PSYCHOLOGY

Degree Types: PhD

The Doctoral Program in Psychology (https://www.psychology.northwestern.edu/graduate/) prepares students to be future leaders in scientific psychology through programs in five areas: clinical psychology; personality, development & health psychology; cognitive psychology; social psychology; and brain, behavior, & cognition.

Program faculty and graduate students conduct some of the most exciting and influential research being done in the psychological sciences today. Graduate students in our program receive rigorous training in methodology, statistics, and broad content areas in psychology.

Students take both general courses and those specific to their areas of interest. Students also engage in a series of research projects and assist with undergraduate teaching. Collaboration with faculty members within and outside the student's area is very common. Many graduates seek academic careers.

Additional resources:

- Department website (https://www.psychology.northwestern.edu/graduate/)
- Program handbook(s)

Degree Offered

- Psychology PhD (https://catalogs.northwestern.edu/tgs/psychology/psychology-phd/)

Learning objective(s)/Students should be able to...

- Design and conduct an experimental study
- Design and conduct a refined experimental study (can be a revision of the first-year project)
- Demonstrate the mastery of the scientific literature in the student's chosen area of research and in related areas
- Propose a coherent set of studies to address substantive theoretical questions
- Complete and write up the proposed research
- Receive annual feedback on progress

Psychology Courses

PSYCH 303-0 Psychopathology (1 Unit)
Understanding the nature of psychological, emotional, and behavioral disorders. Emphasis on current evidence regarding causes and characteristics of these disorders.
Prerequisite: PSYCH 110-0.
Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl

PSYCH 324-0 Perception (1 Unit)
Human perception, particularly vision but also hearing, taste, smell, and touch. Biological foundations, development, and disorders of perception. The senses in everyday life.
Prerequisite: PSYCH 110-0.
Interdisciplinary Distro · See Rules (https://catalogs.northwestern.edu/undergraduate/arts-sciences/#schoolrequirementstext) Natural Sciences Distro Area Natural Sciences Foundational Discipline Social Behavioral Sciences Distro Area

PSYCH 333-0 Psychology of Thinking (1 Unit)
Research methods and recent experimental findings for types of human thinking. Students conduct original research.
Prerequisite: PSYCH 228-0.
Empirical and Deductive Reasoning Foundational Dis Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl

PSYCH 340-0 Psychology and Law (1 Unit)
Examines the application of psychology to law, including topics such as the insanity defense, criminal profiling, eyewitness testimony, and interrogation.
Prerequisite: PSYCH 110-0. Taught with LEGAL_ST 350-0; may not receive credit for both courses.
Ethical and Evaluative Thinking Foundational Discipl Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl U.S. Perspectives on Power, Justice, and Equity

PSYCH 350-0 Special Topics in Psychology (1 Unit)
Topic to be announced. Prerequisites vary. May be repeated for credit with different topic.

PSYCH 373-0 Decision Making (1 Unit)
Human decision making from both descriptive and prescriptive perspectives. Theories and models of decision making applied to a variety of contexts.
Prerequisites: PSYCH 205-0, PSYCH 228-0.
Social Behavioral Sciences Distro Area

PSYCH 378-0 Images of Cognition (1 Unit)
Study of brain processes underlying cognition. Analysis of brain structure and function. Introduction to imaging techniques including fMRI, PET, and ERP.
Prerequisites: PSYCH 205-0; a course in cognition and/or neuroscience (e.g., PSYCH 221-0, PSYCH 228-0, PSYCH 320-0, PSYCH 328-0; COG_SCI 210-0) or consent of instructor.
Interdisciplinary Distro · See Rules (https://catalogs.northwestern.edu/undergraduate/arts-sciences/#schoolrequirementstext) Natural Sciences Distro Area Social Behavioral Sciences Distro Area

PSYCH 390-0 Advanced Seminar in Personality, Clinical, or Social Psychology (1 Unit)
Discussion and critical analysis of research methods and findings in an area of personality, clinical, and/or social psychology. Topics vary. May be repeated for credit with different topic.
Prerequisite: PSYCH 205-0; additional prerequisites may apply.

PSYCH 401-1 Proseminar—Biological & Cognitive Bases of Behavior (1 Unit)
Understanding how brain-imaging techniques apply to the understanding of cognition.

PSYCH 401-2 Proseminar—Social and Personality Bases of Behavior (1 Unit)
Survey of theory and research in the social and personality bases of behavior.

PSYCH 403-0 Proseminar in Clinical Psychology (1 Unit)
Overview of Clinical Psychology.

