Psychology

Natural Sciences Division

Psychology is taught as the scientific study of behavior and mental processes. The psychology curriculum provides an opportunity for students to examine diverse theoretical views and findings in such areas as cognition, human development, learning, neuroscience, personality, social psychology and abnormal psychology. At all levels of study, the department gives students the opportunity to pursue research and to become involved in the work of local educational and mental-health agencies through community engaged learning (CEL) classwork and the Office of Community Partnerships.

The Kenyon College faculty voted to change from Kenyon units to semester hours. This change will go into effect for all students who start at the College in the fall of 2024. Both systems will be used throughout the course catalog with the Kenyon units being listed first.

New Students

Students should begin with PSYC 100 (Introduction to Psychology) or PSYC 110 (General Psychology), either of which is a prerequisite for all other psychology courses. These courses explore a variety of areas in which psychologists conduct research, including the biological foundations of behavior, sensory and perceptual processes, cognition, learning and memory, developmental psychology, personality and social psychology, psychological disorders, and variability in behavior related to culture. PSYC 100 is open only to first-years and sophomores. PSYC 110 is open to all students.

Students who have completed PSYC 100 (or have a score of 5 on the AP psychology exam) and are considering majoring in psychology should next take PSYC 200 (Statistical Analysis in Psychology). In this course, students acquire the basic statistical skills required to conduct and understand research in the field.

Students who elect to major in psychology take statistics and research methods courses along with six intermediate (200- and 300-level) courses in the following areas of psychology:

- Mind and brain
- · Clinical issues and health
- Person and society

Finally, all majors enroll in a two-semester senior practicum, in which they collaborate with their peers and professor while developing expertise on a topic of their choice and developing independent senior projects.

Requirements for the Major

Students majoring in psychology must complete at least 11 courses in the psychology department, with a minimum 2.5 major GPA.

1. Foundations

The required foundation courses include:

- PSYC 100: Introduction to Psychology or PSYC 110: General Psychology
- PSYC 200: Statistical Analysis in Psychology
- PSYC 250: Research Methods in Psychology

Majors are strongly advised to complete PSYC 200 by the end of their sophomore year. A grade of C or higher in PSYC 200 and PSYC 250 is required for these classes to count toward the major.

2. Intermediate Courses

Students are required to have a balanced curriculum within the discipline. Students take at least one course in each of the three areas of psychology. Of the six intermediate courses taken, at least two must be at the 300 or 400 level.

Mind and Brain:

NEUR 212: Introduction to Neuroscience

PSYC 201: Cognitive Psychology

PSYC 206: Psychology of Language

PSYC 208: Drugs and Behavior

PSYC 210: Social Mind, Social Brain

PSYC 275D: Animal Cognition

PSYC 303: Learning and Motivation

PSYC 307: Language Disorders

PSYC 310: Cognitive Neuroscience

PSYC 410: Research Methods in Human Neuroscience

Person and Society:

PSYC 223: Child Development

PSYC 224: Educational Psychology

PSYC 225: Social Psychology

PSYC 227: Cross Cultural Psychology

PSYC 228: Latino Psychology

PSYC 233: Psychology and the Law

PSYC 235: Environmental Psychology

PSYC 246: Psychology of Women and Gender

PSYC 322: Adult Development

PSYC 333: Media Psychology

PSYC 348: Adolescence

PSYC 349: Stereotyping, Racism and Prejudice

PSYC 350: Psychology in Context

Clinical Issues and Health:

PSYC 221: Abnormal Psychology

PSYC 226: Scientific Study of Personality

PSYC 230: Health Psychology PSYC 231: Positive Psychology

PSYC 244: Human Sexual Behavior

PSYC 309: Emotions

PSYC 341: Disaster Psychology

PSYC 342: Helping Professions in Psychology PSYC 343: Children, Psychology and the Law

3. Senior Practicum

All students are expected to take a two-semester senior practicum, PSYC 475-476, in which they focus on a topic of current research in psychology. In the fall semester, students develop expertise on a specific topic and propose an independent project to be completed during the spring semester. Independent projects may involve a research project, literature review or community service project, each with an accompanying paper.

Senior Capstone

In the context of the senior practicum, students complete a comprehensive project. Students present the results of these independent projects in a departmental research conference. Students present either a brief oral presentation or a research poster, which are judged via rubrics completed by faculty members in the department.

Additional <u>information about the senior capstone</u> in psychology is available on the department website.

Honors

Students who do excellent work are encouraged to apply to the department during the second semester of their junior year if they are interested in admission to the Honors Program. Participants complete a large-scale research project on an approved topic during their senior year. Each project is supervised by a primary faculty member but also is reviewed periodically by all members of the department prior to an oral examination by an outside examiner in the spring.

More <u>information about honors work</u> in psychology is available on the department website.

Ideal Progression through the Major

	COURSES	IMPORTANT ISSUES TO CONSIDER
First-year	PSYC 100 or PSYC 110	It is unlikely that you will get into any other psychology courses during your first year.
Sophomore year	One 200-level intermediate course, plus PSYC 200. NOTE: you must be a declared major. Taking PSYC 200 in the fall will allow you to take PSYC 250 in the spring. Only students planning to do off-campus study need to take PSYC 250 during their sophomore year.	If you plan to go on off-campus study for a full year, you must take PSYC 250 this year. There will be no exceptions made to this rule.
Junior year	PYSC 250, plus 2-3 intermediate courses. NOTE PSYC 250 is a prerequisite for all 300-level and 400-level courses.	PSYC 250 must be completed by the end of this year. Keep your off-campus study plans in mind when planning your courses.
Senior year	PSYC 475 and PSYC 476, plus 2-3 intermediate courses.	Students are required to take at least two 300-level courses. Students who will finish in a fall semester must take PSYC 475 and PSYC 476 sequence during their last full year on campus— be sure to let your advisor and the department chair know.

Courses in Psychology

Introduction to Psychology

PSYC 100 Credits: 0.5/4

Psychology is the study of behavior and mental processes. In this introductory course, we explore a variety of areas in which psychologists conduct research: the biological foundations of behavior, sensory and perceptual processes, cognition, learning and memory, developmental psychology, personality and social psychology, psychological disorders, and variability in behavior related to culture. This course is open only to first-year and sophomore students. This counts toward the foundations requirement for the major. No prerequisite. Offered every semester.

General Psychology

PSYC 110 Credits: 0.5/4

Psychology is the study of behavior and mental processes. In this foundation course, we explore a variety of areas in which psychologists conduct research: the biological foundations of behavior, sensory and perceptual processes, cognition, learning and memory, developmental psychology, personality and social psychology, psychological disorders and variability in behavior related to culture. Students who have completed PSYC 100 cannot take this course. This counts toward the foundations requirement for the major. No prerequisite. Generally offered every spring.

Statistical Analysis in Psychology

PSYC 200 Credits: 0.5/4 QR

This course is for psychology majors (or intended majors). Students learn to conduct a variety of statistical tests that are commonly used in psychological research. The course also builds the skills of choosing the appropriate statistical tests for particular research designs and writing and interpreting the results of statistical analyses. Students also learn to use the statistical software package SPSS. This counts toward the foundations requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5; declared psychology majors only. Permission of instructor by application. Offered every semester.

Cognitive Psychology

PSYC 201 Credits: 0.5/4

The goal of this course is to enlighten students about human thinking processes. This course covers research and theories regarding intelligence. Emphasis is on the study of laboratory research, with discussion of how the findings relate to real-world issues. Students should gain an understanding of general cognitive processes that apply to all humans, as well as a perspective on individual differences in cognition and how they may merge with our understanding of clinical disorders. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Psychology of Language

PSYC 206 Credits: 0.5/4

One thing that makes our species unique is our amazing capacity for language and complex symbol use. This course covers basic theory with respect to the evolutionary origins of language, cognitive neuroscience of language, basic psycholinguistics theory and application, nonhuman communication research, and issues of social cognition and language, as well as special cases and conditions in which language capacity or development is disrupted. By the end of the course, students have gained a heightened awareness of just how complex language use really is, along with a richer appreciation of the far-reaching impact it has on their everyday lives. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every other year.

