

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

Course Number :	STAT 3325 CRN:16608
Course Title:	Probability and Applied Statistics
Credit Hours:	3
Term:	Fall 2018
Course Meetings	MW 10:30 am to 11:50 am
&Location:	08/27/2018 – 12/06/2018 (Instruction) Liberal Arts Building 210
Prerequisite Courses:	MATH 1312; Calculus II
Website:	https://sites.google.com/site/utepcourses/stat-3325
Instructor:	Xiaogang Su, Ph.D.
Office Location:	Bell Hall 320
Contact Info:	xsu@utep.edu
Office Hours:	MW 2:00-3:00 pm or by appointment
Textbook(s), Materials:	Required: Diez, D. M., Barr, C. D., and Çetinkaya-Rundel, M. (2017). OpenIntro Stats, 3 rd Edition. URL: https://www.openintro.org/stat/index.php

Course Objectives (Learning Outcomes): Introduces students to probability and statistics applicable to mathematics majors planning a teaching career. By the end of this course, students should be able to read a word problem, realize the uncertainty that is involved in a situation described, select a suitable probability model, estimate and test its parameters on the basis of real data, compute probabilities of interesting events, and make appropriate conclusions. This course covers theory and applications of probability models, random variables, discrete and continuous probability distributions, joint and conditional distributions, sampling distributions, central limit theorem, hypothesis testing, confidence intervals, and exposure to simple linear regression.

Course Activities/Assignments: Each class period will have in-class work completed within the period. Additionally, out of class homework assignments are given. A semester long project, mid-terms and a final exam will also assess learning.

There will be a semester long project. Instructions on the project will be given as the semester progresses. Some of the major points of the project will be data collection, data analysis and writing a final report.

Assessment of Course Objectives: Homework assignments will be given on a weekly or bi-weekly basis. A grading rubric will be used for the semester project (this rubric will be included on a separate file). Daily in-class assignments are graded for completeness only.

Course Schedule:

Note that exam dates are approximate and are subject to change. The exact exam date will be announce at least one week in advance.

Topic 01: Introduction to Data

Topic 02: Probability

Topic 03: Probability

Topic 04: Probability

Topic 05: Distributions

Topic 06: Distributions

Topic 07: Distributions;

Topic 08: Distributions and Inference

Topic 09: Numerical Inference

Topic 10: Numerical Inference

Topic 11: Inference;

Topic 12: Inference

Topic 13: Topics in Inference

Topic 14: Simple Linear Regression

Topic 15: Multiple Linear Regression (if time allows)

Topic 16: Logistic Regression

Final Exam: Friday, December 14th 10:00 am – 12:45 pm

Sep 12th Census Day. If a student drops before the census date, neither the course nor a grade will appear on the student's academic record. This is the last day to drop without a W.

Nov 2nd Fall Drop/Withdrawal Deadline.

Dec 10th -14th -Finals Week.

Grading Policy:

20% Homework, Computer Projects, In-class quizzes, and participation

20% Exam 1

20% Exam 2

20% Exam 3

25% Final Exam

Note that the total adds up to 105, which contains 5 extra credits if one completes all assignments and exams.

Letter grades are determined according to the following scale:

Grade Score

A 90 +

B 80-89

C 70-79

D 60-69

F <60

Make-up Policy: If class is missed for a valid and documented reason, the daily in-class assignments and exams may be made-up for full credit. Check your calendars now for potential conflicts with scheduled class assignments or exams. All other assignments should be turned in on time. If a scheduled homework assignment is late, 10% of the possible credit will be deducted for each day the assignment is not turned in (including weekends).

Attendance Policy: You must attend class to turn in the in-class assignments and homework. Attendance is expected and accommodations will be made only if you are unable to attend class due to illness, family emergency or any other pressing issue.

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

Civility Statement: This is a class where participation is required. We work problems together as a class and in groups. Participation in the class work is required.

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 me as soon as possible.

UTEP College of Science Policies: The UTEP **Fall 2018 deadline is Nov 2nd, 2018**. 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.