

PSYCHOLOGY, PHD

Banner Code: LA-PHD-PSYC

Academic Advising

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The PhD in psychology provides knowledge of the basic content areas in psychology and practical experience in applying this knowledge to solve human problems in relationships, work, and education. Core course requirements cover subject matter identified by the profession as essential to doctoral training. This includes biological, social, cognitive, and individual bases of behavior, as well as the history of psychology. The program offers the following concentrations: applied developmental psychology, clinical psychology, cognitive and behavioral neuroscience, human factors/applied cognition, and industrial/organizational psychology.

Admissions & Policies

Admissions

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in Graduate Admissions. Applicants must already have earned a master's degree in a relevant field.

For specific information, see Application Requirements and Deadlines (<http://psychology.gmu.edu/programs/application/LA-PHD-PSYC>).

Policies

For policies governing all graduate degrees, see Graduate Policies.

Reduction of Credit

For students entering the doctoral program with a master's degree, the number of credits required may be reduced by a maximum of 30 credits subject to the approval of the program faculty and the dean. Requests for reduction of credit are reviewed by a committee only after acceptance to the PhD program.

Grading

Students in the doctoral program are evaluated on the basis of grades, comprehensive exams, research, and communication skills. In doctoral courses, A and B are the only acceptable grades. Students in the doctoral program must successfully complete comprehensive exams administered each year.

Requirements

Degree Requirements

Total credits: 72-76

Students should be aware of the specific policies associated with this program, located on the Admissions & Policies tab.

In addition to satisfying the requirements for all doctoral degrees, students must successfully complete 72–76 credits of required course work chosen in one of five concentrations. Each concentration consists of four educational components: core courses, upper-level specialty courses, supervised practica, and dissertation.

Concentration in Applied Developmental Psychology (APD)

Overview

The applied developmental psychology concentration is concerned with enhancing developmental processes and preventing developmental disorders in individuals and families across the life span. It uses the knowledge base and methodologies of developmental science to assist the development of individuals who vary in cultural and ethnic backgrounds; economic and social opportunities; physical, social, emotional, and cognitive abilities; and conditions of living (e.g., families, neighborhoods, communities, and physical settings). The program's emphasis is on child development (infancy, early childhood, middle childhood, and adolescence), and students may focus their studies on the cognitive, social, emotional, language, personality, or physiological aspects of development.

The applied developmental concentration has two goals: to train students to teach and do research on basic and applied issues in child development for employment in such settings as universities, research institutes, and organizations, and to train students to do applied work in developmental psychology (consultation, program evaluation, assessment and evaluation, developmental interventions, and parent training) in such settings as schools, hospitals, courts, child care facilities, and other organizations. Applied developmental psychology doctoral students have the option of also completing course requirements for the MA concentration in school psychology.

Students pursuing this concentration must complete 72 credits comprised of doctoral course work and at least 12 credits of dissertation research. The number of credits required may be reduced for a prior master's degree as described above.

Doctoral Coursework

Developmental Core

PSYC 704	Life-Span Development	3
Total Credits		3

Cognitive, Biological, or Social Core

Select two from the following: 6

Cognitive:		
PSYC 701	Cognitive Bases of Behavior	
PSYC 768	Advanced Topics in Cognitive Science (except when this course is exclusively methodological)	
Biological:		
PSYC 702	Biological Bases of Human Behavior	
PSYC 558	Neuronal Bases of Learning and Memory	
PSYC 559	Behavioral Chemistry	
Social:		
PSYC 703	Social Bases of Behavior	

PSYC 667	Behavior in Small Groups and Teams	
PSYC 668	Personality: Theoretical and Empirical Approaches	
Total Credits		6

Quantitative Methods

Students must complete an approved Quantitative Methods from the Quantitative or Traditional Emphasis.