Drugs and Behavior

PSYC 208 Credits: 0.5/4

This course addresses the ubiquitous presence of psychoactive drugs in human culture. The approach to understanding how drugs affect and are affected by our body, brain, behavior and culture is biopsychosocial, addressing neurobiological, psychological/behavioral and social/cultural factors that influence drug use and misuse. We draw knowledge from basic laboratory animal research and human drug studies, as well as personal memoirs and historical summaries. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5 or NEUR 212. Generally offered every year.

Social Mind, Social Brain

PSYC 210 Credits: 0.5/4

Humans are one of the very few "ultra-social" species on Earth. Interacting with others is an integral part of being human. Not surprisingly then, our brains have evolved to be wired for sociality. We explore how the brain supports complex social cognition and behavior such as understanding the minds of others, perception of faces and bodies, empathy and moral decision-making. We also explore the need to belong and the biological nature of social pain. The course is meant to be accessible to all students with an interest in the relationship between the social mind and the social brain, regardless of knowledge about the biology of behavior. Students are introduced to each topic primarily through books and essays written for non-experts. This counts as an elective for the major. Prerequisite: PSYC 100, 110, AP PSYC score of 5 or NEUR 212.

Abnormal Psychology

PSYC 221 Credits: 0.5/4

This course provides students with an overview of the classification, causes, pathways and treatment of adult mental disorders, including anxiety, mood disorders and personality disorders. Included is discussion of critical issues and controversies in this field, such as the definition of abnormality, as well as an extended emphasis on cross-cultural issues in psychopathology. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Child Development

PSYC 223 Credits: 0.5/4

This course focuses on normal human development from conception through adolescence. Biological and social influences on development are considered with an emphasis on their interaction and the context in which they occur. Students will have the opportunity to participate in community engaged learning (CEL) in this course. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Educational Psychology

PSYC 224 Credits: 0.5/4

This course involves the study of cognitive, developmental and motivational processes that underlie education. We also examine teacher behavior and other applications of psychology to education. Research and theory on student learning, motivation and development provide the core readings for the course. Individual and group differences as applied to learning environments are addressed. Other topics include multicultural education, achievement motivation, special education, public policy with respect to education, education outside of schools and recent trends in schools and education. Students develop their own teaching philosophy. Connections among a variety of disciplines (e.g., history, sociology, political science) are stressed, as well as links to the real world beyond the classroom. This course is appropriate for those interested in teaching, coaching or mentoring. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Social Psychology

PSYC 225 Credits: 0.5/4

Social psychology is the systematic study of social behavior. In general, it examines how we are affected by our social environment: how we perceive and interpret the behavior of others and the social situation, how we respond to others and they to us, and the nature of social relationships. Application of social psychological theory and methodology is encouraged through participation in small-scale laboratory or field observational studies. This counts toward the

person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Scientific Study of Personality

PSYC 226 Credits: 0.5/4 QR

This course introduces students to major approaches to understanding both consistencies in individual behavior and differences among individuals. Students learn about historical and modern approaches to the study of personality with an emphasis on empirical research. The course consists of lectures, in-class activities and class discussions. Students hone their skills in the areas of critical evaluation of research, written and oral communication, visual literacy and quantitative reasoning. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every other year.

Cross-Cultural Psychology

PSYC 227 Credits: 0.5/4

There are close to 8 billion people in the world. And yet most of the theories we use to explain psychological functioning have been based on limited samples drawn from the West. In this course, we examine in greater detail the impact of culture on human behavior and review issues such as the role of culture in the concept of the self, the cultural influences on social behavior, the association of culture and cognition, and the measurement and experience of cross-cultural psychopathology. By integrating research from various social science disciplines (such as anthropology and sociology), students should gain a wider appreciation of the influence of culture on everyday experiences, while simultaneously understanding that culture is not a static or homogeneous entity. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every other year.

