

Graduate Course List for 1990-1991

Courses below are sorted by Area of Specialization: Clinical, Cognition, Developmental, Educational, Industrial/Organizational, Learning and Animal Behavior, Measurement, Personality, Psychobiology and Clinical Neuropsychology, Sensation and Perception, and Social.

Key: a=Sept-Dec, b=Jan-April, y=Sept-April, no letter=Sept-April. See weights at the end of each description.

LEARNING AND ANIMAL BEHAVIOR

501. Advanced Seminar in Learning. Area Faculty. This weekly seminar, chiefly for students in the learning area, will be attended on a regular basis by several faculty members. The object will be to review current research topics in learning at an advanced level. All students in learning are expected to attend and participate. Second and third year students may wish to take the course for credit. Full course; two terms.

504b. Animal Cognition. W. A. Roberts. This course will cover a number of topics in the recently emerging field of animal memory and cognition. A number of cognitive abilities recently discovered in animals will be discussed within a comparative framework; we will be particularly be concerned with the extent to which cognitive processes found in people may be found in animals. Some of the areas of study to be covered will be language in animals, human-ape communication, the bases of short and long term memory, spatial memory, concept formation, thinking and reasoning, timing, foraging theory, and the processing of sequentially presented information. The course will run on a mixed lecture-seminar format. The instructor will present some of the information in introductory lectures. Each student will be asked to present some articles in class and to write and present a paper on a topic of his/her choosing. The final grade will be based on a class presentation, the term paper, and a final examination. Half course; one term.

SENSATION AND PERCEPTION

516a. Computational Perception. R. Gurnsey. This course will focus on computational approaches to perception, particularly visual perception. Topics will include spatial filtering, perceptual organization, color perception, recovery of surface orientation, and object recognition. Emphasis will be placed on Marr's (1982) tripartite theory of early visual processing and his emphasis on three levels of theoretical analysis. Half course; one term.

518a. Seminar in Sensation and Perception. B. Morrongiello. Faculty and students in Sensation and Perception and related areas will meet once a week to discuss ongoing research and contemporary issues in sensation and perception. Half course; one term.

513b. Psychology of Pain. G. Rollman. Topics include the psychological, clinical, and physiological manifestation of the pain experience, the major theories of pain mechanisms, congenital insensitivity to pain, psychophysical assessment of the sensory and affective components of pain, and placebo effects. As well, the treatment of pain by analgesic drugs, hypnosis, neurosurgery, acupuncture, electrical stimulation, biofeedback, cognitive-behavior therapy, and operant conditioning will be examined. Meetings will be arranged with medical personnel concerned with clinical diagnosis and control of acute and chronic pain. Half course; one term.

DEVELOPMENTAL

539a. Social Relations In Infancy. D. R. Pederson and G. Moran. The purpose of this course is to examine the theoretical and empirical literature on what is loosely described as infant attachment. The

course will survey the development of attachment theory from the classical foundations in psychoanalytic object relations theory, through Bowlby's ethological theory and to contemporary proposals by Main and by Bretherton about self-models. We will also explore the research literature on assessments of attachment, antecedent conditions related to attachment security, and consequences of individual differences in attachment. The format of the course will be discussion of assigned readings. Active participation is expected. Half course; one term.

555b. Social Development. D. Pederson. This seminar will be a survey of current theory and research in social development. Topics will include: infant-parent attachment, development of the self systems, social cognition, moral development, aggression, sex role development, child rearing practices, and peer relationships. Half course; one term.

MEASUREMENT

540. Research Design. R. Gardner. This course serves as a general survey and introduction to statistics at the graduate level, stressing a conceptual understanding and appreciation of major analytic procedures. Topics covered include the logic of inferential statistics, correlation and regression, univariate analysis of variance (both traditional and regression approaches), multivariate analysis of variance, multiple regression, discriminant function analysis, canonical correlation, factor analysis and causal modelling. Students are encouraged to become familiar with the major computer statistical packages. Full course; two terms.

