STAT 532 Course Schedule

Course Outline

Week	Content
1. Week of Aug 29	M. Introductions & Course Overview W. Mechanics of Bayesian Statistics F. Philosophy of Bayesian Statistics (Confidence vs. Probability)
2. Week of Sep 5	M. (No Class) Labor Day W. Belief, Probability, and exchangeability F. Belief, Probability, and exchangeability (HW 1 assigned)
3. Week of Sep 12	M. Binomial Model W. Poisson Model F. Exponential Families & Conjugate priors (HW2 assigned, HW 1 due)
4. Week of Sep 19	M. More on priors (jeffrey's) ect W. R - Overview F. Monte Carlo Procedures
5. Week of Sep 26	M. Sampling and Predictive Distributions (sequential updating) (HW 3 assigned, HW 2 due) W. Monte Carlo Procedures and Posterior Inference F. Normal Model & conditional expectation
6. Week of Oct 3	M. Normal Model, joint inference (HW 4 assigned, HW 3 due) W. Normal Model & priors F. Normal Model
7. Week of Oct 10	M. Review Session (HW 4 due) W. Midterm Exam F. (No Class) Take home work day
8. Week of Oct 17	M. MCMC Intro W. Gibbs Sampling F. MCMC diagnostics (HW 5 assigned)
9. Week of Oct 24	M. Multivariate Normal Distribution W. Wishart distribution and Gibbs Sampling F. Hierarchical Modeling & Regression
10. Week of Oct 31	M. Hierarchical Modeling & Regression (HW 5 due, HW 6 assigned) W. Hierarchical Modeling & Regression F. Hierarchical Modeling & Regression
11. Week of Nov 7	M. Non conjugate priors W. Metropolis-Hastings Algorithm (HW 7 assigned, HW 6 due) F. (No Class) Veterans Day
12. Week of Nov 14	M. Metropolis-Hastings Algorithm W. Generalized Linear Models F. Generalized Linear Models and Metropolis-Hastings
13. Week of Nov 21	M. ST: Latent Variable Models (HW 7 due) W. (No Class) Thanksgiving Break F. (No Class) Thanksgiving Break
14. Week of Nov 28	M. ST: Model Selection & Point Mass Priors (HW 8 assigned) W. ST: Dynamic Linear Models F. Class Presentations
15. Week of Dec 5	M. Class Presentations W. Class Presentations F. In class review (HW 8 due)
16. Mon Dec 12	M. Final Exam: 8 - 9:50