PSYCH 404-0 Diversity Science in Psychology (1 Unit)
PSYCH 404-0 is a grad-level seminar course designed to frame and engage the concept of "diversity science" in psychological research. Topics include: the WEIRD history of psychology; psychometric and other validity issues in studying diversity; (3) qualitative and diverse methodologies; (4) levels of analysis in studying diversity (e.g., individual-level versus group-level phenomena); (5) oppression and privilege, and strategies for understanding and redressing social inequities.
PSYCH 405-0 Psychometric Theory (1 Unit)
Introduction to principles of measurement, reliability, validity, and scale construction.

PSYCH 406-0 Empirical Foundations of Cognitive-Behavior Therapy (1 Unit)
Survey of contemporary topics in behavior and cognitive-behavior therapy. Mechanisms through which behavioral and cognitive therapy techniques mediate change.

PSYCH 411-1 Clinical Psychology Practicum (0-1 Unit)

PSYCH 411-2 Clinical Psychology Practicum (0-1 Unit)

PSYCH 411-3 Clinical Psychology Practicum (0-1 Unit)

PSYCH 412-1 Assessment Practicum (0-1 Unit)
Didactic and applied instruction in diagnosis of psychological disorders; diagnostic interviewing, organic assessment, and personality assessment. Arranged with the clinical program director. Three-quarter sequence.

PSYCH 412-2 Assessment Pract (0-1 Unit)
Didactic and applied instruction in diagnosis of psychological disorders; diagnostic interviewing, organic assessment, and personality assessment. Arranged with the clinical program director. Three-quarter sequence.

PSYCH 412-3 Assessment Practicum (0-1 Unit)
Didactic and applied instruction in diagnosis of psychological disorders; diagnostic interviewing, organic assessment, and personality assessment. Arranged with the clinical program director. Three-quarter sequence.

PSYCH 413-1 Anxiety: Assessment & Treatment (0-1 Unit)
This practicum will cover the theory, history, empirical evidence, and clinical techniques on the assessment and treatment of anxiety disorders, emphasizing cognitive-behavioral approaches.

PSYCH 413-2 Anxiety: Assessment and Treatment (0-1 Unit)
This practicum will cover the theory, history, empirical evidence, and clinical techniques on the assessment and treatment of anxiety disorders, emphasizing cognitive-behavioral approaches.

PSYCH 413-3 Anxiety: Assessment and Treatment (0-1 Unit)
This practicum will cover the theory, history, empirical evidence, and clinical techniques on the assessment and treatment of anxiety disorders, emphasizing cognitive-behavioral approaches.

PSYCH 414-1 Depression: Assessment and Treatment (0-1 Unit)

PSYCH 414-2 Depression: Assessment and Treatment (0-1 Unit)

PSYCH 414-3 Depression: Assessment and Treatment (0-1 Unit)

PSYCH 415-1 Treatment Practicum: Family and Systems Approach (0-1 Unit)

PSYCH 415-2 Treatment Practicum: Family and Systems Approach (0-1 Unit)

PSYCH 415-3 Treatment Practicum: Family and Systems Approach (0-1 Unit)

PSYCH 416-1 Treatment Practicum: DBT (0-1 Unit)
Strategies and tactics of dialectical behavior therapy for effectively treating complex, multi-problem, difficult-to-treat populations.

PSYCH 416-2 Treatment Practicum: DBT (0-1 Unit)
Strategies and tactics of dialectical behavior therapy for effectively treating complex, multi-problem, difficult-to-treat populations.

PSYCH 416-3 Treatment Practicum: DBT (0-1 Unit)
Strategies and tactics of dialectical behavior therapy for effectively treating complex, multi-problem, difficult-to-treat populations.

PSYCH 417-1 Child Intervention (1 Unit)
Clinical Practicum Training.

PSYCH 417-2 Child Intervention (1 Unit)
Clinical Practicum Training.

PSYCH 417-3 Child Intervention (1 Unit)
Clinical Practicum Training.

PSYCH 420-0 History, Ethics, Diversity, and Consultation in Clinical Psychology (1 Unit)
This course considers many of the ethical and diversity issues that clinical scientists and therapists encounter; it also considers the historical bases of current psychological research and practice. Two-quarter sequence.
Prerequisites: Permission of instructor.

PSYCH 421-1 Psychopathology (1 Unit)
Research and theories on the origins of various forms of psychopathology. Topics include schizophrenia, addictive disorders, psychopathy, personality disorders, eating disorders, psychosexual disorders, depression, and anxiety disorders. Also, issues regarding classification of psychiatric disorders. Two-quarter sequence.

