PSYCHOLOGY

Chair: Diana Leonard
Administrative Coordinator: Rian Brennan

Psychology is the science of behavior and mental processes. The department's goals are to give students both a strong, scientifically rigorous base in the major subdisciplines of psychology and an exposure to applications of psychology. The curriculum and related activities acquaint students with the conceptual issues, theoretical models, empirical observations, and ethical decisions that form the basis of psychological knowledge. The department strives to develop students' competencies in conducting and evaluating psychological research, and many students have had the opportunity to publish papers and give presentations in conjunction with faculty. In addition, students can gain experience in applied psychology through the internship program.

Internship Program
The department's active internship program offers supervised opportunities for gaining experience and training in psychological activities at a variety of social service agencies in Portland and abroad. This field experience provides an important supplement to the student's academic program.

Resources for Nonmajors
Introduction to Psychology (PSY 100) is a useful course for most Lewis & Clark majors, since very few disciplines can be divorced from an understanding of human behavior. Statistics courses provide useful tools that are recommended by several majors. In addition, 200-level courses are open to nonmajors who wish to pursue an interest in psychology beyond the introductory level of PSY 100. These courses are appropriate for students interested in pursuing careers in education, business, and social services who also wish to have a foundation in the understanding of human learning, thinking, development, social interaction, and psychopathology.

The Major Program
The major begins with the foundation courses: PSY 100 Introduction to Psychology, PSY 200 Statistics I, and PSY 300 Psychology Methodology. Seven other courses, chosen in conference with the major advisor, fulfill the major requirements. Of these seven courses, two are at the intermediate (200) level, one must be an advanced (300-level) psychology lab, and one must be a capstone (400-level) course. The remaining three courses are electives, two of which must be at the advanced or capstone level. Students may arrange to take independent study courses in consultation with the supervising faculty member.

Psychology Methodology (PSY 300) is the department's final foundation course and gateway to more advanced coursework. Psychology Methodology culminates in the individually written sophomore thesis, and students are required to complete and earn a passing grade on the sophomore thesis in order to pass the course.

Capstone courses are challenging seminars that offer majors an integrative experience toward the end of their college careers. A capstone course may involve any of the following: integration of various subareas within psychology, integration of psychology and other disciplines, or application of psychological principles and methods to real-world problems and/or basic scientific questions. Capstone courses typically include a major project and in-class presentation.

Transfer students must consult the department chair to determine what courses they need to take to fulfill the major requirements.

Major Requirements
A minimum of 40 semester credits (10 courses) in psychology, distributed as follows:

- PSY 100 Introduction to Psychology
- PSY 200 Statistics I, ECON 103 Statistics, HEAL 200 Biostatistics in Public Health, or MATH 105 Perspectives in Statistics. (PSY 200 is recommended.)
- PSY 300 Psychology Methodology
- One course in development, abnormal psychology, or social psychology, chosen from the following:
  - PSY 230 Infant and Child Development
  - PSY 240 Abnormal Psychology
  - PSY 260 Social Psychology
- One course in cognition or the brain and behavior, chosen from the following:
  - PSY 220 Thinking, Memory, and Problem Solving
  - PSY 252 Introduction to Neuroscience
  - PSY 280 Brain and Behavior
- One advanced lab, chosen from the following:
  - PSY 310 Cognition
  - PSY 350 Behavioral Neuroscience
  - PSY 355 Cognitive Neuroscience
- One capstone course, chosen from the following:
  - PSY 400 Advanced Topics in Psychology
  - PSY 410 Advanced Topics in Neuroscience
  - PSY 415 Psychology of Sustainability
  - PSY 425 Human-Computer Interaction
  - PSY 435 Children's Mental Health
  - PSY 440 Social Construction of Madness
  - PSY 445 Psychology Internship
  - PSY 460 Community Psychology
  - PSY 465 Advanced Topics in Social Psychology
  - PSY 490 Senior Thesis

- Three elective courses, two of which must be at the 300 level or higher. A maximum of 4 semester credits may be applied from PSY 295 Faculty Directed Research, PSY 299 Independent Study, PSY 495 Advanced Faculty Directed Research, and PSY 499 Independent Study.