544b. Factor Analysis: Basics, Interpretation and Practical Application. R. Harshman. Common Factor and principal components model, comparison of cluster analysis with factor analysis, introduction to working with matrices, algebraic and geometric interpretations of factor analysis, good and bad methods of determining the number of factors (and what happens when you get it wrong), orthogonal and oblique rotations, "simple structure" and its frequent misuse, factor loading vs factor score estimates, interpretations of factors in different contexts, rules of thumb that ain't necessarily so, testing factor loadings and factor loading differences for statistical significance, how factor analysis for test development differs from its use for data exploration and construct discovery, longitudinal factor analysis and brief introduction to three-mode factor analysis. Types of data for input to factor analysis (binary, n-ary, ordinal, etc.). The student will do several factor analyses using computer programs such as SPSS and/or BMPD and/or SAS, and the results will be discussed in class. Brief discussion of current methods and principles of cluster analysis will be present, time allowing, to clarify the distinct roles and advantages of each methodology. Half course; one term.

546b. Multiple Regression. T. Vernon. This course focuses on the use of multiple regression analysis in behavioral science research. Basic principles of multiple regression, its use as an alternative to the analysis of variance and covariance, and its extension to multivariate procedures such as MANOVA, canonical correlation, and discriminant analysis will be examined. Half course; one term.

548b. Introduction To Microcomputer Software For The Research Psychologist. R. Harshman. A chance to get hands-on experience with the major types of applications potentially important to the research psychologist. All of the following will be discussed, and hands-on experience will be partly determined by interests of students: Operating systems (mostly DOS, but touching on OS2, UNIX), Flat file database--Ask Sam and/or QA Plus, for bibliography, notes, data. Relational databases--dBASEIV (v. 1.1) for more complex inventories, behavior records, etc. Graphics: Simple--Harvard graphics, to powerful Sigmaplot (for statistical graphs) and/or Micrographics Chart and Micrographics Designer, (briefly compared with Corell Draw) and Generic CADD suitable for statistical plots and also for constructing figures of equipment for "Method sections" or posters, or for designing equipment or stimuli, etc. True Desktop Publishing: Ventura 3.0, Communications: Telix (Procom), working from home, e-mail, bulletin (with points on virus safety). Programming languages: 16vs 32 bit compilers, Quick Basic, Fortran, dBase,

SMALLTALK compared. Latest trends in word processing. Statistical Applications: traditional--SPSS/PC, newer exploratory--SOLO, Computational intensive on-line analysis (e.g., Average Evoked Potentials and EEG spectral Analysis, cross-coherence analysis, etc.). Control of lab equipment: interactive computer guided experiments. On line data collection and analysis, where the computer "tailors" the stimuli or experiment to the ongoing results of the subject. Generation of stimuli for perception or other studies (using "super VGA"). Half course; one term.

COGNITION

551a. Autobiographical Memory. A. Katz. This course will deal with the autobiographical memory and its relations to other psychological phenomena. The focus will be on recent developments in research, including the content of autobiographical memories, determinants of memorability, distribution across the lifespan, and the dynamics of autobiographical recall. A special emphasis will be placed on examining (and discriminating) between declarative and narrative aspects of autobiographical memory. The format of the course will be lecture/discussion in which active participation is expected; if the class size permits, experimental research (based on our discussions) will be planned and conducted. Half course; one term.

554b. Foundations Of Cognitive Science. R. Gurnsey. Cognitive Science comprises parts of cognitive psychology, linguistics, artificial intelligence, philosophy and neuroscience. The objective of this course is to introduce and relate the foundational concepts and methodologies of these subdisciplines to the computational "metaphor" of mind. Class format will be a combination of lectures and student seminars. In addition, students will have an opportunity to learn functional programming in LISP (no prior programming experience is assumed). Evaluation will be based on seminar presentations and a term project. The term project will be arranged in consultation with the instructor and may involve an essay. Half course; one term.

. Seminar on Visual Attention. Z. Pylyshyn. This seminar course will cover recent research literature on visual attention, including research on Visual Search, Automatic vs Controlled Processes, Visual Routines, and models of the interface between Low-Level-Vision and Cognitive Processes -- including the FINST model. Approximately the first half of this seminar course will consist of lectures and the second half of student presentations. Students -- including those auditing the course -- will be required to present at least one oral report of selected recent research in the area of Visual Attention and to provide a written paper. Permission of the instructor is required prior to registration. Half course; one term.

