The PhD program in the Department of Psychology covers a wide spectrum of contemporary behavioral science within a close-knit community of faculty and students. The program offers four distinct areas of experimental emphasis: behavioral neuroscience, cognition, perception, and social/personality. The program does not offer training in clinical or counseling psychology. The objective of the PhD program is to prepare students to become experts in research and teaching in psychology. To accomplish this goal, the department takes a mentoring approach whereby the graduate students are apprentices in faculty laboratories, working closely with their faculty mentors throughout their time in the program. The basic apprenticeship relationship is supplemented by other activities, such as required courses (concentrated in the first and second years), advanced seminars and/or course work in this as well as other departments or universities, a colloquium series, assignments as teaching assistants, the master’s project, and the dissertation and its oral defense. After the first year, the structure of the doctoral program, including course work, is flexible and assumes that the process of learning and scientific discovery must be individualized. Graduate students also have an opportunity to develop their teaching and research skills through close mentoring of undergraduate research assistants. The PhD program is a five-year, twelve-months-per-year program. Students earn their master’s degree at the end of their second year and progress to PhD candidacy. There is no freestanding master’s program.

For students who enter the program with a master’s degree, degree candidacy is established through completion of a set of requirements determined on an individual basis. An additional 20 semester hours beyond the master’s degree are required for the PhD degree. The dissertation committee must include at least three tenured or tenure-track faculty members from within the psychology department—two from the student’s interest area and one from another area. The oral defense committee consists of the dissertation committee plus additional tenured and tenure-track faculty members from the psychology department.

Programs

Doctor of Philosophy (PhD)

- Psychology (http://catalog.northeastern.edu/graduate/science/psychology/psychology-phd)
- Psychology—Advanced Entry (http://catalog.northeastern.edu/graduate/science/psychology/psychology-phd-advanced)

Courses

Psychology Courses

PSYC 5100. Proseminar in Psycholinguistics. 3 Hours.
Serves as first-level graduate course in psycholinguistics, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussions. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5110. Proseminar in Cognition. 3 Hours.
Serves as first-level graduate course in cognition, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5120. Proseminar in Sensation. 3 Hours.
Serves as first-level graduate course in sensation, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5130. Proseminar in Perception. 3 Hours.
Serves as first-level graduate course in perception, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5140. Proseminar in Biology of Behavior. 3 Hours.
Serves as first-level graduate course in the biological basis of behavior, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5150. Proseminar in Clinical Neuroscience. 3 Hours.
Serves as first-level graduate course in clinical neuroscience, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5160. Proseminar in Personality. 3 Hours.
Serves as first-level graduate course in personality, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5170. Proseminar in Social Psychology. 3 Hours.
Serves as first-level graduate course in social psychology, focusing on theoretical, experimental, and methodological issues. Includes faculty lectures, student presentations, and discussion. Requires permission of instructor for students who are not enrolled in the PhD program in psychology. May be repeated without limit.

PSYC 5180. Quantitative Methods 1. 3 Hours.
Presents first course in a two-course sequence that surveys a variety of quantitative methods used in experimental psychology. Requires permission of instructor for students who are not enrolled in the PhD program in psychology.
PSYC 5181. Quantitative Methods 2. 3 Hours.
Continues PSYC 5180. Presents second course in a two-course sequence that surveys a variety of quantitative methods used in experimental psychology. Requires permission of instructor for students who are not enrolled in the PhD program in psychology.

PSYC 6130. Affective Computing. 4 Hours.
Studies affective computing—computing that relates to, arises from, or influences emotions. Offers an overview of the theory of human emotion (how it arises from and influences cognition, the body, and the social environment) and computational techniques for modeling human emotion processes as well as for recognizing and synthesizing emotional behavior. Discusses how these can be applied to application design. Offers students an opportunity to gain a strong background in the theory and practice of human-centered computing as it relates to games, immersive environments, and pedagogical applications. Brings together students from different disciplines to work together and learn from each other. CS 6130 and PSYC 6130 are cross-listed.

PSYC 6962. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

PSYC 7200. Seminar in Psycholinguistics. 3 Hours.
Addresses current theoretical and empirical issues in psycholinguistics. Specific topics vary by semester. May be repeated without limit.

PSYC 7210. Seminar in Cognition. 3 Hours.
Addresses current theoretical and empirical issues in cognition. Specific topics vary by semester. May be repeated without limit.

PSYC 7220. Seminar in Sensation. 3 Hours.
Addresses current theoretical and empirical issues in sensation. Specific topics vary by semester. May be repeated without limit.

PSYC 7230. Seminar in Perception. 3 Hours.
Addresses current theoretical and empirical issues in perception. Specific topics vary by semester. May be repeated without limit.

PSYC 7240. Seminar in Biology of Behavior. 3 Hours.
Addresses current theoretical and empirical issues in the biological basis of behavior. Specific topics vary by semester. May be repeated without limit.

PSYC 7250. Seminar in Clinical Neuroscience. 3 Hours.
Addresses current theoretical and empirical issues in clinical neuroscience. Specific topics vary by semester. May be repeated without limit.

PSYC 7255. Window on the Brain: Methods and Applications in Magnetic Resonance Imaging. 3 Hours.
Covers basic principles of magnetic resonance imaging (MRI) with an emphasis on brain function and preclinical research. Lectures are complemented by virtual imaging sessions at the Center for Translational Neuroimaging. Research topics include imaging integrated neural circuits involved in emotion and cognition and the application of MRI to the study of Parkinson’s and Alzheimer’s disease. In addition to functional MRI, other topics include MR spectroscopy, diffusion tensor imaging, manganese tract tracing, PET, SPECT, and CT imaging. Requires permission of instructor for students who are not enrolled in the PhD program in psychology.

PSYC 7260. Seminar in Personality. 3 Hours.
Addresses current theoretical and empirical issues in personality. Specific topics vary by semester. May be repeated without limit.

PSYC 7263. Seminar in Abnormal Psychology. 3 Hours.
Addresses current theoretical and empirical issues in abnormal psychology. Specific topics vary by semester. May be repeated without limit.

PSYC 7270. Seminar in Social Psychology. 3 Hours.
Addresses current theoretical and empirical issues in social psychology. Specific topics vary by semester. May be repeated without limit.

PSYC 7275. Psychological Construction: Linking Mind to Brain. 3 Hours.
Examines the historical roots of the psychological construction approach (e.g., William James, Wilhelm Wundt) and traces conceptions of the mind over the past century, drawing on evolutionary arguments, neuroimaging research, and other evidence. For almost a century, psychologists have assumed that perception, cognition, emotion, and memory are separate faculties of the mind—distinctive mental states with distinct causes. Yet, there is another, earlier conception, called the psychological construction approach, in which perceptions, cognitions, emotions, and memories emerge from the stream of mental activity as momentary “gestalts” or ways of understanding the various states, actions, and feelings of waking life. Requires permission of instructor for students not enrolled in psychology.

PSYC 7280. Seminar in Learning. 3 Hours.
Addresses current theoretical and empirical issues in learning. Specific topics vary by semester. May be repeated without limit.

PSYC 7300. Advanced Quantitative Analysis. 3 Hours.
Covers selected advanced methods of quantitative analysis used in experimental psychology. Specific topics vary by semester. May be repeated without limit.

PSYC 7301. Research Methodologies Psychology. 3 Hours.
Introduces students to a range of conceptual and methodological issues in the conduct of experimental psychology research by department faculty members. Specific course content depends on which faculty members conduct the course in a given semester. May be repeated without limit.

PSYC 7302. Ethics and Professional Issues. 3 Hours.
Identifies and investigates ethical issues (such as privacy, fairness, social responsibility, or animal use) that research psychologists face in acquiring and using scientific knowledge. Also addresses broader professional issues relevant to pursuing a career as a research psychologist in an academic, government, or industrial setting.

PSYC 7990. Thesis. 3 Hours.
Conducts theoretical and experimental research for the master’s degree. May be repeated without limit.

PSYC 7996. Thesis Continuation. 0 Hours.
Continues research for the master’s degree.

PSYC 8400. Research Lab. 1 Hour.
Offers laboratory work in experimental psychology. May be repeated without limit.

PSYC 8401. Research Project. 3 Hours.
 Conducts research project in selected area of experimental psychology. May be repeated without limit.

PSYC 8402. Special Topics in Psychology. 3 Hours.
Offers in-depth analysis of critical topics in psychology. Specific topics vary by semester. May be repeated without limit.

PSYC 8403. Research Issues in Psychology. 3 Hours.
Offers in-depth analysis of research issues in psychology. Specific topics vary by semester. May be repeated without limit.

PSYC 9000. PhD Candidacy Achieved. 0 Hours.
Indicates successful completion of the doctoral comprehensive exam.

PSYC 9984. Research. 1-4 Hours.
Offers an opportunity to conduct research under faculty supervision. May be repeated without limit.
PSYC 9986. Research. 0 Hours.
Offers the student the opportunity to conduct doctoral research. May be repeated without limit.

PSYC 9990. Dissertation. 0 Hours.
Conducts theoretical and experimental research for the PhD degree. May be repeated once.

PSYC 9996. Dissertation Continuation. 0 Hours.
Continues research for the PhD degree. May be repeated without limit.