

**SPPH 481a: Distributed Health Research Methods**  
**University of British Columbia**  
**School of Population and Public Health**

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**COURSE OBJECTIVES:**

Distributed Health Research Methods (DHRM) course provides an introductory overview to health research, and is intended for learners who plan to pursue careers in medicine or other health professions, and/or learners who might apply for a health related graduate degree. DHRM introduces epidemiology and evidence-based healthcare, literature searching, formulating research questions, qualitative and quantitative methods, research with Indigenous Peoples, program evaluation, survey design, interdisciplinary art methods, community based participatory health research and research ethics review. DHRM also introduces learners to inter-professional, collaborative, culturally safe and ethical modes of health research engagement.

**LEARNING OUTCOMES:**

The overall learning outcome is that, by the end of DHRM, learners will be able to ***develop a scholarly research proposal***; to achieve this, learners will be able to do the following:

1. Pose a scholarly question;
2. Conduct a systematic search for evidence, and assess, evaluate and summarize the search findings;
3. Identify and apply appropriate methods and designs for investigating different types of questions, and with different populations and locations.
4. Demonstrate understanding of principles and practices of research with Indigenous Peoples including OCAP (Ownership, Control, Access and Possession) and decolonizing methodologies.
5. Identify and describe a range of health research methodologies, designs and orientations, including the basic principles of epidemiology, biostatistics and qualitative enquiry, and evaluate the circumstances under which their use is appropriate;
6. Recognize, describe and apply the principles of research ethics;
7. Outline key components of research administration and approaches (including budget components), knowledge, dissemination and knowledge translation;
8. Demonstrate inter-professional scholarly team skills, such as peer review, peer support and team communication.

**COURSE FORMAT:**

The course instructor's pre-recorded lectures guide learners through DHRM. In

addition, faculty and professionals provide pre-recorded guest lectures to illuminate specific modules, by sharing personal examples from their own work and to provide expertise information about specific aspect of research methods.

DHRM is hosted on the UBC Canvas on-line platform, so that learners can complete the course remotely. DHRM consists of 13 modules. Each module contains the following three required components. First, learners review 1½ hours of module ***independent study***, which consists of pre-recorded lectures (and readings), and linked self-reflection quizzes to assess one's own understanding of the lecture content. Second, learners complete a 1½ hours of module on-line ***group activity***, which is facilitated by a course instructor or a qualified Teaching Assistant (TA) and will involve fellow learners. Learners participate in the group activity in their own time, after they complete the module's independent study, and before they begin the next module. Third, learners complete and submit the module ***assignment***, which is typically either a quiz, or the writing of the first draft of section(s) of the Research Proposal template.

The 13 modules of the DHRM course are organized into three Parts. Following Part 1 and Part 2, learners will receive feedback from a Teaching Assistant about their respective written assignment (i.e. draft sections of the Research Proposal). In addition, learners will provide peer review comments on written assignments (i.e. draft sections of the Research Proposal) that are submitted by fellow learners.

The overarching goal of DHRM is to support learners in their development and completion of a Research Proposal. Throughout the 13 modules, learners refine and modify their Research Proposal, in an iterative fashion, based on feedback about their draft writing that they receive from learner peer reviews, TAs and the Course Instructor. Learners submit their final Research Proposal during the week following the final (13<sup>th</sup>) module (*see 'Dates and Deadlines' for submission date*).

### **COURSE REQUIREMENTS:**

DHRM is a high-level 4<sup>th</sup> year undergraduate course, open to all learners with an interest in health research. There are no specific pre-requisites for this course. Learners will be accepted into DHRM if they have satisfied the requirements to enter a 4<sup>th</sup> year undergraduate course within their own discipline. DHRM is also open to graduate learners of various disciplines, with permission of the Course Instructor.

### **ASSESSMENT, EVALUATION AND GRADING:**

#### **Participation in On-line Group Activities 15%**

The module on-line group activities will build on the information presented in the pre-recorded lectures and readings of the independent study of the module. During the on-line group activities, learners will be expected to demonstrate understanding and application of the topic, and to acquire and demonstrate inter-professional scholarly team skills, such as team communication, role clarification, conflict

resolution and collaborative leadership. The participation mark (15%) is based on attendance and participation in the on-line learning activities, and the alignment of learner's contributions with the stated learning objectives of DHRM.

