STAT 350: Lecture 36

Course Review

Coverage in Text

- Simple Linear Regression, Chapters 1 through 4.
- Matrix Algebra, Chapter 5.
- Multiple Regression, Chapters 6 through 10. Exceptions:
  - Sections 7.4, 7.5, 7.9.
  - Section 9.5.
  - Sections 10.2-10.6.
- Analysis of Variance, Chapters 16 through 23. Exceptions:
  - Sections 17.5 (covered in 330), 17.6, 17.8.
  - Section 18.7.
  - Sections 20.2 (multiple comparison procedures part), 20.3, 20.4.
  - Section 21.2.
  - Sections 22.4 and 22.5.
- Analysis of Covariance, Chapters 11.1-4, 25.
- Power and Sample Size Calculations, Chapter 26, sections 1, 2 and 4.
- Non-linear least squares, Chapter 13, sections 1, 2, 3 and 6.
- Generalized linear models: logistic regression and Poisson regression, Chapter 14, sections 1-4 and 11, 12.
- Multivariate normal distribution, Chapter 15.

Final Exam: Some remarks

- There will be a question about variable selection in which you have to do one by hand given all the possible error sums of squares.

- There will be an analysis of covariance question.
- There will be a question about matrix formulation of some linear model.
- I will want to see if you have learned about the matrix linear algebra stuff.
- There will be some question about the distribution of things which should have a normal, t or F distribution.
- There will be some regression diagnostics question.
- There will be some questions in which you do a straight up t or F test.
- There will be some question which tests to see if you can manipulate means and variances.
- There may be a Bonferroni simultaneous confidence intervals question.
- There may be a power question.
- The exam is open book: you may bring any texts, or notes.
- You will need a calculator and your text for the tables.