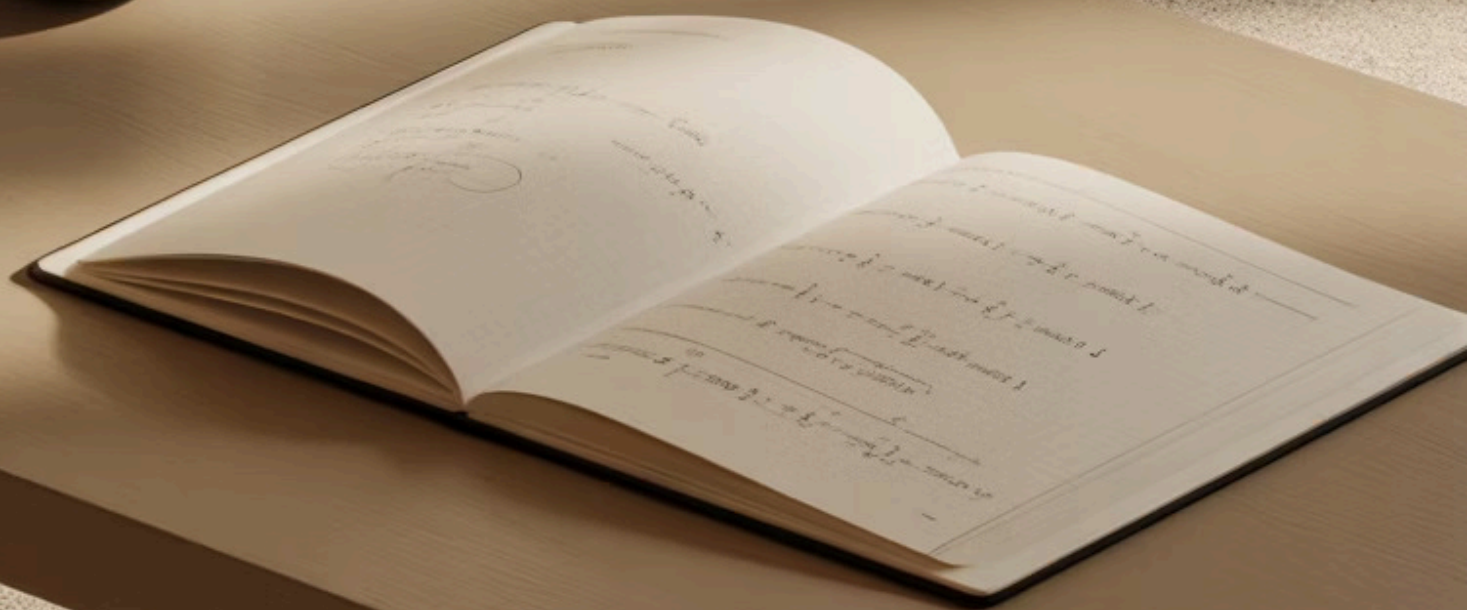


IBMYP Mathematics

For Years 7 - 9



Course Description

The IBMYP Mathematics course is designed to develop students' mathematical understanding and skills through a range of engaging and relevant activities. The course focuses on fostering logical reasoning, problem-solving abilities, and the application of mathematical concepts in real-world contexts. Students will explore various mathematical topics to enhance their critical thinking and analytical skills while cultivating a positive attitude towards mathematics.



Course Objectives



Enhance Mathematical Skills:

Develop proficiency in key mathematical concepts, including number operations, algebra, geometry, statistics, and probability.



Promote Problem-Solving Skills:

Encourage students to apply mathematical reasoning to solve real-life problems and make informed decisions.



Foster Critical Thinking:

Cultivate the ability to analyze mathematical situations, identify patterns, and support conclusions with logical reasoning.

Syllabus Structure

The syllabus is structured into thematic units that address core mathematical concepts, including:

1 Number Systems and Operations

Exploration of integers, rational numbers, and number operations.

2 Algebra and Patterns

Introduction to algebraic expressions, equations, and patterns.

3 Geometry and Measurement

Study of geometric shapes, their properties, and measurement principles.

4 Statistics and Probability

Analysis of data, measures of central tendency, and basic probability concepts.

Assessment Criteria

Assessment in the IBMYP Mathematics course is based on the following criteria:

Criterion A: Knowing and Understanding

Ability to demonstrate knowledge of mathematical concepts and procedures.

Criterion B: Investigating Patterns

Capability to explore mathematical relationships and identify patterns.

Criterion C: Communicating

Effectiveness in conveying mathematical ideas and reasoning through appropriate representation.

Criterion D: Applying Mathematics in Real-Life Contexts

Proficiency in using mathematical techniques to solve authentic problems.

Learning Approaches

The IBMYP emphasizes essential skills that foster student learning. The main categories of ATL (approaches to learning) skills include:



Communication Skills

Clear presentation of mathematical ideas and collaborative problem-solving.



Social Skills

Engaging in group discussions and collaborative learning activities.



Self-management Skills

Developing organisational skills and time management for mathematical tasks.



Research Skills

Techniques for gathering and analysing data to support mathematical reasoning.



Thinking Skills

Applying critical and creative thinking strategies to approach mathematical challenges effectively.