STAT 485/685 Lecture 13
Fall 2017
26 October 2017

- I finished discussing the midterm marking.
- If you want to ask about your grading please send me an email explaining why. I have a scan of your exam.
- I then outlined the goals of the course, trying to give a big picture:
  - Working towards forecasting (Ch. 9).
  - Use ARIMA processes to do so.
  - Fit a mean structure and a covariance structure.
  - Use both to do the forecasting.
  - Steps to forecast?
  - First model specification (Ch 6): specify p, d and q in ARIMA(p, d, q) process. (Use acf and partial acf.)
  - Then estimate parameters of the model: p values of ϕ_i; q values of θ_j; parameters in mean; residual standard deviation σ. (Chapter 7)
  - Assess quality of model using diagnostics based on residuals (Chapter 8): iterate until accepatble model found.
  - Overall grades ok – average in low 60s (in percentage terms).
  - After forecasting attach forecast standard error.
- Defined ARIMA(p, d, q) processes. Illustrated with ARIMA(1,1,0) and ARIMA(0,1,1).
- Showed these could not be written as infinite order AR or MA; contrast with ARMA(p, q).
- Handwritten slides.