• **Instructor:** Prof. Rama T. Lingham
  
  – Office: DuSable 359 E
  – Office Hours: Tuesday and Wednesday 3:30pm to 4:20pm, Friday 11:00am to 11:50am and by appointment
  – Phone: 815-753-6799
  – Email: rama@math.niu.edu (for emergencies only)

• **Required Textbook:** Ronald Christensen, et. al. (2010), Bayesian Ideas and Data Analysis – ISBN: 978-1-4398-0354-7, Published by Chapman & Hall / CRC Press.

• **Coverage of Topics:** Selected material from chapters 1 to 7 and 9 of the Text and an introduction to the R and WinBUGS softwares.

• **Learning outcomes for STAT 479:**

  1. Capacity to formulate scientific problems within the Bayesian statistical paradigm.
  2. Knowledge of Bayesian data-analysis methods.
  3. Practical working knowledge of R and WinBUGS to perform Bayesian data-analysis.
  4. Experience with a variety of statistical problems arising in real world applications.
  5. Knowledge of the key commonalities/differences between the Classical/Frequentist and the Bayesian statistical paradigms.

• **Course Regulations:**

  1. You may receive course information by email through MyNIU / Blackboard. Please make sure that you can open and read jpg, pdf and MS-Word 2010 files from my emails. Not checking on a daily basis, or periodic clean-up of your in-box, etc., in regard to your NIU-email are not acceptable excuses for you not to follow my instructions. Setting up to forward email from your NIU-email to other preferred email addresses, if any, may be helpful.

  2. Homework will be assigned in class or via email, and will be due at times announced. It is the responsibility of the student to keep track of which assignments are due when. Make a friend or two in this class just in case you are unable to attend the lectures (see item 16 below). Late assignments will NOT be accepted unless your emergencies can be confirmed with written documentation.

  3. Assignments are to be neat and presented logically on loose-leaf paper. If more than one sheet of paper is used, the assignment must be stapled together. Please do not ask faculty for use of a stapler. Spiral paper is unacceptable. You are to show all your work. If your assignments are messy, disorganized or do not follow the stated instructions, you will not receive any credit for those assignments.

  4. The maximum possible points for all of the homework during the semester will be 100. Your homework points will be computed by first computing your average homework score for the semester as a percentage. You will then receive that percentage of the 100 points.

  5. Please note that it is unlikely that all of your homework will be graded and returned to you before the exams. You may want to make copies of your homework before turning it in.
6. Announced quizzes will be given in the lectures. The maximum possible points for all of the quizzes during the semester will be 50. Your quiz points will be computed by first deleting the lowest score and then computing your average quiz score for the semester as a percentage. You will then receive that percentage of the 50 points. During quizzes, you are not allowed to use anything except a hand-held calculator in which you cannot save any information about the course.

7. One mid-term and a final exam will be given in the usual classroom. The mid-term Exam is tentatively scheduled for Thursday, March 6, 2014 during regular class time. The Final (comprehensive) Exam is on Tuesday, May 6, 2014 from 2:00 pm to 3:50 pm in the usual classroom.

8. All exams, and quizzes, are closed-book and closed-notes. You are encouraged to bring only a hand-held scientific calculator in which you cannot save any information about the course, and up to two (four)-sheets of only formulas for the mid-term (final) exam. You will receive a zero if your formula sheets contain definitions, examples, home-work problems and codes. However, they can include general formulas and results we discuss in the lectures or from the book. You should bring Tables 2.1 and 2.2 from the Text, without which you may not be able to do some problems on the exams. Sharing of calculators is prohibited.

9. In STAT 579, home-work, quizzes, exams, etc., may be given that are more challenging relative to what I give in STAT 479, per policy of the graduate school.

10. There is no extra credit given in this course. Please do not even ask!

11. **Grade Structure:** The final course grade is based on the percentage of 400 maximum points that you earn in this paired course, based on the mid-term exam (100 points), one final exam (150 points), announced quizzes (50 points total) and homework (100 points total). For students in STAT 479, a scale of 86%, 83%, 79%, 76%, 73%, 69%, 66%, 54%, will be used as cut-points for the grades A, A-, B+, B, B-, C+, C, D respectively; an F grade will result if you score less than 54%.

12. Please note that a grade of incomplete (I) may be considered for students who are passing the course, but cannot complete the course due to documentable health or family reasons. A grade of incomplete will not be assigned to anyone who is not passing the course at the time of the request.

13. Make-up mid-term exam will not be given. If there is a serious emergency which prevents you from taking an exam, contact me as soon as possible. In such a case where missing the mid-term exam is warranted, your final exam will be worth 250 points instead of the usual 150. Make-up quizzes may be given during the final exam, at the discretion of the instructor.

14. Please check all your scores on the NIU Blackboard upon receiving them. Any discrepancies between your record and the Blackboard must be e-mailed to the grader, Polina Peroussanova, at pperoussanova1@niu.edu no later than one week from the time you receive your scores; after that the Blackboard data will be final. **Contacts of any type with the grader about homework, etc., are strictly prohibited, unless the instructor directs you to do so. As a rule, route your questions for the grader through the instructor.**
15. NIU's updated policies on Academic Integrity and Attendance for ALL students, and Accommodations for Students with Disabilities, are now available at

http://www.niu.edu/stat/courses/pdfs/Accessibility_Statement.pdf

Please read carefully this important document, as your full compliance with the updated policies in this document is required in this class.

16. **Attendance:** There is no mandatory attendance requirement for this class. Please note, however, that if you frequently miss class, the instructor reserves the right to deny office hour privileges to you. Further, it is your responsibility to be sure that your work is turned in on-time and that you get the lecture notes and announcements, if any, from a student in the class. My notes will not be available to students.

17. Unless you are recording the lectures, ALL electronic devices you bring in to the class, except calculators and cell phones, must remain switched off during the entire lectures. Distractions like reading newspapers must be avoided during the lectures. You will be asked to leave the class if you violate any of these regulations after one warning.

18. The instructor reserves the right to amend the syllabus at any time. Changes will be announced.