



# SSIS Scope and Sequence

## 12 Math Studies SL



### Overview

- Averaging 19 weeks per semester (38 weeks per year)
- End of semester varies dependent upon Chinese New Year – Units may need to be moved accordingly

month week	August			September				October				November					December			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
<b>SEMESTER 1</b>	Sequences and Series, and Financial Mathematics Ch. 12 and 13						Camp	Probability and Logic Ch. 14 and 15		Internal Assessment (5 hours)		Functions Ch. 16 and 17			Calculus (Part 1) Ch. 19		Internal Assessment (5 hours)			

month week	February				March					April			May					June	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<b>SEMESTER 2</b>	Calculus (Part 2) Ch. 19		IA (2 hours)	Review and Mock Exams			Final Revision					Exams start May 3							

## Math Studies Year 2

Unit of Work	SSIS OILs	IB Framework	Unit Skills, Content or Knowledge	Common Assessments
<b>Sequences and Series, and Financial Mathematics</b>  <b>Ch. 12 and 13</b>	2, 3	<i>Connection</i>	<b>Can we predict the future?</b>  - Solve problems involving sequences and series - Model problems with sequences and series	
<b>Probability and Logic</b>  <b>Ch. 14 and 15</b>	5, 6, 7	<i>Perspective</i>	<b>Is anything certain?</b>  - Understand and apply the basic concepts of probability - Understand the language of symbolic logic	
<b>Functions</b>  <b>Ch. 16 and 17</b>	2	<i>Causation</i>	<b>Can we use mathematics to model the world?</b>  - Use the GDC to solve a variety of different functions - Model real life applications using a variety of functions	Unit Test
<b>Introduction to Differential Calculus</b>  <b>Ch. 19</b>	2	<i>Connection</i>	<b>How can we define change?</b>  - Calculate the first and second derivatives of polynomial functions in abstract and real life problems - Use calculus to find optimal solutions	Unit Test

\*NOTE ABOUT THE IA\* Students have been given 8 hours IA time in class during year 1. Times are given around suggested deadlines