

STA 22101S: Applied Statistics II
Fridays, 2-5 pm, SS 1083

Spring, 2014

Course description: This course teaches methods of applied statistics, with the applications studied motivating the sets of methods taught. The topics covered will include

- planning of studies
- generalized linear models
- semi-parametric regression
- generalized estimating equations
- mixed linear and non-linear models

Grading: The grade in the course will be based on regular homework (60%) and a final exam (40%).

Text: The course text is *Statistical Models* by A. C. Davison (Cambridge University Press), Chapters 8 through 10. Highly recommended is *Principles of Applied Statistics* by D.R. Cox and C.A. Donnelly (CUP).

Additional resources will be provided as needed; I often refer to the 4th addition of *Modern Applied Statistics with S* by W.N. Venables and B.D. Ripley (Springer), *Applied Statistics* by D.R. Cox and E.J. Snell (Chapman & Hall) and *Elements of Statistical Learning*, by T. Hastie, R. Tibshirani, and J. Friedman (Springer).

Course web page(s): I am using Blackboard to manage the course list and grades, but the course information is all on the web page

<http://www.utstat.utoronto.ca/reid/2201S14.html>. The Blackboard page for STA2201S will lead you to this page via the first announcement.

Computing: You are welcome to use the statistical computing package of your choice, but I will refer exclusively to the R computing package. There are some R resources listed on the course webpage.

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Office Hours: Thursday 1 to 3, or by appointment.