Psychology

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Psychology is the scientific study of the mind and behavior, and the application of that science to improve the quality of life.

Learning Goals: Upon graduation, students will demonstrate:

- **Knowledge of psychology**
  - Show familiarity with important psychological discoveries. Use psychological theories to explain or predict behavior and mental processes. Use scientific evidence to evaluate theoretical claims. Describe ways to apply psychological concepts to pressing social issues or in individual, relational, educational, occupational, or clinical contexts. Analyze complex, enduring, or controversial “big ideas” in psychology.

- **Scientific reasoning**
  - Find, read, and understand credible sources of psychological scholarship. Use skeptical inquiry and creative thinking to critique psychological theories and research findings. Propose meaningful research questions. Use statistical and research design concepts to test hypotheses. Analyze and interpret psychological data. Use knowledge about the scientific method to evaluate the quality of research evidence. Evaluate how well research findings apply to the world at large.

- **Ethical and social responsibility in a diverse world**
  - Apply the principles of research ethics, including in research with diverse or vulnerable persons or nonhuman animals. Discuss how societal or cultural developments may relate to the way psychologists theorize about behavior and mental processes. Recognize ways in which sociocultural, theoretical, or personal biases may influence the design and interpretation of research. Show sensitivity to issues of power, privilege, and discrimination, including when interacting with people of diverse abilities, backgrounds, and cultural perspectives. Recognize, understand, and respect the complexity of sociocultural, international, and other forms of human diversity.

- **Communication**
  - Communicate effectively about psychological science in oral and written formats in ways that are consistent with established standards, including with the use of information technology as appropriate. Present clear and coherent arguments, including with the display of data.

- **Professional development**
  - Seek and respond appropriately to feedback from educators, mentors, supervisors, or experts to improve performance. Collaborate on group projects productively. Describe how psychological science or scientific problem-solving may be helpful in the workplace. Propose self-management and self-improvement strategies based on psychological knowledge. Discuss the meaning of one’s identity as a student of psychology in terms of the field’s history and contemporary issues.

Distribution: Courses completed in psychology apply to the social sciences distribution area, with the following exceptions:

- Cultural pluralism or social sciences: 218, 239, 309, 311
- Quantitative analysis: 210
- Science: 215, 225
- None: 325
Total credit requirements for a Psychology major: A student who enters Whitman with no prior college-level work in any of these areas would need to complete at least 36 credits in psychology, at least 2 credits in biology, and at least 2 credits in philosophy

The Psychology major:

- 36 Credits in Psychology (with an additional minimum of 2 credits in biology and 2 credits in philosophy)

- Required Courses
  - Psychology 110, 210, 210L, 220, 420, 495, and 496 or 498
  - One course from three of the four foundation areas
    - Clinical/Personality: Psychology 216, 260, or 270
    - Cognitive/Learning/Physiological: Psychology 215, 217, 225, 229, or 390
    - Developmental: Psychology 218, 219, or 240
    - Social: Psychology 230, 231, or 239
      - A special topics course may satisfy a foundational area requirement only if that has been specified in the course’s description.
  - One 300-level seminar course numbered 300-349
  - At least 2 credits in biology and 2 credits in philosophy
    - Excluding independent study and Philosophy 200

- Other notes
  - Students must complete Psychology 210, 210L and 220 by the end of their junior year
  - No courses may be taken PDF

- Senior Requirements
  - Psychology 420, 495, and 496 or 498
  - Thesis paper
  - One hour oral defense of the thesis

- Honors
  - Students do not apply for admission to candidacy for honors
  - Students must submit a proposal for their thesis or project
    - Must be submitted within the first six weeks of the two-semester period in which student is eligible
  - Accumulated at least 87 credits
  - Completed two semesters of residency at Whitman.
  - Cumulative GPA of at least 3.300 on all credits earned at Whitman College
  - Major GPA of at least 3.500
  - Complete a written thesis or research project prepared exclusively for the satisfaction of this program
  - Earn a grade of at least A- on the honors thesis or project and the honors thesis course
  - Pass the senior assessment with distinction
  - Chair of the department will notify the Registrar of students attaining Honors no later than the beginning of week 12 of the semester.
  - An acceptable digital copy of the Honors Thesis must be submitted to Penrose Library no later than Reading Day

