

STA 3032 Engineering Statistics - Spring 2015

Prerequisite: MAC2311

Instructor:

Peyman Jalali (p.jalali@ufl.edu)

Office: Griffin-Floyd Hall (FLO) 105

Office Hours: MW 1:55 pm- 2:45 pm or by appointment

Teaching Assistants:

1. Xia, Wei (room No. and office hours will be announced next week)
2. Cage, Catherine (room No. and office hours will be announced next week)

Course Description:

This course provides a survey of the basic concepts in probability and statistics with engineering applications. Topics include probability, discrete and continuous random variables, estimation, hypothesis testing and linear and multiple regression.

Course Materials Required:

- (a) Textbook: *Statistics for Engineers and Scientists (Third Edition)*, William Navidi
- (b) Calculator: Scientific calculator (to compute mean and standard deviation)

Grading Scale:

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|----|----------|
| A | 92 - 100 |
| A- | 88-91 |
| B+ | 83 - 87 |
| B | 78 - 83 |
| B- | 74-77 |
| C+ | 69-73 |
| C | 64-68 |
| C- | 60-63 |
| D | <60 |

Homework:

There will be assigned problems for each week. (See last page of this document). These will not be collected. However, one or more of these questions will be an exam question.

Quizzes: There will be a 15-20 minute quiz almost every week based on the assigned homework questions and topics discussed in class. Quiz material will be announced in class. Calculators will be permitted during the quizzes. The lowest quiz will be dropped so there will be no makeup quizzes for any reason. However, there is an extra credit quiz opportunity.

Exams: Three exams will be given throughout the semester. The exams are tentatively scheduled for the dates listed below. You will need a calculator for the exam and if

necessary you will be given a formula sheet. Content on the exam will be announced a week before the exam as the schedule is tentative.

Grading:

| | |
|---------------|-------------------------------|
| Quizzes (20%) | Each will be weighted equally |
| Exam 1 (25%) | Monday, February 9 |
| Exam 2 (25%) | Monday, March 23 |
| Exam 3 (30%) | Monday, April 20 |

Exams will be in class.

Makeup Exam:

There will be one makeup exam given at the end of the semester and it will be cumulative. If a student is unable to take an exam at the scheduled time, they must let me know as soon as possible. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite under such extenuating circumstances. In case of illness, the instructor must be notified before the day of the exam by 4 pm and must receive a medical excuse.

Course Policies

Students with disabilities' Students requesting classroom accommodation must first register with the Dean of Students office. The Dean of Students will provide documentation to the students who must then provide this documentation to the Instructor when requesting information.

Academic Dishonesty: I adhere to the University of Florida rules and guidelines for handling instances of academic dishonesty. Please refer to the Office of Students Services for detailed information about the current policies.

Instructor 's Honor Code: We the members of the University of Florida community pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

Incomplete: Incomplete's are only assigned when extraordinary circumstances, arising after the date for dropping off the course, prevent the student from completing the course requirements. The student must be currently passing the course and discuss the circumstances with the instructor before the final exam takes place. Having a failing grade in the course is not a valid reason for requesting an incomplete.

Gettins Help: Students may ask question during the lectures (preferred) or the office hours. The teaching assistants will answer questions during their office hours.

Suggested Homework Problems:

| | |
|------------------|---|
| Chapter 1 | 1.1- 1,3,5 1.2 - 5,7,8abef, 13 1.3-1,5,15 |
| Chapter 2 | 2.1 - 1,2,3,4,5,7,9 2.3-1,3,5,7,9,11,13,17,21 2.4-1,3,7,9,11,13 |
| Chapter 4 | 4.1 - 1,3,7 4.2 - 1,3,5,9,1 lac, 13 4.3 - 1,3,5,13abde 4.4 - 3,4 4.5 - 1,3,7,9,15 4.7 - 1,3 4.10-1,3 |
| Chapter 5 | 5.1 - 1,3,5abc, 11,13,15,19 5.2 - 1,3,7 5.3 - 1,3,5,15 5.4 - 1,3,5,9 5.5 1,3,5,11 5.6 - 1,3 5.7 - 1,3,9 |
| Chapter 6 | 6.1 - 1,3,9,13 6.2 - 1,3,7,9,15,17,19 6.3 - 1,5,11 6.4-1,3,5,11 6.5-7,11 6.6-1,3,11,13 6.7 - 3,7 6.8-1,5,11 6.10-1,2,4,5,6,8,10 6.12-3,5 6.13 - 1,3,9 |
| Chapter 7 | 7.1 - 3,7,9 7.2 - 1,3,5,11,13 7.3 - 1,3,9,13 7.4-1,3,7,9,11 |
| Chapter 8 | 8.1 - 1,3,5,7,9,11,19 8.2 - 1,3 8.3 - 1,3,5,7,9 |