PSYCH 421-2 Psychopathology (1 Unit)
Research and theories on the origins of various forms of psychopathology. Topics include schizophrenia, addictive disorders, psychopathy, personality disorders, eating disorders, psychosexual disorders, depression, and anxiety disorders. Also, issues regarding classification of psychiatric disorders. Two-quarter sequence.

PSYCH 422-0 Child Psychopathology (1 Unit)
Diagnosis and treatment of various conditions of childhood psychopathology: learning disabilities, phobias, autism, and aggression.

PSYCH 423-0 Professional Issues in Psychology (1 Unit)
Survey of ethical, professional, and policy issues in clinical psychology.

PSYCH 424-0 Behavioral and Neural Basis of Visual Perception (1 Unit)
Reviews current understanding of the encoding of visual information on the basis of behavioral, neurophysiological, and neuropsychological evidence.
Prerequisites: Permission of instructor.

PSYCH 425-0 Improving Methods and Practices in Psychological Science: The Replication Crisis and Beyond (1 Unit)
This course will examine current controversies and new developments in research methods in psychology. The goal of the course is to learn to think critically about how psychological science is conducted and how conclusions are drawn. We will cover both methodological and statistical issues that affect the validity of research in psychology, with a scope that will cover the broad topical range of psychological science. We will discuss the research process from designing a study to how a study gets published. We will also discuss the recent controversy in psychology about the replicability of scientific results.

PSYCH 428-0 Overview of Health Psychology (1 Unit)
Overview of research, theories, and methods in health psychology, emphasizing links between the social world and biology.

PSYCH 434-0 Research Methods in Clinical Psychology (1 Unit)
Conceptual and methodological issues in research in psychopathology and psychotherapy.

PSYCH 440-0 Self-Regulation (1 Unit)
This seminar-based course provides an overview of the social psychological literature on self-regulation. It covers the major theoretical orientations and places a particular emphasis on empirical evidence.

**PSYCH 446-0 Memory & Cognition (1 Unit)**
Theories of encoding and retrieval processes, semantic memory, automatic and strategic processes, and memory structure of text.

**PSYCH 450-0 Fundamentals of Statistics (1 Unit)**
Probability, decision rules, and tests of significance, including chi square, t, and F.

**PSYCH 451-1 Statistics in Experimental Design (1 Unit)**
Design and analysis of experiments. Emphasis on analysis of variance techniques.

**PSYCH 453-0 Linear Models: Correlation & Regression (1 Unit)**
Measurement theories and their implications for the quantification of psychological constructs.

**PSYCH 454-0 Psychological Measurement (1 Unit)**
Survey of theory, data, and methods in cultural research on language and cognition. Focus is on empirical research and its relation to cognitive psychology.

**PSYCH 456-0 Teaching of Psychology (1 Unit)**
This course is designed to help prepare graduate students in psychology for the role of classroom instructor. Topics that will be discussed include course design, lecturing, using demonstrations, ethics, and teaching writing in psychology.

**PSYCH 460-0 Special Topics in Cognition (1 Unit)**
Current research and theory in cognitive psychology. May be repeated for credit with change of topic.

**PSYCH 461-0 Reasoning and Representation (1 Unit)**
Current theories of reasoning in cognitive science; mental steps in solving problems requiring inductive or deductive inferences. Covers relevant background in logic and artificial intelligence and empirical results on reasoning. Prerequisite: One course in either cognitive psychology, logic, or artificial intelligence.

**PSYCH 462-0 Cognitive Development (1 Unit)**
Cognitive development in infancy, childhood, and adolescence. Focus on theoretical explanations for cognitive change and development in core domains, including language, space, number, time, and social relations.

**PSYCH 466-0 Analogy and Similarity (1 Unit)**
Psychology of comparison, including theories of similarity, analogy and metaphor in psychology and artificial intelligence; processes of transfer, comparison in decision making; analogy in mental models and folk theories; and development of analogy and similarity.

**PSYCH 467-0 Culture, Language, and Cognition (1 Unit)**
Survey of theory, data, and methods in cultural research on language and cognition. Focus is on empirical research and its relation to cognitive psychology.

**PSYCH 470-0 Topics in Brain, Behavior, and Cognition (1 Unit)**
Survey of contemporary research in cognitive neuroscience. Covers investigations of memory, perception, and other aspects of cognition using many methodologies, including neuropsychology and neuroimaging.

