

Elementary Probability and Statistics (L24 2200)

Basic Information

Time	9-10:45 _{AM} MTWRF
Location	Eads Room 115
Instructor	Andrew Womack
Email Address	ajwomack@math.wustl.edu
Website	https://www.math.wustl.edu/~ajwomack/
Office	Room 203 Cupples I
Office Hours	11 _{AM} -12 _{PM} MTWRF
Text	Stats: Data and Models, 2 nd Edition by De Veaux, Velleman, Bock

Course Description

An introduction to probability and statistics. Discrete and continuous random variables, mean and variance, hypothesis testing and confidence limits, nonparametric methods, Students t, analysis of variance, regression, and contingency tables. Graphing calculator with statistical distribution functions (such as the TI-83) may be required. Prerequisite: Math 131

Exams

There will be two in class exams and a final. All exams will be cumulative, however each exam will emphasize material from the third of of the class just preceding it. All exams will be held in the same classroom as our regular class meetings.

Students will be allowed one 3×5 note card for notes for each exam.

The exam schedule is:

Exam 1	June 23
Exam 2	July 2
Final Exam	July 16

An exam can be made up only in the event of an excused absence. Students are expected to contact the instructor *prior* to the exam in order to schedule an alternate test date.

Homework

There will be a homework questions assigned everyday. Questions are listed in the class schedule. Questions with stars (*) will be due on the Monday the week after the problems are assigned.

Calculators and Software

Our calculator for the class will be the TI- 83. Students are allowed to use any calculator that they prefer. The text provides instructions for performing calculations in a number of statistical programs. Most of these programs are available in various places on campus. In class, I will use R (<http://cran.r-project.org/>) which is free and fairly easy to use. Code used in class will be available on the course website.

Grade Assessment

Your final grade in the class will be assessed as:

$$.10 * (HW) + .25 * (Exam I) + .25 * (Exam II) + .40 * (Final Exam)$$

Note that I adhere to the following number-to-letter grade conversion chart:

A	90-100
B	80-90
C	70-80
D	60-70
F	0-60

Tentative Course Schedule

Problems listed without stars (*) are for practice and problems with stars are to be handed in for grading.

- June 14 Lady Tasting Tea; Chapters 1, 2;
pgs 15 – 18 : 5, 7, 14*, 19, 23, 24*, 25
- June 15 Chapter 3, 4;
pgs 37 – 45 : 5, 9, 11, 19, 25, 36*, 38*; **pgs 71 – 78 : 5, 13, 17, 27, 30*, 39, 42***
- June 16 Chapter 5;
pgs 99 – 110 : 5, 9, 17, 18*, 25, 33, 35, 37, 38*
- June 17 Chapter 6;
pgs 134 – 140 : 7, 9, 11, 13, 18*, 23, 29, 33, 43, 44*
- June 18 Chapter 7, 8;
pgs 174 – 181 : 3, 5, 13, 15, 16*, 27, 29, 34*, 35
- June 21 Chapter 8, 9; HW 1 due
pgs 204 – 212 : 3, 7, 9, 15, 28*, 38*, 39; **pgs 231 – 237 : 2, 3, 5, 10*, 11, 13, 15, 20*, 23**
- June 22 Chapter 10, Exam I Review;
pgs 254 – 259 : 5, 11, 12*, 13, 15, 24*, 27, 31
- June 23 Exam I**
- June 24 Chapter 11, 12;
pgs 283 – 286 : 5, 7, 9, 15, 18*, 27, 30*, 35; **pgs 308 – 311 : 5, 11, 12*, 17, 21, 28*, 31**
- June 25 Chapter 13, John Snow Supplement;
pgs 332 – 337 : 9, 13, 17, 25, 26*, 31, 38*, 43
- June 28 Chapter 14, 15;
pgs 361 – 365 : 1, 5, 7, 10*, 15, 20*, 25, 28*, 33; **pgs 385 – 389 :**
- June 29 Chapter 16, 17;
pgs 405 – 408 : 4*, 5, 7, 12*, 19, 27, 23, 32*, 35, 39; **pgs 423 – 427 : 3, 5, 17, 24*, 30*, 35**
- June 30 Chapter 18, 19;
pgs 456 – 459 : 1, 3, 5, 10*, 19, 25, 29, 30*, 37, 41; **pgs 476 – 480 : 5, 7, 8*, 9, 13, 21, 23, 26*, 31, 36***
- July 1 Chapter 20, Exam II Review;
pgs 498 – 501 : 3, 7, 10*, 15, 23, 24*, 29
- July 2 Exam II**
- July 5 Independence Day Holiday - No Class**
- July 6 Chapter 21, 22;
pgs 522 – 525 : 3, 5, 9, 12*, 19, 23, 24*, 27; **pgs 539 – 543 : 5, 9, 15, 16*, 17, 23, 26*, 29**
- July 7 Chapter 23, 24
pgs 574 – 579 : 5, 11, 12*, 17, 25, 26*, 31, 33; **pgs 602 – 609 : 5, 9, 12*, 19, 25, 29, 32***
- July 8 Chapter 25
pgs 623 – 630 : 5, 9, 14*, 19, 24*, 27
- July 9 Chapter 26
pgs 654 – 660 : 3, 5, 10*, 15, 18*, 21, 25, 27, 32*
- July 12 Chapter 27, 28
pgs 700 – 710 : 3, 9, 13, 16*, 27, 31, 34*; **pgs 741 – 748 : 5, 6*, 11, 14*, 17, 21, 22***
- July 13 Chapter 29, 30
pgs 775 – 782 : 5, 6*, 15, 16*, 19; **pgs**
- July 14 Chapter 30, 31
pgs 805 – 812 : 1, 3, 4*, 9, 10*, 12*, 14*, 17; **pgs 845 – 851 : 1, 3, 4*, 7, 8*, 9, 11**
- July 15 Final Exam Review
- July 16 Final Exam**