The Psychology minor:

- 15 Credits

- Required Courses
  - Psychology 110 and 210
  - One 300 level seminar
Two additional psychology courses

Other notes
- Psychology 407, 408, 495, 496, and 498 may not be used to satisfy minor requirements
- No courses may be taken PDF

The Psychology+French combined major:
- All the required 36 Credits for a Psychology major (with an additional minimum of 2 credits in biology and 2 credits in philosophy)
- A total of 24 credits, comprised as follows:
  - At least 16 credits taught in French at the 200 level or above, or equivalent.
  - Up to 12 credits comprised of any combination of the following:
    - Up to 4 AP /IB credits (see note)
    - Up to 8 credits from approved courses taught in English
    - Up to 4 credits “double-dipped” with approved courses counted toward another major or minor program
    - Up to 8 credits transferred from off-campus studies or another institution
- Attainment of B2 or Advanced Low level on a recognized language proficiency assessment (DELF, ACTFL, etc.).
- Two or more of the following integrative components with the primary major:
  - A thesis topic that explicitly incorporates a significant portion of French/ Francophone content, broadly understood (textual, geographic, theoretical, historical, etc.)
  - A grade of B or higher in a course in Psychology taught in French (normally only an option through off-campus studies)
  - A course in Psychology that has been approved as a “double dip” (see note)
  - An internship related to Psychology, conducted in a French setting
  - An oral presentation of the senior project (or equivalent) in French, for a general public
  - Portfolio + reflective essay in French

- Complete the senior self evaluation survey about their combined major experience.

- **Honors in Psychology+French** will be determined according to the criteria of the Psychology major.

- **Notes:**
  - Certain majors may allow for a “double dip”, such as:
    - An approved course taught in English that counts towards both the major requirements and the French requirements.
    - A course completed in French off campus that counts towards both the major requirements and the French requirements.
  - Within the 12-credit transfer limitation, any university-level courses taught entirely in French may count toward the French requirements, regardless of topic.
  - Psychology+French candidates have a major advisor in Psychology, and a second advisor from the French department who works with them to define and assess the integrative component. Students should approach a French advisor as soon after declaring their primary major as possible.
110 Introduction to Psychology  
Fall, Spring  
Fall: Blagov, Herbranson, Srigley; Spring: Michael, Prull, Srigley  
3 credits  
The science of psychology as intended for general and beginning students. Designed to introduce students to the technical vocabulary, methodology, and principal fields of research. Analysis of such topics as learning, development, personality, behavior pathology, emotions, and social behavior. All sections designed to introduce the student to the basic material of the introductory psychology course.

210 Psychological Statistics  
Fall, Spring  
Fall: Prull; Spring: Herbranson  
3 credits  
This course introduces students to descriptive, correlational, and inferential statistical methods as well as some of their applications in psychology. The final grade is based on completion of homework assignments and examinations. The material is at an intermediate level of complexity, and students are advised to take the course early in preparation for more advanced work. Psychology 210L also is required for the psychology major. Not available to senior psychology majors without department consent.

210L Statistics Lab  
Fall, Spring  
Fall: Prull; Spring: Herbranson  
1 credit  
This lab is an introduction to the use of automated statistical analysis tools appropriate for large data sets. The final grade is based on completion and interpretation of weekly data analysis assignments. Pre- or corequisites: Psychology 210.

215 Cells to Brain to Mind  
Not offered 2022-23  
4 credits  
This introduction to psychobiology will relate the molecular and cellular workings of the brain to behavior and mind. We will cover the cellular basis of information flow across neural networks (including basic science behind psychopharmacology), sensation and perception, conscious and unconscious behavior, learning and memory, neurobehavioral disorders, and how the interplay between genes and environment contributes to the biological basis of individuality. The course will be a mix of lectures and in class projects that draw on case studies and animal models to help develop an understanding of the tools and experimental approaches used in psychobiology.  
Prerequisite: Psychology 110.

