Course Outline

Dates: September 2016 to April 2017
Times: Friday 9:00-12:00 AM (other days/times as required)
Place: Purvis Hall, room 24 (1020 Pine Avenue West)

Course Instructors: Michael Kramer, MD (michael.kramer@mcgill.ca) and Michal Abrahamowicz, PhD (michal.abrahamowicz@mcgill.ca)

Prerequisites: The protocol defense requires prior successful completion of the PhD comprehensive examination (usually in June of the preceding academic year), although some students may elect to register for the course before passing their comprehensive examination, while defending their own protocol afterwards. Most students in the epidemiology stream will have taken EPIB 623 (Research Design in the Health Sciences), although the latter is not a formal prerequisite for EPIB 702. The research project proposed for the PhD thesis need not be the same as the one submitted in EPIB 623. Even if it is, the protocol submitted for EPIB 702 should be of sufficient originality, scope, and methodologic rigor to qualify for a PhD thesis in the Department of Epidemiology, Biostatistics and Occupational Health.

Schedule: Available dates in both the fall and winter terms will be announced several months before each term, and slots will be assigned based on a lottery once students choose the term (fall or winter) they prefer. Additional dates may be scheduled to accommodate the number of defenses required, if classroom space availability and faculty scheduling permit. It is the student’s responsibility to ensure that his or her PhD thesis supervisor is able to attend on the chosen date. The course instructors should be informed of any scheduling conflicts within two weeks of the date assigned for the defense. Student attendance will be taken at each session; in the absence of pre-approved mitigating circumstances, students are expected to attend 80% of the defenses during the year they are registered for the course.

Learning Outcomes: This course is required for all PhD candidates in the Department of Epidemiology, Biostatistics and Occupational Health. It is intended to provide the student with the experience necessary to propose a comprehensive research project and to convince his or her peers of its scientific merit and originality. It provides a standardized critical evaluation to supplement the expertise of the student’s PhD supervisor and committee and thereby improve the likelihood of the thesis’s success. Moreover, by attending and participating in other students’ protocol defenses, students will be exposed to a variety of substantive and methodologic areas in epidemiology and biostatistics and will learn about the criteria and approaches used in scientific peer review.

External Reviewer: In addition to the two course instructors, an external reviewer with substantive and/or methodologic expertise in the area of the proposed thesis research will be appointed for the protocol defense. The student, thesis supervisor(s), and other thesis committee members are responsible for seeking the participation of the external reviewer, and
for ensuring his or her availability on the date chosen for the defense. To avoid conflict of interest, the external reviewer must not be a member of the thesis committee, have previously supervised or co-authored a paper with the student, nor have been consulted about any aspect of the proposed research.

**Required Documents:** The written protocol should emphasize the importance of the research objective(s) and the proposed methods for addressing them. As per McGill University policy, it can be written in English or French. It should provide sufficient detail on data sources; research design, statistical analyses, and power/sample size for each of the research objectives; and study limitations. The student should make clear in the protocol text the extent of his or her original contribution to the proposed research, as well as the likely format (“traditional” vs manuscript-based) of the thesis. The protocol should be limited to 12 pages (excluding references) on 8.5” X 11” paper in 12-point font and a minimum of 2 cm for all margins on each page. To permit adequate space for the methodologic aspects of the proposed research, we strongly suggest that the Background (Introduction) section of the protocol not exceed 3 of the total 12 pages. Although students may submit appendices containing tables, figures, equations, or text beyond the 12-page limit, these materials will not be read by the reviewers, to avoid advantaging students who submit them or dis advantaging those who do not. The full protocol must be sent by E-mail to the course instructors no later than 17:00 Eastern time two weeks before the defense date. Any protocol not adhering to these criteria and deadlines will not be accepted and will result in postponement of the defense.

**Procedures:** The three reviewers (course instructors and external reviewer) independently read the submitted protocol prior to the defense. The morning of the defense, the course instructors meet with the external reviewer at 9:00 AM to summarize the defense procedures. After a 25-minute (9:15 to 9:40) presentation by the student, the three reviewers pose questions for 10-15 minutes each, for each of two rounds of questioning (total 60-90 minutes). Students and attending faculty are then invited to pose additional questions. Following the defense, the three examiners meet with the student’s thesis supervisor(s) to review the protocol and defense and decide whether to (1) award a pass, (2) request a revised written protocol (or specific sections thereof) for re-review, or (3) require a repeat defense (maximum of one repeat). A formal letter of decision, along with comments and recommendations, will be sent to the student, supervisor(s), EBOH Chair, and Graduate Student Affairs Coordinator, usually within 10-14 days after the defense.