Stat 591: *Advanced Topics – Bayesian Analysis* **Fall 2013**

Instructor data.

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Course data.

Class number:	35728
Prerequisites:	Stat 411
Textbook:	Ghosh, Delampady & Samanta, *Introduction to Bayesian Analysis*, Springer, 2006, 1st (and only) edition. —Link to free full text PDF version on course website —Paperback copy can also be purchased there for $25.
References:	See course website for relevant books/papers
Software:	R, can be downloaded for free at `cran.r-project.org`
Lectures:	MWF 12:00–12:50pm in Addams Hall, Room 311
Office hours:	MWF 10:00–11:00am, or by appointment.
URL:	`www.math.uic.edu/~rgmartin/stat591.html`

Course objectives. In recent years, Bayesian methods are being used in all kinds of scientific applications. It is, therefore, increasingly important for graduate students in statistics and related fields to have a solid background in Bayesian theory and methods. Students successfully completing this course will have the necessary background to apply Bayesian ideas and methods in their own problems and/or pursue research on Bayesian theory and methods. A tentative course outline is available on the course website.

Assignments and grades. There will be no exams. Course grades will be based on homework and "class participation." I expect that there will be about six homework assignments during the semester. Grades will be assigned based on the rule:

$$\text{A} \geq 90\% > \text{B} \geq 80\% > \text{C} \geq 70\% > \text{D} \geq 60\% > \text{F}.$$

I reserve the right to make adjustments to the overall grading policy, but the letter grade cutoffs will be no stricter than those advertised above.

Miscellaneous items.

- No late homework will be accepted.
- Homework is to be completed in (fixed) groups of 3–4 students each. Everyone in the group will get the same score.
- Familiarize yourself with the *UIC Guidelines for Student Conduct*, at `http://www.uic.edu/depts/dos/studentconduct.html`.
- Disputes about homework/exam grading must be brought to my attention within *one week* after the graded paper is returned.