Quantitative Emphasis

PSYC 611	Advanced Statistics	4
PSYC 754	Quantitative Methods III: Psychological Applications of Regression Techniques	3
Select two from the following:		6
PSYC 557	Psychometric Methods	
PSYC 646	Issues and Methods in Longitudinal Developmental Research	
PSYC 652	Quantitative Methods II: Analysis of Variance	
PSYC 756	Quantitative Methods IV: Multivariate Techniques in Psychology	
PSYC 757	Advanced Topics in Statistical Analysis (with approval)	
PSYC 892	Special Topics in Psychology (with approval)	
Total Credits		13

Traditional Emphasis

PSYC 611	Advanced Statistics	4
PSYC 612	Advanced Statistics	4
Select one from the following:		3
PSYC 652	Quantitative Methods II: Analysis of Variance	
PSYC 754	Quantitative Methods III: Psychological Applications of Regression Techniques	
PSYC 756	Quantitative Methods IV: Multivariate Techniques in Psychology	
PSYC 892	Special Topics in Psychology (with approval)	
Total Credits		11

Advanced Specialized Methods

Select one or two Research Methods courses or up to one Specialized Methods course:

Research Methods Courses:		
PSYC 646	Issues and Methods in Longitudinal Developmental Research	
PSYC 654	Naturalistic Methods in Psychology	
Specialized Methods Course:		
PSYC 619	Applied Behavior Analysis: Principles, Procedures, and Philosophy	
PSYC 673	Prevention, Intervention, and Consultation in Schools	
PSYC 709	The Measurement of Intelligence	
PSYC 710	Psychological Assessment	
PSYC 722	Advanced Child Assessment	

PSYC 794	Developmental Assessment	
Total Credits		6

Specialized Content

PSYC 669	Social and Emotional Development	3
Select four from the following:		12
PSYC 592	Special Topics (when topic is Early Childhood Education, Childcare, and the Transition to School or developmental in content)	
PSYC 566	Cognitive and Perceptual Development	
PSYC 614	The Psychology of Aging	
PSYC 615	Language Development	
PSYC 617	Child Psychopathology	
PSYC 630	Developmental Disabilities	
PSYC 648	Developmental Psychopathology	
PSYC 780	Applied Developmental Psychology	
EDRS 631	Program Evaluation	
Total Credits		15

Professional Seminar/Professional Ethics

Students take 1 credit in fall and 1 credit in spring of their first year and 1 additional credit at any other time (preferably in their second year).

PSYC 890	Seminar in Professional Psychology (3 credits) ¹	1-3
Total Credits		3

Directed Reading and Research or Practicum

Students may fulfill this requirement with 8 credits of PSYC 897 Directed Reading and Research or a combination of PSYC 897 Directed Reading and Research and PSYC 792 Psychology Practicum.

Select 8 credits from the following:		8
PSYC 897	Directed Reading and Research (can be repeated for credit)	
PSYC 792	Psychology Practicum (A maximum of 6 credits may be applied to this requirement.)	
Total Credits		8

Elective Courses

Students complete the 72 credits required for the degree with elective courses, which may include credits of PSYC 897 Directed Reading and Research over and above those used to fulfill the requirements above. Credits for MA thesis and proposal (PSYC 798 Thesis Proposal, PSYC 799 Master's Thesis) may not be used as electives in the PhD program.

Select electives to complete the 72 credits for the degree 72

Advancement to Candidacy

To advance to candidacy, students must complete all courses required by the program. Students must also successfully complete and pass written and oral comprehensive exams.

Dissertation Research

The dissertation requirement is designed to demonstrate the student's ability to apply psychological principles to research problems. Once enrolled in PSYC 999 Doctoral Dissertation, students must follow the

university's continuous registration policy as specified in AP.6.10.6 Dissertation Research. Students who defend in the summer must be registered for at least 1 credit of PSYC 999 Doctoral Dissertation.

Students complete a minimum of 3 credits of PSYC 998 Doctoral Dissertation Proposal and 3 credits of PSYC 999 Doctoral Dissertation. They must apply a minimum of 12 dissertation credits (PSYC 998 Doctoral Dissertation Proposal and PSYC 999 Doctoral Dissertation combined) to the degree. Because of the continuous registration policy, students may be required to register for additional credits of these courses.

