

**CMPT 421 Special Topics - Senior Collaborative Project (1–6 sem. hrs.)**

A major collaborative software project in a chosen area of Computing Science with a final report and presentation. At least two, and normally not more than five people work as a team to design, code, debug, test, and document the software.

*NB:* The choice of CMPT 420 or 421 depends on the instructor's assessment of the proposed project's size and complexity.

Cross-listed: ISYS 421

Prerequisite(s): CMPT 419, a related directed study, or instructor's consent.

**CMPT 430 Numerical Analysis II (3 sem. hrs.)**

Numerical solution of systems of equations; eigenvalues; approximation theory; non-linear systems; boundary-value problems; numerical solution of partial differential equations.

*NB:* Not offered every year. See Department chair.

Cross-listed: MATH 430.

Prerequisite(s): CMPT 330 or MATH 330. (3-0 or 3-0)

**CMPT 480 Ethical and Social Issues in High Technology (3 sem. hrs.)**

A study from a Christian context of some historical, social, and ethical issues relating to the development and use of scientific ideas and techniques. Science and technology are examined in their total social, historical, and intellectual contexts, with a view to tracing, in possible new developments, what the key issues are today. Students are challenged to think through the issues from more than one point of view and to learn how to determine appropriate Christian responses to them.

*NB:* Not offered every year. Offered only in fall semester. See Department chair. This course may be substituted for IDIS 400 and/or NATS 487, but not NATS 490. Students need to take both CMPT 480 and NATS 490 to meet the core requirement in upper level Interdisciplinary Studies. Students from other departments may take CMPT 480 as their IDIS 400 requirement, but they should be familiar with the history and/or the practice of science.

Cross-listed: ISYS 480

Prerequisite(s): Third year standing overall and at least one Computing Science or lab science course at the university level. (3-0; 0-0)

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**CO-OPERATIVE EDUCATION****COOP 110, 210, 310, 410, 420 Co-op Work Terms (0 sem. hrs.)**

These are the course numbers for Co-op work terms. The appropriate semester would coincide with the first digit, e.g., 110 would be the first semester of work experience for students in the Co-op program. Co-op terms provide an opportunity to integrate theory and practice. Requirements include completion of a work term report. Approval from The Career Development Office is required prior to registration for this course.

*NB:* Non-credit, Pass/Fail course.

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**COUNSELLING PSYCHOLOGY, GRADUATE COURSES**

*NB:* Courses CPSY 501-695 are graduate courses. For further information about when courses are offered, see the School of Graduate Studies section or contact the Counselling Psychology Graduate Program Director.

**CPSY 501 Advanced Statistics (3 sem. hrs.)**

Provides an in-depth study of standard parametric and non-parametric statistical methods used in psychological research. Topics include multiple regression, ANOVA, different models of analysis of variance, analysis of covariance, multivariate

analysis of variance (MANOVA), and factor analysis.

*NB:* Limit 25 students.

Prerequisite(s): Undergraduate psychology course covering basic statistics.

**CPSY 502 Research Design (3 sem. hrs.)**

Provides an in-depth examination of quantitative and qualitative research methods available for the conduct of research in counselling psychology. Students are equipped to define and evaluate research problems, conduct literature searches, and critically evaluate published research and professional writing. Ethical and cultural considerations in research are also addressed.

*NB:* Limit 25 students.

Prerequisite(s): CPSY 501.

**CPSY 504 Evaluating Statistics and Research (3 sem. hrs.)**

This course prepares students to evaluate and critique statistics and research methods in Counselling Psychology, including learning about the use and misuse of basic quantitative and qualitative analytical techniques in counselling-related research and in program evaluation. The course also provides an introduction to ethical issues in research, and conducting critical reviews of the literature.

*NB:* Limit 25 students

**CPSY 505 Foundations of Counselling Psychology (3 sem. hrs.)**

Provides a critical introduction to scholarly literature on philosophical, cultural, historical, and theological issues related to counselling and psychotherapy. Students explore their personal worldviews in relationship to professional, biblical, and scientific standards and begin to formulate their approaches to serving in socially and culturally diverse professional settings.

*NB:* Limit 25 students.

**CPSY 506 Theories of Counselling (3 sem. hrs.)**

Critically evaluates major theories of counselling and psychotherapy in terms of their assumptions, research support, and applications. Such issues as cultural diversity, gender differences, and human development are discussed. Students are introduced to the process of integrating theories as they develop their own framework for counselling practice.

*NB:* Limit 25 students.

**CPSY 508 Marriage and Family Therapy (3 sem. hrs.)**

Utilizing a systems perspective, the course provides an opportunity for students to become familiar with, identify, and differentiate the major theoretical and therapeutic models assumed by contemporary theorists and practitioners of marriage and family therapy.

*NB:* Limit 25 students.

**CPSY 510 Group Counselling (3 sem. hrs.)**

An overview of the theory and application of group processes. The course provides participants with introductory group facilitation skills. It consists of an introduction to group dynamics, an introduction to the major models of group counselling and therapy, and a laboratory section to facilitate the development of group counselling skills and competencies. Ethics and cultural differences are also addressed.

*NB:* Limit 24 students.

**CPSY 515 Career Counselling (3 sem. hrs.)**

Provides a critical examination of major career development theories and research. The course also addresses a wide range of issues such as gender, culture, socio-economic status, age, and mental health concerns, as these issues relate to career. Students are introduced to a variety of career counselling strategies within the current labour market. In addition, students each complete a set of career assessment instruments, and interpret them for class partners.

*NB:* Limit 25 students.