216 Emotion  
Not offered 2022-23  
4 credits  
This course will grapple with fundamental questions about the nature of emotion. What constitutes an emotion? What causes an emotion? Are there basic emotions that exist across culture and history? If so, how many are there and which make the cut? What is the purpose of emotion? How do scientists measure emotion? How is emotion represented in the brain? What role does emotion play in mental illness, moral judgment, communication, and other important human phenomena. In answering these questions, we will draw on a variety of psychological subfields as well as disciplines outside of psychology. Readings will be journal articles and book chapters. Writing assignments will apply emotion theory to personal experience and case material. Prerequisite: Psychology 110.

217 Psychology and Law  
Fall  
Michael  
4 credits  
This course introduces the ways in which psychological research and practice influence the legal system and, to some extent, how law influences mental health practitioners. Topics that illustrate issues related to science vs. pseudoscience, improving measurement and decision-making, mental health, and human diversity will receive emphasis. The general topics may include: investigation techniques, pretrial consulting, forensic assessment in criminal and civil cases, psychology of the trial and jury, punishment and correction, psychology of victims, discrimination, and civil rights. The specific topics may include psychological ethics, profiling, interrogation, lie detection, jury selection, competence to stand trial, eyewitness testimony accuracy, the insanity defense, jury decision-making, mental illness and retardation of the offender, psychopathy, battered spouse syndrome, and
contributions of psychology to legal cases related to race, gender, and sexual orientation. *Prerequisite:* Psychology 110.

218 Psychology of Poverty
Spring Clearfield 4 credits
The United States today has a highly unequal distribution of wealth and income, with the top one-tenth of 1% of our population owning almost as much wealth as the bottom 90%. Tens of millions of people live below official poverty thresholds in the U.S., including around 20% of children. What are the psychological implications of being poor in such an unequal society? How are the impacts of poverty and economic inequality evident in our mental health, physical health, family relationships, and personal identity? In this course, we will study: 1) psychological concepts of social class, 2) the effects of poverty across the lifespan on such topics as child development, parenting, mental and physical health, family relationships, and personal identity, 3) the psychological stigma of being poor, and 4) justifications for inequality. Assessment will include class discussion, frequent short writing assignments and a final paper. *Prerequisite:* Psychology 110.

219 Educational Psychology
Not offered 2022-23 4 credits
In this course, we will investigate issues and research in educational psychology. The course will focus on theories within the field of child and adolescent development as they apply to educational theory and practice. We will read both theoretical and empirical literature, with an eye toward using psychological concepts to improve children’s and adolescents’ educational outcomes. Topics will include student development, evaluation techniques, tracking and ability groupings, teaching approaches, and motivation. Assignments will include short response papers related to observations and readings, exams, and a final project that requires students to apply their knowledge to an issue in education. *Prerequisite:* Psychology 110.

220 Research Methods
Fall, Spring Fall: Michael; Spring: Meyers, Pahlke 4 credits
This course will provide students with an understanding of the research methodology used by psychologists. Students will learn to read and critique psychological studies and learn the details of experimental design. Students will also design an empirical study, review the related literature, and learn to write a formal APA-style research report. *Prerequisites:* Psychology 110, 210 and 210L.

225 Behavioral Neuroscience
Not offered 2022-23 4 credits
This course will introduce students to the field of psychobiology and topics fundamental to neuroscience (neuroanatomy, neurophysiology, and neurochemistry). Chapters from popular science books will frame discussions relevant to the molecular and cellular properties of the nervous system as they relate to behavior. In addition, students will engage in careful analysis of brain-behavior relationships by reading and evaluating primary literature. Specific topics will include the electrical and chemical basis of neural functioning, the structure and function of sensory and motor systems, the physiological basis and treatment of psychopathology; and the biology of central processes including but not limited to learning, memory and emotion. The course will include lectures (2x/week) and laboratory exercises (1x/week) that will enable students to develop an understanding of the tools and experimental approaches used in psychobiology. *Prerequisite:* Psychology 110. *Corequisite:* Psychology 225L. Credit not allowed if Psychology 215 has been taken.

229 Cognitive Psychology
Spring Prull 4 credits
This course examines the theories, issues, and research associated with the ways that people come to know and understand the world in which they live. Topics include pattern recognition, attention, memory, imagery, language, problem-solving, decision-making, and consciousness. Course meetings are twice weekly. At least two essay
examinations and one research paper are required. Prerequisite: Psychology 110. Credit not allowed if Psychology 349 has been taken.

