

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

Course #: STAT 3325
Course Title: Probability and Applied Statistics
Credit Hrs: 3
Term: Fall 2016
Course Meetings & Location: TR 1:30 pm- 2:50 pm LART 207
Prerequisite Courses: MATH 1312; Calculus II
Course Fee: (if applicable) NA
Instructor: Lorena Galvan
Office Location: Bell Hall 130 F
Contact Info: Lgalvan3@utep.edu Phone # 747-9741

Emergency Contact: 915-747-5761
(math dept office)

Office Hrs: M 10:00 am -11:30 am & F 10:00 am -11:30 am ; or by appt.
Textbook(s), Materials: Required: OpenIntro Stats, Diez, Barr and Çetinkaya-Rundel
Suggested: Intro to Probability, Grinstead and Snell, opentext on website

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.

The semester long project is a learning portfolio. This will document the most significant learning activities you engage in during the semester. This will include in-class exercises, homework, or other activities that affected your learning in this course. Another component of the portfolios includes an optional service-learning component where you will conduct some teaching activities at a local YWCA with a focus on math and statistics. If you choose not to participate in the service learning component, then an optional assignment will be given.

Assessment of Course Objectives: Homework assignments will be graded for completion and accuracy. A grading rubric will be used for the semester project. Daily in-class assignments are graded for completeness only.

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

Week 1: Introduction to Data

Week 2: Probability

Week 3: Probability

Week 4: Probability

Week 5: Distributions

Week 6: Distributions; **Exam 1**

Week 7: Distributions

Week 8: Distributions and Inference

Week 9: Numerical Inference

Week 10: Numerical Inference; **Exam 2**

Week 11: Inference

Week 12: Inference

Week 13: Topics in Inference

Week 14: Regression

Final Exam: Thursday, December 8th 1:00 pm – 3:45 pm

Sept 7th Fall 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.

Oct 28th Fall Drop/Withdrawal Deadline

December 5th -10th -Finals Week.

Grading Policy: 5% In-class assignments and participation
25% Final Project with community engagement component
20% Homework (turned in every 1-2 weeks)
15% Exam 1
15% Exam 2
20% Final Exam

- 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 weekly 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.
- Class LMS/website:** This term we will be using Blackboard for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Blackboard.
- 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 2016 deadline is October 28th, 2016. 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.