

# PEDIATRICS

## PEDS 7010 Introduction to Biostatistics in Child Health Research 3 cr

In this 3-week intensive course, students will be introduced to biostatistical theory and examples from pediatrics. Mornings will be spent in didactic lectures. In the afternoons, students will have the opportunity to practice biostatistical analyses in a lab setting. Required acceptance to the Pediatric Graduate Program and PHIA (both Shared Health and U of M).

## PEDS 7020 Introduction to Research Methods 3 cr

Students will learn from methods experts in qualitative and quantitative methods, systematic reviews and bioinformatics, and who lead cutting edge pediatric research in Manitoba. Assignments are designed to be of practical use. There will be one cumulative final take home exam.

## PEDS 7030 Equity, Diversity and Inclusion for Professionals 0 cr

In this half day course, students learn about the importance of promoting and supporting a community that embraces equity and inclusion for all, and builds upon the strengths of diversity. Students will also be encouraged to consider their own biases. Course graded pass/fail.

## PEDS 7040 Introduction to a Clinical Environment 0 cr

In this half day course, non-clinical students will be introduced to a real or simulated clinical learning environment that align with their areas of study. Pre-requisites include completion of TCPS and PHIA, and approval of advisor. Course graded pass/fail.

## PEDS 7050 Ethics and Equity in Child Health Research 3 cr

Students will learn that children are not small adults, but have unique considerations and conditions. Students will also develop an appreciation for social disparities that exist within pediatric populations in Manitoba, and learn from experts who work with these communities.

## PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics 0 cr

The COVID-19 pandemic propelled virtual healthcare delivery forward. This course covers hands-on practical and ethical issues of virtual pediatric healthcare delivery. Approval of instructor required. Course graded pass/fail.

## PEDS 7070 Reflexive Practice in Patient Engagement 0 cr

Students will discuss project patient engagement activities that will inform their thesis writing and knowledge translation.

## PEDS 7080 Indigenous Child Health 0 cr

In many Indigenous cultures around the globe, children are considered sacred and spiritual. This is true for First Nation people in Manitoba. Indigenous Knowledge Keepers will share how cultural losses have impacted the health of Indigenous children. This required course is pass/fail.

## PEDS 7110 Directed Readings in Pediatric Literature 3 cr

In this individualized directed readings course, the student and instructor will work together to identify areas of interest directly relevant to the student's thesis, in order to advance the student's knowledge of the topic.

## PEDS 7120 Foundations in Bioinformatics 3 cr

This course is intended to familiarize students with the field of bioinformatics. A broad overview of the 'omic fields, such as genomics, transcriptomics, and proteomics and common technologies, such as next generation sequencing, mass spectrometry, and NMR will be provided. Additionally, there will be discussion of the computational challenges of algorithm development, automation, and statistical analysis, particularly as it applies to the data consumer and an introduction to the Python programming language.

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

Prerequisites: PEDS 7010, PEDS 7020, or permission of the instructor.

## PEDS 7130 Multidisciplinary Immersion in Clinical Research 1.5 cr

Students not in the clinical pillar will spend 3 weeks in a clinical environment during which they will learn about clinically-relevant topics and concerns related to their area of study. The course follows an individual program of study. Required if not in clinical pillar.

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

Pre-requisite: PEDS 7010, PEDS 7020, PEDS 7050, and instructor permission.

## PEDS 7140 Practical Epidemiology 6 cr

In this online course, students will use data from the CHILD cohort to develop a manuscript from idea to submission. Students will analyse their own data.

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

Prerequisite: PEDS 7010 or equivalent and permission of instructor.

## PEDS 7150 Multidisciplinary Immersion in Basic Sciences 1.5 cr

Students not in the basic sciences pillar will spend 3 weeks in a basic sciences lab during which they will learn about techniques, methods and analyses related to their area of study. Required for students outside the basic sciences pillar.

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

Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

## PEDS 7160 Multidisciplinary Immersion in Population Health 1.5 cr

Students not in the population health pillar will spend 3 weeks with a population health group, during which they will learn about methods and analyses and related topics. Required for students outside population health pillar.

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

Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

## PEDS 7170 Multidisciplinary Immersion in Policy and Practice 1.5 cr

Students not in the policy and practice pillar will learn about healthcare policy as it relates to ethics, government, and medical education.

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

Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

## PEDS 7180 Practical Qualitative and Mixed Methods 3 cr

Students will learn and actively practice qualitative data collection and analysis, and compare qualitative and mixed methods research.

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

Pre-requisites: Acceptance into the Pediatric Graduate Program; PEDS 7010 (or comparable); PEDS 7020 (or comparable); permission from the instructor.

**PEDS 7190 Medical Education, Ethics, and Engagement 3 cr**

Students will gain theoretical and practical knowledge in medical education and ethics, as well as discuss practical ways to engage with policy makers and the popular press. Emphasis will include application of medical education methods. The course will be taught using team-based learning.

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

Pre-requisites: PEDS 7030 and PEDS 7050; permission of instructor.