

Syllabus outline

Syllabus component	Teaching hours
	SL
All topics are compulsory. Students must study all the sub-topics in each of the topics in the syllabus as listed in this guide. Students are also required to be familiar with the topics listed as prior learning.	
Topic 1 Algebra	9
Topic 2 Functions and equations	24
Topic 3 Circular functions and trigonometry	16
Topic 4 Vectors	16
Topic 5 Statistics and probability	35
Topic 6 Calculus	40
Mathematical exploration Internal assessment in mathematics SL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics.	10
Total teaching hours	150

Assessment outline

First examinations 2014

Assessment component	Weighting
<p>External assessment (3 hours)</p> <p>Paper 1 (1 hour 30 minutes)</p> <p>No calculator allowed. (90 marks)</p> <p>Section A</p> <p>Compulsory short-response questions based on the whole syllabus.</p> <p>Section B</p> <p>Compulsory extended-response questions based on the whole syllabus.</p> <p>Paper 2 (1 hour 30 minutes)</p> <p>Graphic display calculator required. (90 marks)</p> <p>Section A</p> <p>Compulsory short-response questions based on the whole syllabus.</p> <p>Section B</p> <p>Compulsory extended-response questions based on the whole syllabus.</p>	<p>80%</p> <p>40%</p> <p>40%</p>
<p>Internal assessment</p> <p>This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.</p> <p>Mathematical exploration</p> <p>Internal assessment in mathematics SL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics. (20 marks)</p>	<p>20%</p>

Syllabus outline

Syllabus component	Teaching hours
	SL
All topics are compulsory. Students must study all the sub-topics in each of the topics in the syllabus as listed in this guide. Students are also required to be familiar with the topics listed as prior learning.	
Topic 1 Number and algebra	20
Topic 2 Descriptive statistics	12
Topic 3 Logic, sets and probability	20
Topic 4 Statistical applications	17
Topic 5 Geometry and trigonometry	18
Topic 6 Mathematical models	20
Topic 7 Introduction to differential calculus	18
Project The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements.	25
Total teaching hours	150

It is essential that teachers are allowed the prescribed minimum number of teaching hours necessary to meet the requirements of the mathematical studies SL course. At SL the minimum prescribed number of hours is 150 hours.

Assessment outline

First examinations 2014

Assessment component	Weighting
External assessment (3 hours)	80%
Paper 1 (1 hour 30 minutes) 15 compulsory short-response questions based on the whole syllabus. (90 marks)	40%
Paper 2 (1 hour 30 minutes) 6 compulsory extended-response questions based on the whole syllabus. (90 marks)	40%
Internal assessment This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	20%
Project The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements. (20 marks)	