



# THE VIRTUAL EDUCATION PROJECT PAKISTAN



## Title of the Course

Biostatistics for Biological and Health Sciences

## Course Coordinator

Prof. Dr. H. Anwar Ahmad

## Credit Hours

This course fulfills one credit-hour course requirements. On-site students at the ICCBS will have 16 hours of formal classes.

## Learning Objectives

1. To understand the basic concepts of biostatistical methodologies
2. To apply these concepts in biomedical research
3. To familiarize with the SAS environment and be able to use SAS-procedures in various experimental designs and data analysis- depending upon the availability of the software package.

**Schedule: Time: 09:00 to 10:00 AM (Tuesday and Wednesday)**

| Weeks   | Topics  |
|---|---|
| <b>1<sup>st</sup> week</b><br>May 9 & 10, 2017<br>(Tuesday, Wednesday)  | General Introduction to Biostatistics               |
| <b>2<sup>nd</sup> week</b><br>May 16 & 17, 2017<br>(Tuesday, Wednesday) | Types of Studies; Frequency Distributions           |
| <b>3<sup>rd</sup> week</b><br>May 23 & 24, 2017<br>(Tuesday, Wednesday) | Summary Statistics                                  |
| <b>4<sup>th</sup> week</b><br>May 30 & 31, 2017<br>(Tuesday, Wednesday) | Probability Concepts; Some Important Distributions. |

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| <b>5<sup>th</sup> Week</b><br>June 6 & 7, 2017<br>(Tuesday, Wednesday)   | Statistical Inference                     |
| <b>6<sup>th</sup> Week</b><br>June 13 & 14, 2017<br>(Tuesday, Wednesday) | Hypothesis Testing                        |
| <b>7<sup>th</sup> Week</b><br>June 20 & 21, 2017<br>(Tuesday, Wednesday) | Confidence Interval; Inference about Mean |
| <b>8<sup>th</sup> Week</b><br>July 4 & 5, 2017<br>(Tuesday, Wednesday)   | Analysis of Variance                      |
| <b>9<sup>th</sup> Week</b><br>July 11, 2017<br>(Tuesday)                 | <b>Final Exam</b>                         |