



STAT302: Statistical Inference (211)

Instructor	Email	Office Location	Office Hours
Esam Al-Sawi	Using BB/MS teams	B5-R310	



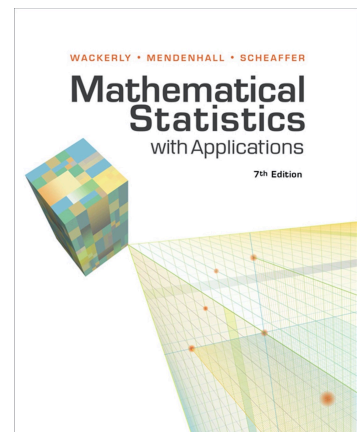
Course Objectives

Present a solid undergraduate foundation in statistical theory, its relevance and importance in solving practical problems in the real world.



Textbook:

Mathematical Statistics with Application, by: Wackerly, Mendenhall and Scheaffer, Seventh edition.



This course is a prerequisite to AS 483.

Please note that 302 is only offered in the first semester, AS 483 in the second.

Notes Regarding Homework Problems

- Homework should be submitted in class on the first day after a chapter ends.
- No **late** homework will be accepted.
- Homework **not submitted** will get a score of zero.
- Homework problems solutions should be complete with **justifications and reasons** for all steps by referencing theorems, equations and discussion from your textbook.
- **Copying** from any source, human, print or electronic will result in a zero on the homework and will be reported to the department chairman for appropriate action in accordance with University rules. See Article 38 page 27 of “the Undergraduate Study and Examinations Regulations and the KFUPM Rules for their Implementation”

<http://registrar.kfupm.edu.sa/docs/pdf/AcademicRegulations.pdf>

Assessment:

Assessment for this course will be based on attendance, homework, two major exams and a comprehensive final exam, as in the following: (tentative)

Activity	Weight
Homeworks	20%
Exam 1	20%
Exam 2	20%
Final Exam	40%
Total	100%

Topics to be covered & HW problems

Section	Title	HW problems	Remarks
2.12	Random Sampling		
6.7	Order Statistics	74, 75, 86, 89	
7.1	Introduction to Sampling Distributions,	10, 13, 14, 21, 26, 30	
7.2	Sampling Distributions Related to the Normal Distribution		
8.1-8.10	Estimation	1, 2, 3, 5, 21, 25, 32, 33, 39, 43, 56, 60, 70, 71, 81, 82, 96, 97	
9.1-9.9	Properties of Point Estimators and Methods of Estimation	1, 3, 4, 15, 28, 38, 39, 49, 56, 60, 71, 72, 81, 82	
10.1-10.12	Hypothesis Testing	2, 3, 17, 19, 30, 31, 37, 46, 50, 51, 56, 62, 63, 68, 69, 79, 80, 83, 88, 96, 100, 106, 107	
16.1-16.5	Introduction to Bayesian Methods for Inference	1, 2, 7, 8, 18, 24	
14.1-14.7	Analysis of Categorical Data	2, 4, 14, 22, 23	If time permits

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