SOCIAL

560a. Theories in Social Psychology. M. Atkinson. This course presents an overview of the theories and content areas of experimental social psychology. Topics covered include history, learning approaches, attitudes, attribution, social cognition, social influence, and group processes. Readings come from a text on theory and from contemporary journal articles. The course is a combination lecture/discussion format, and evaluation will consist of one take-home exam and one research proposal. Half course; one term.

561b. Research Methods in Social Psychology. C. Seligman. A coverage of the major empirical designs and procedures in social psychology, illustrated with examples from the current literature. A goal of the course is the development of student research suitable for the M.A. thesis or an original study. Half course; one term.

565b. Theories of the Self. V. Esses. This course will survey current theoretical analyses of the self, dealing with issues in both personality and social psychology. Among the topics to be covered are self-monitoring, self-consciousness, self-schemata, self-verification, and self-presentation. Emphasis will be placed on a critical evaluation of the empirical work on which these analyses are based. Half course; one term.

PERSONALITY

580a. Personality Assessment. D. Jackson. This seminar will emphasize theoretical and research problems in the assessment of personality and psychopathology. Topics to be considered will include personality scale construction, factor analysis, response styles, faking, and the assessment of invalidity, clinical judgements and inferences, actuarial characterization of a person and a computer-based interpretation, differential diagnosis and other recurrent themes. Tests reviewed will include: the Basic Multiphasic Personality Inventory (BPI), the MMPI, the Personality Research Form, the Jackson Personality Inventory, and the Jackson Vocational Interest Survey. Opportunities will be provided for individual projects. Half course; one term.

587y. Ethnic Relations. R. Gardner. This seminar will survey the general area of ethnic relations. Although a major intent will be to focus on topics relevant to the Canadian social scene, they will be considered from the perspectives of social scientists in Canada, the United States, and Europe. Topics to be covered include intergroup relations, foreign language learning, ethnic stereotypes, ethnic identity, ethnolinguistic vitality, the contact hypothesis, the multiculturalism hypothesis, acculturation, social and cognitive consequences of bilingualism, etc. Within each topic, attention will be focused on examining the major issues in that area, reviewing the research done, and considering particular methodological and/or analytic developments, problems, or shortcomings. Students will be encouraged to develop research projects to investigate issues raised. Half course; two terms.

588a. Human Life Histories. P. Rushton. This course will explore human personality and the development of individual differences in social behavior from modern gene-based evolutionary (sociobiological) theorizing. Half course; one term.

INDUSTRIAL/ORGANIZATIONAL

591y. Practicum in Industrial/Organizational Psychology. J. Meyer. This course offers students the opportunity to to apply psychological theory to practical problems in industry and business. Teams of students working under faculty supervision, are assigned to projects with participating organizations. Although the nature of the projects will depend upon the needs of the organizations, typical projects include the development/evaluation of selection and performance appraisal procedures and the development and analysis of attitude surveys. Half course; two terms.

595b. Personnel Selection. D. N. Jackson. This seminar will consider topics in the recruitment, selection, and retention of employees using rational procedures. Topics to be considered will include measures of general and specific aptitudes, personality, and those based on other types of assessment, assessment centers, and past performance. Other topics will include economic and utility analyses and issues related to the hiring of ethnic minorities. Half course; one term.

EDUCATIONAL

606b. Educational Assessment. A. Corkill. The course will provide an overview of theory, methods and issues in educational assessment. Particular emphasis will be placed on measures relevant to classroom teaching and learning, including readiness, intelligence, achievement, and diagnostic and prescriptive measures. Students will also consider the applicability of developments in instructional psychology to educational assessment. Half course; one term.

CLINICAL

618a. Health Psychology: Theory. L. Swartzman. This course is designed to provide an introduction to health psychology. The field of health psychology, broadly defined, encompasses any activity of psychology related to any aspect of health and illness. Areas to be covered may include, though are not

limited to: physiological bases of emotion and their influence on health and illness; psychophysiology; the impact of psychological factors on symptom report tendencies; psychosocial influences on health and illness behavior; compliance; assessment issues and mediators of the effect of stress management procedures. It should be noted that the course emphasis will be on theory and research methods and findings rather than on applied techniques. Half course; one term.

