1-2014

STAT 341.01: Introduction to Probability and Statistics

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INTRODUCTION TO PROBABILITY AND STATISTICS

STATISTICS 341 SECTION 1

CRN 30684

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COURSE WEBPAGE `http://www.math.umt.edu/roscoe/stat341`

GOALS Upon successful completion of STATISTICS 341, a student will be able:

1. To understand basic probability, counting and combinatorial methods, and Bayes' Theorem.
2. To write formal proofs of basic results in set theory and probability.
3. To learn about models for discrete and continuous random phenomena and to apply these models to real problems.
4. To learn to simulate random phenomena in SPSS or other computer language.

TEXT Ross, S. (2010). *A first course in probability (8th ed.).* Upper Saddle River, NJ: Pearson Prentice Hall.

GRADING 18% Written Homework
12% Projects
45% Mid-Semester Exams
25% Final

HOMEWORK Homework will be assigned at the beginning of class every Friday, to be handed in at the beginning of class the following Friday. No late homework will be accepted for any reason. 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 allowed and even 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 Mid-semester exams will be cumulative and closed book. 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.

Exam 1 - February 24: Chapters 1 and 2
Exam 2 - March 28: Chapters 1, 2, 3 and 4
Exam 3 - April 28: Chapter 1, 2, 3, 4, 5 and Statistics Handouts
Final - 10:10-12:10AM Friday, May 16: Cumulative

PROJECTS Over the course of the semester I will assign several projects that will provide an opportunity for you to apply the knowledge that you have acquired in the course to investigate real and tangible phenomena. These projects will be announced in class.

CALCULATORS It is recommended that you own a graphing calculator. You are encouraged to bring it to class and use it however you like on homework assignments. I will use a TI-84+ in classroom demonstrations. Use of a graphing calculator will be allowed on all exams.

HONESTY All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar wit the Student Conduct Code. The Code is available for review online at `http://life.umt.edu/vpsa/student_conduct.php`.

GRADE SCALE Let S be your final weighted average in the course then,

$$
\begin{array}{rcccrcl}
93 & \leq & S & < & 100 & \Rightarrow & \text{A} \\
90 & \leq & S & < & 93 & \Rightarrow & \text{A-} \\
87 & \leq & S & < & 90 & \Rightarrow & \text{B+} \\
83 & \leq & S & < & 87 & \Rightarrow & \text{B} \\
80 & \leq & S & < & 83 & \Rightarrow & \text{B-} \\
77 & \leq & S & < & 80 & \Rightarrow & \text{C+} \\
73 & \leq & S & < & 77 & \Rightarrow & \text{C} \\
70 & \leq & S & < & 73 & \Rightarrow & \text{C-} \\
67 & \leq & S & < & 70 & \Rightarrow & \text{D+} \\
63 & \leq & S & < & 67 & \Rightarrow & \text{D} \\
60 & \leq & S & < & 63 & \Rightarrow & \text{D-} \\
0 & \leq & S & < & 60 & \Rightarrow & \text{F}
\end{array}
$$

ACCOMMODATION

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 that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.

IMPORTANT DATES

Feb. 4 - Last day to add a course via CyberBear.
Feb. 14 - Last day to drop a course or change the grading option via CyberBear.
Apr. 7 - Last day to drop/add a course, change sections, change your grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. After this date a student is allowed to make these changes only by petition.
May 9 - Last day to petition to drop/add a course, change sections, change you grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. Petitions require signature and recommendation of instructor. Grounds for recommending late drops and changes of grading options are detailed in the university catalog.

TENTATIVE SEMESTER SCHEDULE

Monday	Wednesday	Friday
Jan 27 CH1	Jan 29 CH1	Jan 31 CH1
Feb 3 CH1	Feb 5 CH2	Feb 7 CH2
Feb 10 CH2	Feb 12 CH2	Feb 14 CH2
Feb 17 Presidents Day	Feb 19 CH2	Feb 21 CH2
Feb 24 EXAM 1	Feb 26 CH3	Feb 28 CH3
Mar 3 CH3	Mar 5 CH3	Mar 7 CH3
Mar 10 CH3	Mar 12 CH4	Mar 14 CH4
Mar 17 CH4	Mar 19 CH4	Mar 21 CH4
Mar 24 CH4	Mar 26 CH4	Mar 28 EXAM 2
Mar 31 Spring Break	Apr 2 Spring Break	Apr 4 Spring Break
Apr 7 CH5	Apr 9 CH5	Apr 11 CH5
Apr 14 CH5	Apr 16 STAT	Apr 18 STAT
Apr 21 STAT	Apr 23 STAT	Apr 25 STAT
Apr 28 EXAM 3	Apr 30 STAT	May 2 STAT
May 5 STAT	May 7 STAT	May 9 STAT
Final Exam 10:10-12:10AM Friday, May 16		