**PSYCH 471-0 Cognitive Neuroscience (1 Unit)**
Introductory overview of social psychology for graduate students, with a focus on recent and classic theories and their empirical support.

**PSYCH 472-0 Research Methods in Social Psychology (1 Unit)**
Overview of the conceptual and practical aspects of experimental research in social psychology, including design, questionnaire development, validity and reliability, and ethical issues.

**PSYCH 483-0 Social Cognition (1 Unit)**
Comprehensive survey of research addressing social aspects of perception, memory, language, and judgment and their role in social behavior and outcomes.

**PSYCH 484-0 Relationship Science (1 Unit)**
The primary goal of this course is to explore theory and research on attraction and close relationships. Students are expected to: (a) read all readings carefully prior to attending each class session, (b) participate actively in class discussion, (c) give a formal (conference-like) presentation, and (d) write a formal research proposal. By.

**PSYCH 485-0 Psychology of Attitudes (1 Unit)**
Surveys social psychological theory and attitudes. Considers attitude measurement, attitude structure, attitudes as predictors of behavior, and attitude change.
Prerequisites: Permission of instructor.

**PSYCH 486-0 Stereotyping and Prejudice (1 Unit)**
Analysis of the psychological causes and consequences of stereotyping and prejudices with a focus on recent developments in the field of social psychology.

**PSYCH 487-0 Moral and Political Psychology (1 Unit)**
Despite claims about “the end of ideology” (Daniel Bell, 1960) and “the end of history” (Francis Fukuyama, 1989), today’s world is saturated in ideology, and consensus surrounding the primacy of liberal democracy is teetering. In the United States, partisanship has surged in recent decades, especially in terms of disdain for the other party. Although such trends are complex and multiply determined, psychology affords a particularly expansive vantage point for making sense of them. This course provides a graduate-level survey of moral and political psychology to help us understand today’s politicians and the body politic. By the end of the course, students should be knowledgeable about, and capable of generating original research in, this research space.

**PSYCH 488-0 Theories of Social & Emotional Development (1 Unit)**
This graduate-level seminar closely examines theories and research on social and emotional development. Particular attention is given to theories and research that address the roles of culture, context, and marginalization. The course adopts an ecological perspective, examining how multiple, intersecting levels of micro and macro contexts (parents, peers, schools, media, culture, stereotypes) shape social and emotional development and its associations with psychosocial adjustment, academic success, and health.

**PSYCH 489-0 Topics in Social Psychology (1 Unit)**
Research and theory of current interest. Topics vary. May be repeated for credit with change of topic.

**PSYCH 490-0 Topics in Clinical/Personality Psychology (1 Unit)**
Survey of contemporary research in cognitive neuroscience. Covers investigations of memory, perception, and other aspects of cognition using many methodologies, including neuropsychology and neuroimaging.

**PSYCH 491-0 Advanced Topics in Cognitive Development (1 Unit)**
Development of cognitive structures and processes, including learning, memory, reasoning, language, and conceptual systems. Advanced level.

**PSYCH 492-0 Personality Theory & Research (1 Unit)**
The nature and functions of theory in psychology. Major theoretical approaches to personality: dynamic, phenomenological, trait, social-psychological, sociological, and behavioral.

**PSYCH 493-0 Psychological Assessment (1 Unit)**
First Quarter: Introduction to assessment, interviewing, mental status exam, DSM-III, and objective personality test (MMPI). Second Quarter: Intellectual/neuropsychological assessment, including intellectual
and achievement tests and report writing. Third Quarter: Projective assessment, including Rorschach, TAT, miscellaneous projective techniques, and report writing.

PSYCH 496-1 Contemporary Psychotherapy (1 Unit)
First Quarter: Contemporary approaches to individual psychotherapy. Second Quarter: Contemporary approaches to group psychotherapy and the treatment of disturbed marital and family relationships. Third Quarter: Minipracticum.

PSYCH 497-0 Special Topics in Clinical Psychology (1 Unit)
Research and theory in clinical psychology. May be repeated for credit with change of topic.

PSYCH 499-0 Independent Study (1-3 Units)
SEE DEPT FOR SECTION AND PERMISSION NUMBERS.

PSYCH 519-0 Responsible Conduct of Research Training (0 Unit)

PSYCH 590-0 Research (1-3 Units)
SEE DEPT FOR SECTION AND PERMISSION NUMBERS Independent investigation of selected problems pertaining to thesis or dissertation. May be repeated for credit.