COURSE SYLLABUS

STAT 499 – Applied Bayesian Statistical Methods – Section 001 – 3-credit course
Fall Semester 2010 – Tuesdays 10:00 – 11:15am in Mundelein Hall, Room 404
Prerequisites: previous exposure to basic statistics and **maturity to move quickly through new material**
Required Texts: (1) Scott M. Lynch, ***Introduction to Applied Bayesian Statistics and Estimation for Social Scientist***, 2010, Springer; (2) Jim Albert, ***Bayesian Computation with R***, 2009, Springer.

Instructor: Dr. Timothy E. O'Brien Email address: tobrie1@luc.edu or teobrien@gmail.com
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Office Hours: Tuesdays and Thursdays 11.30am – 2.00pm (except 10/14, 11/11 & 11/16); and by appointment
Course Web Page: **http://webpages.math.luc.edu/~tobrien/courses/bayes/course-homepage.html**

Course Overview

Most basic statistical techniques are based upon the frequentist and likelihood "classical" perspectives; this course introduces and illustrates Bayesian methods as an alternative. The emphasis of the course is on applications instead of statistical theory, and students are required to analyze real-life datasets using the Minitab, SAS and R statistical packages. Grading will be based on homework assignments, in-class presentations and questions/answers, and a course project/paper.

Grading Scheme

Student Presentations and Participation	50 %
Final Project-Paper (due 12/14 by noon)	25 %
Homework	25 %

Final course (letter) grades will be awarded according to the following grading scheme:

	[92.5 , 100] = A	[90.0 , 92.5) = A-
[87.5 , 90.0) = B+	[82.5 , 87.5) = B	[80.0 , 82.5) = B-
[77.5 , 80.0) = C+	[72.5 , 77.5) = C	[70.0 , 72.5) = C-
[67.5 , 70.0) = D+	[60.0 , 67.5) = D	[0.0 , 60.0) = F

Participation

Students are expected to attend all classes and to actively participate in classroom discussion. It is expected that students will read the lecture material before class so as to better benefit from the class lecture and discussion.

Course Calendar: Topics Covered (L = Lynch text and A = Albert text), and Presenter

Date	**08/31**	**09/07**	**09/14**	**09/21**	**09/28**	**10/05**	**10/12**	**10/19**
Book and Chapter	**L1&L2**	**A1&A2**	**L3**	**L4**	**A3&A4**	**L5**	**Break**	**A5**
Presenter	**O'Brien**	**Yan**	**Nam**	**Daiki**	**Yan**	**Nam**	**-----**	**Daiki**
Date	**10/26**	**11/02**	**11/09**	**11/16**	**11/23**	**11/30**	**12/07**	**12/14**
	L6	**A6**	**L7**	**L8**	**A9**	**L9**	**A7**	**Final**
	Yan	**Nam**	**Daiki**	**Yan**	**Nam**	**Daiki**	**O'Brien**	**Papers due**