**230 Social Psychology**  
*Fall, Spring*  
Fall: Meyers; Spring: Srigley  
4 credits  
This course provides students with a broad introduction to the field of social psychology, the study of how others influence our thoughts, feelings, and behavior in a social world. Course content will focus on both theoretical and empirical research to explore the ways in which social situations affect our cognition, emotion, and action, and the ways in which the self contributes to the social construction of human behavior. Specific topics include social judgment, group behavior, stereotyping and prejudice, conflict and war, liking and love, helping, and persuasion, among others. Prerequisite: Psychology 110.

**231 Psychology of Intergroup Relations**  
*Spring*  
Meyers  
4 credits  
This course is intended to provide a foundation in understanding a core issue in social psychology, intergroup relations, which focuses on the psychological processes involved with how individuals in groups perceive, judge, remember, reason about, feel, and behave toward people in social groups. Social groups can take many forms, ranging from classic social groups (e.g., race, gender, ethnicity, religion, sexual orientation) to minimal groups where membership is arbitrary. Throughout the course we will examine intergroup interactions, social categorization, stigma, prejudice/discrimination, and individual differences (e.g., political ideology, social dominance orientation, etc.). We will accomplish this through a combination of readings, class discussion, writing assignments, and a final project. Prerequisite: Psychology 110.

**239 Psychology of Gender**  
*Not offered 2022-23*  
4 credits  
This course will begin with an empirical and theoretical exploration of conceptions of sex and gender. We will then explore how gender differences manifest themselves in all aspects of individuals’ lives, including childhood, love and dating relationships, families, the media’s influence, work, violence, and mental health. Assessment will include class discussion, quizzes, and writing assignments. Prerequisite: Psychology 110 or Gender Studies 100.

**240 Developmental Psychology**  
*Spring*  
Clearfield  
4 credits  
This course provides students with a broad introduction to developmental psychology, the study of how we go from a single cell to a walking, talking, thinking adult in a social world. The goals of the course are to promote critical thinking and problem-solving skills using readings, data and video on issues in perceptual, motor, social, and cognitive development, from pre-natal development through emerging adulthood. Students will understand the major issues in developmental psychology and developmental processes through critical reading of research reports and popular press, evaluating conflicting data, interpreting data, and generating testable hypotheses. Prerequisite: Psychology 110.

**247, 248 Special Topics**  
3-4 credits  
These courses focus on topics within psychology and/or research interests of psychology faculty. These courses are generally not offered regularly. Enrollments in 200-level special topics courses can be larger than the limited-enrollment 300-level seminars, and these courses may provide broad surveys of a certain domain within psychology. Prerequisite: Psychology 110. Any current offerings follow.

**260 Psychological Disorders**  
*Spring*  
Armstrong, Blagov  
4 credits  
This course is a broad overview of psychopathology. It covers the classification, symptoms, epidemiology and morbidity, and prominent etiological models of the major kinds of psychological disorders. It examines critically
issues related to different approaches to diagnosis, the standard of treatment for different disorders, and several types of research. Prerequisite: Psychology 110.

270 Personality Psychology
Fall, Spring  Fall: Srigley; Spring: Blagov  4 credits
This course is about the science of individual differences (meaningful ways in which people differ) and personality structure (the organization of mental processes shared by most people). We will examine personality theories and research examples from several psychological paradigms. We will address such issues as the measurement, science vs. pseudoscience, and pathology of personality. The readings will include a textbook, and they may include a few articles and short stories. Assessment may include quizzes, exams, and written critiques of personality test results. Students will choose to critique either their own results or those of volunteers. Prerequisite: Psychology 110.

309 Science of Sexual Orientation
Fall  Blagov  3 credits
This advanced seminar explores critically the contemporary psychological science of human homosexuality (major theories, methods, findings, and gaps in our knowledge). Other forms of sexual diversity may be addressed. The course emphasizes empirical studies and reviews in such areas as the subjective experience, psychobiology, and developmental course of homosexuality, as well as questions related to same-sex relationships and parenting, sexual-minority discrimination, and gay-affirmative therapy. Most class meetings will involve guided discussion of assigned readings; toward the second half of the semester, students will lead discussion with the instructor’s support. Additional assignments may include weekly written responses to the readings and two or three papers. May be taken for credit toward the Gender Studies major or minor. Prerequisites: Psychology 110 and 210 or consent of instructor.

