

Psychology

This section presents the requirements for programs in:

- **M.A. Psychology**
- **M.A. Psychology with Specialization in Data Science**
- **Ph.D. Psychology**
- **Ph.D. Psychology with Concentration in Quantitative Methodology**

Program Requirements

M.A. Psychology (5.0 credits)

Requirements:

1. 1.0 credit in:	1.0
PSYC 5410 [0.5]	Advanced Analysis of Variance
PSYC 5411 [0.5]	Advanced Regression
2. Completion of:	0.0
PSYC 5906 [0.0]	Pro-Seminar in Psychology
3. 1.0 credit in PSYC at the 5000 level, excluding the professional development courses listed in Item 4 and excluding the elective statistics courses listed below.	1.0
4. 0.5 credit from the following professional development courses:	0.5
PSYC 5002 [0.5]	Ethics in Psychology
PSYC 5003 [0.5]	Open Science and Methodological Improvements
PSYC 5004 [0.5]	Knowledge Translation
PSYC 5903 [0.5]	Practicum in Psychology
5. 2.5 credits in:	2.5
PSYC 5909 [2.5]	M.A. Thesis (which must be defended at an oral examination)
Total Credits	5.0

Note: courses for each research area are listed on the departmental website: carleton.ca/psychology.

M.A. Psychology with Specialization in Data Science (5.0 credits)

Requirements:

1. 1.0 credit in:	1.0
PSYC 5410 [0.5]	Advanced Analysis of Variance
PSYC 5411 [0.5]	Advanced Regression
2. 0.5 credit in:	0.5
DATA 5000 [0.5]	Data Science Seminar
3. 0.5 credit in PSYC at the 5000 level, excluding the professional development courses listed in Item 4 and excluding the elective statistics courses listed below.	0.5
4. 0.5 credit from the following professional development courses:	0.5
PSYC 5002 [0.5]	Ethics in Psychology
PSYC 5003 [0.5]	Open Science and Methodological Improvements
PSYC 5004 [0.5]	Knowledge Translation
PSYC 5903 [0.5]	Practicum in Psychology
5. Completion of:	0.0
PSYC 5906 [0.0]	Pro-Seminar in Psychology
6. 2.5 credits in:	2.5

PSYC 5909 [2.5]	M.A. Thesis (in the area of Data Science, which must be defended at an oral examination)	
Total Credits		5.0

Notes:

1. Students must receive a minimum grade of A in each of the courses included in the Specialization.
2. Courses for each research area are listed on the departmental website: carleton.ca/psychology.

Ph.D. Psychology (10.0 credits)

Requirements:

1. 1.0 credit in:	1.0
PSYC 5410 [0.5]	Advanced Analysis of Variance
PSYC 5411 [0.5]	Advanced Regression
2. 0.5 credit in Elective Statistics courses (listed below):	0.5
or other, as approved by the graduate committee.	
3. 1.0 credit in graduate level PSYC courses, excluding the professional development courses listed in Item 4 and excluding the elective statistics courses listed below.	1.0
4. 0.5 credit from the following professional development courses:	0.5
PSYC 5002 [0.5]	Ethics in Psychology
PSYC 5003 [0.5]	Open Science and Methodological Improvements
PSYC 5004 [0.5]	Knowledge Translation
PSYC 6104 [0.5]	Seminar in University Teaching
PSYC 6114 [0.5]	Teaching Practicum
PSYC 6903 [0.5]	Practicum in Psychology
5. Completion of:	
PSYC 6906 [0.0]	Pro-Seminar in Psychology I
PSYC 6907 [0.0]	Pro-Seminar in Psychology II
6. 7.0 credits in:	7.0
PSYC 6909 [7.0]	Ph.D. Thesis (equivalent to 7.0 of the required 10.0 credits which must be defended at an oral examination)
7. All Ph.D. candidates are required to submit a thesis prospectus. The prospectus examination will normally be successfully completed within seven calendar terms of the student's initial registration for full-time students and ten terms for part-time students	
Total Credits	10.0

Note: courses for each research area are listed at the departmental website: carleton.ca/psychology.

