Form (H)
Short course description

Course title: Data Analysis	Course number and code: STAT 339
Previous course requirement: STAT 332	Language of the course: English or Arabic
Course level:6 / Year 3	Effective hours:3 (2+0+2)

Course description   وصف المقرر :

Introduction to Data Analysis. Introduction to statistical software SAS, SPSS and MINITAB. Types of Data: Study of qualitative and quantitative variable. Graphical representation of data, Normality... , Analysis of paired data. Criterion of Correlation for Qualitative and Quantitative data (Person, Spearman, Kappa test, Cochran–Armitage test for trend, Cronbach's alpha, Independents, Odds Ratio,..), Principal component Analysis ANOVA one and two ways, Multiple Regression Analysis, Analysis of Covariance (ANCOVA) Multiple Logistic regression. Clustering, k-mean, Time series analysis using SAS. This course is based on SAS or SPSS or MINITAB.

Course objectives   أهداف المقرر

Students are expected to learn the nature of data
Learn who to select statistical method
Carry an appropriate statistical analysis

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)
After studying this course, the student is expected to be able to:

Students get familiar with the use of well-known Statistical packages
In general, they know how to use Statistics for a given data set

Textbook adopted and supporting references

Title of the book	Author's name	Publisher's name	Date of publication
SAS Documentations	http://www.ats.ucla.edu/stat/seminars/default.htm	SAS	2018
Probability and Statistics for Engineers and Scientists	Ronald E. Walpole (Author), Raymond H. Myers (Author), Sharon L. Myers (Author), Keying E. Ye (Author)	Prentice Hall	2011
Applied Linear Statistical Models	Michael H. Kutner EmOlY University Christopher J. Nachtsheim University of Minnesota John Neter	University of Georgia William Li Universlty of Minnesota	2005