Select 12 credits from the following:	12
PSYC 998 Doctoral Dissertation Proposal	
PSYC 999 Doctoral Dissertation	
Total Credits	12

Concentration in Clinical Psychology (CLN)

Overview

The clinical psychology concentration is committed to the clinical science model. Our goal is to train clinical psychologists who are capable of integrating research and applied clinical activities. The program is unique in approaching clinical psychology from social psychological and contextual perspectives. A social psychological approach uses theory and research from social psychology to understand emotional, cognitive, behavioral, and interpersonal functioning. A contextual perspective stresses the impact of social and cultural factors on the individual and vice versa. Most of the faculty members employ cognitive-behavioral and interpersonal approaches to research and clinical practice, but students also receive exposure to humanistic, existential, and psychodynamic perspectives.

Students pursuing this concentration must complete 76 graduate credits comprised of doctoral course work and at least 12 credits of dissertation research. The number of credits required may be reduced for a prior master's degree as described above.

Doctoral Coursework

Biological Bases of Behavior

PSYC 702 Biological Bases of Human Behavior	3
Total Credits	3

Developmental Bases of Behavior

PSYC 704 Life-Span Development	3
Total Credits	3

Design and Data Analysis Emphasis

Select one Emphasis from the Following.

Basic Emphasis A

PSYC 611 Advanced Statistics	4
PSYC 612 Advanced Statistics	4
PSYC 644 Methods for Social Research	3
Total Credits	11

Enhanced Quantitative Emphasis B

PSYC 611 Advanced Statistics	4
PSYC 644 Methods for Social Research	3

PSYC 754 Quantitative Methods III: Psychological Applications of Regression Techniques	3
Select one additional approved quantitative course, such as those in the list shown under Quantitative Emphasis C	3
Total Credits	13

Quantitative Emphasis C

PSYC 611 Advanced Statistics	4
PSYC 644 Methods for Social Research	3
PSYC 754 Quantitative Methods III: Psychological Applications of Regression Techniques	3
Select two additional approved quantitative courses, such as:	6
PSYC 557 Psychometric Methods	
PSYC 646 Issues and Methods in Longitudinal Developmental Research	
PSYC 652 Quantitative Methods II: Analysis of Variance	
PSYC 756 Quantitative Methods IV: Multivariate Techniques in Psychology	
PSYC 757 Advanced Topics in Statistical Analysis (varies by semester but includes Bayesian methods)	
PSYC 892 Special Topics in Psychology (Credits: 3 that include Meta-analysis/SEM)	
Total Credits	16

Required Courses

PSYC 810 Psychological Assessment I	4
PSYC 811 Psychological Assessment II	4
PSYC 822 Scientific Foundations of Clinical Psychology I	3
PSYC 830 History, Systems, and Theories of Personality and Psychotherapy	3
PSYC 833 Social And Cognitive Foundations Of Clinical Psychology	3
PSYC 860 Introductory Helping Skills and Motivational Interviewing	3
PSYC 861 Cognitive Behavioral Therapy for Youth ¹	3
PSYC 862 Cognitive Behavioral Therapy for Adults ¹	3
PSYC 881 Practicum in Clinical Psychology ²	1-3
PSYC 883 Ethical and Professional Issues in Clinical Practice	3
Total Credits	41

¹ Students take 3 credits in fall and 3 credits in spring of the second year.

² Students take 3 credits in fall and 3 credits in spring of the third year.

Electives

The choice of quantitative emphasis affects the number of credits available for electives. Those who choose Emphasis A take 6 credit hours of electives; students choosing Emphasis B take 4 hours of electives; students choosing Emphasis C take 1 hour of elective.

Select 1-6 electives in consultation with the approval of an advisor	1-6
Total Credits	1-6

Advancement to Candidacy

To advance to candidacy, students must complete all core courses required by the program. Students must also successfully complete and pass written and oral comprehensive exams.

Dissertation Research

The dissertation requirement is designed to demonstrate the student's ability to apply psychological principles to research problems. Once enrolled in PSYC 999 Doctoral Dissertation, students must follow the university's continuous registration policy as specified in AP.6.10.6 Dissertation Research. Students who defend in the summer must be registered for at least 1 credit of PSYC 999 Doctoral Dissertation.

Students complete a minimum of 3 credits of PSYC 998 Doctoral Dissertation Proposal and 3 credits of PSYC 999 Doctoral Dissertation. They must apply a minimum of 12 dissertation credits (PSYC 998 Doctoral Dissertation Proposal and PSYC 999 Doctoral Dissertation combined) to the degree. Because of the continuous registration policy, students may be required to register for additional credits of these courses.

