Basic Descriptive Analysis

If you have to run any analysis of a set of data, you usually start with some descriptive statistics. There are, for example, several different ways you can explore the central tendency of a data set, and there are also different ways you can look at how spread out your data is.

This class will teach you the basics of how to do this with a data set in Microsoft Excel. Whether you need to do this for your own research project, or you just want to understand what others have done, to understand someone else's published data set, this class will be very useful for you.

STATISTICS LEVEL 1 - CLASS 2

LEARNING OUTCOMES

After taking this class the student will be able to:

1. Be able to perform basic descriptive analysis in Microsoft Excel

LESSON CONTENT

Every lesson has a practice quiz. At at the end of the lessons there is a final quiz and if you pass the final quiz, you will receive a certificate of completion.

1. Introduction to basic descriptive analysis

- Introduction to descriptive statistics.
- You will learn the difference between descriptive and inferential statistics.
- You will also learn about the two main types of descriptive statistics, including central tendency and measures of variability.
- Finally, you will see some examples of the three most common measures of central tendency, mean, median and mode.

2. How to calculate mean, median and mode using Microsoft Excel

- Learn how to calculate mean, median and mode in Microsoft Excel.
- We will show you how this is done and we will also provide you with instructions.

3. How to calculate skewness in Excel

- In this lesson, you will learn about skewness.
- Learn how to calculate the skewness coefficient in excel and will also learn about what it means with practical examples.

4. How to calculate range, variance, and standard deviations

- In this lesson, you will learn about range, standard deviation, and variance.
- You will see some examples and learn how to do these calculations in Excel.

5. How to calculate Percentiles and Quartiles

- In this lesson, you will learn about Percentiles and Quartiles.
- You will also learn about the data analysis tool with examples and Excel.

6. How to use the data analysis tool

- In this lesson, you will learn how to create some basic graphs or plots in Excel. Y
- ou will learn how to create a Box plot, a Scatter plot, and a Histogram in Excel.

SUBJECT TAGS

mean, median, mode, box plot, histogram, range, percentiles, quartiles, standard deviation, variance, central tendency, variability, descriptive statistics, inferential statistics, skewness

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