Deira International School

IB DP HL Applications and Interpretations HL (IB1)

📑 Summary

SL - Testing Draft

Subject	**Year**	**Start date**	**Duration**
Mathematics: applications and interpretation	IB1	Week 2, February	4 weeks

Course Part

📖 Inquiry & Purpose

❓ Inquiry / Higher Order Questions

Type	Inquiry Questions
Skills-based	What does correlation coefficients tell you about the relationship between two variables?
Skills-based	What is the purpose of hypothesis testing?

🔍 Curriculum

⊕ Aims

Develop a curiosity and enjoyment of mathematics, and appreciate its elegance and power

◇ 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 4.10

Spearman's rank correlation coefficient, r_S.

Awareness of the appropriateness and limitations of Pearson's product moment correlation coefficient and Spearman's rank correlation coefficient, and the effect of outliers on each.

SL 4.11

Formulation of null and alternative hypotheses, H_0 and H_1

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Significance levels. p-values.

Expected and observed frequencies.

The χ^2 test for independence: contingency tables, degrees of freedom, critical value.

The χ^2 goodness of fit test.

The t-test.

Use of the p-value to compare the means of two populations.

Using one-tailed and two-tailed tests.

📑 ATL Skills

🗣 Approaches to Learning

⚙️ **Thinking**

- In this unit, we will

   ask students to formulate a reasoned argument to support their opinion or conclusion

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

   set students a task which required higher-order thinking skills (such as analysis or evaluation)

👨‍🔧 Developing IB Learners

☆ Learner Profile

Inquirers

Knowledgeable

Thinkers