

Syllabus

STAT 341, Introduction to Probability & Statistics

Fall 2016, MWF 10:10-11:00am in Math 103

Course Information:

- **Instructor:** Brian Steele, Math 314, 243-5396, brian.steele@umontana.edu.
- **Textbook:** *Probability with R*, by Jane Horgan
- **Office Hours:** To be announced and by appointment
- **Grading:** Homework: 40%, Exams 1 and 2: 20% each, Final: 20%
- **Prerequisites:** M 162 (Applied Calculus) or M 172 (Calculus II)

Homework

Homework will typically be assigned every Friday, to be handed in at the beginning of class the following Friday. **NO LATE HOMEWORK WILL BE ACCEPTED FOR ANY REASON**, and the lowest homework grade will be dropped. Homework is not only a fairly substantial portion of your grade, but is vital to your success in this class. Working with other students on homework is encouraged, as long as you hand in your own work, and do not simply copy someone else's work.

Exams

Exams are closed book though you may bring one paper (8.5 by 11 in.) with notes. Phones must be off during exams (and class). More about the exams, including the exact dates of the exams will be given later. If you cannot make it to an exam, you must let me know **BEFORE** the exam is given. No make-up exams will be given without a documentable reason for missing the exam.

Final Exam

The final exam is scheduled for Thursday May 12 from 10:10-12:10 a.m.

Course Material and Objectives

This course is intended as an introduction to probability and statistics, with an emphasis on probability theory and simulation. Topics such as basic probability concepts, probability models, random variables, density functions, and their relationship to estimation and hypothesis testing will be studied. Use of computer software (**R**) will be integrated into the lectures and homework.

Questions are strongly encouraged, both during class and at office hours. If you are lost and confused, please let me know.

Important Dates

February 12: Last day to drop courses/change grading options in Cyberbear.

March 28: Last day to drop courses. Paper form must be signed by your advisor and the instructor. A *W* will appear on your transcript. After this date, drops can only be done by with the Dean's signature.

Monday, February 15: Presidents' Day

Monday-Friday, April 4-8, Spring break

Friday, May 6: Last day of class. Last day to change grading option (letter grade to CR/NCR or vice-versa). Requires paper form signed by advisor and instructor.

Learning Outcomes

1. Demonstrate ability to read and write mathematical arguments
2. Solve problems containing a stochastic component
3. Apply stochastic and statistical concepts to problems in a variety of settings
4. Demonstrate an understanding of the basic ideas of probability and statistics and how these ideas are used to solve problems in a variety of disciplines

Disability Services

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommasson 154. We will work with you and DSS to provide an appropriate accommodation.

Academic Honesty

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary action by the University. All students need to be familiar with the Student Conduct Code. You can find it in the A-Z index on the UM home page.