Syllabus
STAT 341, Introduction to Probability & Statistics
Fall 2017, MWF 10:10-11:00am in Math 103

Course Information:

- **Instructor**: Jon Graham, Math 204, 243-2561, jgraham@mso.umt.edu.
- **Textbook:** *A First Course in Probability, 6th-9th ed.,* by Sheldon Ross
- **Office Hours**: To be announced, By appointment
- **Course Webpage**: Accessed through Moodle
- **Grading**: Homework: 30% Exams 1,2,3: 45% Final: 25%
- **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. Solutions to all problems will be provided.

Exams

Exams 1, 2, & 3 will be cumulative and closed book. 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 Friday, December 15 from 8:00-10:00am.

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 as needed.

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

Important Dates

      Monday, September 4: Labor Day holiday

      Tuesday, September 12: last day to add courses by Cyberbear.

      Thursday, September 21: Last day to drop courses/change grading option in Cyberbear.

      Thursday, November 2: Last day to drop courses. Paper form must be signed by advisor and instructor. A W will appear on your transcript. After this date, drops can only be done by with the Dean's signature.

      Friday, November 10: Veterans Day

      Wednesday, November 22 – Friday, November 24: Thanksgiving holiday

      Monday, December 11: Last day of class.

      Tuesday, December 12: Last day to change grading option (letter grade to CR/NCR or vice-versa). Requires paper form signed by advisor and instructor.

Learning Outcomes: Upon successful completion of STAT 341, a student will:

1. Understand basic probability, counting and combinatorial methods, and Bayes' Theorem.
2. Be able to write formal proofs of basic results in set theory and probability.
3. Learn about models for discrete and continuous random phenomena and be able to apply these models to real problems.
4. Be able to simulate random phenomena in **R.**

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.