

Wheeling Jesuit University
Department of Engineering
MAT 115-01, Introduction to Statistics
Spring 2018

Instructor: Neetika Sharma

Office: DON 110

Office Phone: 304-243-2287

E-mail: nsharma@wju.edu

Office Hours: MWF 12-1pm, or by appointment.

Catalog Course Description:

Descriptive statistics including measures of central tendency and variability, graphic representation, probability, the binomial, normal and T distributions, hypothesis testing and linear regression.

Prerequisite: MAT 101 or equivalent.

TEXTBOOK: "Introduction to the Practice of Statistics"; David S. Moore, George O. McCabe; ISBN: 0-7167-6400-8

Student Learning Objectives:

A successful student in this course will be able to...

1. Understand the basic statistical methods (low).
2. Use different graphical methods to interpret the data (medium).
3. Learn the applications of probability and its different types of distributions (high).
4. Analyze the data using various hypothesis tests (high).
5. Determine the appropriate techniques to solve problems (high).

Evaluation Methods: Your grade will be based on the following distribution:

Exam 1	Thursday, 1/31*	20%
Exam 2	Tuesday, 2/26*	20%
Exam 3	Thursday, 4/4*	20%
Quizzes & HW	Thursdays (except test weeks)	10%
Final Exam	Tuesday, 4/30, 8:00am – 10:30am	30%

*These dates are tentative and may be changed with adequate prior notice.

The following scale will determine your grade:

93.0-100.0 %	A	77.0-79.9 %	C+
90.0-92.9 %	A-	70.0-76.9 %	C
87.0-89.9 %	B+	67.0-69.9 %	C-
83.0-86.9 %	B	64.0-66.9 %	D+
80.0-82.9 %	B-	55.0-63.9 %	D

Homework policy: Homework problems will generally be posted on Blackboard. You are expected to submit the homework in one week.

Quizzes and Exams: Quizzes (in-class) will be given right after the submission of the homework. The quiz problems will generally be similar to the homework problems. In case, you have to miss a quiz or exam quiz, and you are traveling on a WJU sanctioned event, you must notify me AT LEAST ONE WEEK IN ADVANCE to make arrangements.

Attendance Policy: It is valuable to you to attend and participate in every class. The official WJU attendance policy dictates that for this class, which meets four times a week, you are permitted at most eight absences. Exceeding this maximum number will result in a grade of “FA,” (failure due to excessive absences). There may an exceptional circumstance when you must miss a class—this is understandable. However, as a rule, **YOU ARE EXPECTED TO ATTEND EVERY CLASS. EXCESSIVE ABSENCES WILL ADVERSELY AFFECT YOUR GRADE.** If you miss a class, you are expected to do the assignment as posted on Blackboard, and be prepared for the next class.

Last Date to Add/Drop the Course: Friday, 1/11

Last Date to Withdraw from the Course: Tuesday, 3/26.

Disability Statement:

Wheeling Jesuit University offers students with documented disabilities individual accommodations on a case-by case basis with confidentiality in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. In order to receive academic or physical accommodations, students with disabilities must provide current (within three years) and comprehensive documentation concerning the nature and extent of the disability and communicate their needs to the Disability Services Director, located in Ignatius Hall Room G 24 or call 304-243-4484. Students are required to meet with the director to develop accommodation plans that they will present to their course instructors at the beginning of each semester. Students with disabilities that require specific housing accommodations must contact both the Director of Residence Life and the Disability Services Director.

Ultimately, all students with disabilities are responsible for their own academic achievement. They must attend classes, complete course assignments, and fulfill all university requirements for their chosen field of study. It is up to students with disabilities to seek out available assistance on campus and to utilize individualized accommodations that promote academic success.

Academic Integrity Statement:

Students are advised that WJU's Academic Integrity Policy will strictly be enforced in this course (see www.wju.edu/studenthandbook). Questions regarding the policy may be directed to the Office of the Academic Vice-President

Official E-mail: An official WJU e-mail is established for each registered student, each faculty member, and each staff member. All university communications sent via e-mail will be sent to this WJU e-mail address.

The Academic Resource Center:

The Academic Resource Center (ARC) is a totally free academic-support service available to all enrolled Wheeling Jesuit University students and staffed almost exclusively by WJU students recommended for employment by WJU faculty. The ARC is located in Bishop Hodges Library and is open five days a week: Sundays 6:00-8:00 p.m., and Mondays-Thursdays 1:00-9:00 p.m. Please visit the ARC's website (the first listing under "Student Services" on the Cardinal homepage) to learn about the ARC's services (emphasizing writing, math, and the sciences) and to schedule appointments; appointments will no longer be available by phone.

Title IX Statement:

Wheeling Jesuit University seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment, misconduct, or assault we encourage you to report this. If you report this to a faculty member, she or he must notify our college's Title IX coordinator about the basic facts of the incident (you may choose whether you or anyone involved is identified by name). For more information about your options at WJU, please go to <http://wju.edu/titleix/>.

Outline:

Chapter 1: Stemplots, Histograms, Five-number summary, Standard Deviation, and Z-score.

1st exam, last week of January.

Chapter 2 and 3: Scatter Plots, Correlation, regression lines.....

2nd exam, last week of February

Chapter 4, 5, and 6: Probability, Binomial distribution, and Hypothesis testing

3rd exam, first week of April

Chapter 7: t-test, chi-squared test... and review in the second and third week of April

Final exam (cumulative) in the last week of April