Latino Psychology

PSYC 228 Credits: 0.5/4

Latino psychology is a vibrant and emerging field geared toward understanding the experiences of the largest minority group in the United States, either U.S.-born or U.S.-residing Latinos. Unlike "Cross-Cultural Psychology," its focus is less on the intercultural group differences and more on intracultural differences and similarities across Latino subgroups. More specifically, this course focuses on understanding the core experiences of Latinos in the U.S. while also revealing the heterogeneity of this group. Students begin this course by reviewing the history of Latino psychology. Following this, topics to be explored include a review of demographic variables (such as immigration/migration, socioeconomic status, language, gender, race and sexuality), and interpersonal variables (such as psychological acculturation, ethnic identity, cultural values and perceived discrimination), and how these variables often operate in

conjunction when trying to understand Latino mental health. A special focus of the class is on the assessment of Latino psychopathology, such as the Latino cultural idioms of distress "ataques de nervios," "nervios" and "susto." This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every other year.

Health Psychology

PSYC 230 Credits: 0.5/4

Health psychology addresses the cognitive, social and emotional factors related to health and illness, with an emphasis on the prevention and modification of health-compromising behaviors. A biopsychosocial approach is used to address topics such as: promotion of good health and prevention of illness; the recovery, rehabilitation and psychosocial adjustment that correspond with health problems; and the role of stress and coping in illness. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Offered every other year.

Positive Psychology

PSYC 231 Credits: 0.5/4

Although much of psychology's past has been spent investigating the problems facing human beings, the field and people in general are coming to realize that a life devoid of the negative is not synonymous with a life well-lived. This course focuses on the aspects of life that tend to help individuals and communities flourish. We discuss emotions (past-, present- and future-oriented), character traits (strengths and virtues) and institutions (work, school, family), and how these influence the good life. Through lecture, readings, discussions and hands-on activities, we investigate the empirical literature on positive psychology, including points of conflict and avenues for future research. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Psychology and the Law

PSYC 233 Credits: 0.5/4

This course introduces students to the major topics represented in the field of psychology and law. Students examine how psychological research (across subdisciplines such as social, clinical, cognitive and community psychology) can contribute to a better understanding of the law or legal process, how the legal system can be informed by the results of psychological research, and how psychological research can be more reactive to legal issues. Topics include the reliability of eyewitness testimony; factors that affect jury decision-making; interrogation and confessions; the clinical determination of insanity, competence and future dangerousness; myths associated with "psychological profiling"; sexual victimization of adults and children; race

and the law; and juvenile justice. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every year.

Environmental Psychology

PSYC 235 Credits: 0.5/4

Every day, we exist in a world that combines nature and buildings, open sky and low ceilings, supreme quiet and intense sound. This course considers how human beings interact with (and impact) their environment, both the natural world and human-built. What improves our well-being? What influences our performance or behaviors? And, if this Earth is all we have, how can we have a positive impact and how should be best protect it? We cover topics such as urban planning, principles of design, pro-environmental behavior and restorative spaces. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110.

Human Sexual Behavior

PSYC 244 Credits: 0.5/4

The primary goal of the course is to increase knowledge of human sexual behavior through consideration of research and theory on the topic. We read and discuss material relating to sexual attitudes, sexual identities, cultural influences on sexuality, and variations in sexual behavior. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Generally offered every other year.

Psychology of Women & Gender

PSYC 246 Credits: 0.5/4

Psychological research about women and gender is examined critically in this course. We examine research on gender stereotypes, on gender differences and similarities in behaviors, and on how gender relates to sexualities, power in society and experiences in the workplace. We examine the variety of theoretical perspectives that are used to try to explain gender-related behaviors. We use a variety of learning tools such as projects, papers, quizzes and discussion to learn the material. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Typically offered every year.

Research Methods in Psychology

PSYC 250 Credits: 0.5/4 QR

In this course, students learn the basics of research in psychology. Students participate in research projects conducted across different areas of psychology, which might involve observation and interviewing, psychological tests and measures, physiological measures and

computerized tasks. Students learn about issues of reliability and validity in psychological research, as well as ethical issues associated with psychological research. Students further develop techniques for descriptive statistical analysis of their data, and they communicate their research findings both orally and in writing, using the writing style of the American Psychological Association. This course is designed for sophomore and junior students planning to major in psychology. This counts toward the foundations requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5 and PSYC 200. Generally offered every semester.

