

# COMMUNITY HEALTH SCIENCES (CHSC)

## CHSC 6810 Biostatistics for Clinicians 3 cr

This course is designed for students in clinical Master's programs in Medicine, Pharmacy, Dentistry and Nursing. It is designed as a basic biostatistics course that will introduce the tools needed to read and understand quantitative health literature.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Permission of instructor.

## CHSC 7200 Current Concepts in Global Health: Populations, Policies and Programs 3 cr

The course will focus on global patterns of mortality and morbidity, and the organization of health care services. Social, cultural, and economic issues will be related to health and health services.

## CHSC 7212 Gender, Health, and Social Theory 3 cr

This course explores foundational texts in social theory to think about health from an interdisciplinary feminist perspective. Pointing to the intersections amongst race, class, gender, ability and sexuality, this course examines how current concepts of health and illness have come to make sense in and through gendered constructions. Appealing to feminist and postcolonial theories of science, this course requires students to question taken-for-granted biomedical understandings of the body.

## CHSC 7220 Health and Health Services of First Nations, Métis and Inuit Peoples 3 cr

Seminar-based course critically examines First Nations, Metis and Inuit health status, health care services, historical assumptions about indigenous populations, and 'pre-Canada' world events influencing European colonization of this land with resultant marginalization of original indigenous Peoples.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission to register.

## CHSC 7230 Maternal Health 3 cr

### CHSC 7232 Families and Care Across the Life Course 3 cr

Advanced study of the provision of care by family members and friends for dependent children and adults with long-term care needs in the context of increasing family diversity and population aging. Topics include theoretical perspectives on care, the gendered nature of care, consequences of care and policy implications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

## CHSC 7250 Science and Practice of Knowledge Translation in Health Research 3 cr

This course will provide students with an overview of the fundamental aspects and current state of knowledge translation (KT) science and practice in health research and care. The topics covered in this course will equip the student with the basic principles required to integrate knowledge translation science into health research and apply best KT evidence and methodologies to their dissemination and implementation activities.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required.

## CHSC 7270 Epidemiology of Chronic (Non-Cancer) Diseases 3 cr

The objective is to study the natural history of chronic diseases including the distribution of diseases, risk and prognostic factors, rationale and strategies for prevention. The methodological issues concerning the investigation of severe disease are also discussed.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7820, or instructor permission.

## CHSC 7290 Economic Evaluation of Health Care 3 cr

The objectives of this course are to enable students to understand economic evaluation methodologies (cost-effectiveness, cost-benefit, cost-utility analysis) as applied to health care and to familiarize them with the applied literature on economic evaluation of health care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7810 or CHSC 7820, and CHSC 7520, or instructor permission.

## CHSC 7300 Health Policy and Planning 3 cr

This course defines health policy and describes the planning and decision-making process. Case studies will be used to illustrate and critique the substance, process and outcome of policy papers that address contemporary policy issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

## CHSC 7312 Research Methods for Linked Administration Data 3 cr

(Lab Required) Administrative data from domains such as health, social services, the legal system, education, and immigration are widely used for research and decision-making. This course will discuss the different types of administrative data, the advantages and disadvantages of using large administrative databases for research, and the considerations one must make when analyzing and interpreting results generated with administrative data. Research topic areas will include use of administrative data in population health, health services, social/education policy, immigration, and the legal system. Students are required to analyze and interpret administrative data for a term project. May not be held with the former CHSC 7310.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Graduate Course in Biostatistics, multivariable statistics, or equivalent. Instructor permission if lacking one of these prerequisites.

**Equiv To:** CHSC 7310

## CHSC 7320 Organization and Financing of the Canadian Health Care System 3 cr

The purpose of this course is to help students develop the knowledge and skills to understand and improve Canadian healthcare. The course provides an introduction to the way the Canadian health system is organized and financed; covers key policy issues and controversies; and examines the challenge of change.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

## CHSC 7330 Cultural Perspectives on Illness and Medical Practice 3 cr

The objective of this course is to make students aware of the ways in which disease, illness, and medical practice are socially and culturally mediated. The course will examine cultural influences on the experience and expression of illness and consider the medical practitioner's role in the development and provision of culturally responsive health care.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7352 Women's Cardiovascular Health: Physiology and Pathophysiology 3 cr**

This course will introduce the molecular and clinical differences between men and women in regards to heart health. The following content will be covered: cardiovascular risk assessment in women, overview of the different cardiovascular diseases more common in women, approaches to cardiovascular disease management, treatment and prevention, recovery and cardiac rehabilitation for women.

