STAT 536C - DESIGN AND ANALYSIS OF CLINICAL STUDIES
2011/12 – Term 2

Instructor: Dr. Paul Gustafson, e-mail: gustaf@stat.ubc.ca
Lectures: Tuesday, Thursday, 9:30 -11:00
Pre-requisite: STAT 460 or equivalent

Text: Some references we may use are as follows. The first three are available via the UBC library e-book collection.
Vittinghoff et. al. *Regression methods in biostatistics.* Springer 2008.
Moye._*Statistical Reasoning in Medicine-The Intuitive P-Value Primer 2nd Ed. Springer 2006.*
Steyerberg. *Clinical prediction models*. Springer 2009.
Lachin. *Biostatistical Methods.* Wiley 2000.

Course description: This course will present basic statistical concepts and methodology for the most common types of studies in health sciences research. Topics include studies of agreement, diagnostic tests, clinical trials, standardization, cohort studies, case-control studies, survival analysis, longitudinal data, and other topics. The course is as a core course for students in Statistics following the Biostatistics option in the M.Sc. program. It should also be of interest to students in Statistics and other departments who seek a broad introduction to biostatistics.

Course Outline: Not yet determined.   An example from a previous year follows.

Week	Topics
1	Introduction, Two group comparisons
2	Likelihood, Inference
3	Study Design
4	Clinical Measurement
5	Stratified Analysis for Two Groups
6	Random Effects
7	Case Control and Matched Studies
8	More on Likelihood
9	Logistic Regression
10-11	Count data and Poisson Regression
12-13	Event-Time Data: Survival Analysis