# University of Manitoba

# Graduate Courses in Community Health Sciences

#### Winter 2021

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

#### (Mondays, 1300 – 1520 hours; Instructors: Josée Lavoie, Elder Geraldine Shingoose)

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. Prerequisite: Students outside CHS require instructor permission to register.

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

### (Tuesdays, 0930 – 1150 hours; Instructor: Kathryn Sibley)

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. Prerequisite: Instructor permission is required.

#### CHSC 7290 Economic Evaluation of Health Care

#### (Thursdays, 0930 – 1150 hours; Instructor: Evelyn Forget)

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

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

# (Thursdays, 1300 – 1520 hours; Instructor: Sara Kreindler)

Students will study the historical development and current structure of the Canadian health care system and relate its development to changes in social and political factors. The course provides an economic perspective on current policy issues in the organization, financing, and delivery of health care in Canada. Prerequisite: Students outside CHS require instructor permission.

# CHSC 7330 Cultural Perspectives on Illness and Medical Practice

# (Thursdays, 0930 - 1150 hours; Instructor: Andrew Hatala)

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. Prerequisite: Students outside CHS require instructor permission.

#### CHSC 7362 Systematic Reviews and Meta-Analysis

#### (Thursdays, 1300 - 1550 hours; Instructors: Ahmed Abou-Setta, Ryan Zarychanski)

Systematic reviews and meta-analysis are integral to research success. Lectures and skill sessions will parallel the steps needed for successful completion of rigorous systemic reviews and meta-analyses of intervention studies. Prerequisites: CHSC 7520 and CHSC 7820. Instructor permission is required.

#### CHSC 7400 Trauma and Resilience in Childhood and Adolescence

#### (Tuesdays, 1830 - 2120 hours; Instructor: Caroline Piotrowski)

This course provides advanced study of the effects of adverse childhood experiences (ACEs) on mental and physical health. Leading theories on children's trauma and resilience, including post-traumatic growth and pediatric medical trauma, will be critically reviewed.

# CHSC 7400 Seminar in Foundations of Disease Analytics Part B (spanned fall & winter)

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

The 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 date. This seminar-style course is participatory in nature.

#### CHSC 7502 Core Concepts in Public Health 2

#### (Wednesdays, AM Timing TBA; Instructor: TBA)

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

# CHSC 7510 Problem Solving in Public Health

# (Wednesdays, 1330 - 1620 hours; Instructor: Joel Kettner)

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

# CHSC 7530 Applied Public Health Epidemiology

# (Tuesdays, 1300 – 1550 hours; Instructor: Tammy Stuart Chester)

This course builds on the Principles of Epidemiology course through an applied focus. It discusses the application of epidemiologic 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. Prerequisites: CHSC 7520, CHSC 7810 or CHSC 7820. Students outside CHS require instructor permission.

# CHSC 7540 Advanced Epidemiology

#### (Tuesdays, 1000 – 1250 hours; Instructor: Marcelo Urquia)

Advanced epidemiologic 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. Prerequisites: CHSC 7520 (B+ minimum grade), CHSC 7820 (B+ minimum grade). Students outside CHS require instructor permission.

# CHSC 7620 Research Data Centre (RDC) Research Methods Part II 1.5 credit hours

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

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. Prerequisite: successful completion of Part A (CHSC 7610 T09); Venue: 309 Brodie Centre

#### CHSC 7730 Topics in Health Services Research Part B

#### (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 7740 Advanced Qualitative Research Methods in Community Health Sciences (Wednesdays, 1300 - 1545 hours; Instructor: C. Kelly)

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

# CHSC 7830 Advanced Biostatistics for Community Health Sciences

# (Mondays, 0900 - 1150 hours; 1230 - 1320 computer lab; Instructor: TBA)

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 probit 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. Prerequisites: CHSC 7820 with minimum grade B+. Instructor permission is required.



#### CHSC 7840 Current Topics in Biostatistics: Design and Analysis

(Thursdays, 1300 – 1550 hours; Instructors: L. Lix, R. Balshaw, D. Jiang, R. Rabbani, L. Shafer)

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. Prerequisite: CHSC 7520; CHSC 7820 with minimum grade of B+; CHSC 7860, or instructor permission is required.