**CHSC 7360 Clinical Trials 3 cr**

The Randomized Clinical Trial is the only true experiment in clinical research. This course is intended to give students detailed knowledge of the design and implementation of RCTs. Students will participate in a qualitative review of RCTs. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7362 Systematic Reviews and Meta-Analysis 3 cr**

Systematic reviews and meta-analysis are integral to research success. Lectures and skill sessions will parallel the steps needed for successful completion of rigorous systematic reviews and meta-analyses of intervention studies. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520 and CHSC 7820.

**CHSC 7380 Prevention and Health 3 cr**

The course will cover frameworks used in formulating preventive strategies. Topics will include risk factor assessment, screening, health education, legislation, litigation, lifestyle and prevention. Actual case studies will be used. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7390 Health Promotion 3 cr**

Examination of the history, theories, principles, and settings for health promotion. Assumptions underlying the discipline and how they affect practice are explored. Different conceptualizations of health and implications for practice are examined. Recent health promotion strategies are critically analyzed using case studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7400 Directed Readings I: In Epidemiologic Methods 3 cr**

An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: permission of instructor and Graduate Program Director.

**CHSC 7410 Directed Readings: II - In Epidemiology 3 cr**

An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: permission of instructor and Graduate Program Director.

**CHSC 7430 Seminars on Advanced Topics: II - In Methods of Health Care 3 cr**

Seminars dealing with current research issues, emerging methodologies and analytical techniques will be offered for advanced students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7450 Epidemiology of Communicable Diseases 3 cr**

Overview of epidemiological principals in communicable disease investigation and prevention and specific issues in controls of certain specific communicable diseases of public health importance in Canada will be introduced. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7460 Environmental and Occupational Health 3 cr**

The aim of the course is to acquaint the student with the role of the environment (general and specifically working) as the determinant of health. The content of the course will be presented in the form of lectures, seminars, and field visits. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7490 Empirical Perspectives on Social Organization and Health 3 cr**

This course will focus on a selected review of the epidemiological literature which has integrated social factors in the investigation of the distribution of health and illness in society. The course will review a selection of important empirical studies in investigating the roles played by social, psychological and economic status factors in determining health and illness. Emphasis will be placed on identifying the central theoretical and methodological approaches to defining and measuring socioeconomic status in this literature. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7820.

**CHSC 7500 Conc. Public Health 3 cr**

Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part one (with CHSC 7502) that is designed to provide students with a breadth of exposure to core competencies and content areas important to public health practice. This course provides students with an introduction to the historical and current theoretical debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to inequities in health, Indigenous health, environmental and occupational health, knowledge translation, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health Program.

**CHSC 7502 Core Concepts in Public Health 2 3 cr**

Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part two (with CHSC 7500) of the breadth of exposure to core competencies and content areas important to public health practice. Combined with CHSC 7500, this course adds to relevant debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to health policy, health promotion, prevention and health, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health program.

**CHSC 7510 Problem Solving in Public Health 3 cr**

This seminar based course focuses on current issues and topics in community health to advance skills of thinking critically and communicating clearly about practical solution to public health problems. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7520 Principles of Epidemiology 3 cr**

This course will introduce the basic concepts and methods of epidemiology, including the definition and measurement of health status and health determinants in populations, assessing health risks and inferring causation, and issues in the design and analysis of population health studies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7530 Applied Public Health Epidemiology 3 cr**

This course builds on the Principles of Epidemiology course through an applied focus. It discusses the application of epidemiological principles in applied public health practice including the investigation of outbreaks, disease surveillance and the basic concepts of social network analysis, vaccine epidemiology and mapping. Students will also gain an understanding of the principles of prevention in public health practice, the benefits of qualitative methods and the role of the laboratory in outbreak investigation. They will receive instruction on the use of software for database development, data entry, analysis, and presentation of results. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520, CHSC 7810 or CHSC 7820.