Select 12 credits from the following:	12
PSYC 998 Doctoral Dissertation Proposal	
PSYC 999 Doctoral Dissertation	
Total Credits	12

Internship

Students complete a full-time, 12-month clinical psychology internship at a site accredited by the American Psychological Association.

Externship (optional, but recommended)

Students complete a part-time clinical psychology externship in the fourth and/or fifth year of the program.

Concentration in Cognitive and Behavioral Neuroscience (CBNR)

Overview

This concentration focuses on studying biological substrates of behavior. Core and affiliated faculty study areas as diverse as neural control of behavioral development; animal models of learning and memory and their disorders (such as Alzheimer's); human brain systems involved in cognition, perception, human error, decision making, and movement; the relation of neural activity to human performance; and cognitive aging. A focus of the program is on translational neuroscience-complementary study of neural systems in humans and animals, including application of animal research to human behavior.

The program's core facilities have well-equipped behavioral testing and histological/histochemical facilities. The program's strong links to the Krasnow Institute for Advanced Study and the Center for Biomedical Genomics and Informatics allows opportunities for collaborative work as diverse as tissue slice preparations and molecular genetics. The doctoral program prepares students for research-based careers in academics, government, or industry.

Students pursuing this concentration must complete 72 graduate credits comprised of course work and at least 12 credits of dissertation research. The number of credits required may be reduced for a prior master's degree as described above.

Doctoral Coursework

Cognitive and Behavioral Neuroscience Core

PSYC 531	Mammalian Neurobiology	3
PSYC 555	Neuroimaging	3
PSYC 559	Behavioral Chemistry	3
PSYC 558 or PSYC 685	Neuronal Bases of Learning and Memory Cognitive Neuroscience	3
Total Credits		12

Quantitative and Research Methods

PSYC 611	Advanced Statistics	4
Select one course in advanced statistics from the following:		3
PSYC 652	Quantitative Methods II: Analysis of Variance	
PSYC 754	Quantitative Methods III: Psychological Applications of Regression Techniques	
PSYC 756	Quantitative Methods IV: Multivariate Techniques in Psychology	
Select two elective methods courses ¹		6
Total Credits		13

¹ Choose quantitative or research methods electives in consultation with an advisor and with the approval of the program faculty. This can include the course not chosen to fulfill the requirement above.

Professional Seminar

Take two credits in Professional Seminar from the following:	2
PSYC 850 Teaching Practicum in Psychology	
PSYC 890 Seminar in Professional Psychology	
Total Credits	2

Research Credits

The research credit requirement can be met through completion of a master's thesis (recommended) or other research course as approved by the program.

Select 6 credits in either a master's thesis or other research course ¹	6
Total Credits	6

Elective Credits

Students can complete the 72 credit requirement through credits of additional coursework as approved by the program/advisor. Six of these courses must be outside of the cognitive and behavioral neuroscience program.

Select electives to complete the 72 credit requirement

Advancement to Candidacy

To advance to candidacy, students must complete all core courses required by the program. Students must also successfully complete and pass written and oral comprehensive exams.

Dissertation Research

The dissertation requirement is designed to demonstrate the student's ability to apply psychological principles to research problems. Once enrolled in PSYC 999 Doctoral Dissertation, students must follow the university's continuous registration policy as specified in AP.6.10.6 Dissertation Research. Students who defend in the summer must be registered for at least 1 credit of PSYC 999 Doctoral Dissertation.

Students apply to this degree a minimum of 3 credits of PSYC 998 Doctoral Dissertation Proposal and 3 credits of PSYC 999 Doctoral Dissertation; they may apply a minimum 12 and a maximum of 24 dissertation credits (PSYC 998 Doctoral Dissertation Proposal and PSYC 999 Doctoral Dissertation combined) to the degree. Because of the continuous registration policy, students may be required to register for additional credits of these courses.

