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

Course #: STAT/DS 5381
Course Title: Mathematical Statistics II/Math Foundation of DS II
Credit Hrs: 3
Term: Spring 2022
Course Meetings & Location: MW 12:00 - 1:20pm LART 205
Prerequisite Courses: STAT 5380 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: MW: 1:00-2:00pm or by appointment
Textbook(s), Materials: Required: Statistical Inference, 2nd edition by G. Casella and R. Berger

Course Objectives: A continuation of Mathematical Statistics I. Topics covered:
(Learning Outcomes): Parametric statistical models, sufficiency, exponential families,
methods of estimation, comparison of estimators, confidence intervals,
hypothesis testing, optimal tests, likelihood ratio tests, large sample
theory. Through assigned homework and class discussions, 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

Course Schedule:
Midterm I: TBA
Midterm II: TBA
Final Exam: 05/13/22 1:00pm-3:45pm

Grading Policy: Homework 20%
Exam I 20%
Exam II 20%
Final Exam 40%
The final grade is based on a scale of 90-100 = A, 80-89 = B, 70-79 =
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

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