



## **BASIC STATISTICS 1: DESCRIPTIVE STATISTICS (BS 1)**

The course serves as a gateway to the understanding and appreciation of Statistics in practical settings. Statistics plays an integral role in collecting, organizing, summarizing, and analyzing any form of data. In this training course, participants will learn the necessary tools in performing basic statistical techniques and analysis as input to evidence-based decisions and other policy-making activities. The course will also make use of MS Excel for practical ways in visualizing, summarizing, describing, and exploring data, and will highlight the meaning and understanding of the statistical information produced.

### **Purpose**

To enable participants to properly use basic knowledge in statistics in collecting and describing a given data set.

### **Benefits to the Participants**

Appreciation of statistics in visualizing, summarizing, describing and exploring data, which can aid in making evidence-based decisions. This knowledge can be applied to a wide-range of disciplines including research, data monitoring and management, and data analytics.

### **Target Participants**

Personnel involved in simple data analysis and report preparation. Participants must have basic working knowledge of MS Excel<sup>®</sup>; Microsoft Excel<sup>®</sup> for Data Management (SW1) is a recommended course prerequisite.

### **Course Coverage**

- I. Introduction
  1. Basic Concepts in Statistics
  2. Major Fields in Statistics
  3. Steps in a Statistical Inquiry
  4. Levels of Measurement
- II. Methods of Collecting Data
  1. Survey
  2. Observation
  3. Experimentation
  4. Use of Documented Data
  5. Registration
- III. Methods of Presenting Data
  1. Textual
  2. Tabular
  3. Graphical
- IV. Summary Measures
  1. Measures of Central Tendency
  2. Measures of Location
  3. Measures of Dispersion
  4. Measures of Skewness
  5. Rates, Ratios, Proportions, Percentage, Percent Change
  6. Box and Whiskers Plot
- V. Software in Constructing Charts and Generating Descriptive Statistics

**Duration:** 4 Days – 8:30am to 4:00pm