Ph.D. Psychology with Concentration in Quantitative Methodology (10.0 credits)

Requirements:

1. 1.0 credit in:	1.0
PSYC 5410 [0.5]	Advanced Analysis of Variance
PSYC 5411 [0.5]	Advanced Regression
2. 1.0 credit in Elective Statistics courses (listed below)	1.0
or other as approved by the graduate committee	
3. 0.5 credit in:	0.5
PSYC 6410 [0.5]	Capstone Research Project in Quantitative Methods

4. **0.5 credit from** the following professional development courses: 0.5

PSYC 5002 [0.5]	Ethics in Psychology
PSYC 5003 [0.5]	Open Science and Methodological Improvements
PSYC 5004 [0.5]	Knowledge Translation
PSYC 6104 [0.5]	Seminar in University Teaching
PSYC 6114 [0.5]	Teaching Practicum
PSYC 6903 [0.5]	Practicum in Psychology

5. **Completion of:**

PSYC 6906 [0.0]	Pro-Seminar in Psychology I
PSYC 6907 [0.0]	Pro-Seminar in Psychology II

6. **7.0 credits in:** 7.0

PSYC 6909 [7.0]	Ph.D. Thesis
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All Ph.D. candidates are required to submit a thesis prospectus. The prospectus examination will normally be successfully completed within seven calendar terms of the student's initial registration for full-time students and ten terms for part-time students.

Total Credits 10.0

Notes:

1. Students must receive a minimum grade of A in each of the courses included in the Concentration.
2. Registration in PSYC 6410 will occur after the other 2.0 credits have been completed and after a proposed research project has been approved by the Department.
3. Upon completion of the Concentration's requirements, the student will request an in-program change from a PhD in Psychology to a PhD in Psychology with a Concentration in Quantitative Methodology.
4. Courses for each research area are listed on the departmental website: carleton.ca/psychology.

Regulations

See the General Regulations section of this Calendar.

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See the General Regulations section of this Calendar.

The minimum program requirements for the Ph.D. degree in Psychology include 10.0 credits with a grade of B- or higher in each course

Admission Requirements

The normal requirement for admission into the master's programs is a B.A. Honours Psychology (or equivalent) with high honours standing, completion of a research thesis, and credit in a breadth of courses in line with the psychology major.

Candidates with particular course deficiencies may be required to register in additional courses at Carleton.

Qualifying Year

Occasionally, candidates with exceptional promise who offer less than Honours B.A. status may be admitted to a qualifying-year program approved by the graduate studies committee and designed to prepare them for master's study. A grade of B- or better must be obtained in each qualifying-year course, and candidates may be required to

complete satisfactorily the equivalent of a B.A.(Honours) thesis.

Admission

The requirements for admission to the Ph.D. program are outlined in the General Regulations section of this Calendar. Scores on the Graduate Record Examination are optional.

The Ph.D. program in psychology normally will be undertaken on a full-time basis; however, in cases of exceptional merit, the Department will accept a few candidates for the degree on a part-time basis.

Psychology Elective Statistics Courses

PSYC 5401 [0.5]	Multivariate Techniques
PSYC 5407 [0.5]	Scale Development and Psychometrics
PSYC 5412 [0.5]	Topics in Advanced Statistics and Methods
PSYC 5413 [0.25]	Workshops in Advanced Statistics and Methods
PSYC 5414 [0.5]	Structural Equation Modeling
PSYC 5415 [0.5]	Multilevel Modeling
PSYC 5416 [0.5]	Advanced Survey Methods
PSYC 5417 [0.5]	Categorical Data Analysis

Psychology (PSYC) Courses

PSYC 5001 [0.5 credit]

Qualitative Research Methods in Psychology

Introduction to various non-numerical, interpretive research methods. Attention will be devoted to the philosophical underpinnings of qualitative research, methods collecting and analyzing qualitative data, and issues regarding sampling, reliability, and validity. Includes: Experiential Learning Activity

PSYC 5002 [0.5 credit]

Ethics in Psychology

Ethical concepts and controversies related to research and practice in psychology. Topics may include ethical dilemmas and debates, professional codes of ethics, confidentiality, informed consent, legal rights and responsibilities, use of deception, or guidelines for research with special populations.

PSYC 5003 [0.5 credit]

Open Science and Methodological Improvements

Exploring recent debates around reproducibility and openness in psychology. Practical objectives involving the improvement of research practices, publication strategies, and evaluation of past findings. Topics may include basic issues in measurement, statistical inference, ethics, and philosophy of science.