310 Seminar in Adolescent Development
Fall  Pahlke  3 credits
This seminar course explores development over the course of adolescence, focusing on physical, cognitive, social, and personality transitions. Students will explore central psychological issues of this developmental period (e.g., identity, autonomy, intimacy, and sexuality). Because development takes place in context, we will pay particular attention to the influences of family, peer group, school, and culture. Coursework will involve reading original source materials, and class sessions will include a combination of lecture and discussion. Assignments will include writing related to observations and readings, oral presentations and discussion-leading, and a theoretical paper. Prerequisite: Psychology 218 or 219 or 240.

311 Development and Parenting Across Cultures
Not offered 2022-23  3 credits
This seminar explores development and parenting across cultures. The first half of the course will focus on theory and research on families in cultures outside the U.S. The second half of the course will focus on racial/ethnic groups within the U.S. Topics will include parental beliefs and expectations, parenting strategies, parental engagement, and children’s and adolescents’ academic and social outcomes. Weekly written responses, a theoretical paper, and class participation will form the basis of the course grade. Prerequisite: Psychology 218 or 219 or 240.

315 From Columbine to Parkland: How school shooters develop
Not offered 2022-23  3 credits
The US has had 57 times as many school shootings as the other major industrialized nations combined. Who are these shooters and how did they develop? This course will explore the development of these teens through case studies along with theoretical and empirical work on likely contributing factors. Through the lens of developmental psychology, we will explore topics such as physiology and brain development, psychopathy, psychosis, trauma, decision-making, masculinity, bullying, parenting and the media. Assignments may include class discussion, frequent short writing assignments, class presentations and a final paper. Prerequisite: Psychology 240 or 260.
317 Perspectives on Disgust
Spring  Armstrong  3 credits
What makes something disgusting? Why do we experience disgust? How did it evolve? How is it shaped by culture? What role does disgust play in moral judgment? What role does disgust play in psychopathology? This course will explore these questions and more through classic and contemporary works of psychologists, evolutionary biologists, cultural anthropologists, and literary writers. In addition, the course will provide a foundation in psychological research and theory on emotion. Prerequisite: six credits in psychology.

318 Child Abuse and Neglect
Spring  Clearfield  3 credits
Rates of child abuse and neglect are increasing in the U.S., with the highest rates among infants and children under 5. In this course, we will explore the neurological, psychological and emotional effects of neglect and abuse on young children. We will learn about Adverse Childhood Experiences (ACEs), focusing on physical and emotional neglect, as well as physical, emotional and sexual abuse. Additional topics may include treatments, foster care and the child welfare system. Prerequisite: Psychology 218 or 240.

320 Seminar: Psychology of Aging
Not offered 2022-23  3 credits
This course surveys basic knowledge in the psychology of aging. Models of successful aging, social changes in late life, age-related changes in cognitive and intellectual functioning, psycho-pathology and the consequences of age-related degenerative diseases (Alzheimer’s and Parkinson’s diseases) are among the topics discussed. The course will likely motivate students to examine their preconceptions about older people and the aging process. Prerequisite: Psychology 110.

321 Diversity and Intergroup Relations
Not offered 2022-23  3 credits
This seminar will examine contemporary issues in intergroup relations focused on the perspective of diversity. In order to explore these topics, we will primarily focus on large societal groups that differ on cultural dimensions of identity, with a focus on race and gender. We will examine how diversity in our environments, institutions, and messaging, impact intergroup outcomes such as prejudice, contact, and behavior. In addition, we will also examine how perceptions of diversity and inclusion shape our attitudes and behaviors. The goal of the course is to provide an overview of social psychological frameworks used to study diversity and inclusion, and to stimulate creative thinking and research on this topic. We will accomplish this through a combination of weekly readings and short written assignments, student presentations, group discussions, and a final research proposal paper. Prerequisites: Psychology 218 or 230 or 231 or 239.

