

EPIDEMIOLOGY (PH.D.)

Offered by: Epidemiology and Biostatistics (Faculty of Medicine & Health Sciences)

Degree: Doctor of Philosophy

Program Description

Epidemiology is the study and analysis of the patterns and causes of disease in human populations. It forms the core discipline of public health by identifying excess illness and by gaining the etiologic understanding to intervene toward the improvement of population health. The PhD program in epidemiology at McGill trains scientists and health professionals to design and conduct studies, analyze health data and effectively communicate scientific results, and to gain novel insights into the causes and prevention of diseases at the population level. Epidemiologic work at the doctoral level involves a thorough integration of biological knowledge of pathogenesis, statistical knowledge of quantitative analysis and causal inference, and sociological knowledge to place these insights in the context of dynamic and interconnected human populations. Major areas of strength at McGill include epidemiologic methods, clinical epidemiology, infectious diseases, social epidemiology, pharmacoepidemiology, public and population health, global health, environmental epidemiology, chronic diseases and aging, and perinatal epidemiology.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Thesis

A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain.

Required Courses (16 credits)

Expand allContract all

Course	Title	Credits
EPIB 701	Ph.D. Comprehensive Examination.	0
EPIB 702	Ph.D. Proposal.	0
EPIB 703	Principles of Study Design.	2
EPIB 704	Doctoral Level Epidemiologic Methods 1.	4
EPIB 705	Doctoral Level Epidemiologic Methods 2.	4
EPIB 706	Doctoral Seminar in Epidemiology.	3
EPIB 707	Research Design in Health Sciences.	3

Complementary Courses (9 credits)

9 credits of coursework, at the 500 level or higher, with a minimum of 3 credits in biostatistics and 6 credits in epidemiology and/or substantive topic (normally related to the thesis topic). Courses must be chosen in consultation with the student's supervisor and/or the degree program's director or adviser.