Course #: STAT 3320, CRN 28156
Course Title: Probability and Statistics
Credit Hrs: 3
Term: Spring 2024
Course Meetings & Location: Asynchronous CLASS
Prerequisite Courses: MATH 1312; Calculus II
Course Fee: NA

Instructor: Francis Biney
Office Location: NA
Contact Info: NA
fbiney@utep.edu
915-747-5761 (Math Dept.)

Office Hrs: MW: 12:00-1.30pm

Textbook(s), Materials: Required: Probability and Statistics for Engineering and the Sciences, 9th 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 9th edition in WebAssign.

[WebAssign HWK Access] THIS DOES NOT INCLUDE A HARDCOPY OF THE TEXT, BUT AN E-TEXT INSTEAD!

Drop Date: March 28th

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 Dates  
**Census Day**  
**Final Exams**  
Jan 31\(^{th}\) May  
6\(^{st}\) to 10\(^{th}\)

**Course Objectives**  
(\textit{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 \textit{theory} and \textit{applications} of probability models, random variables, discrete and continuous probability distributions, joint and conditional distributions, sampling distributions, central limit theorem, hypothesis testing, confidence intervals, one way analysis of variance, chi-square tests for categorical variables and exposure to simple linear regression. Time to failure probability models are considered.

**Course Activities/Assignments:**  
All instructions will be ONLINE. Additionally, out of class homework assignments are given. A semester inclusive of \textit{homeworks, mid-terms} and a \textit{final exam} will assess learning.

**Assessment of Course Objectives:**  
Homeworks will be graded for completion and accuracy through the \textit{WebAssign} portal. All exams will be administered through \textit{BLACKBOARD}.

**WebAssign:**  
WebAssign is an online Course Management System of Cengage, the publisher of our text. You must have reliable internet in order to take an online course. You will use the instructions below to access and register for WebAssign. You will have a 14-day free trial so that you may access your coursework immediately.

**Instructions to access and register for WebAssign:**  
To enter your course on WebAssign on July 6\(^{th}\), go to \url{www.webassign.net} and follow these steps:

1) Click on “Enter Class Key”
2) Enter the class key: \textit{utep 3737 2626} in the three boxes given.

3) Verify the section number and instructor name, then enter your information. Please make sure that you use your miners email and that you remember the password that you create.
4) The next time you log in, click on “Log In” and enter your miners email and the password that you created.

You are required to purchase an access code to log in as soon as possible and definitely before the grace period ends. If you purchased a new book from the UTEP bookstore, the code should have come with it. When entering the code, enter all the words and characters in the boxes appropriately.
Course Schedule: Note that exam dates except **FINALS** are approximate and are subject to change.

- **Week 1/2:** Descriptive Statistics *(Chapter 1)*
- **Week 3:** Probability *(Chapter 2)*
  - **Exam 1 (TBA)**
- **Week 4/5:** Discrete Random Variables *(Chapter 3)*
- **Week 6/7:** Continuous Random Variables *(Chapter 4)*
  - **Exam 2 (TBA)**
- **Week 8:** Introduction to Statistics; Sampling Distributions *(Chapter 5)*
  - **Exam 3 (TBA)**
- **Week 9:** Introduction to Statistics; Statistical Inference *(Chap. 7&8)*
- **Week 10:** Statistical Inference: Hypothesis testing (Mean/Proportion) *(Chap 7&8)*
- **Week 11:** Statistical Inference – Confidence intervals *(Chapters 7&8)*
- **Week 12:** One Way ANOVA / Regression *(Chapter 10)*
- **Week 13:** Chi-Square Tests *(Chapter 14)*
  - **FINAL - (TBA)**

Grading Policy:

- 25% Homework
- 15% Exam 1
- 15% Exam 2
- 15% Exam 3
- 30% Comprehensive Final Exam

- \( \geq 90 \text{ (A)}, 80 \text{ to } < 90 \text{ (B)}, 70 \text{ to } < 80 \text{ (C)}, 60 \text{ to } < 70 \text{ (D)}, < 60 \text{ (F)} \)

Make-up Policy:

If class is missed for a valid and documented reason, the daily class assignments, 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. A MISSED MAKE-UP HOMEWORK OR EXAM WILL RECEIVE NO REASSIGNMENT.**

All 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). It is your responsibility to find out about material covered/information delivered during a lecture in which (you) the student was absent for a non-documented reason. The instructor will NOT repeat the information delivered on a lecture via e-mails or phone calls or by any other means, on the basis that the lecture was missed.

Attendance Policy:

Meetings are **ALL ONLINE** with videos posted on **BLACKBOARD.** Students are expected to watch videos, read assigned chapter from textbook in advance before attempting assignments.

Academic Integrity Policy:

Please see [https://www.utep.edu/student-affairs/osccr/](https://www.utep.edu/student-affairs/osccr/)
Civility Statement: Since all instructions will be ONLINE, all students are highly encouraged to stick with the schedule to avoid any backlogs.

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.