

IBM 7040 and DEC PDP-10 computer facilities. The Department has a remote terminal, card reader and printer for use with the PDP-10. In addition to a library of computer programs, a full-time programmer is available for special programs or consultation.

Potential field settings (and sources of subjects) for research include, in addition to industry and schools, three mental hospitals, psychiatric wards in two general hospitals, an Alcoholism and Drug Addiction Research Foundation, a Child Guidance Clinic, a Children's Psychiatric Research Institute, a Crippled Children's Treatment Center and a nursery school. Four mobile laboratories are available for off-campus research with children.

### **M.A. DEGREE**

The purpose of the master's program is to increase the student's general knowledge of psychology beyond that obtained in undergraduate courses and to train him for research and scholarly work. The program also provides a foundation for advanced training in applied psychology. Candidates are required to take three graduate courses, and to submit a thesis based on an empirical investigation of a problem within some area of psychology. The thesis research is supervised by a faculty member to whom the student is apprenticed.

The minimum residence requirement is one academic year of full-time study by a candidate entering with a Canadian Honors degree or its equivalent, but students who have not completed the requirements for the degree are expected to remain in residence during the summer.

### **Ph.D. DEGREE**

The primary purpose of the doctoral program is to train scientists and university teachers. The program typically includes graduate seminars and tutorials, a comprehensive examination in one area of specialization, and a dissertation based on a research project. Individual programs of study are encouraged, and include teaching and research apprenticeship training with members of staff. The minimum residence requirement is three academic years of full-time study after an Honors level Bachelor's or two after a Master's degree. Frequently, more time is necessary. All students are expected to be in residence during the summer.

### **ADMISSION REQUIREMENTS**

MA Degree: A student must have obtained at least second class honors in the final years of his undergraduate work to be admitted to the Faculty of Graduate Studies.

PhD Degree: An MA degree in psychology is normally required for admission as a PhD candidate in the Department. A copy of the MA thesis may be requested at the time of application.

## **PSYCHOLOGY**

### **PROGRAM OF STUDIES**

The graduate program provides advanced training in general psychology with specialization in learning and motivation, sensation and perception, physiological and comparative, verbal learning and memory, cognition, measurement, experimental child, personality theory and assessment, experimental social, psycholinguistics, educational, mental retardation, and experimental psychopathology.

### **FACILITIES OF THE DEPARTMENT**

Facilities for experimental research include animal laboratories and rooms specially designed for research with human subjects in perception, psychophysiology, learning, personality and experimental social psychology. Standard equipment is available, and additional special equipment necessary for a student's research may be purchased. Facilities to aid in running experiments include a PDP-8s and a PDP-12 computer complete with analog converter, oscilloscope, etc. An engineering shop, a work shop and electronic consultants are available. Data processing equipment includes programmable electronic calculators (in addition to standard mechanical and electronic calculators) and access to complete

Graduate Record Examination results (Aptitude and Advanced Tests) are required and should be made available at the time of application. MAT scores may be accepted in certain cases.

## COURSES

**500-509. Learning and Motivation.** Introduction to theories of Hull-Spence, Logan, Mowrer, Miller, Skinner, Estes; classical conditioning; operant conditioning; frustration; punishment; discrimination learning; partial reinforcement; mediation concepts; and, motivational models.

**510-519. Sensation and Perception.** Psychophysical theory and methods; physiological basis of sensory and perceptual processes and their stimulus correlates; spatial and temporal factors; color vision; adaptational processes; theories and models of perception; and, developmental and motivational aspects of perception.

**520-529. Physiological and Comparative.** Neural mechanisms of learning; memory; language; sensory and perceptual processes; attention; sleep and wakefulness; and, neural and endocrine integrations underlying drives and emotional behavior.

**530-539. Experimental Child.** Motivational and associative factors in children's learning; development of sensory integration; problem solving and cognitive development; behavioral modification in preschool children; assessment of brain-injury; and special problems in behavioral development.

**540-549. Research Design and Measurement.** Design of research and the analysis of data; general statistical principles; analysis of variance; correlation theory; multivariate techniques; methods and principles of measurement; numerical analysis; and, theory of errors.

**550-559. Cognitive Processes.** Concept formation; problem solving; computer simulation of cognitive processes; the creative process in literature; cross-cultural variation in thinking processes; decision-making and game theory.

**560-569. Experimental Social.** An overview of problems in social psychology; theory and method; social learning and motivation; person perception; attitudes; social influence; group structure and process.