626b. Clinical Research Methods. J. Neufeld. The purpose of this course is to inform students about the clinical use of quantitative methods designed to answer immediate applied and research questions. Basic mathematical computations are discussed in terms of their uses for condensing clinical data. Half course; one term.

627a. Adult Psychopathology. J. Neufeld. This course is designed to familiarize students with theory and research in psychopathology. Seminars will focus on the major diagnostic systems and the disorder subsumed in these systems. Of particular concern will be issues related to the etiology, diagnosis, and prognosis of each disorder. Half course; one term.

630a. Current Perspectives in Psychotherapy. I. Gotlib. This course will introduce students to important concepts, issues, and theories in contemporary psychotherapy. The course will examine the theoretical rationales, goals, therapeutic techniques, and effectiveness of several different approaches to therapy, including classical psychoanalysis, object relations, cognitive-behavioral, client-centered, and gestalt therapies. Half course; one term.

635a. Professional Foundations of Clinical Psychology. D. Evans. The course serves as an orientation to professional issues and skills relevant to all areas of clinical psychology. Ethics, standards of practice and service, consultation methods and other professional activities will be considered. Preference given to Clinical students. Half course; one term.

636b. Pre-practicum in Clinical Skills. N. Kuiper. This course is designed to provide clinical students with practice in fundamental clinical skills underlying assessment and intervention. Interviewing skills are taught with a clinical orientation. Students also complete a variety of exercises focusing on cognitive-behavioral intervention techniques. Some interviewing with patients in a clinical setting will be arranged. Students will also attend case presentations relating to other clinical practica courses. Pre- or Co-requisites: for clinical students who have taken Psychology 636a, and 621a/b or 627a/b, and a graduate half course in psychometric theory. Half course; one term.

637a. Marital and Family Therapy. L. Oldershaw. Major theories of marital and family therapy will be outlined, contrasted, and critically reviewed. Assessment intervention strategies, and research associated with each theory will be presented. When possible, guest speakers (i.e., marital and family therapists) will provide insight into the more practical aspects of different therapeutic approaches. Half course; one term.

609y. Practicum in Adult Assessment. R. Martin. The course is designed to provide clinical students with skills in the administration, scoring, interpretation, and integration of the major psychodiagnostic instruments currently used in clinical practice with adults. Supervised experience assessing adults in clinical settings is included. Emphasis is also placed on the integration of assessment data and report writing. Prerequisite: For clinical students who have already taken Psychology 635a/b, 636a/b, 580a/b, and 627a/b. Half course; two terms.

615y. Advanced Assessment Practicum in Clinical Psychology. R. Martin. This advanced assessment practicum involves placement of clinical students with an adjunct faculty supervisor in one of our clinical settings (adult or child). Prerequisites: For clinical students who have completed Psychology 609y or 617y. Half course; two terms.

617y. Practicum in Child Assessment. D. Wolfe. The course is designed to teach clinical students to administer the major tests employed in clinical practice with children (first term) and to acquire supervised experience in child assessment in clinical settings (second term). Emphasis will be placed on

the integration of assessment data and reporting. Prerequisites: for clinical students who have already taken Psychology , 635a, and 636b. Half course; two terms.

639y. Practicum in Child Intervention. D. Wolfe. Clinical students are assigned to a particular setting and clinical supervisor in the fall term and continue intervention activities until the spring. Specific experience varies across settings. Students will meet as a group at intervals to discuss their experiences and make presentations. Prerequisites: for clinical students who have already taken a Child Assessment Practicum, Psychology 635a, 636b, 627a/b, and a graduate half course in psychometric theory. Half course; two terms.

644y. Practicum in Adult Intervention. N. Kuiper. This intervention practicum involves placement of clinical students with an adjunct faculty supervisor in one of our adult clinical settings. Prerequisite: For clinical students who have completed an Adult Assessment Practicum, 635a, 636b, 627a/b, and a graduate half course in psychometric theory. Half course; two terms.

