# Psychology

**PROFESSORS:** Bonnie B. Bowers (chair) **ASSOCIATE PROFESSOR:** Richard L. Michalski **ASSISTANT PROFESSORS:** Seung-Hee Han, Caroline E. Mann, Alex Wooten

The core program in psychology emphasizes the learning of representative knowledge in content areas that constitute modern psychology, with particular concentration on the research methods and the scientific roots of psychology. Areas of focus chosen by the student emphasize the integration of psychology with other disciplines (i.e., neuroscience, biology, ethology, statistics, and education) and provide course work relevant to her interests as well as to her career and/or graduate study goals.

#### **REQUIREMENTS FOR A MAJOR IN PSYCHOLOGY (B.A.):**

12 courses (45-49 credits)

#### CORE COURSES:

- PSY 141: Introduction to Psychological Science (4)
- PSY 205: Research Design (4) and PSY 205L: Laboratory for Research Design (1)
- PSY 208: Research Statistics (4)
- PSY 470: Senior Seminar (4)
- Two additional Psychology courses at the 200 or 300 level (8)

#### AREA COURSES: (20 credits)

Students are required to take one course from each of the five areas listed below:

- Abnormal & Clinical: PSY 342: Principles of Abnormal Behavior (4)
  Biological & Comparative: PSY 215: Motivation and Emotion (4) PSY 272: Evolutionary Psychology (4)
- PSY 272: Evolutionary Psychology (4) BIOL/PSY 317: Biological Psychology (4) BIOL/PSY 323, 323L: Animal Behavior (4, 2), lab optional for PSY 323
- Developmental: PSY 144: Child Psychology (4) PSY 238: Multicultural Children and Families (4) PSY 351: Behavioral Disorders of Childhood (4)
- Cognition: PSY 319: Cognition (4) PSY 371: Eyewitness Memory (4)
- Social & Personality: PSY 204: Social Psychology (4) PSY 218: Cross Cultural Psychology (4) PSY 272: Evolutionary Psychology (4) PSY 273: Psychology of Human Sexuality (4) PSY 363: Personality Psychology (4)

PSY 141 or its equivalent is a prerequisite for all courses in the department except as noted. A score of 4 or 5 on the Advanced Placement Psychology exam will substitute for credit for PSY 141.

#### **REQUIREMENTS FOR A MAJOR IN PSYCHOLOGY (B.S.):**

18-19 courses (69-73 credits)

#### REQUIRED COURSES IN PSYCHOLOGY: CORE COURSES:

- PSY 141: Introduction to Psychological Science (4)
- PSY 205: Research Design (4) and PSY 205L: Laboratory for Research Design (1)
- PSY 208: Research Statistics (4)
- PSY 210: Research Practicum (4)

- PSY 470: Senior Seminar (4)
- PSY 290/390: Independent Study (4) or PSY 490: Senior Honors Thesis (8)
- Two additional Psychology courses at the 200 or 300 level (8)

#### AREA COURSES: (20 credits)

Students are required to take one course from each of the five areas listed above.

#### **REQUIRED ALLIED COURSES:**

 16 additional credits in biology, chemistry, mathematics, statistics, and/or physics (at least one course with a lab, at least one course 200-level or above) chosen in consultation with advisor. No more than 4 credits of 100-level Biology may be applied for allied courses. MATH 100 and MATH 105 do not fulfill allied course credit.

#### REQUIREMENTS FOR A MAJOR IN PSYCHOLOGY WITH A CONCENTRATION IN CLINICAL AND

COUNSELING SKILLS (B.A.)

(15-16 courses, 55-57 credits)

#### CORE COURSES:

- PSY 141: Introduction to Psychological Science (4)
- PSY 205: Research Design (4) and PSY 205L: Laboratory for Research Design (1)
- PSY 208: Research Statistics (4)
- PSY 470: Senior Seminar (4)

#### AREA COURSES: (8 credits)

Students are required to take one course from each of the two areas listed below. Other area course requirements are fulfilled through the Clinical and Counseling Skills Concentration.

- Biological & Comparative: PSY 215: Motivation and Emotion (4) PSY 272: Evolutionary Psychology (4) BIOL/PSY 317: Biological Psychology (4)
- Cognition: PSY 319: Cognition (4)

#### CLINICAL & COUNSELING SKILLS CONCENTRATION: (8 courses, 30 credits)

- PSY 144: Child Psychology (4) (fulfills Developmental requirement)
- PSY 281: Professional Development in Psychology (2)
- PSY 342: Abnormal Psychology (4) (fulfills Abnormal & Clinical requirement)
- PSY 361: Theory & Research in Clinical/Counseling Psychology (4)
- PSY 362: Practice & Techniques of Clinical/Counseling Psychology (4)
- PSY 363: Personality Psychology (4) (fulfills Social & Personality requirement)
- PSY 380: Supervised Field Placement (4)
- One of the following:
  - o Additional counseling courses TBD

