

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

Course #: STAT 5380 (CRN 10810)
DS 6380 (CRN 15595)
Course Title: Mathematical Statistics I / Math Foundation of DS I
Credit Hrs: 3
Term: Fall 2023 (Instruction 08/28/2023 – 12/07/2023)
Course Meetings & Location: Bell Hall 130A
12:00 - 13:20 MW
Prerequisite Courses: STAT 3330 with a grade of "C" or better, or its equivalent as approved by the instructor.
Instructor: Xiaogang Su
Office Location: Bell Hall 320
Contact Info: (915) 747-6860 [O]
xsu@utep.edu
Fax: (915) 744-6502
Office Hours: 13:00-13:50 TR
Teaching Assistant (TA): TBA
Class Web page: <https://sites.google.com/site/xgsu00/STAT5380>
Textbook(s), Materials: Required: Casella, G. and Berger, R. L. (2002). *Statistical Inference*, 2nd Edition. Pacific Grove, CA: Duxbury.

Suggested: Van der Vaart, A. W. (1998). *Asymptotic Statistics*. Cambridge University Press.

Course Description and Learning Outcomes: The probabilistic foundations of mathematical statistics. Topics covered: Probability spaces, random variables, univariate and multivariate probability distributions, conditional distributions, expectation, generating functions, multivariate transformations, modes of convergence, and limit theorems. 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 will be assigned throughout the semester. Zero grades will be assigned to those whose solutions are the exact copies of someone else's. NO LATE HOMEWORK WILL BE ACCEPTED, except in exceptional circumstances and only with prior approval from the instructor.

Course Schedule: 08/28 Class Starts
11/03 Class Drop Deadline
12/11 - 12/15 Final Exam Period
Holidays
09/04 Labor Day
11/23-11/24 Thanksgiving

Final Exam Schedule: Friday, December 15th 1:00 pm – 3:45 pm

Grading Policy: There will be three midterms and one comprehensive final exam, plus several homework assignments and a few in-class pop quizzes, which, in together, add up to the final grade.

	Date and Time	Percent
Midterm Exam I	09/27 Wednesday 12:00-13:20 pm	20%
Midterm Exam II	10/25 Wednesday 12:00-13:20 pm	20%
Midterm Exam III	11/22 Wednesday 12:00-13:20 pm	20%
Homework & Quizzes	TBA	20%
Final Exam	12/15 Friday, 1:00 -3:45 pm	25%

Letter grades are determined according to the following scale below. Attendance and class participation will be used to help decide borderline grades.

Grade Score

- A 90+
- B 80-89
- C 70-79
- D 60-69
- F <60

Note these raw final scores are out of 105 with five extra credits. However, the extra credits are only applicable to those who complete all assignments and exams without any unexcused absence; otherwise, the final score will be calculated on the 0-100 scale.

There is NO make-up exam; if you must miss a midterm exam, e.g., with a university excuse or due to illness, the percentage of that exam will be re-distributed to other or future exams. All exams will be taken in class; online exams will not be allowed unless doing so is the last resort.

Homework problems will be assigned; whether they will be collected and graded depends on if we are assigned a TA. The solution manual will be made available. It is highly recommended that you do homework regularly and independently before checking out the solutions.

Attendance Policy: Class attendance is REQUIRED and helpful to decide borderline grades. If a student must be absent from a particular class, he/she will be responsible for notifying the instructor and catching up with course material. FOUR or more unexcused absences will result in an instructor-initiated drop or grade failing / reduction. Your academic advisor will be consulted before final action is decided and taken. If you expect to miss TEN or more class hours for any reason, please don't consider taking this course.

Academic Integrity Policy: Please see <http://academics.utep.edu/Default.aspx?tabid=23785>

Civility Statement: This is a class where participation is required. You will be participating in classroom discussions. All students will be treated with respect.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

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

UTEP College of Science Policies Please watch out for the UTEP drop/withdraws deadline for the Spring 2023 semester – 11/03/2023 (Friday). The College of Science will remain aligned with the University and not approve any drop requests after that date.

All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g., multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.