649y. Advanced Intervention Practicum in Clinical Psychology I. N. Kuiper. This advanced intervention practicum involves placement of clinical students with an adjunct faculty supervisor in one of our clinical settings (adult or child). Prerequisite: For clinical students who have completed 639y or 644y. (Prerequisite may be in the child domain if the the student is doing an advanced child intervention practicum.) Half course; two terms.

659y. Advanced Intervention Practicum in Clinical Psychology II. N. Kuiper. This advanced intervention practicum involves placement of clinical students with an adjunct faculty supervisor in one of our clinical settings. Prerequisite: for clinical students who have completed 639y or 644y and 649y. (Prerequisite may be in the child domain if the the student is doing an advanced child intervention practicum.) Half course; two terms.

769y. Advanced Intervention Practicum in Clinical Psychology III. N. Kuiper. This advanced intervention practicum involves placement of clinical students with an adjunct faculty supervisor in one of our clinical settings (adult or child). Prerequisite: for clinical students who have completed Psychology 639y or 644y, 649y, and 659y. (Prerequisite may be in the child domain if the the student is doing an advanced child intervention practicum.) Half course; two terms.

PSYCHOBIOLOGY AND CLINICAL NEUROPSYCHOLOGY

526a. Clinical Neuropsychology. This course focuses on those aspects of neuropsychology which are pertinent to a neurological setting. Topics include: the neurological examination, the cerebrovascular system, epilepsy; testing for disorders of perception, memory, visuospatial ability, constructional ability and language. Videotapes and detailed consideration of individual patients' test patterns will form an important part of the instructional content. Prerequisite: Psychology 525a or undergraduate physiological psychology. Half course; one term.

709b. Structure of the Nervous System. C. Vanderwolf. This course includes: demonstration and gross dissection of human and sheep brain; microscopic study of serial sections of the human brain; and a series of lectures and required readings. Student progress is assessed by oral examinations. Half course; one term.

718y. Research Seminars in Psychobiology. P. Cain. Faculty and students in Psychobiology and related areas meet every two weeks to report on ongoing research. Some didactic topics are also covered. Half course; two terms.

730a. Advanced Topics in Psychobiology I: Neurobiology of Human Sex Differences. This course takes a biological and evolutionary approach to understanding the differences in behavior between men and women. Topics will include basic sexual differentiation; neural and hormonal mechanisms in

reproductive behavior; hormonal contributions to aggression, sexual preference and gender identity; sex differences in hypothalamic and non-hypothalamic brain organization; sex differences and hormonal influences on cognitive function. Half course; one term.

731b. Advanced Topics in Psychobiology II: Current Perspectives in sociobiology. K. P. Ossenkopp.

This course will take an evolutionary and biological approach to understanding social interactions in animal behavior, with an emphasis on human behavior. The basic concepts of evolutionary biology and optimality theory will be introduced and applied to an evolutionary discussion of social behavior. The course will then focus on discussion of a variety of special topics from a sociobiological perspective. Topics that will be covered include: the ultimate causes of sexual dimorphism, theories of parental investment, parent-offspring conflict, the biology of altruism, strategies of social competition with an extensive examination of aggressive behavior and the application of game theory to the evolution of behavioral strategies. This course will also cover some of the current criticisms of sociobiology and the relationship between sociobiology and other social sciences, especially psychology. Half course; one term.

PRACTICA

721a. Practicum in Clinical Neuropsychology I. This is an introduction to practical applications of Clinical Neuropsychology. The course of instruction includes attendance at the interdepartmental Neuropsychology rounds, as well as appropriate hospital rounds in the clinical setting. Typically there will be supervised practical experience in taking medical/neuropsychological histories, administering and scoring basic tests of intelligence and memory on neurological patients, and administering and scoring of specialized neuropsychological tests. Prerequisite: Psychology 526b. Half course; one term (first or second term).

722b. Practicum in Clinical Neuropsychology II. As above, but for advanced students in Clinical Neuropsychology. It will typically include supervised report writing on individual cases, reading pertinent literature, and learning special procedures. For senior students, it will include an introduction to ethical principles of practice as they are pertinent to Clinical Neuropsychology. Prerequisite: Psychology 526b. Half course; one term (first or second term).