#### **REQUIREMENTS FOR A MINOR IN PSYCHOLOGY:**

5 courses (20 credits)

- PSY 141: Introduction to Psychological Science (4)
- Four additional psychology courses at the 200 level or above (16)

#### COURSES IN PSYCHOLOGY:

#### **PSY 141: INTRODUCTION TO PSYCHOLOGICAL SCIENCE (4)**

Survey of major topic areas in modern psychology and terminology of the discipline, giving students a more complete understanding of themselves and others. Discussion of topics such as the debate over nature and nurture, human development, physiological psychology, social psychology, and several other major areas within psychology, and

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discussions of the implications of findings within these areas on cultural products. We will explore these topics through lectures, lab exercises, and assignments. Open to first-year students. Offered both terms.

#### PSY 144: CHILD PSYCHOLOGY (4)

This course focuses on the definition and understanding of processes basic to the development of complex human behaviors. Particular attention will be paid to the powerful developmental factors during the first 12 years of life and their relevance for later behavior. Open to first-year students. Offered Term 1.

#### PSY 150: SPECIAL TOPIC: ADOLESCENCE AND EMERGING ADULTHOOD (4)

This course examines theories and research on adolescent and emerging adult development. Influences of biological, cognitive, and social factors on development will be discussed in various topics such as identity, the self, independence, delinquency, and resilience. Emphasis will be given to ecological factors surrounding adolescents such as family, peers, school, work, and social media. Open to first-year students. Offered Term 2.

#### 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. Offered Term 1.

#### PSY 205: RESEARCH DESIGN (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. Corequisite: PSY 205L. Offered both terms. *(r)* 

#### **PSY 205L: LABORATORY FOR RESEARCH DESIGN (1)**

This lab offers practical applications of concepts covered in the lecture course. Topics covered include locating and critiquing primary research articles, basics of scientific writing with an emphasis on APA style, data collection, analysis, and interpretation, reliability and validity analysis, and professional presentation fundamentals. The lab must be taken in the same term as the lecture course. Corequisite: PSY 205. Offered both terms.

#### **PSY 208: RESEARCH STATISTICS (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. Open to first-year students. Prerequisite: *q*. Offered both terms. (*Q*)

#### **PSY 210: RESEARCH PRACTICUM (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. Prerequisites: PSY 205 and PSY 208. Offered both terms. (SCI)

#### **PSY 215: MOTIVATION AND EMOTION (4)**

This course covers the physiological, cognitive, and social aspects of motivation and emotion through lectures, discussions, and interactive exercises. Some of the topics to be covered include types of needs, intrinsic and extrinsic motivation, goal setting, theories of emotion/ individual emotions, and growth motivation. Practical applications will be emphasized throughout the course. Prerequisite: PSY 141. Not offered in 2023-2024.

#### PSY 218: CROSS-CULTURAL PSYCHOLOGY (4)

This course focuses on the role of culture in developing human mind and behavior, and cultural similarities and differences in psychological processes around the world. The various psychological processes will be discussed in topics such as socialization, cognition and perception, emotions, motivation, interpersonal relationships, morality, and physical and mental health. Prerequisite: PSY 141. Offered Term 1.

#### PSY 238: MULTICULTURAL CHILDREN AND FAMILIES (4)

This course focuses on the cultural variation in child development and family life around the world and within the U.S. Attention will be paid to the external conditions that affect the internal workings of these families. We will discuss topics such as cultural variation, acculturation, enculturation, and the values that are inherited from the country of

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origin (with the exception of Native Americans). Prerequisite: PSY 144. Open to first-year students. Offered Term 2.

#### 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. Prerequisite: PSY 141. Offered Term 2.

#### PSY 273: PSYCHOLOGY OF HUMAN SEXUALITY (4)

This course is an overview of the scientific study of human sexual thoughts, feelings, and behavior. This course will place emphasis on future directions for research on human sexuality. Topics include developmental and social perspectives of sexual thought and behavior, sexual motivation and arousal, and more specific topics, including sexual interests across the menstrual cycle, mate preferences, and infidelity. Prerequisite: PSY 141. Not offered in 2023-24. (*w*, *x*, *o*)

#### PSY 281: PROFESSIONAL DEVELOPMENT AND ETHICS IN PSYCHOLOGY (4)

This 4-credit course will introduce students to diverse career options available in the field of psychology and cover ethical issues and principles. Course activities and guest speakers will help prepare students to apply to graduate programs and employment opportunities. Examples of topics covered include career paths, licensing requirements, internships, the graduate school application process, résumé writing, as well as ethical quandaries around justice, consent, and confidentiality in humans service fields and research. Prerequisite: PSY 141. Offered Term 1 in odd years.

#### 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. Offered any term.

#### 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. Also listed as BIOL 317. Prerequisite: PSY 141. Offered Term 1.

#### PSY 319: COGNITION (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, intelligence, and problem solving. Prerequisite: PSY 141. Not offered in 2023-24.