Animal Cognition

PSYC 275D Credits: 0.5/4

Can ants count? Can gorillas "converse" about the past or the future? Do crows use tools? Can dogs read human faces to detect our mood or follow our gaze for guidance or direction? These are the types of questions we consider in this seminar. We examine how various cognitive abilities evolved in non-human animals and the purpose these abilities serve in their lives. Additionally, we explore the implications of animal cognition for our own cognitive abilities. General topics include memory, learning, conceptual abilities, spatial cognition, numerical competence, planning, social intelligence, communication and language, animal culture, and self awareness and theory of mind in non-human animals. This course can be used as an elective towards the neuroscience major or concentration. This counts toward the mind and brain requirement for the major. This course is the same as NEUR 275D. Prerequisite: PSYC 100, 110 or NEUR 212.

Learning and Motivation

PSYC 303 Credits: 0.5/4

This course provide students a comprehensive introduction to the theories and basic principles of learning and motivation in human and non-human animals, with an emphasis on associative learning — namely, classical and instrumental conditioning. We discuss how these principles can be applied to our everyday lives, from training pets and raising children to the development and treatment of mental illness and substance-use disorders. Students learn the scientific methods of the discipline and improve their critical thinking skills by reading and critiquing primary empirical sources. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 250 or NEUR 212. Generally offered every year.

Language Disorders

PSYC 307 Credits: 0.5/4

The goal of this course is to explore the current categories of language disorders in the Diagnostic and Statistical Manual for Psychology. Aside from learning more about individual differences in intelligence and cognitive processing, highlighted conditions include autistic spectrum disorder, ADHD and dyslexia. Another category of language disorders is specific

linguistic impairments (SLIs). Each student researches an assigned impairment with the goal of summarizing findings and highlighting needs for future work. A final category we explore is linguistic patterns associated with mental illness. Students also create a digital story to communicate important findings in the scientific literature regarding the assigned condition. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 250. Generally offered every year.

Cognitive Neuroscience

PSYC 310 Credits: 0.5/4

This course focuses on human brain systems that support sensory, motor, cognitive, social and affective phenomena. Early in the semester, we build a foundation of knowledge about brain anatomy and physiology, human sensory and motor systems, and the methods used in cognitive neuroscience research. We incorporate this knowledge into subsequent explorations of how the brain gives rise to complex phenomena such as attention, learning and memory, language, emotion and social cognition. The course aims to provide students with a greater understanding of, and appreciation for, the complex relationship between brain and mind, and how our understanding of this relationship is informed by cognitive neuroscience research. This counts toward the mind and brain requirement for the major. Prerequisite: PSYC 250 or NEUR 212. Generally offered every year.

Adult Development

PSYC 322 Credits: 0.5/4

This course provides an overview of developmental issues related to adult life and an in-depth examination of some current theory and research in adult development and aging. We cover the psychological, social and biological dimensions of adult development, including personality, learning and memory, family psychopathology and some clinical interventions from emerging adulthood through the lifespan. This counts toward the person and society requirement for the major. Prerequisite: PSYC 250. Generally offered every other year.

Media Psychology

PSYC 333 Credits: 0.5/4

An increasing and significant portion of human behavior and interaction either takes place through a mediated channel (a channel other than face-to-face) or involves an interaction with a mediated technology. Despite this, psychology has been slow to investigate the effects of mediated environments on previously established psychological constructs. This course attempts to provide a general understanding of the effects of media in two ways. First, we investigate what it means for an interaction to be mediated, the type of interactions that can be mediated and the nuance of various types of channels. Second, we attempt to understand the

effect of the technology that mediates our interactions on various aspects of human behavior. Topically, we cover numerous channels (movies, television, video games, virtual reality, the internet, social network sites, smartphones) and psychological concepts (self-presentation, aggression, addiction, belonging, impression formation, child development, social influence, self-disclosure). This counts toward the person and society requirement for the major. Prerequisite: PSYC 250. Generally offered every year.

