

Summary

SL - Statistical Measures Draft

Subject	Year	Start date	Duration
Mathematics: applications and interpretation	IB1	Week 1, October	4 weeks

Course Part

Inquiry & Purpose

Inquiry / Higher Order Questions

Type	Inquiry Questions
Skills-based	How do you decide whether or not the results are biased or reliable?
Skills-based	How do you decide on the best sampling method to use?

Curriculum

Aims

Develop an understanding of the concepts, principles and nature of mathematics

Objectives

Technology: Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.

Syllabus Content

Topic 4: Statistics and probability

SL Content

SL 4.1

Concepts of population, sample, random sample, discrete and continuous data.

Reliability of data sources and bias in sampling.

Interpretation of outliers.

Sampling techniques and their effectiveness.

SL 4.2

Presentation of data (discrete and continuous): frequency distributions (tables).

Histograms.

Cumulative frequency; cumulative frequency graphs; use to find median, quartiles, percentiles, range and interquartile range (IQR).

Production and understanding of box and whisker diagrams.

SL 4.3

Measures of central tendency (mean, median and mode).

Estimation of mean from grouped data.

Modal class.

Measures of dispersion (interquartile range, standard deviation and variance).

Effect of constant changes on the original data.

Quartiles of discrete data.

 **ATL Skills**

 **Approaches to Learning**

 **Thinking**

- In this unit, we will

give students time to think through their answers before asking them for a response

 **Developing IB Learners**

 **Learner Profile**



Knowledgeable