Honors
At the end of the second semester of the junior year, students may apply to participate in the psychology senior thesis program. Selection is based on an evaluation of academic performance (a GPA of 3.500 in the major and overall) and the quality of a research proposal prepared in cooperation with a faculty member. Students work closely with a thesis committee. If the resulting thesis and its defense are deemed worthy of
Semester credits: 4.
Usually offered: Annually, fall and spring semester.
Prerequisites: None.

Content: Principles underlying behavioral development and change, psychological principles to social phenomena. Of individuals, counseling and psychotherapy techniques, application of understanding functional and dysfunctional personality characteristics processes of human perception and cognition, approaches to physiological processes that mediate psychological functioning, Content: Psychological development in domains including perception, cognition, language, personality, social behavior. How psychological processes evolve and change. Emphasis on infancy and childhood.

Semester credits: 4.
Usually offered: Annually, fall and spring semester.
Prerequisites: PSY 100.

Content: Application of cognitive theory to decision making and problem solving. Selective perception, memory, contextual effects on decision making, paradoxes in rationality, biases created from problem-solving heuristics, probability and risk assessment, perception of randomness, attribution of causality, group judgments and decisions.

Semester credits: 4.
Usually offered: Annually, fall and spring semester.
Prerequisites: PSY 100.

PSY 200 Statistics I
Content: The theory of statistics and designing experiments. Use of distributions, measures of central tendency, variability, correlation, t-tests, simple analysis of variance and nonparametric techniques. Computer applications using SPSS statistical analysis programs and other software.
Prerequisites: None.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 220 Thinking, Memory, and Problem Solving
Content: Application of cognitive theory to decision making and problem solving. Selective perception, memory, contextual effects on decision making, paradoxes in rationality, biases created from problem-solving heuristics, probability and risk assessment, perception of randomness, attribution of causality, group judgments and decisions.
Prerequisites: PSY 100.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 230 Infant and Child Development
Content: Psychological development in domains including perception, cognition, language, personality, social behavior. How psychological processes evolve and change. Emphasis on infancy and childhood.
Prerequisites: PSY 100.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.
PSY 240 Abnormal Psychology
Content: Issues in defining abnormality; classification and description of abnormal behaviors; societal reactions to abnormal behavior; theory and research on causes, treatments, and prevention of pathology; major psychopathologies including physical symptoms and stress reactions; anxiety, somatoform, and dissociative disorders; sexual dysfunctions; addictions; sociopathy and other personality disorders; schizophrenia; mood disorders.
Prerequisites: PSY 100.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 244 Practicum
Content: Internship or practicum to be arranged with instructor.
Prerequisites: None.
Restrictions: Sophomore standing and consent required.
Usually offered: Annually, fall and spring semester.
Semester credits: 1-4.

PSY 252 Introduction to Neuroscience
Content: Study of the biological basis of behavior. Gross anatomy of the brain, structure and function of neurons, synaptic transmission. Exploration of learning and memory, vision, neurological and psychiatric diseases, addiction, and reproductive behavior. Cross-listed with BIO 252. Students who have received credit for PSY 280 should not enroll in this course.
Prerequisites: BIO 110 and PSY 100.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 260 Social Psychology
Content: The effects of social and cognitive processes on the ways individuals perceive, influence, and relate to others. Person perception, the self, prejudice and stereotyping, social identity, attitudes and attitude change, conformity, interpersonal attraction, altruism, aggression, group processes, intergroup conflict.
Prerequisites: PSY 100.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 280 Brain and Behavior
Content: How the brain controls and regulates behavior. Basic properties of neurons, neurotransmitters, and the basic anatomy of the nervous system. Emphasis on the brain's role in such functions as sensation, emotion, language, learning and memory, sexual behavior, sleep, motivation. The biological bases of abnormal conditions, such as affective disorders, amnesia, learning disorders. Students who have received credit for PSY/BIO 252 should not enroll in this course. Not open to students with previous credit in PSY 350 or PSY 355.
Prerequisites: PSY 100.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 295 Faculty Directed Research
Content: Faculty-student collaborative research experience. Students will apply their knowledge of research methods to faculty-directed research projects both on and off campus. Students will work collaboratively with faculty to collect and analyze research data.
Prerequisites: None.
Usually offered: Annually, fall, spring, and summer.
Semester credits: 1-2.

