

Course outline

STAT 328 (Statistical Packages) 3 credit hours

Instructor: Prof. Khalaf S. Sultan

Office: 2B20 Building #4, Phone (office): 4676263

Room: AB 126 Building #4

E-mail: ksultan@ksu.edu.sa

Text Books:

1. Minitab Guide, Second Edition Desmond J. Higham and Nicholas J. Higham A-Jin Publishing Company. Latest version
2. Excel 2010 guide to accompany understanding basic statistics sixth edition
3. SPSS Guide to Data Analysis by Marija Norse's. . Latest version
4. Hector Guerrero. Excel Data Analysis: Modeling and Simulation, Springer. . Latest version
5. SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM Spss. Latest version
6. Alain F. Zuur l Elena N. Ieno Erik H.W.G. Meesters. A Beginner's Guide to R, Springer. Latest version

Course Scope Contents:

Using program code in a statistical software package (Excel – Minitab – SAS – SPSS - R - Maple - Matlab) to write a program for data and statistical analysis. Topics include creating and managing data files, graphical presentation - and Monte Carlo simulations.

Week	Topics Covered
1	Introduction to statistical analysis using excel
	Some mathematical, statistical and logical functions in excel
	Descriptive statistics using excel
2	Statistical tests using excel
	Correlation and regression using excel
	Introduction to Minitab- Descriptive statistics using Minitab
3	Statistical distributions in Minitab
	Statistical tests using Minitab
Exam	
4	Correlation and regression using Minitab
	Introduction to SPSS
	Descriptive statistics using SPSS

5	Statistical tests using SPSS
	Correlation and regression using SPSS
	Introduction to R
6	Statistical and mathematical functions in R
	Descriptive statistics using R
	Statistical distributions in R
Exam	
7	Statistical tests using R
	Correlation and regression using R
	Programming and simulation in R
Final exam :	

Assignments and Tests:

Assignments and Labs	Will be given during the classes	10 marks
Midterm test I		25 marks
Midterm test II		25 marks
Final Exam	Final exam :)	40 marks

Attendance:

Student missing more than 25% of the total class hours won't be allowed to write the final exam.