322 Seminar in Stereotyping, Prejudice and Discrimination
Not offered 2022-23  3 credits
In this seminar we will examine contemporary issues in stereotyping, prejudice, and discrimination, both from the perceiver’s and the target’s perspective. We will cover the phenomena and processes associated with one’s beliefs about members of social groups (stereotypes), attitudes and evaluative responses toward group members (prejudice), and behaviors toward members of a social group based on their group membership (discrimination). We will also study how these issues shape the experiences of social group members, especially when they are members of low-status and/or minority groups. In order to explore these topics, we will primarily focus on large societal groups that differ on cultural dimensions of identity, with a focus on race and gender. The goal of the course is to provide an overview of social psychological frameworks used to study stereotyping and prejudice, and to stimulate creative thinking and research on this topic. We will accomplish this through a combination of readings, student presentations, group discussions, and written assignments. Prerequisite: Psychology 218 or 230 or 231 or 239.

325 Brain and Language
Not offered 2022-23  3 credits
If there is one trait that is uniquely human, it is our capacity for language. But when and why did this trait evolve? Clues to the origins, evolution, and use of language may exist by studying the brains and behaviors of other groups of animals in addition to our own. In this seminar, we will discuss how social experience and speech/language deficits have informed our understanding of how the human brain and body govern our ability to communicate with sounds (e.g., speech) and gestures (e.g., sign). By examining the nervous and communication systems of other animal species, we will identify additional biological bases necessary for speech and, potentially, language. Students will be expected to prepare written responses to readings, lead a class discussion, write a final term paper, and participate in an oral debate. Students will read literature from multiple disciplines (e.g., psychology, biology, anthropology) and theorize about how and why language evolved and what may be special about our brains to support this human-specific behavior. No distribution credit. Prerequisite: Psychology 215 or 225.

330 Personality: Clinical Science and Research
Not offered 2022-23 3 credits
What is personality, and in what important ways do people differ? Valid theories of personality and its pathology may help us ask research questions, make clinical inferences, and treat patients. How do scholars evaluate such theories? Students will critique primary sources (with a focus on modern theories) and collaborate to interpret quantitative and qualitative data and to complete an original research project. The main goal will be to help students enhance their scientific critical thinking while theorizing about what it means to be a person. Prerequisite: Psychology 260 or 270, or consent of instructor.

339 Comparative and Evolutionary Psychology
Spring Herbranson 3 credits
This seminar explores psychological topics across a wide variety of species, with a particular emphasis on evolution as a determinant of behavior and cognition. Course content will include modern research on animal behavior and ethology, stressing the importance of an animal’s biological, ecological and social milieu. Specific topics may include dominance and social structure, foraging, mating, predation, communication, perception, conflict, and cooperation. Prerequisite: Psychology 229 or 390.

347, 348 Special Topics Seminars
3-4 credits
These seminars focus on specific topics within psychology and/or research interests of psychology faculty. These courses are generally not offered regularly. Individual courses may be taught only once, and course offerings are likely to change substantially from year to year. Enrollments are generally limited to 12 students per class so that class discussion opportunities are maximized. Any current offerings follow.

349 Seminar in Human Memory
Fall Prull 3 credits
Other than that which is genetically coded, everything that we know about the world represents some aspect of human memory. This seminar examines historical and contemporary accounts of human memory, with particular emphasis on reading and discussing primary research articles. Neurobiological as well as psychological perspectives to the study of human memory will be taken. Domains that are likely to be explored include memory processes (e.g., encoding, storage, and retrieval), distinctions (e.g., short-term/long-term, episodic/semantic, implicit/explicit) and systems (e.g., temporal and frontal lobe correlates of memory). Class presentations and an empirical project are required components of the course. Prerequisites: Psychology 110 (or equivalent) and 229.

353 Practicum in Psychology
Not offered 2022-23 1-3 credits
Practicum experiences allow students to integrate and apply issues they have learned in coursework. Placements vary by semester and may include school, hospital, community, or outpatient sites. Students engage in a minimum of three hours per week in off-campus placement, complete readings and assignments, and meet weekly with course
instructor. Prerequisites: Psychology 110 and consent of instructor. Corequisites: Psychology 356 (if taking for the first time).

