

Prince Sultan University Department of Mathematical Science

SYLLABUS for

STAT 101 (Term 082)

Course:		STAT 101
Title	:	Introduction to Statistics and Probability Theory
Textbook	:	Introduction to Probability & Statistics;
		W. Mendenhall, R. Beaver, and B. Beaver, 12 th Edition
Faculty member:		Dr. Quazi Abdus Samad, Email : gsamad@oyp.psu.edu.sa

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Office hours:

Sun, Tues (10-11am), Room: E338

Week#	Date	Text Sections	Topics				
		1.1	Variables and Data				
1	February 28 – March 4	1.2	Types of Variables				
	,	1.3	Graphs for Categorical Data				
	March 7 11	1.4	Graphs for Quantitative Data				
2	March 7 -11	1.5	Relative Frequency Histograms				
		2.1	Describing a Set of Data with Numerical Measures				
		2.2	Measures of Center				
3	March 14 – 18	2.3	Measures of Variability				
		2.4	On the Practical Significance of the Standard				
			Deviation				
		2.5	A Check on the Calculation of s				
4	Manak 21 25	2.6	Measures of Relative Standing				
4	March 21 – 25	2.7 3.1	The Box Plot				
		3.1	Bivariate Data				
			Graphs for Qualitative Variables Scatterplots for Tow Qualitative Variables				
5	March 28 – April 1	3.3	Numerical Measures for Quantitative Bivariate Data				
	•	3.4					
	April 4 – 8	4.1	The Role of Probability in Statistics				
6		4.2	Events and the Sample Space				
		4.0	Exam I; April 7, 2009 (1.1-3.4) Calculating Probabilities Using Simple Events				
7	April 11 – 15	4.3	Useful Counting Rules				
7	1 ² -	4.4	Event Composition and Event Relations				
		4.5	-				
8	April 18 – 22	4.6	Conditional Probability and Independence				
		4.7	Bayes' Rule				
	Midterm break (April 25 – April 29)						
		4.8	Discrete Random Variables & Their Prob. Distributions				
9	May 2 – 6	5.1	Introduction to Discrete Distributions				
		5.2	The Binomial Probability Distribution				
	May 6, 2009 Last day for dropping course(s) with grade of "W"						
		5.3	The Poisson Probability Distribution				
10	May 9 – 13	5.4	The Hypergeometric Probability Distribution				
	-		Exam II; May 12, 2009 (4.1-5.2)				
	May 16 – 20	6.1	Probability Distributions for Continuous Random				
11		6.2	Variables The Normal Probability Distribution				
	May 13, 2009 Last day	for withdraw	al from all courses with grade of "W"				
		6.3	Tabulated Areas of the Normal Probability				
12	May 23 – 27		Distribution				
12		6.4	Normal Approximation to the Binomial Prob. Distribution				
13		7.1-7.2	Intro. & Sampling Plans and Experimental Designs				
	May 30 - June – 3	7.3	Statistic and Sampling Distributions				
		7.4	The Central Limit Theorem				
14	June 6 – 10	7.5	The Sampling Distribution of the Sample Mean				
			Exam III; June 9, 2009 (5.3-7.2)				

	June 10, 2009 Last day for withdrawal from all courses with grade of "WP/WF"					
15	June 13 – 17	7.6	The sampling distribution of the sample proportion Review			
	June 20 – 1 July		Final Examinations			

Grading Policy:

Exam I: **15**%, Exam II: **15**%, Exam III: **15**%, Class Work: **15**%, Final Exam: **40**% The class work grade is expected to reflect the performance of the student throughout the semester and is based on at least 15 quizzes, and 15 home works.

Class attendance:

- Students should not **miss** any class lecture without a legitimate excuse.
- If you **miss** a class with a legitimate excuse, you should contact the student's affairs within a week.
- In case a student **misses** a class, he must contact any one of his classmates to get all information and topics covered of classes he **missed**.
- "DN Grade" will be issued to a student who misses 16 classes. This means you cannot enter any more classes or exams. (1st warning; 6 absences; 2nd warning: 11 absences).
- It is your responsibility to **check** your number of absences regularly.
- It is very important that you are in the class **on all time**.
- The attendance will be taken during the **first 5 minutes** of the class. If you come to class after 5 minutes, you will be marked **absent**.
- From the past experience, **absence** is the biggest reason for failing, so make sure you are in class at all times.

Quizzes and Class work:

• Quizzes will be given at the **beginning** of the lessons. The quiz covers the materials discussed during the previous lectures and it will be similar or picked from <u>examples</u>, or the list of suggested <u>HOMEWORK PROBLEMS</u> you are given along with the syllabus.

(Remember that being absent or late for the lesson will deny you the quiz mark.) (There is no make up for the missed quizzes)

Calculators:

• Scientific Calculators are required in this course in each class (No Graphing Calculators). So **you must bring the calculator with you in each class**. You will not be allowed to borrow calculators from others nor will you be allowed to use your mobile phones as calculators. If you do so, marks will be deducted in each occasion.

Books:

• You are required to bring the suggested text book(s) in the class on all occasions.

Other materials:

• Besides, you are required to bring **pen**, **pencil**, **paper** (note book) etc. in each class. You will not be allowed to borrow all these things from others.

General instruction: In case of any queries, information or help needed, please contact me during my office hour (Sundays & Tuesdays: 10-11am).

I wish you a productive and nice semester with me at PSU!