

THE UNIVERSITY OF THE WEST INDIES OPEN CAMPUS St. Kitts-Nevis

INTRODUCTION TO DATA ANALYSIS TOOLS

COURSE DESCRIPTION

Participants will be introduced to the key concepts and basic tools in data analysis. The course gives an overview of some of the main aspects of data analysis from the setting up of the data in a form that can be easily utilised to producing information in tables such as pivot tables. This course presents learners with opportunities to be exposed to data analytic tools using Microsoft Excel as far as possible in order to apply skills learnt. The course will also expose students to the free statistical software called R. SPSS will also be used to illustrate the storage and coding of survey data.

RATIONALE

This course is designed to provide students with an understanding of the principles and strategies necessary at the beginning of any data analysis project. It provides foundational coverage of the reasoning, practical, and technical skills needed to ensure efficient data analysis. The course uses an applied approach using real world data and uses Microsoft Excel and the statistical software R. This course is a good precursor to more detailed data analytic techniques especially for those who have not been exposed to data analysis. Participants are empowered so that they can apply these data analysis techniques to their respective fields of study.

OBJECTIVES

At the end of the course participants will be able to

- 1. Enter data in a suitable form for data analysis
- 2. Manipulate data to produce information
- 3. Use pivot tables in data analysis
- 4. Produce various graphical plots to visualise data
- 5. Interpret descriptive statistics
- 6. Report the results of simple descriptive data analysis

COURSE CONTENT

This course is includes the following topics:

- Data Preliminaries
- Sampling Designs
- Manipulating Data
- Visualising Data
- Basic Descriptive Statistics
- Relationship between two variables

HOW MUCH WILL THIS COURSE COST? OURSE CONTENT This 10-week course costs EC\$600.00.

The University reviews tuition fees annually and course fees may be subject to change. Courses are only offered if there is a viable class size.