

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES

Course #: STAT/DS 5385/6385
Course Title: Statistics in Research
Credit Hrs: 3
Term: Fall 2022
Course Meetings & Location: TR 10:30 - 11:50am BUSN 330
Prerequisite Courses: MATH 3323, STAT 4380 or its equivalent
Instructor: Naijun Sha
Office Location: Bell Hall 203
Contact Info: Phone # 747-6844
E-mail nsha@utep.edu
Fax # 747-6502
Office Hrs: TR: 1:00pm-2:00pm or by appointment
Textbook(s), Materials: Required: Applied Linear Regression Models, 4th edition by Kutner, Nachesheim and Neter.

Course Objectives (Learning Outcomes): An introduction to statistical modeling of a univariate response conditional on a set of explanatory variables. Classical formulation of multiple linear regression and analysis of variance. Selected topics from generalized linear models, nonparametric regression, and quasi-likelihood estimation. Emphasis is on model building, fitting, validation and subsequent inferences. Analysis of real data using major statistical software packages will be considered. Students will learn to apply appropriate statistical techniques on model building, fitting, validation and subsequent inferences for various problems. Through assigned homework, class discussions and hands-on labs, students will also acquire skills to identify real problems that require advanced mathematical and statistical knowledge.

Course Activities/Assignments: Homework and data analysis projects will be assigned throughout the semester. You may do the exercises with your partner, but each student must answer the questions individually. ZERO grades will be obtained for those whose solutions are the exact copies of someone else's. NO LATE HOMEWORK WILL BE ACCEPTED.

Assessment of Course Objectives: Homework, Exam/Project.

Course Schedule: **Midterm Exam: TBD**
Final Exam: 12/08/22 10:00 am – 12:45 pm
Drop/Withdrawal Deadline: 10/28/22

Grading Policy: Homework 20%
Midterm Exam 30%
Final Exam 50%
The final grade is based on a scale of 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, below 60 = F. Attendance and class participation will be used to help decide borderline grades.

Make-up Policy: IF you notify me BEFORE the exam AND have a university excuse for missing the exam, you may take the make-up exam arranged by the instructor.

Attendance Policy: Class attendance is required.

Academic Integrity Policy: Reference UTEP's policy cited in
<http://academics.utep.edu/Default.aspx?tabid=23785>

Civility Statement: Please turn off cell phones during classes.

Disability Statement: If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact as soon as possible.