CODE BSPH-205 BIOSTATISTICS

Course Objectives:

After studying this course, you should be able to:

i. Present & Interpret data in tabular and graphical forms
ii. Apply the basic rules of probability
iii. Summarize data using the appropriate measures of central tendency and variation
iv. Apply the principles of normal distribution on a population and on sample means
v. Determine the required sample size for a given level of significance
vi. Determine & Interpret the confidence interval for sample means and proportions
vii. Apply the appropriate test of significance to test the hypothesis on a given data set

Course Contents:

i. Introduction to Biostatistics and its Application in Research
ii. Data: its Types, Sources and uses
iii. Organizing and Displaying Data
iv. Measures of Central Tendency and Measures of Dispersion
v. Introduction to Statistical Software
vi. Probability
vii. Normal Distribution
viii. Sampling Techniques
ix. Confidence Intervals for Mean
x. Confidence Intervals for Proportion
xi. Hypothesis Testing
xii. Introduction to Tests of Significance
xiii. Correlation and Regression

Recommended Books:

1. Bio Statistics Bush, Heather M 2012.
2. Fundamentals of Biostatistics 7th edition by Bernard Rosner 2011.
3. Bio Statistics Daniel, Wayne W 2009.
4. Bio Statistics Rao, K Visweswara (ed) 2009.
5. Pagano, Gauvreau Principles of Biostatistics 2nd Thomson
6. Rosner Fundamentals of Biostatistics 6th Thomson
7. Daniel WW Biostatistics: A Foundation for analysis in Health Sciences 5th (1990) Joh Wiley and Sons