PSY 299 Independent Study
Content: Topics not covered in depth in other department courses, or faculty-supervised research projects. Details determined by the student in conference with the supervising faculty member. First-year or sophomore level. Credit-no credit. May be repeated for credit.
Prerequisites: None.
Restrictions: Consent required.
Usually offered: Annually, fall and spring semester.
Semester credits: 1-4.

PSY 300 Psychology Methodology
Content: Research methodologies and experimental design techniques applied to laboratory investigation of psychological phenomena. Data collected from laboratory studies analyzed statistically and reported in technical lab reports. Students are required to complete an individually written sophomore thesis and must earn a passing grade on this assignment in order to pass the course.
Prerequisites: PSY 100. PSY 200, ECON 103 or MATH 105.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 310 Cognition
Content: Classical and contemporary research topics in cognition. Discussion of scientific methods used to investigate cognition. Emphasis on memory, reasoning, decision making, cognitive science. Laboratory sections supplement lectures and readings with computer-based experiments and demonstrations. Seniors will be given registration preference during the first round of registration.
Prerequisites: PSY 220. PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 311 Statistics II
Content: Continuation of PSY 200; emphasis on theory and experimental design. Variance, covariance, regression analyses, nonparametrics, and exploratory data analyses using the computer as a tool in psychological research (SPSS statistical analysis programs and PC/Mac packages).
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Alternate Years, fall and spring semester.
Semester credits: 4.

PSY 325 Social Influence
Content: Social psychology research and theory seeking to explain social influence with a focus on norm formation, conformity, and deviance. Emphasis on the role of social identity, leadership, and group dynamics. Role of norms and minority influence in health, business, marketing, political and media contexts, and the ethical considerations of using norms to influence others.
Prerequisites: PSY 260. PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, spring semester.
Semester credits: 4.

PSY 330 Adolescent and Adult Development
Content: Adolescence, emerging adulthood, and adult development in areas including physiology, emotion, cognition, personality, and social behavior. How psychological processes evolve and change with age. Emphasis on adolescence through late adulthood and death.
Prerequisites: PSY 230. PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall semester.
Semester credits: 4.
PSY 340 Personality Theory
Content: Theory and research about human nature, individuality, and the causes and meaning of important psychological differences among individuals. Major theories of personality including psychoanalytic, humanistic, trait, social learning, cognitive perspectives; current topics in personality research.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall semester.
Semester credits: 4.

PSY 345 Overseas Internship
Content: Applied field learning experience and exposure to psychologically oriented occupations on LC overseas programs. Building human relations skills; becoming acquainted with important human service institutions and their social impact in an environment of socialized health and human services. Theoretical, cross-cultural, and practical frameworks for interventions. May be taken twice for credit if participating in two programs. Summers only, or occasionally during semester-long off-campus programs.
Prerequisites: PSY 280, PSY 300.
Restrictions: Sophomore standing and acceptance to Australia or England/Ireland overseas program required.
Usually offered: Annually, summer only.
Semester credits: 4.

PSY 350 Behavioral Neuroscience
Content: The relationship between basic psychological processes and underlying functions of the nervous system. Biological bases of sensation, perception, motivation, emotion, learning, memory, psychopathology. Laboratory sections supplement lectures and readings with practical experience in neural anatomy, animal (rat) behavioral testing, and neuropsychological testing. Seniors will be given registration preference during the first round of registration.
Prerequisites: PSY 280, PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 355 Cognitive Neuroscience
Content: Foundational and contemporary issues in cognitive neuroscience. Scientific methods used to investigate relationships between brain function and cognition. Emphasis on higher cognitive and emotional function and the neurobehavioral underpinnings of psychopathology. Laboratory sections supplement lecture and reading topics with demonstrations and practice applying cognitive neuroscience research techniques. Seniors will be given registration preference during the first round of registration.
Prerequisites: PSY 220, PSY 252, BIO 252, or PSY 280, PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, spring semester.
Semester credits: 4.

