

King Fahd University of Petroleum and Minerals

Department of Mathematics and Statistics

STAT302: Statistical Inference

Fall Semester 2015 (Term 151)

Instructor: Nasir Abbas
Phone: 013-860-4485

Office: 5-333
E-mail: nasirabbas@kfupm.edu.sa

Office Hours (Tentative): UTR. 09:00 am – 10:00 am, or by appointment

Course Objectives: Statistics, as a subject matter, is a set of scientific principles and techniques that are useful in reaching conclusions about populations and processes when the available information is both limited and variable; that is, statistics is the science of learning from data. The world is rapidly reaching the point where most things can be monitored or measured. The primary learning objective of this course is to present a solid undergraduate foundation in statistical theory, its relevance and importance in solving practical problems in the real world.

Textbook: Mathematical Statistics with Applications, by D.D. Wackerly, W. Mendenhall and R.L. Scheaffer, 7th edition.

Assessment*

Activity	Weight
Class Participation (home works, quizzes, attendance, etc.)	15%
First Major Exam	10%
Second Major Exam	20%
Third Major Exam	25%
Final Exam (Comprehensive) Thursday December 17, 2015, 7:00 pm	30%

Grade Assignment

Score	87 – 100	80 – 86.9	75 – 79.9	70 – 74.9	65 – 69.9	60 – 64.9	55 – 59.9	50 – 54.9	0 – 49.9
Grade	A+	A	B+	B	C+	C	D+	D	F

Academic Integrity: All KFUPM policies regarding **ethics** and **academic honesty** apply to this course.

Important Notes:

- ✓ Excessive unexcused absences will result in a grade of **DN** in accordance with University rules.
- ✓ **Attendance** on time is *very* important.
- ✓ Check **Blackboard** regularly for announcements.
- ✓ **Homework** will be assigned later, and is due in class on the first **Sunday** after we finish a chapter.

Your Responsibilities:

- ✓ Taking all exams.
- ✓ Attending all lectures.
- ✓ Completing all homework problems posted on the Blackboard.
- ✓ Reading all my e-mails in a timely manner, i.e. check your e-mail every day.
- ✓ Asking for help when you need it and not waiting until the end of the semester.
- ✓ Practice active learning instead of waiting until the day before an exam to attempt to learn the material.

Syllabus

Section	Title
2.12	Random Sampling
6.7	Order Statistics
7.1	Introduction to Sampling Distributions
7.2	Sampling Distributions Related to the Normal Distribution
8.1 – 8.10	Estimation
9.1 – 9.9	Properties of Point Estimators and Methods of Estimation
10.1 – 10.12	Hypothesis Testing
16.1 – 16.5	Introduction to Bayesian Methods for Inference
14.1 – 14.7	Analysis of Categorical Data