

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

Course #: STAT 3320, CRN 28175  
Course Title: Probability and Statistics  
Credit Hrs: 3  
Term: Spring 2018  
Course Meetings & Location: **1:30 pm - 2:50 pm, TR- Liberal Arts Building 103**  
Prerequisite Courses: MATH 1312; Calculus II  
Course Fee: (if applicable) NA  
Instructor: Desmond Koomson  
Office Location: **Bell Hall, 215**  
Contact Info: NA  
Phone #  
E-mail address: [dkoomson@utep.edu](mailto:dkoomson@utep.edu)  
Fax #  
Emergency Contact  
Office Hrs: **MW 1:30 pm - 2:50 pm ; or by appt.**  
Textbook(s), Materials: Required: Probability and Statistics for Engineering and the Sciences, 9<sup>th</sup>/8<sup>th</sup> ed. (etext with WebAssign or hardcopy text with WebAssign)

**YOU WILL NEED TO BUY YOUR OWN TEXTBOOK IF YOU ONLY BUY THE HOMEWORK ACCESS!**

[Devore, Probability and Statistics for Engineering and the Sciences, 9/e](#)

Homework and ebook access  
-There is no separate package that does not include the e-book when you select the 9<sup>th</sup>/8<sup>th</sup> edition in WebAssign.

**THIS DOES NOT INCLUDE A HARDCOPY OF THE TEXT, BUT AN E-TEXT INSTEAD!**

Drop Date: **Thursday, March 29<sup>th</sup>**

After the drop date, you can be dropped only with an F. No exceptions. The instructor will not grant a W after the drop date.

**Spring Break:**  
**Cesar Chavez Holiday:**

12<sup>th</sup> – 16<sup>th</sup> Mar (**NO CLASS**)  
Friday, 30<sup>th</sup> Mar (**NO CLASS**)

Course Objectives (Learning Outcomes): Introduces students to probability and statistics applicable to research in computer science and other sciences. 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, chi-square tests for categorical variables and exposure to simple linear regression. Time to failure probability models are considered.

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, quizzes, mid-terms** and a **final exam** will also assess learning.

Assessment of Course Objectives: Homework assignments will be graded for completion and accuracy through **WebAssign**. A grading rubric will be used for the semester project.

Course Schedule: Note that exam dates are approximate and are subject to change

Week 1: Descriptive Statistics

Week 2: Descriptive Statistics

Week 3: Probability

Week 4: Discrete Random Variables

Week 5: Discrete Random Variables - **Exam 1**

Week 6: Continuous Random Variables

Week 7: Continuous Random Variables

Week 8: Introduction to Statistics

Week 9: Introduction to Statistics

Week 10: Introduction to Statistics; Statistical Inference - **Exam 2**

Week 11: Statistical Inference – Confidence intervals

Week 12: Statistical Inference – Hypothesis testing

Week 13: Topics in Statistical Inference/Regression

Week 14: Regression

**FINAL - Thursday, May 10<sup>th</sup> 1:00 pm – 3:45 pm**

Grading Policy: 20% Homework (**Includes Project Proposal**)  
10% Quizzes  
15% Exam 1 (**Tuesday, 6th March**)  
15% Exam 2 (**TBA**)  
20% Final Exam  
20% Final Project (**Submitted before Finals Week**)

Make-up Policy: If class is missed for a valid and documented reason, the daily in-class assignments, quizzes and exams may be made-up for full credit. **ALL MAKE-UPS** will be determined by me, and students should contact me in advance of any missed work, **latest by that very day. CALCULATORS ARE NOT TO BE SHARED!** 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, 15% 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 any in-class assignments and weekly homework that are assigned. 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.