoting health and managing chronic illness. Topics include health-compromising behaviors, chronic pain, diabetes, immunological disorders, cardiovascular disease, and stress-related disorders. Prerequisite: PSY 141.

PSY 329: HUMAN NEUROPSYCHOLOGY (4)

This course investigates how brain and experience come together to create cognition, language, memory, emotion, motor and visuospatial capabilities—all the attributes that make up the self. We also examine what happens when developmental processes, head injury, or illness intervene to create behavioral deficits, learning disabilities, and psychopathologies due to brain dysfunction. Prerequisite: BIOL/PSY 228 or PSY 317.

PSY 342: PRINCIPLES OF ABNORMAL BEHAVIOR (4)

A study of the psychosocial, sociocultural, and biological aspects of behavior disorders. Major topics include anxiety and psychosomatic disorders, schizophrenia, and the affective disorders. Prerequisite: PSY 141.

PSY 343: NEUROPSYCHOLOGY OF SPEECH AND COMMUNICATION DISORDERS (4)

In this course we examine relationships between neural mechanisms and speech/language systems in the functional brain. Topics will also cover neuroanatomical substrates for a variety of communication disorders involving speaking, reading, and writing. Readings will include current research literature. Prerequisite: BIO/PSY 228 or PSY 317 with permission.

PSY 346: INTELLIGENCE (4)

This course covers the major theoretical perspectives on the development of intelligence in humans. Topics will include: the evolution of intelligence, animal intelligence, major intelligence theories, intelligence research, testing, and artificial intelligence. There will be hands-on laboratories on techniques in intelligence research and the major intelligence tests will be covered. Prerequisite: PSY 141.

PSY 350: SPECIAL TOPIC - HONORS SEMINAR (2)

Open to students conducting honors theses or independent research studies, this course provides individualized instruction in the use of software for organizing and formatting bibliographic data, constructing research posters, and conducting statistical analyses for single- and multiple-subject research designs. Each student will receive practice in and feedback for the oral presentation of her thesis/study. Prerequisite: PSY 205.

PSY 350: SPECIAL TOPIC - INTRODUCTION TO PERSONALITY (4)

This course provides an overview of theory and research on personality. We'll critically examine major theoretical perspectives on personality, such as psychoanalytic, humanistic, and social learning approaches. Current research investigating models of personality, personality constructs, and the assessment of personality will also be explored. Prerequisite: PSY 141.

PSY 350: SPECIAL TOPIC – RESEARCH WRITING IN PSYCHOLOGY (2)

Students receive hands-on experience in all phases of research report writing according to the guidelines in the *Publication Manual of the American Psychological Association*. This seminar also includes instruction in the presentation of research through Power Point and printed poster formats. Prerequisite: PSY 205.

PSY 350: SPECIAL TOPIC - SCIENCE AND PRACTICE (4)

This course addresses the foundations of modern social psychology, social interactions and social processes, the nature and characteristics of social gatherings, types of social groupings, social change and stability, and the development and change of attitudes. The course also has practical applications as found in current research on group influences and reactions in experimental and natural settings. Prerequisite: PSY 141.

PSY 350: SPECIAL TOPIC – SEMINAR ON THE PSYCHOLOGY OF HOMICIDE (4)

This seminar course focuses on key studies conducted on the psychology of homicide. We'll review various theoretical perspectives applied to the study of homicide and review various types of homicide including fratricide, infanticide, serial homicide, suicide, and parricide. We'll explore demographic information of both victims and perpetrators and examine circumstances that precede homicides such as partner violence, sexual jealousy, same-sex conflicts over status and reputation, stalking, and robbery. Prerequisites: PSY 205 and PSY 208

PSY 351: BEHAVIOR DISORDERS OF CHILDHOOD (4)

An examination of the theories, characteristics, etiology, and treatment of the major categories of behavior disorders that affect children and adolescents. Topics include autism, hyperactivity, school phobia, mental retardation, anxiety, aggression, substance abuse, schizophrenia, sexual behavior problems, and antisocial behavior. Prerequisite: PSY 141.

PSY 352: BEHAVIOR THERAPY (4)

Examination of the use of behavioral and cognitive strategies for the treatment of specific problems and disorders. Topics include theory and techniques of anxiety reduction, prevention and control of depression, self-control, and modification of maladaptive behavior. Prerequisite: PSY 202.

PSY 360: INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (4)

The primary purpose of this course is to introduce students to the methods and practices of industrial and organizational psychology. The course will establish a foundation in I/O psychology from both an applied and theoretical viewpoint. Another objective of this course will be for students to develop critical analytical and evaluation skills. Students learn to apply theories of psychology to organizations in order to improve the efficiency of the organization and the quality of life of employees. Prerequisite: PSY 141.

PSY 365: EATING BEHAVIOR AND DISORDERS (4)

This course examines the psychological influences on eating behavior and disorders. The impact of psychological factors, such as family settings and societal pressures for thinness, on body image, and the development of eating disorders will also be examined. Disordered eating behaviors covered include anorexia nervosa, bulimia nervosa, binge eating disorder, and obesity. Prerequisite: PSY 141 or PSY 142.

PSY 370: PERSONNEL PSYCHOLOGY (4)

This course examines individual differences in the workplace. Specifically, students are exposed to the various aspects of human resource development, including job analysis, performance appraisal, selection techniques, recruiting and interviewing, employment testing, and the development and evaluation of training programs. This course is designed to include the application of learned processes and techniques. Prerequisite: PSY 141.

PSY 390: INDEPENDENT STUDY IN PSYCHOLOGY (2 or 4)

An opportunity to explore advanced topics within psychology of special interest to a student. Students may suggest programs of reading, laboratory, research, or clinical activity to individual faculty for their approval and guidance.

PSY 399: INTERNSHIP IN PSYCHOLOGY (4)

Students participate in applied psychological programs at institutions or with psychologists in private practice in the Roanoke area. Emphasis is on direct, intensive experience with the application of psychological principles in practical circumstances. Application with faculty required prior to registration.

PSY 425: HISTORY AND SYSTEMS OF PSYCHOLOGY (4)

A comprehensive overview of the history of psychology, including early philosophical roots, the “schools” of psychology, and major branches of modern psychology with emphasis on important studies in each area. Prerequisite: senior psychology major or permission from the instructor.

PSY 470: SENIOR SEMINAR IN PSYCHOLOGY (4)

Current developments within the major areas of psychology. Most of the material covered in this course is based upon research and theories published within the last several years. Prerequisites: PSY 202; senior psychology majors and others with permission.

PSY 490: SENIOR HONORS THESIS (4, 4)

An extensive research project to be carried out over both regular terms and Short Term. A research proposal and literature review is due at the end of Term 1. Students complete an APA-style thesis and present their projects at the Division III Science Seminar in Spring Term. Open to qualified senior psychology majors. Application with faculty is required prior to registration.