**356 Applied Psychology**
*Not offered 2022-23*  
3 credits  
This course focuses on the applications of psychology in community settings. Integrates theory, research, and treatment modalities to introduce the scientist practitioner model of psychology. Addresses professional issues and career possibilities in applied areas of psychology. Class sessions devoted to a discussion of the readings, exposure to basic therapeutic skills, and group supervision of practicum experiences. All students required to be concurrently enrolled in Psychology 353. Prerequisites: Psychology 260 and consent of instructor. Corequisite: Psychology 353.

**358 Research Experience**
*Fall, Spring*  
Staff 3-4 credits  
A supervised research experience in an ongoing lab project, arranged with the instructor, giving students the opportunity to recruit participants, collect, code, and analyze data, as well as read relevant literature and write lab reports. Prerequisite: consent of instructor.

**390 Psychology of Learning**
*Not offered 2022-23*  
4 credits  
This course uses principles of conditioning and learning to explore how humans and animals adapt their behavior to meet changing environmental demands. Students will learn about historical and modern applications of Pavlovian and operant conditioning, and will apply those models to contemporary problems in psychology. In the associated lab, rats will be used as a model organism to demonstrate principles of learning as tools for the modification of behavior. Prerequisite: Psychology 110.

**407, 408 Independent Study**
*Fall, Spring*  
Staff 1-3 credits  
Independent study in an area of special interest selected by the student with direction of a staff member. Prerequisite: consent of instructor.

**410 Multivariate Statistics for Psychology**
*Not offered 2022-23*  
2 credits  
This course covers advanced statistical procedures, with an emphasis on multivariate analyses. Class meetings will involve analyzing and interpreting complex data sets. We will also consider how the availability of advanced statistical analyses influences measurement, theory, and experimental design within the field of psychology. Intended for students who already have an understanding of basic statistics and are familiar with IBM SPSS software. Prerequisites: Psychology 210 and 210L.

**415 Theories of Psychotherapy**
*Not offered 2022-23*  
3 credits  
This seminar introduces major theories that inform case conceptualization and intervention in psychotherapy, and it invites their critical comparison. It touches upon issues related to evidence, ethics, and diversity in therapy. The course does not teach psychological evaluation or intervention skills or how to critique psychotherapy research. Student responsibilities (some of which may require group work) will likely include weekly reading and brief written assignments, class participation, a presentation or leading discussion, and a paper. Prerequisites: Psychology 260 or 270 or consent of instructor.

**420 Contemporary and Historical Issues in Psychology**
*Fall*  
Clearfield, Meyers, Pahlke 4 credits  
This capstone course considers where psychology came from, what it is now, and what the field should be, through close reading of historical and current literature. Goals are: 1) to provide senior psychology majors a conceptual and historical background by which to consider contemporary matters of pressing concern; 2) to assist students in their
integration of psychology as a discipline; and 3) to consider the wide range of ethical issues pertinent to the study and practice of psychology. Students are asked to write several position papers, complete a take-home exam, and lead a class discussion on a current debate. Prerequisite: restricted to senior psychology majors and minors; others by consent of instructor. Required of all senior psychology majors.

**495 Thesis**
**Fall**  
Staff  
3 credits  
First semester of a yearlong thesis project, usually completed in a small research team. The course includes separate weekly meetings with class, with research team, and with advisor. Several drafts of a well-documented proposal are expected throughout the semester. Open only to senior psychology majors. **Prerequisite:** Psychology 220.

**496 Thesis**
**Spring**  
Staff  
3 credits  
Second semester of a yearlong thesis project, usually completed with a small research team. The course includes separate weekly meetings with class, with research team, and with advisor. Students are expected to give an oral presentation on the thesis project. A polished final draft is typically due in early April. Open only to senior psychology majors. **Prerequisite:** Psychology 495.

**498 Honors Thesis**
**Spring**  
Staff  
3 credits  
Second semester of a yearlong thesis project, usually completed with a small research team. The course includes separate weekly meetings with class, with research team, and with advisor. Students are expected to give an oral presentation on the thesis project. A polished final draft is typically due in early April. In addition, a public presentation, preferably at a professional or student conference, is required. Open only to senior psychology majors.