



## College of Nursing - Dawadmi

<b>Programs Name:</b> Bachelor of Science in Nursing	<b>Course Code:</b> MEDI 1201
<b>Course Title:</b> Biostatistics	<b>Credit hours:</b> 2 (1+1)

### Course Description

This introductory course is designed to give students the basic skills to organize and summarize data, along with an introduction to the fundamental principles of statistical inference. The course emphasizes an understanding of statistical concepts and interpretation of numeric data summaries along with basic analysis methods, using examples and exercises from medical and public health studies. The course does not require a high-level mathematics background and will highlight the use and integration of statistical software, spreadsheets and word processing software in conducting and presenting data summaries and analyses.

No	Course content
1.	Introduction to the course and its content
2.	Basic Statistical Concepts
3.	Basic definitions of data collection
4.	Types of data variables
5.	Descriptive statistics
6.	Concepts of Probability
7.	Probability Analysis (Distributions)
8.	Two Variables Relationships (Correlation Analysis)
9.	Sampling Distributions and Confidence Intervals
10.	Hypothesis Testing
11.	Comparing Two means (t-tests)
12.	Comparing Three or More Means (Analysis of Variance ANOVA)
13.	Analysis of categorical outcome variables
14.	Measurement of association between two variables: <ul style="list-style-type: none"> <li>● Odds ratio Relative risk</li> <li>● Attributable risk</li> </ul>

### Textbook (s)

- Applied Medical Statistics (2022) for beginners by Dr. Mohamed Elsherif
- Fundamental of Biostatistics 8<sup>th</sup> edition, Bernard Rosner, 2016