

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

Course #: STAT 3320, CRN 24267
Course Title: Probability and Statistics
Credit Hrs: 3
Term: Spring 2019
Course Meetings & Location: **10:30 am - 11:50 am, MW - COTT 201**
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
Fax #
Emergency Contact
915-747-5761 (Math Dept.)
915-747-5761 (Math Dept.)

Office Hrs: **TWR 3:00 pm - 5:00 pm or by appt.**

Textbook(s), Materials: Required: Probability and Statistics for Engineering and the Sciences, 9th ed. (etext with WebAssign or hardcopy text with WebAssign)

WebAssign Class Key

utep **6052 0814**

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 9th/8th edition in WebAssign.

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

Drop Date: **Friday, April 5th**

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.

Other Date **Spring Break**

March 18th - 22nd (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 inclusive of **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**.

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

Week 1: Descriptive Statistics

Week 2: Descriptive Statistics

Week 3: Probability - **Exam 1**

Week 4: Discrete Random Variables

Week 5: Discrete Random Variables -

Week 6: Continuous Random Variables

Week 7: Continuous Random Variables - **Exam 2**

Week 8: Introduction to Statistics

Week 9: Introduction to Statistics

Week 10: Introduction to Statistics; Statistical Inference

Week 11: Statistical Inference – Hypothesis testing (Mean/Proportion) - **Exam 3**

Week 12: Statistical Inference – Confidence intervals

Week 13: Topics in Statistical Inference/Regression

Week 14: Chi-Square Tests

FINAL - Friday, May 17th 10:00 am – 12:45 pm

Grading Policy: 20% Homework
10% Quizzes
15% Exam 1 (**TBA**)
15% Exam 2 (**TBA**)
15% Exam 3 (**TBA**)
25% Comprehensive Final Exam

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, a penalty of 20% 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. 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.