

Course Title:	Biostatistics
Course Code:	Bios101
Program:	Medicine, Pharm. D., Nursing, Respiratory Therapy, Emergency Medical Services, Anesthesia, Health Information System
Department:	General science and English Language
College:	Applied Science
Institution:	Almaarefa University

Course Identification

1. Credit hours:	3						
2. Course type							
a.	University	College		Department	Others		
b.	Required	\boxtimes	Elective				
3. Level/year at which this course is offered: Year 1-Level 1							
4. Pre-requisites for this course (if any): None							
5. Co-requisites for this course (if any): None							

Course Objectives

1. Course Description

This course is designed to provide the students with a basic understanding of biostatistics. The course covers of descriptive statistics with concepts of dispersion, central tendency measurements. Graphical and tabular displays are also covered. Simple inferential statistics involving probability, sampling, confidence intervals and tests of significance are presented. Simple linear regression and correlations are also covered. Understanding concepts and rational for various methods are emphasized with use of computer statistical software (SPSS) for graphs and calculations Perform basic statistical analysis using SPSS package.

Describe and critically discuss the statistical analysis results and present a scientific conclusion.

2. Course Main Objective

Students who successfully complete this course should be able to correctly:

- 1. Describe the key features of health data.
- 2. Present the data graphically and numerically.
- 3. Calculate and interpret mean, median, mode, range, variance, standard deviation
- 4. Perform statistical inference such confidence intervals and tests of significance.
- 5. Be able to understand probabilities and use it in his daily life.
- 6. Be able to use standard normal distributions tables.
- 7. Compare between variables by using linear correlation and linear regression
- 8-Be able to use SPSS software to define variables and entering data
- 9. Be able to analyze data by applying the important functions in SPSS program