#### PSY 323: ANIMAL BEHAVIOR (4)

Also listed as BIOL 323. PSY 323 fulfills the Biological & Comparative area course for the Psychology major, regardless of whether PSY 323L is taken. Prerequisite: PSY 208. Offered Term 2.

#### **PSY 323L: LABORATORY FOR ANIMAL BEHAVIOR (2)**

Also listed as BIOL 323L. The lab course is optional for PSY 323. Prerequisite: PSY 208. Offered Term 2.

#### **PSY 342: PRINCIPLES OF ABNORMAL BEHAVIOR (4)**

This is an upper-level class that covers the evidence-based understanding, diagnosis, and treatment of psychological disorders in adults. Topics covered include schizophrenia, anxiety disorders, post-traumatic stress, mood disorders, and others. Prerequisite: PSY 141, PSY 205 (can co-req for concentration students). Offered Term 1.

#### **PSY 350: SPECIAL TOPIC: COGNITIVE NEUROSCIENCE (4)**

Cognitive neuroscience aims to understand the ways in which the brain influences how people think, feel, and act (the relationship between the brain and the mind). Throughout this course we will investigate higher mental processes—such as perception, attention, memory, cognitive control, and emotion—with a focus on how each are linked to neural processes. Methods (e.g., fMRI, EEG) to study these brain functions will be discussed along with notable empirical findings. Prerequisite: PSY 141. Offered Term 2.

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#### PSY 350: SPECIAL TOPIC: HOMICIDE (4)

This seminar course focuses on key studies conducted on the psychology of homicide. We will review various types of homicide, including fratricide, infanticide, serial homicide, suicide, and parricide. We will explore demographic information of both victims and perpetrators and will examine circumstances that precede homicides such as partner violence, sexual jealousy, same-sex conflicts over status and reputation, stalking, and fatal attraction. Prerequisites PSY 205 & PSY 208. Offered Term 2.

#### PSY 361: THEORY & RESEARCH IN CLINICAL/COUNSELING PSYCHOLOGY (4)

This course explores theories and research trends within the field of Clinical/Counseling Psychology. Students will learn to conceptualize individuals from a variety of perspectives and to critically examine evidence of treatment efficacy. This course will summarize the ethical guidelines, varied applications, and current state of clinical practice in the United States. PSY 361 is a prerequisite for PSY 362. Offered Term 1.

#### PSY 362: PRACTICE & TECHNIQUES OF CLINICAL/COUNSELING PSYCHOLOGY (4)

This course covers the basic techniques, skills, and intervention tools used in the counseling field. Students will be expected to engage in active role-play, to provide and receive interpersonal feedback, and to examine their individual assumptions in line with culturally informed practices. The course will emphasize general factors and an evidence-based orientation to counseling. Prerequisite: PSY 361. Offered Term 2.

#### PSY 363: PERSONALITY PSYCHOLOGY (4)

Personality is a very broad field of study. It refers to the set of enduring psychological traits within individuals that influence their interactions with, and their adaptations to, different environments. This course introduces students to the history of personality psychology and the research and applications of personality science. This course also introduces students to biological, cognitive, intrapsychic, and social factors that influence personality. Prerequisite: PSY 141. Offered Term 2.

#### PSY 371: EYEWITNESS MEMORY (4)

This course examines the psychology behind eyewitness memory. Why do witnesses make memory errors? How can these mistakes be prevented? We'll explore both questions by discussing notable research studies related to psychology and the law. Additionally, we'll examine cases of individuals who have been wrongfully convicted based on faulty eyewitness evidence. Examples of topics covered include: the cross-race effect, child eyewitnesses, co-witness effects, false confessions, jury decision making, identification procedures, and the cognitive interview. Prerequisite: PSY 205. Offered Term 2.

#### PSY 380: SUPERVISED FIELD PLACEMENT IN PSYCHOLOGY (4)

This is an experiential learning course which combines a field placement in the community with a formal reflective component and integrative project. Students will apply their knowledge of psychology in a relevant setting and reflect upon new learning experiences in a weekly seminar format. Placements must be arranged in advance via instructor consultation and include a minimum 112-hour commitment. Permission of instructor is required. Offered Term 2.

#### 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. Offered any term.

#### **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. Offered both terms.

#### **PSY 470: SENIOR SEMINAR (4)**

This course allows students to apply the knowledge and skills they have developed over the course of their undergraduate careers in psychology. Students' experiences in summarizing ideas in writing and in oral form will be practiced. Psychology majors will have opportunities to contemplate the future of the field of psychology through readings that highlight noteworthy and controversial recent findings. Prerequisite: senior psychology major or permission from the instructor. Offered Term 1.

#### 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 are due at the end of Term 1. Students will complete an APA-style thesis and present their projects

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at the Division III Science Seminar in Spring Term. Open to qualified senior psychology majors. Application with faculty is required prior to registration.