

## Summary of pp. 92-181 of Notes

### Chapter 5: Normal model

- Normal-gamma prior
- Mean squared error of Bayes estimators
- Large sample properties of Bayesian inference

## Chapter 6: Use of Gibbs sampling to approximate the posterior

- Full conditionals of a joint distribution
- Update components of  $\theta$  one at a time
- Generated observations are correlated and form a Markov chain
- Convergence diagnostics: burnin, mixing, sample autocorrelation function, thinning

## Chapter 7: Multivariate normal model

- Conjugate prior: normal-inverse Wishart
- Missing data
  - Missing at random
  - Effect on likelihood
  - Use of Gibbs sampling to approximate the posterior