Select 12-24 credits from the following:	12-24
PSYC 998 Doctoral Dissertation Proposal	
PSYC 999 Doctoral Dissertation	
Total Credits	12-24

Concentration in Human Factors/Applied Cognition (HF)

Overview

The human factors and applied cognition concentration covers basic theoretical and empirical issues and emphasizes research that applies cognitive science to real-world problems. The program builds bridges between human factors engineering and cognitive psychology. Many applications of cognitive science are in the domain of human factors, and many doctoral students who complete our program go on to be human factors professionals.

Students pursuing this concentration must complete 72 graduate credits comprised of course work and at least 12 credits of dissertation research. The number of credits required may be reduced for a prior master's degree (up to 30 credits).

Doctoral Coursework

Cognitive Core

PSYC 701 Cognitive Bases of Behavior	3
or PSYC 768 Advanced Topics in Cognitive Science	
Total Credits	3

Biological, Social, or Developmental Core

Select two from the following:	6
Biological:	
PSYC 558 Neuronal Bases of Learning and Memory	
PSYC 559 Behavioral Chemistry	
PSYC 685 Cognitive Neuroscience	
PSYC 702 Biological Bases of Human Behavior	
Social:	
PSYC 667 Behavior in Small Groups and Teams	
PSYC 668 Personality: Theoretical and Empirical Approaches	
PSYC 703 Social Bases of Behavior	
Developmental:	
PSYC 566 Cognitive and Perceptual Development	

PSYC 669 Social and Emotional Development	
PSYC 704 Life-Span Development	
Total Credits	6

Quantitative and Research Methods

PSYC 611 Advanced Statistics	4
Total Credits	4

Advanced Statistics or Qualitative Methods

Select four courses from the following:	12
STAT 525 Nonparametric Statistics and Categorical Data Analysis	
PSYC 557 Psychometric Methods	
PSYC 612 Advanced Statistics	
PSYC 646 Issues and Methods in Longitudinal Developmental Research	
PSYC 652 Quantitative Methods II: Analysis of Variance	
PSYC 754 Quantitative Methods III: Psychological Applications of Regression Techniques	
PSYC 756 Quantitative Methods IV: Multivariate Techniques in Psychology	
PSYC 757 Advanced Topics in Statistical Analysis	
SOCI 634 Qualitative Research Methods	
Total Credits	12

Specialized Content

PSYC 530 Cognitive Engineering: Cognitive Science Applied to Human Factors	3
PSYC 645 Research Methods in Human Factors and Applied Cognition	3
Select three courses from the following: ¹	9
PSYC 734 Seminar in Human Factors and Applied Cognition	
PSYC 768 Advanced Topics in Cognitive Science	
Total Credits	15

¹ These are seminars with variable topics that may be repeated for credit when the topic is different.

Special Topics in Professional Issues

PSYC 890 Seminar in Professional Psychology	1-3
Total Credits	3

Directed Reading and Research

Students are encouraged to take a minimum of 1 credit of this course each semester until they advance to candidacy.

PSYC 897 Directed Reading and Research	1-3
Total Credits	1-3

Elective Courses

Students have several options for completing the remaining 72 credits required for the degree. They may take additional content courses with permission of their advisor. Students who do not have work experience in applied cognition or human factors are encouraged to take up to 6 credits of practicum.

Students are strongly encouraged to develop competence in programming and computer science through course work or independent study. Students are also encouraged to identify and take relevant courses within or outside the department with permission of their advisor.

Some options for fulfilling this requirement:

PSYC 734	Seminar in Human Factors and Applied Cognition	3
PSYC 768	Advanced Topics in Cognitive Science	3
PSYC 730	Practicum in Applied Psychology	1-6
or PSYC 592	Special Topics	

Advancement to Candidacy

To advance to candidacy, students must complete all core courses required by the program. Students must also successfully complete and pass written comprehensive exams.

Dissertation Research

The dissertation requirement is designed to demonstrate the student's ability to apply psychological principles to research problems. Once enrolled in PSYC 999 Doctoral Dissertation, students must follow the university's continuous registration policy as specified in AP.6.10.6 Dissertation Research. Students who defend in the summer must be registered for at least 1 credit of PSYC 999 Doctoral Dissertation.

