Week	Date	Methods	LM2	LM1	Supplements
1	Sept 14	Review of Linear Regression	Ch.2-4	Ch.2-3	CD Ch.1; SM Ch.8.2.1, 8.3
2	Sept 21	Model compari- son, diagnostics, collinearity, factors, model-checking	Ch.3, Ch.10, Ch.14-1,2	Ch.4, Ch.13	CD Ch.6; SM Ch.8.5- 7
3	Sept 28	Model Selection, Types of Studies	Ch.10	Ch. 8	CD Ch.1,2; SM 8.7.1
4	Oct 5	Factor variables; ran- dom and mixed ef- fects; principles of measurement	Ch.14-17	Ch.14-16	CD Ch.4; SM Ch.9.2.1
5	Oct 12	Designed experi- ments; preliminary analysis	Ch.14,15	Ch.13,14	CD Ch.5; SM Ch.9.1.2
6	Oct 19	Review of Logistic Regression	ELM-1 Ch.2		SM 10.4.1
7	Oct 26	Binary Data; Gener- alized Linear Models	ELM-1 Ch.2,3, 6		SM 10.3
8	Nov 2	Generalized Linear Models	ELM-1 Ch.3.1,6,7		SM 10.6
9	Nov 9	Break			
10	Nov 16	Catch-up			
11	Nov 23	Nonparametric Regression	ELM-1 Ch. 11		CD Ch.8; SM 10.7.1,2
12	Nov 30	Nonparametric Regression	ELM-1 Ch. 11		CD Ch.8; SM 10.7.1,2
13	Dec 7	Recap			

Comments

This shows the main topics I'd like to cover, but is subject to adjustment as the course evolves. Electronic copies of the books listed below are available through the U of T Library, and have been posted to Quercus.

The books by Faraway are somewhat easier to read, so if you find Davison daunting go to those first and then come back to Davison after the lecture. The book by Cox & Donnelly is quite different as it sets out very general principles that are well worth reviewing as we go along.

Main Texts

The library has just the first editions. If you are buying the text, the second edition is worth it.

LM-1: Linear Models with R 1st edition by J.J. Faraway (Chapman & Hall)

LM-2: Linear Models with R 2nd edition by J.J. Faraway (Chapman & Hall)

ELM-1: Extending the Linear Model with R 1st edition by J.J. Faraway (Chapman & Hall)

ELM-2: Extending the Linear Model with R 2nd edition by J.J. Faraway (Chapman & Hall)

Supplementary

These are well worth owning. The first is an encyclopedic reference; the second has unusual material you can't find anywhere else.

SM: Statistical Models by A.C. Davison (Cambridge University Press)

CD: Principles of Applied Statistics by D.R. Cox and C.A. Donnelly (Cambridge University Press)

Background

These texts may be more accessible, they are often used for undergraduate courses.

A Modern Approach to Regression with R by S.J. Sheather. (Springer)

Data Analysis and Graphics Using R by J. Maindonald & W.J. Braun