Jan 8 – Apr 12, 2024: Mon, 2:30–4:20 p.m.
Burnaby

Jan 8 – Apr 12, 2024: Wed, 2:30–3:20 p.m.
Burnaby

Apr 13, 2024
Sat, 12:0.

2. be able to interpret the results of an analysis in relation to the original questions or hypotheses that motivated the analysis,

3. be familiar with data analysis methods commonly used in health sciences and understand the basic limitations of competing methods,

4. understand and be able to critique the analysis methods described in published health research papers,

5. be able to communicate effectively with statistical consultants.

The scheduling of the following topics is approximate:

1. Review of introductory statistics from the pre-requisite course: Hypothesis testing, estimation and con idence intervals for means and proportions.

2. Review of basic concepts of probability with applications including diagnostic testing, sensitivity and speci icity, the relative risk and the odds ratio.

3. Contingency Tables: The Chi-square test, r x c tables, multiple 2x2 tables, Simpson's paradox, Mantel- Haenszel method.

4. Correlation and simple linear regression: Regression concepts, estimation and testing for regression coef icients, evaluation of the model.

5. Multiple linear regression: Inference for regression coef icients, confounding and interaction, indicator variables, model selection, prediction, model assumptions and checking.

6. Logistic regression: Odds ratios, inference for regression coef icients, model assumptions, case-control studies.

7. Time permitting: Survival analysis including life tables, censoring, Kaplan-Meier method, log-rank test.

Grading

Assignments	**15%**
Quizzes	**10%**
Midterm 1	**20%**
Midterm 2	**20%**
Final Comprehensive Exam	**35%**

NOTES:

There will be no make-up midterms.

Materials

RECOMMENDED READING:

by M. Pagano, K. Gauvreau. Publisher: Chapman and Hall/CRC

REQUIRED READING NOTES: