

Instructor: Dr. A. W. Swift

Email: aswift@unomaha.edu, please put course number in subject line.

Office Location: DSC 237

Office hours: Tuesday and Thursday 3:30pm – 5:15pm, or by appointment

Class: Tuesdays and Thursdays 7:00pm – 8:15pm in DSC 110

Textbook: *Bayesian Data Analysis*, 3rd edition by Gelman et al.

Preliminary Course Outline

1. Introduction to Time Series
2. Probability & Inference
3. Single Parameter Models
4. Multi-parameter Models
5. Comparison with Classical Statistical Inference
6. Hierarchical Models
7. Model Checking
8. Computation / MCMC
9. Regression Models

Assignments: There will be a homework assignment posted every week. Assignment deadlines and questions will be posted on Blackboard. These assignments should be submitted electronically through blackboard by clicking on the assignment and attaching a file. A single PDF file is strongly preferred. The assignments will be graded and returned to you through blackboard. At the end of the semester, your assignment scores will be converted to a percentage.

For some assignments, the use of software will be required. All computer generated output using R (graphs and analysis) used to answer the question must be included in your solution file. The output should appear where relevant in your narrative, rather than included as additional files or appendices. You may also wish to submit your raw code in the form of a commented .R file, STAN or JAGS file (or some combination thereof). This allows for better assignment of partial credit. Please do not submit .Rnw files.

To summarize, an ideal submission would be a PDF file containing your solution, including any relevant output from R, any .R, file containing your raw R code (with comments), and any STAN or JAGS model files.

Exam: There will be one take-home exam at the end of the semester. Your exam score will be a percentage. The deadline will be announced via Blackboard. No late submissions will be graded. The final is expected to be entirely your own work. Any student who is found in violation of the rules of the final (as specified on the exam itself) will receive an F for the course and possible further disciplinary action as dictated by the university's student code of conduct policy.

Final Score: Your final score will be a weighted average of the two percentages above, determined by whichever is greater. If your assignment percentage is greater then your final score will be calculated by adding 70% of your assignment percentage to 30% of your exam percentage. If your exam percentage is greater then your assignment percentage then your final score will be calculated by adding 60% of your assignment percentage to 40% of your exam percentage.

Grades:

Points	Grade	Points	Grade
97 to 100	A+	77 to 79	C+
93 to 96	A	73 to 76	C
90 to 92	A-	70 to 72	C-
87 to 89	B+	67 to 69	D+
83 to 86	B	63 to 66	D
80 to 82	B-	60 to 62	D-
		0 to 59	F

Late Assignments: Late Assignments will not be graded unless prior (that is, before the deadline) arrangements have been made with the instructor, and then only in the case of an unavoidable emergency.

Blackboard: It is your responsibility to make sure your Blackboard account is functioning properly and to check the site daily for announcements and updates. Your access to the Blackboard site is tied to your registration for this course. If you have concerns about your registration, please inform the instructor as soon as possible.

Email: Other than in-person (during class times and office hours), email is my preferred method of communication. You should feel free to email me at any time with questions about the course. I ask that your email communications follow three simple rules: Firstly, all email must come from your UNO email account (email from non-UNO accounts will not be replied to). Secondly, please include the course number 8700 in the Subject line of your email, and thirdly, please try to check your UNO email daily, email from me regarding this course will only be sent to UNO email addresses.

Student Behavior and Respect:

It is expected that every student enrolled in this course will show respect to their fellow students and the instructor. Below are some examples.

In class:

- Arrive on time.
- Do not pack up your things early whilst the instructor is still teaching.
- Do not hold conversations with other students during lecture.
- Turn off mobile phones, and all other non-course related electronic devices.
- Do not surf the web, check email or do homework for other classes during lecture.

At all times:

- Be polite and respectful in all communications (both in person and electronically) with other students and the instructor.
- Simple manners go a long way; if you have asked the instructor a question via email and they have responded with the answer then a simple reply saying 'Thank You' is always appreciated.

Continued incidences of disrespect may result in removal of the student from the classroom, or in the case of more serious incidents, removal from the course and possible further disciplinary action consistent with the rules of the university.

Course Accommodations: Accommodations are provided for students who are registered with Disability Services and make their requests sufficiently in advance. For more information, contact Disability Services (EAB 117, Phone: 554-2872, TTY: 554-3799) or go to the website: www.unomaha.edu/disability.

Collaboration and academic honesty

- Collaboration on assignments is permitted and encouraged. **However, outright copying is not allowed.**
- All work submitted must be your own. Submitting work of others and claiming it as your own is plagiarism and is not allowed.
- The Exam is intended to be an individual effort. If any collaboration is detected, all students involved will receive a grade of F.
- The university academic integrity policy and its corresponding penalties apply to this course. If you are unsure whether an activity would constitute a violation of the academic honesty policy, please ask the instructor.

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