Students complete a minimum of 3 credits of PSYC 998 Doctoral Dissertation Proposal and 3 credits of PSYC 999 Doctoral Dissertation. They must apply a minimum of 12 dissertation credits (PSYC 998 Doctoral Dissertation Proposal and PSYC 999 Doctoral Dissertation combined) to the degree. Because of the continuous registration policy, students may be required to register for additional credits of these courses.

Select 12 credits from the following:	12
PSYC 998	Doctoral Dissertation Proposal
PSYC 999	Doctoral Dissertation
Total Credits	12

Concentration in Industrial/Organizational Psychology (IO)

Overview

The industrial/organizational psychology concentration focuses on multiple aspects of behavior in organizational settings, including personnel selection, quantitative analysis, teams, leadership, work and family issues, and organizational health issues. Mason's graduate work in this area emphasizes research as the key to knowledge in both academic and applied settings. The program fosters a peer-oriented environment whereby students collaborate on numerous projects in addition to working with faculty members, in many different areas of industrial/organizational psychology.

Students pursuing this concentration must complete 72 graduate credits comprised of course work and at least 12 credits of dissertation research. The number of credits required may be reduced for a prior master's degree as described above.

Doctoral Coursework

Core Course

PSYC 703	Social Bases of Behavior	3
Total Credits		3

Required Courses in Statistics

PSYC 557	Psychometric Methods	3
PSYC 611	Advanced Statistics	4
PSYC 633	Evaluative Research in Psychology	3
PSYC 754	Quantitative Methods III: Psychological Applications of Regression Techniques	3
PSYC 892	Special Topics in Psychology	1-6
Select one additional specialized statistics course ¹		3
Total Credits		17-22

¹ Such as PSYC 646 Issues and Methods in Longitudinal Developmental Research, PSYC 756 Quantitative Methods IV: Multivariate Techniques in Psychology, PSYC 892 Special Topics in Psychology (not SEM/META)

Survey of Content

PSYC 631	Industrial and Personnel Testing and Evaluation	3
PSYC 636	Survey of Industrial Psychology	3
PSYC 639	Survey of Organizational Processes	3
PSYC 739	Seminar in Industrial/Organizational Psychology	3
Total Credits		12

Specialized Content

Students taking 12 credits of specialized content may take an additional 3 credits of PSYC 897 Directed Reading and Research.

Select four to five courses of specialized content from the following:	12-15
PSYC 638	Training: Psychological Contributions to Theory, Design, and Evaluation
PSYC 667	Behavior in Small Groups and Teams
PSYC 733	Issues in Personnel Psychology
PSYC 741	Psychology of Work Motivation
PSYC 892	Special Topics in Psychology
Total Credits	12-15

Professional Development

Required:

PSYC 890	Seminar in Professional Psychology	3
PSYC 892	Special Topics in Psychology	6

Recommended:

Select one from the following:	
PSYC 730	Practicum in Applied Psychology
or PSYC 897	Directed Reading and Research
PSYC 730 & PSYC 897	Practicum in Applied Psychology and Directed Reading and Research

Total Credits 9

¹ Students taking 12 credits of specialized content may take an additional 3 credits of PSYC 897 Directed Reading and Research.

Electives

Students complete the remaining credits required for this degree through additional course work in professional development or dissertation.

Advancement to Candidacy

To advance to candidacy, students must complete all core courses required by the program. Students must also successfully complete and pass written and oral comprehensive exams.

Dissertation Research

The dissertation requirement is designed to demonstrate the student's ability to apply psychological principles to research problems. Once enrolled in PSYC 999 Doctoral Dissertation, students must follow the university's continuous registration policy as specified in AP.6.10.6 Dissertation Research. Students who defend in the summer must be registered for at least 1 credit of PSYC 999 Doctoral Dissertation.

Students complete a minimum of 3 credits of PSYC 998 Doctoral Dissertation Proposal and 3 credits of PSYC 999 Doctoral Dissertation. They must apply a minimum of 12 dissertation credits (PSYC 998 Doctoral Dissertation Proposal and PSYC 999 Doctoral Dissertation combined) to the degree. Because of the continuous registration policy, students may be required to register for additional credits of these courses.

Select 12 credits from the following:	12
PSYC 998 Doctoral Dissertation Proposal	
PSYC 999 Doctoral Dissertation	
<hr/> Total Credits	12