Helping Professions in Psychology

PSYC 342 Credits: 0.5/4

This course introduces students to the helping professions in psychology. Through readings, videos, discussion, role-plays, and presentations, students are exposed to the major therapeutic orientations as well as newer schools of interventions. Case studies from the instructor's experience as a therapist will be used throughout the course to further highlight the material. This course is best suited for students who are considering applying to graduate school in helping professions in psychology. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 221 and 250.

Children, Psychology and the Law

PSYC 343 Credits: 0.5/4

Special issues arise when children become involved in our legal system, a system that was designed for adults. This course introduces students to the major topics represented in the field. Students examine how psychological research (across subdisciplines such as social, clinical, cognitive and community psychology) can contribute to a better understanding of the special issues pertaining to children who enter the legal system. Topics include the nature of and societal response to child maltreatment, the reliability of children's eyewitness testimony, jurors' perceptions of children's testimony, and juvenile justice. This course reviews how psychological research can contribute to a better understanding of these issues, how the legal system can be informed by the results of research, how psychological interventions can improve the mental health and well-being of legally involved youth, and how to design future research to address remaining questions. This counts toward the clinical issues and health requirement for the major. Prerequisite: PSYC 250. Generally offered every year.

Adolescence

PSYC 348 Credits: 0.5/4

This course provides students with an overview of important issues in adolescent psychology, from early adolescence to young adulthood. The major physical, cognitive, social and emotional developments that occur during this transitional period are covered. Influences on adolescent development such as family, peers, school, work and culture are also explored. This counts

toward the person and society requirement for the major. Prerequisite: PSYC 250. Generally offered every other year.

Stereotyping, Racism and Prejudice

PSYC 349 Credits: 0.5/4

This course introduces students to psychological theory and research concerning stereotyping, prejudice, racism and the effects of social stigma on self and society. Students examine how stereotypes, prejudice and racism are formed, maintained and reduced. For instance, students explore research unpacking the psychological underpinnings of why we treat "out-group" members differently from "in-group" members ("in-group bias"), as well as the experiences of stereotyping for targets (e.g., stereotype threat). Class content includes a review of research focusing on prejudice toward different social groups, including those formed by racial and ethnic origins, gender identity, sexual orientation, and overweight and physically different individuals. Students leave this class with concrete, evidence-based, practical strategies and interventions to work toward eradicating prejudice and racism. This counts toward the person and society requirement for the major. Prerequisite: PSYC 250. Generally offered every year.

Psychology in Context

PSYC 350 Credits: 0.5/4

This course focuses on the application of psychology to social settings and social services. We examine a selection of social problems and the influence of social systems on individuals. In addition to regular class meetings, students spend five out-of-class hours each week at a local community agency (Knox County Head Start). This commitment to community-engaged learning allows students to integrate service experiences into course-related material. This counts toward the person and society requirement for the major. Prerequisite: PSYC 100 or 110 or AP score of 5. Junior standing. Generally offered every fall.

Advanced Research Methods in Human Neuroscience

PSYC 410 Credits: 0.5/4 QR

This course introduces students to the methods used in human neuroscience research. Several structural and functional techniques used to investigate the brain will be discussed. However, the course will primarily focus on the two most commonly used tools in cognitive neuroscience: functional magnetic resonance imaging (fMRI) and electroencephalography (EEG). We will take a detailed look at the physical phenomena that make MRI possible, as well as the neurophysiological properties that produce the signal measured by MRI. A similar in-depth approach will be used to understand the physical and physiological processes involved in EEG. The course trains students in the practical aspects of fMRI/EEG data acquisition and analysis. We will therefore dedicate a considerable amount of time to "hands-on" data analysis using

several software packages that are commonly used in the field. This counts toward the advanced research requirement for the major. Prerequisite: PSYC 250 and 310 or NEUR 304, 305 or 307 or permission of instructor. Offered occasionally.

