



MATH 3360 Statistical Methods

Credit: 3

Contact Hours: 45

Class Days: Monday to Friday, June 29th, 2020 to July 31st, 2020

Instructor: TBA

Email: TBA

Office Hours: By appointment

Course Description

Prerequisites: Math 1314 College Algebra or an equivalent. This course will cover basic statistics including, but not limited to, the following topics: descriptive statistics, combinatorics, probability, statistical inference, regression, and analysis of variation.

Course Objectives

Upon successful completion of the course, the students will be able to:

1. Communicate using statistics with precision and clarity
2. Locate, select, organize, and present information effectively
3. Think and reason analytically
4. Function responsibly in the natural, social, and technological environment
5. Recognize and respond to creative expression found in mathematics
6. Developed life skills for dealing with quantitative data

Program Learning Outcomes

Program outcomes related to this course:

1. Apply mathematical techniques to modeling of natural phenomena
2. Communicate mathematics effectively to peers and professionals
3. Use technology effectively as a tool in problem solving as well as an aid in understanding mathematical concepts

Course Materials (Text, calculator, etc.)

Statistics for the Utterly Confused, 2nd edition. Lloyd Jaisingh, McGraw-Hill New York, 2006. ISBN: 978-0-07-146193-1

Access to Microsoft Excel and a scientific calculator also required (TI-83/84 or equivalent recommended).

Grading Scale

Letter Grade	Grade Percentage
A	90% - 100%
B	80% - 89%
C	70% - 79%

D	60% - 69%
F	59% - 0%

Course Grading Policies

Your final grade of this course will be a weighted average on the scale listed above. The Weighted Average will be calculated as follows:

3 major exams	60%
Homework	15%
Final Exam	25%
Total	100%

Course Assignment, Examination, and or Project Policies

Homework

Please expect homework every day. Although homework “only” counts for 15% of the coursework, *all* exam questions will be similar to some of the homework problems. Homework must be done neatly and in order, with detailed work shown in order to receive full credit. To provide you with feedback on your work, homework will be collected on every Monday and five selected problems will be graded at up to 20 points each. The grading scale is: 20 points if correct, 10 points if wrong, and 0 points if not attempted or for just an answer with no work shown. Thus, if you turn in your assignment complete, the lowest grade you can make on that assignment is a 50. **Absolutely no late homework will be accepted.**

Exams

There are 3 chapter exams in this course as well as a comprehensive final. The chapter exams approximately correspond to the chapters covered in the textbook. I will notify you of the exam date at least 1 week prior, although the tentative exam dates are posted below in the calendar. There are absolutely no makeup exams, but if you know you will be out of town on a test date, you may make arrangements to take it early.

Tentative Course Schedule

This is a tentative course schedule, the instructor reserve the right to make changes on it to make it better for the student’s development. Notice will be given should any changes take place.

Date	Required Readings	Assignment Due Dates
June 29	Course Introduction and begin Chapter 1: Graphical Displays	
June 30	Chapter 1: Graphical Displays	
July 1	Chapter 2: Measures of Central Tendency	Chapter 1 HW
July 2	Chapter 3: Measure sof Variability	Chapter 2 HW
July 3	Chapter 3: Measure sof Variability	
July 6	Chapter 4 Measures of Position	Chapter 3 HW
July 7	Review for Exam 1 or day to catch up on the material	Chapter 4 HW
July 8	Exam 1 (Chapters 1-4)	

July 9	Chapter 6: Exploring Categorical Data	
July 10	Chapter 7: Randomness, Uncertainty, and Probability	Chapter 6 HW
July 13	Chapter 8: Discrete Probability Distributions	Chapter 7 HW
July 14	Chapter 9: The Normal Probability Distribution	Chapter 8 HW
July 15	Review for Exam 2 or day to catch up on the material	Chapter 9 HW
July 16	Exam 2 (Chapters 6-9)	
July 17	Chapter 10: Sampling Distributions/Central Limit Theorem	
July 20	Chapter 11: Confidence Intervals: Large Samples	Chapter 10 HW
July 21	Chapter 12: Hypothesis Tests: Large	Chapter 11 HW
July 22	Chapter 13" Confidence Intervals & Hypothesis Test: Small Samples	Chapter 12 HW
July 23	Review for Exam 3 of day to catch up on the material	Chapter 13 HW
July 24	Exam 3 (Chapters 10-13)	
July 27	Chapter 14: Chi-square	
July 28	Chapter 15: The Analysis of Variance (ANOVA)	Chapter 14 HW
July 29	Chapter 5: Discovering Relationships	Chapter 15 HW
July 30	Review for Final Exam	Chapter 5 HW
July 31	Final Exam, Chapters 1-13, 14 and 15	

Policies and Responsibilities

Your Role as a Student in this Course –

Just to be clear about my expectations of you. I expect to:

1. Come to class every day. Statistical Methods is five days a week because we really like you!
2. Come to class prepared to work! Take advantage of the time we have together.
3. Please treat all participants, both myself and your classmates, with respect.
4. Complete or at least attempt to complete your homework each day.
5. If you get home and find you cannot work the problems, come to my office, e-mail me, ask the teaching assistant, call a friend from class. This course builds. If you do not understand a concept the next day will only be worse!
6. You should spend at least twice the amount of time you are in class each week doing homework.
7. Absolutely no late homework will be accepted.
8. Put your cell phone in your backpack and leave it there. You have paid for this course, get the most out of the experience by giving it your full attention for one hour a day. Plus, it is a distraction for other people.

Academic Integrity

All work must be completed individually unless otherwise stated. Commission of any of the following acts shall constitute scholastic dishonesty: acquiring or providing information for any assigned work or examination from any unauthorized source; informing any person or persons of the contents of any examination prior to



the time the exam is given in any subsequent sections of the course or as a makeup; plagiarism; submission of a paper or project that is substantially the same for two courses unless expressly authorized by the instructor to do so. For more information, see the Code of Student Life.

Acceptable Student Behavior

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (Code of Student Life). Unacceptable or disruptive behavior will not be tolerated. Students engaging in unacceptable behavior may be instructed to leave the classroom. Inappropriate behavior may result in disciplinary action or referral to the University's Behavioral Intervention Team. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc.

Attendance Policy

For the purposes of learning assessment and strategic planning, all students enrolled in Core Curriculum or developmental courses at West Texas A&M University must swipe their Buff Gold cards through the card reader installed in the classroom/lab for each class/lab meeting. Any students with more than three unexcused absences will automatically fail the course.

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