PSYC 5004 [0.5 credit]**Knowledge Translation**

Knowledge translation encompasses a wide variety of activities designed to support the flow of knowledge from creators (e.g., researchers) to users (e.g., policy makers) and back. This course explores theory and practice concerning the creation, synthesis, sharing, and uptake of knowledge, and communication skills.

PSYC 5011 [0.5 credit]**Social Psychology I**

Recent developments in social psychology theory and research. Topics may include social cognition, social influence, group processes, conflict resolution and social change.

PSYC 5012 [0.5 credit]**Organizational Psychology I**

Recent developments in organizational psychology and research. Topics may include personnel selection, work motivation, morale and productivity, organizational decision making, leadership and social action.

PSYC 5015 [0.5 credit]**Methods in Social and Personality Psychology**

An overview of traditional and emerging research methods in social and personality psychology. Students will learn a variety of experimental and nonexperimental procedures for assessing individual differences, cognitions, emotions, attitudes, and behaviours in the laboratory and the field.

PSYC 5020 [0.5 credit]**Applications of Psychology to Policing and the Courts**

A review of theory and research related to the application of psychology to various components of the criminal justice system, particularly policing and the courts. Topics may include criminal investigations, police use of force, eyewitness testimony and identification, victim rights, and jury decision making.

Includes: Experiential Learning Activity

PSYC 5021 [0.5 credit]**Forensic Assessment**

Theoretical and empirical issues of the biopsychosocial antecedents of criminal behaviour. Classification and assessment of offenders for courts, probation and parole services. Risk assessment, management and service planning are addressed in both correctional and mental health contexts.

Includes: Experiential Learning Activity

PSYC 5022 [0.5 credit]**Adult Offenders**

Theoretical and empirical issues on the use of different types of interventions in modifying adult criminal behaviour. Institutional treatment and community-based approaches are discussed.

PSYC 5024 [0.5 credit]**Juvenile Delinquency**

An examination of the development of delinquency with a focus on etiology, risk factors, assessment, prediction, and developmental trajectories. Individual, group, and family institutional and community treatment approaches are examined.

PSYC 5104 [0.5 credit]**Psychology of Women**

This seminar will consider and evaluate research concerning the psychology of women, including research methods, gender roles and gender differences.

PSYC 5107 [0.5 credit]**Psychology of Family Violence**

Biopsychosocial antecedents and consequences of the abuse and neglect of children, partners and elders within the family. The efficacy of preventive and treatment strategies is also assessed, as are current controversies and research methods in the area.

PSYC 5208 [0.5 credit]**Advances in Positive Psychology**

Overview and critical analysis of current theory and research in positive psychology; application of principles in organizations, schools, and the community. Topics may include positive youth development, perspectives on psychological wellness and growth, positive emotions, resilience, and mindfulness.

PSYC 5209 [0.5 credit]**Psychology of Health and Illness**

A critical examination of scientific theory and research on the role of psychological factors in health and illness, and the use of psychological interventions in treating illness and maintaining health. Topics include the biopsychological model of illness, stress and coping, psychoneuroimmunology, personality, and stress management.

PSYC 5300 [0.5 credit]**Perceptual Processes**

Theoretical and empirical issues of the area of perception. Topics may include: psychophysics, constancies, depth perception, pattern recognition, iconic memory, attention, hemispheric specialization.

PSYC 5301 [0.5 credit]**Psychophysics**

A study of classic and contemporary psychophysical methods. Applications to cognition will be included.

PSYC 5401 [0.5 credit]**Multivariate Techniques**

Applications of multivariate statistical techniques with psychological data including multivariate analysis of variance, canonical correlation, discriminant function analysis, and factor analysis. Extensive use is made of statistical software.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411.

PSYC 5407 [0.5 credit]**Scale Development and Psychometrics**

This course will typically be designed to provide an in-depth understanding of the process of psychological scale development with respect to both the classical (i.e., reliability, validity) and the more modern (item response theory) psychometric approaches.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5411.

PSYC 5410 [0.5 credit]**Advanced Analysis of Variance**

Concepts and applications of advanced analysis of variance designs, including factorial, within groups, and hierarchical designs, and analysis of covariance. Extensive use is made of statistical software.

Includes: Experiential Learning Activity

PSYC 5411 [0.5 credit]**Advanced Regression**

Concepts and applications of advanced regression analyses, including multiple regression, hierarchical and polynomial techniques. Extensive use is made of statistical software.

Includes: Experiential Learning Activity

PSYC 5412 [0.5 credit]**Topics in Advanced Statistics and Methods**

Selected topics in advanced statistics and research methods relevant to broad areas of psychology, varying from year to year. Topics may include broad analytic approaches, such as, program evaluation, qualitative methods, nonparametric statistics, among others.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5413 [0.25 credit]**Workshops in Advanced Statistics and Methods**

Intensive focus on specific statistical or methodological approaches relevant to psychological research such as advanced factor analysis, meta-analysis, observational methods.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5414 [0.5 credit]**Structural Equation Modeling**

An in depth examination of structural equation modeling (SEM) techniques. SEM involves the integration of path analysis and factor analysis. Basic issues such as model fitting and identification will be covered as well as more applied issues surrounding mediation and moderation testing in SEM.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5415 [0.5 credit]**Multilevel Modeling**

An in depth examination of multilevel modeling (MLM). Students will develop the skills required to interpret and conduct multi-level data analysis, including longitudinal and nested designs, using hierarchical linear modeling software. The primary focus will be on two- level and three-level hierarchies.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5416 [0.5 credit]**Advanced Survey Methods**

Analysis of data from complex sample designs, including the development of selection and non-response weights, methods for handling and imputing missing data, the effects of stratification and clustering on estimation, and methods of variance estimation for complex sample designs.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5417 [0.5 credit]**Categorical Data Analysis**

This course will provide students with an in-depth understanding of several statistical techniques that can be used to analyze categorical data. Topics include contingency tables, log-linear analysis, logistic regression analysis with categorical predictors, continuous predictors, and interaction terms, and receiver operator characteristic (ROC) analysis.

Includes: Experiential Learning Activity

Prerequisite(s): PSYC 5410 and PSYC 5411. This course also requires permission of the Department.

PSYC 5500 [0.5 credit]**Developmental Psychology Methodology**

An overview of research methods in the study of developmental psychology. Topics may include: observational and interview techniques, use of archival data, longitudinal designs, questionnaire development, and basic assessment methods. A research project will be required.

Includes: Experiential Learning Activity

PSYC 5503 [0.5 credit]**Advanced Topics in Developmental Psychology:
Social and Emotional Development**

Recent developments in developmental psychology theory and research related to the study of social and emotional development. Topics may include child temperament, parenting and the family, peer relationships, self-system, and developmental psychopathology.

PSYC 5504 [0.5 credit]**Advanced Topics in Developmental Psychology: Cognitive Development**

Recent developments in developmental psychology theory and research related to the study of cognitive development. Topics may include: language, literacy, numeracy, and theory of mind.

PSYC 5505 [0.5 credit]**Theories of Developmental Psychology**

An in-depth examination of theories of developmental psychology. Special attention will be given to the mechanisms that account for change. Although most theories speak to the developmental of children, students will have the opportunity to investigate theories of ageing as well.

PSYC 5601 [0.5 credit]**Contemporary Research in Personality**

Current controversial issues in personality research, and selected theoretical and research studies in personality.

PSYC 5700 [0.5 credit]**Advanced Topics in Cognition I**

An in-depth study of a specific topic in the area of basic cognitive processes. Topics will vary from year to year and may include judgmental processes, object identification, selective attention and spatial cognition.

PSYC 5703 [0.5 credit]**Cognition I**

A survey of issues and research methodologies in basic cognitive processes. Topics may include detection and processing of sensory signals, pattern recognition, attention, mental imagery and automaticity.

PSYC 5704 [0.5 credit]**Cognition II**

A survey of issues and research methodologies in higher-level cognitive processes. Topics may include memory, representation of knowledge, decision processes, and the procedural/declarative controversy. The course may be focused on a particular area (e.g. reading, transfer in problem solving).

PSYC 5800 [0.5 credit]**Special Topics in Psychology**

The topics of this course will vary from year to year, and will be announced in advance of the registration period.

PSYC 5900 [0.5 credit]**Directed Studies**

In-depth investigation of selected problems in psychology by means of directed library research. Registration is restricted, permission to register being granted only by the graduate committee. A final report must be filed in the departmental office prior to submission of course grade. Includes: Experiential Learning Activity

PSYC 5901 [0.5 credit]**Independent Research**

Permission to register and approval of research plan must be obtained from the graduate committee. A final research report must be filed in the departmental office prior to submission of course grade. The course may be repeated for credit.

