Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 604-291-3112 or csdo@sfu.ca

Instructor: Dr. Charmaine Dean

Prerequisite:

STAT 801

Textbook:

No Textbook Required

Outline:

Statistical methodology used in analyzing failure time data. Likelihoods under various censoring patterns. Inference using parametric regression models including the exponential, Weibull, lognormal, generalized gamma distributions. Goodness-of-fit tests. The proportional hazards family, and inference under the proportional hazards model. Stratification and blocking in proportional hazards models. Time-dependent covariates. Regression methods for grouped data.

1. Basic ideas
2. Some nonparametric and graphical procedures
3. Review of maximum likelihood large sample theory
4. Inference with specific lifetime distributions
5. Nonparametric/distribution free methods
6. Regression analysis
7. The proportional hazards model
8. Regression methods for grouped data
9. Longitudinal studies
10. Multivariate and multi-state problems

Grading Scheme: (tentative)

Assignments: 60%
Project: 40%

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Please consult the General Guidelines of the calendar for more details.

Revised May 2007