**570-579. Verbal Learning, Memory, and Psycholinguistics.** Stimulus and response parameters; coding or mediating processes; structural aspects of language; theoretical interpretations of verbal learning; processes in short-term and long-term memory; psycholinguistic phenomena including developmental aspects; situational determinants, pathology, and individual differences in language and verbal behavior.

**580-589. Personality Theory and Assessment.** Critical evaluation of theories concerning the nature and function of the person as a psychological entity, and the theoretical and quantitative

foundations of assessment; empirical foundations of personality theory; personality theory and practice; test theory; construct validation and test construction; classification and diagnosis; and, multivariate procedures.

**600-609. Educational Psychology.** Introduction to educational psychology; the analysis of the general principles of psychology as applied to education; education of exceptional children including children with emotional, neurological and perceptual disorders as well as the gifted, retarded, and culturally deprived; educational research; educational measurement; and the psychology of teaching and application of learning theory to classroom learning.

**620-629. Experimental Psychopathology.** Theoretical foundations of psychopathology; etiology; assessment and treatment of behavior disorders and organic impairments.

**630-639. Occupational Psychology and Counselling.** A critical survey of alternative counselling strategies and approaches; research on counselling practice and counselling outcomes; assessment in counselling; research on occupational choice and career development.

**640-649. Current Topics.** Proseminars in various areas of specialization conducted in cooperation with many faculty members. Psychology 640 is a general proseminar required of all MA students.

**680-689. Tutorial in Experimental and Theoretical Psychology.**

**590. MA Thesis.**

**690. PhD Thesis.**

**Note:** At least one seminar in each of the above areas is normally offered each academic year. Seminars are frequently inter-disciplinary with contributors from other Departments, such as: Computer Science, Neurology, Physiology, Sociology, Psychiatry, Physics, and Paediatrics.

GRADUATE COURSES 1971-72

<u>COURSE</u>	<u>INSTRUCTOR</u>	<u>MAX. SIZE</u>	<u>TIME</u>
500: Learning	Kendall, Roberts	10	Th. 1:30-4:30
501: Adv. Learning	Kendall, Lobb, Roberts, Van Fleet, Murray	10	F. 2:30-5:30
511: Perception	W. Siegel, Rollman	10	W 9:30-12:30
512a: Visual sens. processes	Wilkinson	10	M 9:30-12:30
514b: Signal detect. theory	Chamberlain	10	M 9:30-12:30
521: Physiological	Vanderwolf, Baran, Boles, Kimura, Mogenson	10	F 9:30-12:30
531: Child	Simmer, Bartoshuk, Pederson	10	Th 9:30-12:30
540: Research Design	Gardner,	50	T 1:30-4:30
541: Adv. Measure.	t.b.a.	10	W 1:30-4:30
542a: Math. for Psychologists	Chamberlain	20	M 7-10 P.M.
551: Cognition	Denny	10	T 9:30-12:30
560: Exp. Social	Rokeach, Vidmar, Sorrentino	10	M 9:30-11:30
561a: Group dynamics	Sorrentino	10	W 9:30-10:30
561b: Attitudes	Gardner, Goodstadt	10	F 9:30-12:30
*562: Res. sem. in Social Psych.	Goodstadt	10	F 9:30-12:30
563: Special problems in Social Psych.	Goodstadt	10	W 11:30-12:30
571: Psycholinguistics	Vidmar, Rokeach, Gardner, Sorrentino	10	Th 1:30-4:30
580: Personality Assessment	Paivio	15	Th 9:30-12:30
*581: Pers. theory research	Reitz, t.b.a.	20	Lect. T 9:30-12:30 Lab. W 9:30-12:30
600: Educational	Fay, S. Prytulak	20	F 9:30-11:30
621a: Clin. Child	Stennett	10	T 7-10 P.M.
622b: Ment. retard.	Bucher	15	M 9:30-12:30
625: Behavior Modification	Lobb	15	M 9:30-12:30
626a: Clinical Neuropsych.	Bucher, Carlson	20	W 1:30-4:30
627b: Psychopathology	Kimura	15	Th 9:30-12:30
628a: Community Psych.	Reitz	15	F 1:30-4:30
629b: Research topics in clin. psych.	t.b.a.	15	Th 1:30-4:30
*630: Intro. to Counselling	t.b.a.	15	Th 1:30-4:30
631: Adv. counsell.	Murphy	15	F 11:00-12:30
640: Proseminar	Siess, Murphy	15	Th 9:30-12:30
*641: Clin. prosem.	Turner	50	TWTh 4:30
	Carlson	25	Th 7-10 P.M.

\* Half course meeting part-time in both first and second terms.