

University of Manitoba
Graduate Courses in Community Health Sciences
FALL 2020

CHSC 6810 Biostatistics for Clinicians

(Tuesdays/Thursdays, 1700 – 1820 hours lecture; 1600 – 1700 optional tutorial Tuesdays; 1820 – 1920 optional tutorial Thursdays; Instructor: Shiva Halli)

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. Pre-requisite: Permission of instructor.

CHSC 7300 Health Policy and Planning

(Thursdays, 1300 - 1550 hours; Instructor: Sandor Demeter)

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. Prerequisite: Students outside CHS require instructor permission.

CHSC 7360 Clinical Trials

(Thursdays, 0900 – 1150 hours; Instructor: Lauren Kelly)

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. Prerequisites: CHSC 7520; CHSC 7820. Students outside CHS require instructor permission.

CHSC 7400 T23 Critical Social Theory & Health

(Mondays, 1300 – 1550 hours; Instructor: Robert Lorway)

In this directed reading course, students will travel a diverse theoretical terrain of foundational texts in social theory while guided on how to *think with* these ideas as they relate to issues of health and illness facing the world today. The course will engage students in close readings of these challenging and complex texts. Concise excerpts will offer powerful new avenues for rethinking our analysis of contemporary health issues and our approaches to the amelioration of illness and disease. It is expected that each student will carve out their own theoretical journey that will contribute to the conceptual development of their eventual graduate research project. Through weekly readings, writing assignments, and discussion, we will explore theoretical questions of health and illness as they pertain to power, inequality and social change; subjectivity, ethics, and desire; 'the body' in culture and politics; gender, sexuality and race; and science and technology.

CHSC 7400 T24 Seminar in Foundations of Disease Analytics Part A (spanned fall & winter)

(Fridays, 1330 - 1620 hours; Instructor: Lisa Lix)

This course will expose Visual and Automated Disease Analytics (VADA) Program students to selected topics in substantive and methodological topics associated with visualization and automated analytics for large-scale chronic and infectious disease data. This seminar-style course is participatory in nature.

CHSC 7490 Social Organization and Health

(Mondays, 1300 - 1520 hours; Instructor: Brenda Elias)

This course will focus on a selected review of the epidemiological literature which has integral 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. Prerequisites: CHSC 7520, CHSC 7820. Students outside CHS require instructor permission.

CHSC 7500 Core Concepts in Public Health

(Tuesdays, 0900 – 1120 hours; Instructor: Brenda Elias)

Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. The course provides students with an introduction to this field and examines 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. Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health program.

CHSC 7520 Principles of Epidemiology

(Wednesdays, split lecture 1030 – 1150 hours / 1300 – 1420 hours; Instructor: Nathan Nickel)

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. Prerequisite: Students outside CHS require instructor permission.

CHSC 7610 T06 Statistical Methods in Spatial Epidemiology

(Mondays, September 14 – October 26, 2020; 0900 - 1150 hours; Instructor: Mahmoud Torabi)

This course describes methods for the analysis of spatially indexed epidemiological data. Emphasizes methods for the analysis and visualization of three basic types of spatial data: areal data, point (geostatistical) data, and point processes. Covers four major topics: clustering and cluster detection, disease mapping, spatial regression, and an introduction to geographical information systems. Prerequisites: successful completion (grade A or better) of Biostatistics for Community Health Sciences 2 (CHSC 7830) or permission of instructor.

CHSC 7610 T09 Research Data Centre Research Methods Part A

(Fridays, every other, 0900 - 1120 hours; Instructor: Shahin Shooshtari)

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

CHSC 7710 Social Aspects of Aging

(Thursdays, 1300 – 1545 hours; Instructor: Kerstin Roger)

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. This course is a required course for the Graduate Specialization in Aging Certificate. Prerequisite: Students outside CHS require instructor permission.

CHSC 7730 Topics in Health Services Research Part A

(Fridays, 0900 – 1150 hours; Instructor: Malcolm Doupe)

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. Pre and/or Co-Reqs: CHSC 7320 and one of CHSC 7310 or CHSC 7300. Students outside CHS require instructor permission.

CHSC 7738 Qualitative Research Methods in Community Health Sciences

(Tuesdays, 1300 – 1550 hours; Instructor: Deborah McPhail)

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. Prerequisite: Students outside CHS require instructor permission.

CHSC 7810 Biostatistics for the Health and Human Sciences

(Tuesdays/Thursdays, 1600 – 1920 hours; Instructor: Tamara Taillieu)

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. Prerequisite: Students outside CHS require instructor permission.

CHSC 7820 Biostatistics for Community Health Sciences

(Mondays, 0930 – 1220 hours online / computer lab in person 1430 – 1550 hours;

Instructor: Depeng Jiang)

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. Prerequisites: 3 credit hour statistics course within five years. Instructor permission is required.

CHSC 7860 Methods and Concepts for Community Health Sciences

(Tuesdays, 1000 – 1220 hours; Instructor: Tracie Afifi)

The 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. Co-requisites: 1) CHSC 7520 and ONE of the following: CHSC 7820 or CHSC 7810 or CHSC 7738. Students outside CHS require instructor permission.

CHSC 8600 Senior Seminar in Community Health Sciences

(Tuesdays, 1000 – 1220 hours; Instructor: Verena Menec)

This seminar course is designed to engage senior students in the field of health research. The emphasis in the course will be to discuss great research studies that have changed or challenged the way we think about health or conduct research, seminal research endeavors from Manitoba, research studies that were not successful, and controversies and the role of media in health research. A focus of the course will be to discuss great research projects, programs, and institutions. This is an advanced course intended for Ph.D. students. Prerequisites: CHSC 7810 or 7820 or 7738, CHSC 7860. Instructor permission is required for students outside the Community Health Sciences PhD program.