### **Peer Reviews 10%**

You will be asked to contribute constructive feedback evaluation comments to your peers about their incremental written draft sections of the Research Proposal assignment. The peer review mark (10%) is based on participation in the peer review process and on demonstration of acquiring peer review skills.

### **Completion of Assignments 30%**

For each module, learners will complete the independent study (item#1, below) before the start of the module on-line group activity. Learners will complete and submit the assignments (items #2-5, below) before the start of the next respective module.

1. Review the module independent study material, which is pre-recorded lectures (and readings), and complete any linked self-reflection quizzes to assess your own understanding of the content.
2. Submit certificates of completion of the on-line Canadian Tri-Council Policy Statement, 'Ethical Conduct for Research Involving Humans (TCPS-2)' and the York University Academic Integrity Quiz
3. Write and submit a component of the Research Proposal following the template provided
4. Complete quiz assignments
5. Provide written peer review assessments of peers' sections of their Research Proposal.

### **Completion of Feedback Surveys 5%**

Following each Part, learners are invited to complete a Feedback Survey. The course instructor uses learners' feedback to improve the educational experience of the course for future students. The mark (5%) is based on successful completion of each feedback survey before the start of the next respective Part.

### **\*Research Proposal 40%**

Learners' completed final Research Proposal (submitted as the assignment for Module 13) will address the following topics:

1. State the research question you will be addressing and why this research question is significant;
2. Include a critical review of the most relevant articles published on the topic of your research question, describe the 'knowledge gap' your research question is addressing, and a bibliography of your cited references that is formatted according to *Uniform Requirements for Manuscripts Submitted to Biomedical Journals*.

3. Your selected study design, and the reason for selecting this methodological approach to address your posed question with this population and in this location; for qualitative projects, locate your question and your approach within your self-identified paradigm and worldview.
4. Your data collection methods and instruments, and the data analysis that you will use;
5. Any potential ethical concerns and how you will address them, and your intent to apply for a Research Ethics Board (REB) certificate of approval;
6. The anticipated expenses for your research study, and where you will apply for research funds;
7. The strengths your study and the limitations that may emerge, their potential impact and how you might address these limitations to ameliorate their consequences.
8. Summary of the importance of your work and the potential implications of your findings for knowledge dissemination and translation;
9. Acknowledgements, authorship contribution statement and any conflicts of interest.

Your final Research Proposal is due during the week following the final (13<sup>th</sup> module): see the submission date in the 'Dates and Deadlines' document. Early submissions are welcome. Please submit your Research Proposal into Canvas in a separate Word document (no more than 3-4 pages (excluding references), double spaced, Times New Roman, 12 point font, 1 inch margins).

**GRADING CRITERIA**

1. Participation in on-line activities	15%
2. Peer reviews	10%
3. Completion of assignments	30%
4. Research Proposal	40%
5. Feedback Surveys	5%
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Total	100%

**LATE POLICY**

Assignments must be submitted by 11:59PM on the listed due date. Late assignments will be deducted 5% for each day they are late. If you are requesting an academic [concession](#) for an assignment please contact the instructor or TA as soon as possible.

**REQUIRED AND RECOMMENDED READINGS:**

**Required readings:**

Selected readings will be assigned from the following text: AFMC Primer on Population Health [http://phprimer.afmc.ca/inner/primer\\_contents](http://phprimer.afmc.ca/inner/primer_contents)

**Optional readings:**

An extensive bibliography of additional resources is provided to learners.

**COURSE SCHEDULE:****Part 1: Designing a Research Question**

Module 1 – Introduction to the Course

Module 2 – Introduction to Epidemiology and Evidence-Based Medicine

Module 3 – Paradigms and PICO

Module 4 – Searching the Literature and Using Evidence in Practice

Module 5 – Indigenous Methodologies and Approaches

**Part 2: Methods for Research**

Module 6 – Qualitative Methods

Module 7 - Quantitative Methods

Module 8 – Various Approaches to Health Research

Module 9 – Program Evaluation

**Part 3: Data Analysis and Research Administration**

Module 10 – Qualitative Data and Analysis

Module 11 – Quantitative Data and Analysis

Module 12 – Survey Design

Module 13 – Research Administration and Knowledge Translation

**ACADEMIC INTEGRITY:**

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all learners are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Discipline. Careful records are kept in order to monitor and prevent recurrences.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at <http://calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0>.