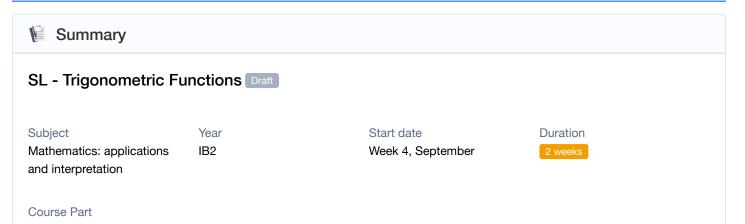
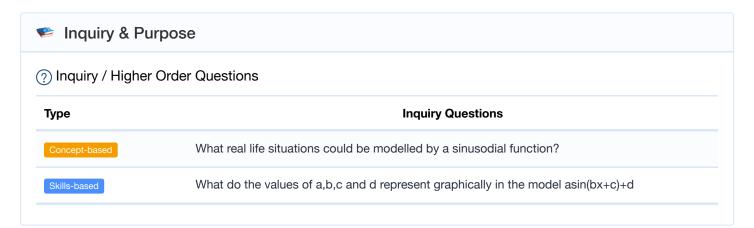
IB DP IB1 HL Applications (Mr Jacobs) (IB2)





Curriculum

Aims

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

♦ Objectives

Communication and interpretation: Transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation; use appropriate notation and terminology.

Syllabus Content

Topic 2: Functions

SL Content

SL 2.5

Sinusoidal models: $f(x) = a\sin(bx) + d$, $f(x) = a\cos(bx) + d$

SL 2.6

Modelling skills:

IB DP IB1 HL Applications (Mr Jacobs) (IB2)

Use the modelling process described in the "mathematical modelling" section to create, fit and use the theoretical models in section SL2.5 and their graphs.

Develop and fit the model:

Given a context recognize and choose an appropriate model and possible parameters.

Determine a reasonable domain for a model.

Find the parameters of a model.

Test and reflect upon the model:

Comment on the appropriateness and reasonableness of a model.

Justify the choice of a particular model, based on the shape of the data, properties of the curve and/or on the context of the situation.

Use the model:

Reading, interpreting and making predictions based on the model.



ATL Skills



Approaches to Learning



Thinking

- In this unit, we will

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



Developing IB Learners



Inquirers

☆ Learner Profile



Knowledgeable



Thinkers