**CHSC 7540 Advanced Epidemiology 3 cr**

Advanced epidemiological research methods focusing on selected epidemiological issues (bias, confounding, matching, etc.). Discussion will be directed to both epidemiological and statistical considerations to find the optimal solution to a research problem. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520 (B+) or CHSC 7820 (B+). CHSC 7810 (B+) may be acceptable with instructor permission.

**CHSC 7560 Epidemiology of Cancer 3 cr**

This course introduces the magnitudes, risk factors and prevention strategies of cancer. It focuses on current knowledge related to the etiology of cancer, medical interventions and potential for prevention. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7580 Public Health Field Placement 0 cr**

The aim of the field placement is to highlight the relationship between learning and application of public health principles and practice through the integration of coursework with supervised fieldwork undertaken in local, provincial, or national public health settings. It is specifically designed for MPH students who do not have extensive public health experience, or who seeks a public health experience in a setting different from their primary professional background, and is open to any MPH student seeking further public health practice experience. In addition, to meeting educational objectives (to be set in consultation with the MPH Advisory committee and the Field Placement Supervisor at the host agency), students will participate in the day-to-day activities of the host agency. The site of the field placement will be based on the student's career interests and learning needs, and be located in a public health organization or agency, or situated within a public health program or service. Field placements are expected to be anywhere from 12 – 16 weeks full time equivalent (minimum is 12 weeks) and evaluated on a pass/fail basis.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: Students must have the permission of the Director of the Graduate Program to register.

**CHSC 7590 Capstone Research Project in Public Health 0 cr**

The capstone project in public health is designed as an alternative to CHSC 7580 for eligible MPH students who already have extensive public health practice experience. The aim of the capstone project is for a student to develop some research experience in carrying out a research project, limited in scope, that has applied public health relevance. The capstone research project is expected to be conducted within 12 – 16 weeks full time equivalent (minimum is 12 weeks). For the majority of students, their project will be part of a larger research program led by a Faculty PI who will be a research supervisor for the project. On occasion, students may develop an independent research question to pursue, but this will be done in consultation with faculty, and the project will need to be completed within the allotted timeframe. As part of the project, students will consult the relevant published literature, other sources, develop and carry out a research plan, write a report of their findings, and make a public presentation. Prior to the start of the capstone project, the student will have already developed the research question and a proposal that has been reviewed by the Research Project Supervisor and the MPH Advisory Committee, following which, if appropriate, a submission to the research ethics office will have been initiated. Evaluation is based on a pass/fail basis. Students must have the permission of the Director of the Graduate Program to register.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7860.

**CHSC 7610 Advanced Topics in Community Health 1 1.5 cr**

Special advanced research topics in Community Health Sciences.

**CHSC 7620 Advanced Topics in Community Health 2 1.5 cr**

Special advanced research topics in Community Health Sciences.

**CHSC 7630 Work and Family Interrelationships 3 cr**

In this course students will engage in advanced study of the intersection of earning and caring activities of families over the life course and how these activities interrelate at the community, provincial, national, and global levels. The influence of gender and demographic trends will be explored and family, private sector, and public sector responses to the issue will be examined. There will also be an emphasis on relating current research to relevant theoretical perspectives and professional practice. May not be held with the former FMLY 7230.

**Mutually Exclusive:** FMLY 7230

**CHSC 7632 Evaluation of Family, Health and Social Development Programs 3 cr**

This course teaches the theory and practice of program evaluation with a focus on health and social development programs. It emphasizes a utilization-focused evaluation approach. It studies program evaluation from a "real world" perspective, including the political and ethical issues related to evaluation. The course provides strong theoretical foundations. Students put this into practice by working with a particular agency/program to fully develop an evaluation plan to be actually used by the agency/program. May not be held with the former FMLY 7500.

**Mutually Exclusive:** FMLY 7500

**CHSC 7634 Research Data Centre Research Methods Part I 1.5 cr**

This course will introduce the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7510.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre or Co-requisite: Graduate level biostatistics course or equivalent.

**Mutually Exclusive:** FMLY 7510

**CHSC 7636 Research Data Centre Research Methods Part II 1.5 cr**

A continuation of the introduction to the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7520.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: Successful completion of Part I (CHSC 7634).

