

Summary

SL- Linear Functions and Regression Draft

Subject	Year	Start date	Duration
Mathematics: applications and interpretation	IB1	Week 1, November	2 weeks

Course Part

Inquiry & Purpose

? Inquiry / Higher Order Questions

Type	Inquiry Questions
Skills-based	How is the least square regression line different from other lines of best fit?
Skills-based	How do we decide whether a piecewise linear model is needed?

Curriculum

🎯 Aims

Appreciate how developments in technology and mathematics influence each other

◇ 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 4.4

Linear correlation of bivariate data.

Pearson's product-moment correlation coefficient, r .

Scatter diagrams; lines of best fit, by eye, passing through the mean point.

Equation of the regression line of y on x .

Use of the equation of the regression line for prediction purposes.

Interpret the meaning of the parameters, a and b , in a linear regression $y = ax + b$.

ATL Skills


Approaches to Learning


Thinking

- In this unit, we will
 - ask open questions
 - set students a task which required higher-order thinking skills (such as analysis or evaluation)
 - build on a specific prior task

Developing IB Learners

Learner Profile

 Inquirers

 Knowledgeable

 Thinkers