Includes: Experiential Learning Activity

PSYC 5903 [0.5 credit]**Practicum in Psychology**

The practicum offers master's level students the opportunity to gain experience in a range of applied psychology settings with the goal of integrating academic and practical aspects of psychology. This course cannot be repeated for credit. Students will receive a grade of satisfactory or unsatisfactory.

Includes: Experiential Learning Activity

PSYC 5906 [0.0 credit]**Pro-Seminar in Psychology**

The pro-seminar is based on the departmental invited colloquia series. This course provides breadth in terms of exposure to research. Colloquia are offered from September to April.

PSYC 5909 [2.5 credits]**M.A. Thesis**

Includes: Experiential Learning Activity

PSYC 6101 [0.5 credit]**Social Psychology II**

A seminar covering a selection of advanced topics in social psychology theory and research taken from recent publications and debates in the discipline.

PSYC 6102 [0.5 credit]**Organizational Psychology II**

A seminar covering advanced topics in organizational psychology theory and research taken from recent publications and debates in the discipline.

PSYC 6104 [0.5 credit]**Seminar in University Teaching**

Theoretical and empirical work related to teaching in higher education. Analysis of instructional discourse, use of language in classroom decision-making, bases of effective practice and methods of instruction. Constructivist principles of teaching and learning. Role of teaching in university scholarship.

Also listed as LALS 5204.

Precludes additional credit for LALS 5905 (Section T, 1997-98), LALS 5905 (Section X, 1998-99), LALS 5905 (Section W, 1999-2000), LALS 5905 (Section W, 2000-01), LALS 5905 (Section X, 2001-02), LALS 5905 (Section W, 2002-03) and LALS 5204.

PSYC 6114 [0.5 credit]**Teaching Practicum**

The purpose of this course is to provide doctoral students who have an interest in developing their teaching skills with the opportunity for mentored practice within the discipline of psychology. Graded SAT/UNS.

Includes: Experiential Learning Activity

PSYC 6410 [0.5 credit]**Capstone Research Project in Quantitative Methods**

Conduct an independent quantitative data analysis project that demonstrates a student's mastery of advanced quantitative techniques. This project may involve practical experience with an organization or agency when the principal activity extends the student's knowledge of quantitative techniques.

Includes: Experiential Learning Activity

Prerequisite(s): permission of the Department.

PSYC 6700 [0.5 credit]**Advanced Topics in Cognition II**

An in-depth study of a specific topic in higher-level cognitive processes. Topics will vary from year to year and may include mathematical knowledge and processes, problem solving, or models of reading.

PSYC 6800 [0.5 credit]**Special Topics in Psychology**

The topics of this course will vary from year to year, and will be announced in advance of the registration period.

PSYC 6900 [0.5 credit]**Directed Studies**

In-depth investigation of selected problems in psychology by means of directed library research. Registration is restricted, permission to register being granted only by the graduate committee. A final report must be filed in the departmental office prior to submission of course grade.

Includes: Experiential Learning Activity

PSYC 6901 [0.5 credit]**Independent Research**

Permission to register and approval of research plan must be obtained from the graduate committee. A final research report must be filed in the departmental office prior to submission of course grade. The course may be repeated for credit.

Includes: Experiential Learning Activity

PSYC 6903 [0.5 credit]**Practicum in Psychology**

The practicum offers Ph.D. students the opportunity to gain experience in a range of applied psychology settings with the goal of integrating academic and practical aspects of psychology. This course cannot be repeated for credit. Students will receive a grade of satisfactory or unsatisfactory.

Includes: Experiential Learning Activity

PSYC 6906 [0.0 credit]**Pro-Seminar in Psychology I**

The pro-seminar is based on the departmental invited colloquia series. This course provides breadth in terms of exposure to research. Colloquia are offered from September to April.

Includes: Experiential Learning Activity

PSYC 6907 [0.0 credit]**Pro-Seminar in Psychology II**

The pro-seminar is based on the departmental invited colloquia series. This course provides breadth in terms of exposure to research. Colloquia are offered from September to April.

Includes: Experiential Learning Activity

PSYC 6909 [7.0 credits]**Ph.D. Thesis**

Includes: Experiential Learning Activity