**Mutually Exclusive:** FMLY 7520

**CHSC 7638 Children and Violence 3 cr**

An examination of children's experiences of violence at the levels of families, communities and societies. Relevant theoretical and measurement issues are addressed, as well as the developmental outcomes of various forms of violence. The incidence and prevalence of violence in children's lives is examined. Models of prevention, intervention and policy are explored. May not be held with the former FMLY 7620.

**Mutually Exclusive:** FMLY 7620

**CHSC 7640 Family Violence 3 cr**

Advanced study of current topics in family violence. Topics may include child abuse, sibling abuse, parent abuse, dating violence, intimate partner violence, and elder abuse. Emphasis is on understanding and critiquing current theory and research. May not be held with the former FMLY 7800.

**Mutually Exclusive:** FMLY 7800

**CHSC 7642 Family Conflict and Health and Well-being 3 cr**

The origins and manifestation of conflict in family relationship across the life course will be reviewed with an emphasis on its relation to individual, dyadic, and family health and well-being. May not be held with the former FMLY 7810.

**Mutually Exclusive:** FMLY 7810

**CHSC 7644 Social Development in Theory and Practice 3 cr**

This advanced seminar examines the concepts and practices of social development within specific contexts. It examines the interplay between theory and practice and the epistemological underpinnings of social development research, programs, and policies as applied to families, communities, and populations. Case studies are assessed and critiqued. May not be held with the former FMLY 7930.

**Mutually Exclusive:** FMLY 7930

**CHSC 7710 Social Aspects of Aging 3 cr**

This course is an advanced seminar designed to examine current social issues in aging. The course is organized around selected topics related to aging. Where possible, the Canadian experience will be compared to international trends and diversity will be highlighted. The first section is a review of the field of gerontology, ageism, demographic trends, theoretical perspectives and methods and the second section explores contemporary social issues.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7720 Health and Aging 3 cr**

This course is an advanced seminar designed to examine health and health care issues in aging. Where possible, the Canadian (or Manitoban) experience will be highlighted. Key topics in the health domain will be covered, such as frailty, mental health and dementia. The provision of care for older adults will also be covered, focusing on both the formal care system, as well as informal care providers.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7730 Topics in Health Services Research 3 cr**

This course will expose students to select health services research topics that are particularly relevant in Manitoba and Canada. Students are expected to actively engage in seminars led by health services researchers and decision-makers, and also provide informative presentations in their own area of research. Students will also gain knowledge about various communication and knowledge translation strategies. Students outside CHS require instructor permission.

**CHSC 7738 Qualitative Research Methods in Community Health Sciences 3 cr**

The purpose of this course is to provide students with fundamental knowledge on theoretically informed qualitative inquiry for applied health services and health policy research. The course will include an introduction to social theory and respective qualitative methodologies best suited for population health, health services, social and cultural determinants of health, and health policy research. By the end of the course, students will have an understanding of the principles and practices involved in: integrating theory and qualitative methods; community engagement in qualitative research, including indigenous methodologies and diverse cultural contexts; the design of a theory driven qualitative research study; various ways of generating and analyzing qualitative data; integrated Knowledge Translation; and ethics, among other topics.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7740 Advanced Qualitative Research Methods in Community Health Sciences 3 cr**

The purpose of this seminar-based course is to provide students with advanced knowledge on transformative qualitative research methodologies, methods and analysis related to redressing health inequities from a strength-based interdisciplinary perspective. Using case study and other applied approaches students will gain knowledge and experience in: the application of critical social theories to health research; understanding processes of community, stakeholder, and partnership engagement from multiple scales and perspectives (e.g. indigenous populations locally and globally); various ways of generating qualitative data and analyzing texts consistent with selected theory; developing different products for knowledge exchange activities; and the ethics and politics inherent within the research process.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7738 (formerly FMLY 7710) or instructor permission is required.

**CHSC 7810 Biostatistics for the Health and Human Sciences 3 cr**

An introduction to statistical ideas and techniques for health sciences and human research. Describing data, patterns in data, the normal distribution. Principles of estimation and principles of hypothesis testing. Principles and practice of the major statistical tests (t tests, analysis of variance, Chi squared tests, correlation and regression). Nonparametric statistical techniques. The use of statistical software to carry out statistical analysis. Analytical decision strategies.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: Students outside CHS require instructor permission.