Advanced Research in Psychology Laboratory

PSYC 450 Credits: 0.25-0.5/2-4

Students conducting advanced research in psychology work with a faculty member and possibly a small group of students to conduct research in the faculty member's research area. Students critically analyze published research in the topic area and collect, analyze and write reports on data they have collected with a small group of students. Students are expected to work independently and collaboratively; the course emphasizes effective written and oral communication. This course is offered only on a credit/no credit basis. Permission of instructor required. Prerequisite: PSYC 250 and related intermediate-level study.

Psychology Senior Seminar

PSYC 475 Credits: 0.5/4

This is the first semester of the two-part sequence required for senior psychology majors. Each section has a different topic, but in every seminar, students read and discuss psychological literature, write and discuss critiques of research articles, review the literature and develop a research proposal on a topic related to the seminar's topic, and make a formal oral presentation to the class. This theoretical framework lays the groundwork for the execution of a project in the second half of the practicum. This counts toward the Senior Capstone requirement for the major. Senior standing and psychology major. Offered every fall.

Psychology Senior Practicum

PSYC 476 Credits: 0.5/4

This is the second semester of the two-part sequence required for senior psychology majors. This class features hands-on experience in creating and conducting research to allow students to learn by doing. We investigate the procedure of generating research from start to finish through the lens of theory learned in the first semester. This course strongly and equally emphasizes strengthening scientific writing skills, generating research designs and quantitative reasoning and application. Along the way we practice evaluating research designs and perfecting APA style. This course is designed to prepare students for a career in research in psychology. This counts toward the Senior Capstone requirement for the major. Prerequisite: PSYC 475. Senior standing, psychology major. Offered every spring

Individual Study

PSYC 493 Credits: 0.25-0.5/2-4

Individual study in psychology allows students the opportunity to pursue research on a topic of special interest. The course is designed in consultation with a faculty mentor. The level of credit can range from 0.25 to 0.5 unit, and students may take more than one semester of individual study. Typically, only juniors or seniors may pursue this option. To enroll, a student must first identify a member of the psychology department who is willing to mentor the project. The student must give the department chair a written description of the project, including the nature of the proposed work and a list of references. The project should include reading and reviewing scientific literature and likely entail a research project in which original data are collected. The student and faculty member are expected to meet, on average, once a week. The final project likely a paper written in the style of the American Psychological Association. Additional assignments may be required, including a public presentation. The amount of work required for the individual study should approximate that required of other 400-level psychology courses. It is possible for students to pursue a group project, but more work is expected for the completed project and each student writes her or his own individual paper. Because students must enroll for individual studies by the end of the seventh class day of each semester, they should begin discussion of the proposed individual study by the semester before, so that there is time to devise the proposal and seek departmental approval.

Senior Honors

PSYC 497Y Credits: 0.5/4

This is a program for senior candidates for honors in psychology, culminating in a senior honors thesis. The course will consist of a research project in some area of psychology. A student who wishes to propose an honors project must meet each of the following three criteria: (1) the student must have a GPA of 3.7 in psychology and an overall GPA of 3.5; (2) the student must have participated in a psychology department-approved research experience (which might be research in a research methods course, independent study or summer lab work); and (3) the student must have completed a minimum of 4 units in psychology and have taken the appropriate core courses for the proposal before the senior year. To continue in honors, students must earn an A in PSYC 475 during the fall of their senior year to continue in the honors program. Students enrolled in this course who successfully complete PSYC 475 with an A will be automatically added to PSYC 498Y for the spring semester. If at any point during the yearlong process, either the student or the departmental faculty determine that the project should not move forward as an honors project, it will automatically convert to an individual study (IS) for .50 units. If such a change occurs in the spring term, the fall designation for Honors will also be changed to an IS worth .50 units. Permission of instructor and department chair required.

Senior Honors

PSYC 498Y Credits: 0.5/4

This is a program for senior candidates for honors in psychology, culminating in a senior honors thesis. Students will be required to successfully complete PSYC 475 (earn an A) and PSYC 497Y. If at any point during the yearlong process, either the student or the departmental faculty determine that the project should not move forward as an honors project, it will automatically convert to an individual study (IS) for .50 units. If such a change occurs in the spring term, the fall designation for Honors will also be changed to an IS worth .50 units. Permission of instructor and department chair required.