📑 Summary

HL - Radians and Sinusodial models

Subject	Year	Start date	Duration
Mathematics: applications and interpretation	IB2	Week 3, September	2 weeks

Course Part

Description
In this unit you will learn how to use radian as a measure of turn opposed to degrees.

🎓 Inquiry & Purpose

⑦ Inquiry / Higher Order Questions

Type	Inquiry Questions
Debatable	When is it best to use degrees or radians? Why have multiple methods to do the same thing?
Content-based	Are there any other measures of turn that are used world-wide? If so, what are they used for?

🔍 Curriculum

⊕ Aims

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

Appreciate the universality of mathematics and its multicultural, international and historical perspectives

◇ Objectives

Knowledge and understanding: Recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.

📓 Syllabus Content

Topic 2: Functions

SL Content

SL 2.5

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

AHL Content

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

AHL 2.9

Sinusoidal models: $f(x) = a\sin(b(x-c)) + d$

Topic 3: Geometry and trigonometry

AHL Content

AHL 3.7

The definition of a radian and conversion between degrees and radians.

Using radians to calculate area of sector, length of arc.

📝 ATL Skills

🗣 Approaches to Learning

⚙️ Thinking

👨‍💼 Developing IB Learners

⭐ Learner Profile

🔍 Inquirers

📚 Knowledgeable

💡 Thinkers