**CHSC 7820 Biostatistics for Community Health Sciences 3 cr**

The course will cover techniques of research design and analysis for community health researchers. Topics include: principles of experimental design, study size determination, statistical software as an analytical tool, techniques for the analysis of continuous outcomes, analysis of variance for multi-way, factorial and split-unit experiments, and multiple regression and general linear models. Introduction to more advanced statistical methods including logistic regression and survival models. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: 3 credit hour statistics course within five years.

**CHSC 7830 Advanced Biostatistics for Community Health Sciences 3 cr**

This course focuses on Generalized Linear Models. Upon completion of the course, students will be able to: 1) give examples of different types of data arising in public health studies; 2) understand differences and similarities between standard linear regression and models for discrete outcomes; 3) use modern statistical concepts such as binomial and Poisson in public health studies; 4) understand models for polytomous outcomes; 5) conduct and interpret logistic, conditional logistic (case-control), and prohibit regression inference; 6) conduct and interpret time-related outcome variables including survival analysis and proportional hazard regression; 7) conduct and interpret Poisson outcome variables and Poisson regression. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7820 (B+).

**CHSC 7840 Current Topics in Biostatistics: Design and Analysis 3 cr**

This course will introduce students to leading-edge advanced study design and statistical analysis methods for health research. The course will use case studies to explore the study design and analysis topics and their applications.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: CHSC 7520; CHSC 7820 (B+); CHSC 7860, or instructor permission is required.

**CHSC 7850 Advanced Biostatistical Methods for Hierarchical and Longitudinal Data 3 cr**

The course teaches statistical methods for analyzing hierarchical ("multi-level") data and longitudinal data. Mixed models are rapidly becoming the principal statistical tools for understanding hierarchical or "multi-level" data, such as the academic achievement of students within school classes within schools and perhaps within communities. The longitudinal application of "mixed models" provides analysis of temporal trajectories, for example, of the health of individuals (potentially nested within families, or communities) over time. Mixed models also can be utilized to analyze relationships, for example between health and income, over time, for individuals or families within communities, etc. The course will focus on the conceptualization, estimation, and interpretation of mixed models in SAS. The primary emphasis will be on linear mixed models for continuous outcomes, however, nonlinear mixed models for categorical or count outcomes will also be discussed. Instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: CHSC 7820 (B+).

**CHSC 7860 Methods and Concepts for Community Health Sciences 3 cr**

This course is designed to provide a practical introduction to qualitative, quantitative, and mixed method approaches used in health research. The emphasis in the course will be on developing research questions, selecting appropriate methods, and writing a research proposal. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Co-requisites: 1) CHSC 7520 and ONE of the following: CHSC 7820 or CHSC 7810 or CHSC 7738.

**CHSC 7870 Health Survey Research Methods 3 cr**

Students critically examine the use of health survey methodology within epidemiology. They also learn to apply survey methodology, as a means to gain a strong appreciation of the reflective, theoretical and analytical thinking required to successfully design and implement epidemiological health surveys. Students outside CHS require instructor permission.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7520.

**CHSC 7900 Manitoba Training Program Field Placement 0 cr**

The aim of the Manitoba training program (MTP) field placement is to highlight the relationship between learning and application of health services research principles and practices through the integration of course work and supervised field work undertaken in local and provincial public health settings. University of Manitoba students accepted into the Manitoba training program are eligible to register for this course; instructor permission is required.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Pre-requisite: CHSC 7730 and CHSC 7320. Grade, Pass/Fail.

**CHSC 8600 Senior seminar in Community Health Sciences 3 cr**

This course is an advanced seminar designed to examine various aspects of health research and health. The emphasis in the course will be on: interrogating assumptions that underlie what research is conducted and how it is conducted; including a diversity of experiences and perspectives in research; and critically appraising the quality of research. This is an advanced course intended for Ph.D. students.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: CHSC 7810 or CHSC 7820, or CHSC 7738, and CHSC 7860; instructor permission is required for students outside the Community Health Sciences Ph.D.