PSY 360 Psychology of Gender
Content: Theory and data in the psychological development of females, their attitudes, values, behaviors, and self-image. Alternative models for increasing gender-role flexibility and allowing all humans to explore their full potential. Research methodology, changing roles, androgyny, gender schema, extent and validity of gender differences. Influence of culture, socialization, and individual differences on women and men. Relationship between the psychology of gender and principles of feminism.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall semester.
Semester credits: 4.

PSY 370 Clinical Psychology
Content: Overview of the science and practice of clinical psychology. Application of psychological science to psychotherapeutic interventions and clinical assessment. Major theories and techniques of therapeutic assessment and behavior change, including psychodynamic, humanistic, behavioral, cognitive-behavioral, family, group, and time-limited approaches, with emphasis on empirically validated treatments. Logic and methodology of psychotherapy process and outcome research. Ethical issues in therapy and assessment.
Prerequisites: PSY 240, PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, spring semester.
Semester credits: 4.

PSY 375 Health Psychology
Content: The interactions of psychology and health, including how thoughts, emotions, and behavior influence health and the effects of health on psychological well-being. Emphasis on how psychological, social, and biological factors interact with and determine the success people have in maintaining their health, getting medical treatment, coping with stress and pain, recovering from serious illness.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 380 Drugs and Behavior
Content: An introduction to the principles of psychopharmacology and the effects of psychoactive substances on behavior. The mechanisms of drug action with an emphasis on how drugs affect the brain. Discussion of the social and political aspects of drug abuse.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, spring semester.
Semester credits: 4.

PSY 390 Cross-Cultural Psychology
Content: Relations between culture and human behavior. Examination of topics in psychology from a multicultural, multietnic perspective, with special emphasis on cultural influence on research methods, self-concept, communication, emotion, social behavior, development, mental health. Cultural variation, how culture shapes human behavior, and psychological theories and practices in different cultures.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Alternate Years, fall and spring semester.
Semester credits: 4.
PSY 395 Contemporary Issues in Psychiatric Health: The Complex Patient in a Complex System
Content: Explores the ethical, legal, and clinical issues surrounding the care of the severely and persistently mentally ill. Addresses questions of homelessness, incarceration, involuntary treatment, organicity, and the assessment of capacity and risk. Students are required to spend two days in a setting that serves the basic needs of the mentally ill. Prerequisites: PSY 240. PSY 300. Prerequisites will not be waived. Restrictions: Sophomore standing required. Usually offered: Alternate Years, spring semester. Semester credits: 4.

PSY 400 Advanced Topics in Psychology
Content: In-depth study of current issues and topics in psychology. Central theoretical, empirical, practical issues of each topic. May be taken twice for credit with change of topic. Prerequisites: PSY 300. Psychology courses appropriate for the topic of study. Restrictions: Sophomore standing required. Usually offered: Annually, fall and spring semester. Semester credits: 4.

PSY 410 Advanced Topics in Neuroscience
Content: In-depth discussion of current theoretical, research, and practical issues in neuroscience. Topics may vary by semester and may include the biological basis of behavior, the neural substrates of cognitive processes, and biological basis of psychological disorders. Behavioral, electrophysiological, neuropsychological, and biochemical approaches considered. Prerequisites: PSY 220 or PSY 280. PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, spring semester. Semester credits: 4.

PSY 415 Psychology of Sustainability
Content: Application of psychological theories and principles to real-world problems and issues in sustainability resilience. In-depth examination of topics such as health, child development, environmental philosophy, social cognition, environmental morality, environmental justice, activism, and climate resilience studied from a psychological perspective. Prerequisites: PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, fall semester. Semester credits: 4.

