

Math 3200 - Fall 2018

Elementary to Intermediate Statistics and Data Analysis

Rebstock 215 9:00 - 10:00am MWF

Instructor: Dr. Nicholas Syring

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Website: <https://www.math.wustl.edu/~nasyring/home.html>

Office Hours: MWF 10:00 – 11:00am

Office Location: Cupples I 203

Course Description:

An introduction to probability and statistics. Probability theory, discrete and continuous random variables, mean and variance, joint probability distributions, sampling distributions, single-sample and two-sample hypothesis testing, confidence limits and regression models.

Prerequisites: Math 233.

Text: *Probability & Statistics with R for Engineers and Scientists*, by Michael Akritas.

References: “An Introduction to R” at

http://cran.r-project.org/doc/contrib/Lam-IntroductionToR_LHL.pdf, and

“simpleR - Using R for Introductory Statistics” at

<http://cran.r-project.org/doc/contrib/Verzani-SimpleR.pdf>.

Software: This course will utilize the R and RStudio software programs. These can be downloaded at <http://cran.wustl.edu/> and at

<https://www.rstudio.com/products/rstudio/download/>.

Grade Distribution:

Homework 35%

Three Midterm Exams 45%

Final Exam 20%

Letter Grade Distribution:

A+ 95 – 100

B+ 80 – 85

C+ 65 – 70

D 50 – 55

A 90 – 95

B 75 – 80

C 60 – 65

F 0 – 50

A- 85 – 90

B- 70 – 75

C- 55 – 60

Homework: There will be homework assignments due (almost) every Friday at 11:59pm. Assignments will be posted on my website and are to be submitted online through Crowdmark. These should be written up clearly and in detail. Discussion amongst students is encouraged, but students are to write up homework on their own. Offering and accepting solutions from others is an act of plagiarism. Looking up solutions online or in other sources is also an act of plagiarism. The lowest homework grade will be dropped when calculating the final grade.

Exams: There will be three midterm exams, given from 6:30 – 8:30pm on Monday, September 17, Tuesday, October 9, and Tuesday, November 13. Each midterm exam is worth 15% of the final grade. Each exam will cover material from the beginning of the semester up to and including the Friday of the week before the exam. There will be a cumulative final exam from 10:30am – 12:30pm on Friday, December 14. The final exam is worth 20% of the final grade. To find your seating assignment for these exams, go to <https://www.math.wustl.edu/seatlookup/>.

Calculators: Graphing calculator with Z, t, chi-square and F distribution functions (such as the TI-83 series) are recommended (but not required). You may not use cell phones during any exams.

Attendance and Absences: Students are expected to attend each class. It is the absentees responsibility to get all missing notes and materials.

Academic Integrity: This course will strictly follow the Washington University academic integrity policy. This policy is discussed in detail at <https://wustl.edu/about/compliance-policies/academic-policies/undergraduate-student-academic-integrity-policy/>.