PSY 425 Human-Computer Interaction
Content: Broad survey of human-computer interaction (HCI). Project-based exploration of the processes for creating technologies that expand human capability (functionality) while adapting to the abilities of users (usability). HCI topics including cognition, perception, personality, learning, and motivation, as well as social, developmental, abnormal, and educational psychology studied from a psychological perspective. Prerequisites: PSY 300. Restrictions: Junior standing required. Usually offered: Annually, fall semester. Semester credits: 4.

PSY 435 Children's Mental Health
Content: Psychology capstone course with a focus on children's and adolescents' mental health. Application of developmental theories and principles to real-world problems and issues. In-depth examination of topics that have practical applications for parents, therapists, educators, and creators of social policy, including major psychological disorders of childhood, family processes, and development in different contexts. Prerequisites: PSY 230. PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, spring semester. Semester credits: 4.

PSY 440 Social Construction of Madness
Content: Scrutiny of historical and contemporary Western conceptions of madness. Theoretical position of social constructionism used to understand how professional taxonomies and public stereotypes of insanity are reflections of culture. Analysis of movies, fiction, poetry, drama. Prerequisites: PSY 240. PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, spring semester. Semester credits: 4.

PSY 444 Practicum
Content: Internship or practicum to be arranged with instructor. Prerequisites: PSY 300. Restrictions: Junior standing and consent required. Usually offered: Annually, fall and spring semester. Semester credits: 1-4.

PSY 445 Psychology Internship

PSY 460 Community Psychology
Content: Community agencies dealing with mental health, homelessness, child abuse, substance abuse, criminal justice, or AIDS. How agencies provide services to diverse populations, including the elderly, adolescents, children, gays, mentally ill, and others. The politics of funding. How grassroots organizations develop and change. Students evaluate how effectively a community agency or organization provides needed services to specific populations. Prerequisites: PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, fall semester. Semester credits: 4.

PSY 465 Advanced Topics in Social Psychology
Content: Advanced undergraduate seminar examining current theoretical and empirical advances in social psychology. Extensive reading and discussion of primary sources focusing on three selected topics: social cognition, social influence, and group relations. Topics may include emotion, social judgment, the self, nonverbal communication, attitude change, advertising and marketing, stereotyping and prejudice, conflict resolution, interpersonal relationships, group dynamics. Prerequisites: PSY 260. PSY 300. Restrictions: Sophomore standing required. Usually offered: Alternate Years, spring semester. Semester credits: 4.
PSY 490 Senior Thesis
Content: Continuation of independent research project begun in PSY 499T. Details determined by the student in conference with supervising faculty member and thesis committee. Details must then be approved by department. If the resulting thesis and its defense are deemed worthy of distinction by the psychology faculty, the student will be awarded honors on graduation.
Prerequisites: PSY 300. PSY 499T, and department consent.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.

PSY 495 Advanced Faculty Directed Research
Content: Advanced faculty-student collaborative research experience. Students will apply their knowledge of research methods to faculty-directed research projects both on and off campus. Students will work collaboratively with faculty to collect, analyze, and present research data. PSY 495 students will also mentor and supervise PSY 295 students in the research process.
Prerequisites: PSY 300.
Restrictions: Sophomore standing required.
Usually offered: Annually, fall, spring, and summer.
Semester credits: 1-4.

PSY 499 Independent Study
Content: Same as PSY 299 but requiring work at the junior or senior level. May be repeated for credit.
Prerequisites: PSY 300.
Restrictions: Sophomore standing and consent required.
Usually offered: Annually, fall and spring semester.
Semester credits: 1-4.

PSY 499T Pre-thesis Independent Research
Content: Faculty-supervised research projects as part of the senior thesis. Details determined by the student in conference with a two-member faculty committee.
Prerequisites: PSY 300.
Restrictions: Senior standing and consent of instructor and department required.
Usually offered: Annually, fall and spring semester.
Semester credits: 4.