

Diploma Program Outline (2026-2028)

Subject: MATH AI SL/HL

Week	Week of...	Topic / Unit / Text	Content / Skill Development	Graded Assessments
Year 1 Semester 1				
1	August 18	1 Number and Algebra	<ul style="list-style-type: none"> SL1.1 Scientific notation AHL1.9 Logarithms AHL1.10 Exponents 	
2	August 25	1 Number and Algebra	<ul style="list-style-type: none"> SL1.1 Scientific notation AHL1.9 Logarithms AHL1.10 Exponents 	
3	September 2	1 Number and Algebra	<ul style="list-style-type: none"> SL1.2 Arithmetic sequences and series; SL1.3 Geometric sequences and series AHL 1.11 Infinite sequences 	1.1, 1.2, 1.9, 1.10 Formative assessment
4	September 8	1 Number and Algebra	<ul style="list-style-type: none"> SL1.5 Exponents and logarithms AHL1.12, AHL1.13 Complex numbers 	
5	September 15	1 Number and Algebra	<ul style="list-style-type: none"> SL1.5 Exponents and logarithms AHL1.12, AHL1.13 Complex numbers 	1.5 Formative assessment
6	September 22	1 Number and Algebra	<ul style="list-style-type: none"> SL1.6 Measurement, estimation, rounding, approximation, error AHL1.12, AHL1.13 Complex numbers 	1.6 Formative assessment AHL1.12, 1.13 Formative assessment
7	September 29	National Holiday		
8	October 6	1 Number and Algebra	<ul style="list-style-type: none"> SL1.4, SL1.7 Financial mathematics AHL1.14 Matrices 	
9	October 13	1 Number and Algebra	<ul style="list-style-type: none"> SL1.4, SL1.7 Financial mathematics AHL1.14 Matrices 	
10	October 20	1 Number and Algebra	<ul style="list-style-type: none"> SL1.4, SL1.7 Financial mathematics AHL1.15 Eigenvalues and eigenvectors 	1.4, 1.7 Formative assessment
11	October 27	1 Number and Algebra	<ul style="list-style-type: none"> SL1.4, SL1.7 Financial mathematics AHL1.15 Eigenvalues and eigenvectors 	1.4, 1.7 Summative assessment
12	November 3	1 Number and Algebra	<ul style="list-style-type: none"> SL Topic 1 Review AHL Topic 1 Review 	
13	November 10	1 Number and Algebra	<ul style="list-style-type: none"> SL Topic 1 Review AHL Topic 1 Review 	
14	November 17	2 Functions	<ul style="list-style-type: none"> Topic 2 prior knowledge 	AHL Topic 1 Summative Assessment
15	November 24	Week Without Walls		
16	December 1	2 Functions	<ul style="list-style-type: none"> SL2.1, SL2.2, SL2.3, SL2.4 straight lines, functions, and graphs AHL2.7 Function composition 	
17	December 8	2 Functions	<ul style="list-style-type: none"> SL2.1, SL2.2, SL2.3, SL2.4 straight lines, functions, and graphs AHL2.8 Transformations 	SL2.1, 2.2, 2.3, 2.4 Formative assessment
18	December 15	2 Functions	<ul style="list-style-type: none"> SL2.1, SL2.2, SL2.3, SL2.4 straight lines, functions, and graphs AHL2.9 Logarithmic, sinusoidal, logistic, and piecewise models 	
19	December 22	Christmas & New Year		
20	December 30	Christmas & New Year		
21	January 5	2 Functions	<ul style="list-style-type: none"> SL2.1, SL2.2, SL2.3, SL2.4 straight lines, functions, and graphs AHL2.10 Linearization and log graphs 	
22	January 12	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6, SL 3.5, SL3.6 Modeling and modeling skills; Voronoi diagrams AHL Topic 2 Review 	
23	January 19	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6, SL 3.5, SL3.6 Modeling and modeling skills; Voronoi diagrams AHL Topic 2 Review 	2.1, 2.2, 2.3, 2.4 Summative assessment
Year 1 Semester 2				
1	January 26	2 Functions	<ul style="list-style-type: none"> SL4.1, SL4.2, Data and Sampling, Presenting Data AHL 4.12 Data collection methods 	
2	February 2	2 Functions	<ul style="list-style-type: none"> SL4.1, SL4.2, SL4.3, Data and Sampling, Presenting Data, Statistical measures 	Internal Assessment introduction
3	February 9	2 Functions	<ul style="list-style-type: none"> SL4.1, SL4.2, SL4.3, Data and Sampling, Presenting Data, Statistical measures 	4.1, 4.2, 4.3 Formative assessment
4	February 16	Chinese New Year		
5	February 23	Chinese New Year		
6	March 2	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.3, SL4.4 Statistical measures, Correlations and regressions AHL4.12 Categorizing data for chi-squared tests 	

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7	March 9	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.3, SL4.4 Statistical measures, Correlations and regressions AHL4.13 Non-linear regression 	
8	March 16	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.3, SL4.4 Statistical measures, Correlations and regressions AHL4.13 Non-linear regression 	
9	March 23	4 Statistics & Probability	<ul style="list-style-type: none"> SL 4.10 Spearman's r AHL4.13 Non-linear regression 	SL4.1, 4.2, 4.3, 4.4, 4.10 Formative assessment
10	March 30	4 Statistics & Probability	<ul style="list-style-type: none"> Review 	SL4.1, 4.2, 4.3, 4.4, 4.10 Summative assessment
11	April 6	Easter Holiday		
12	April 13	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.5, SL4.6 Probability and expected value, Probability calculations 	
13	April 20	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.5, SL4.6 Probability and expected value, Probability calculations 	
14	April 27	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.7 Random variables AHL 4.14 Variance of random variables 	
15	May 4	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.8 Binomial distribution 	SL4.5, 4.6, 4.7, 4.8 Formative assessment
16	May 11	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.9 Normal distribution AHL 4.15 Central limit theorem 	
17	May 18	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.11 Hypothesis testing, Chi-squared and t-testing AHL 4.17 Confidence intervals 	
18	May 25	Final Exam Week		
19	June 1	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.11 Hypothesis testing, Chi-squared and t-testing AHL4.16 Poisson distribution 	
20	June 8	4 Statistics & Probability	<ul style="list-style-type: none"> SL4.11 Hypothesis testing, Chi-squared and t-testing AHL3.9 Matrix transformations 	
21	June 15	Collaborative Science Project		
Year 2 Semester 1				
1	August	3 Geometry & Trigonometry	<ul style="list-style-type: none"> SL3.1 3D Space AHL3.10 Vectors 	
2	August	3 Geometry & Trigonometry	<ul style="list-style-type: none"> SL3.2 Trigonometric ratios AHL3.11 Vector equation of a line 	
3	September	3 Geometry & Trigonometry	<ul style="list-style-type: none"> SL3.3 Applications of right-angle trigonometry AHL3.12 Kinematics 	SL3.1, 3.2, 3.3 Formative assessment
4	September	3 Geometry & Trigonometry	<ul style="list-style-type: none"> SL3.4 Circles AHL3.13 Vector products 	SL3.1, 3.2, 3.3, 3.4 Summative assessment
5	September	2 Functions	<ul style="list-style-type: none"> SL2.4 Graphing functions AHL4.19 Transition matrices, Markov chains 	
6	September	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6 Modeling with functions AHL4.19 Transition matrices, Markov chains 	SL2.1, 2.2, 2.3, 2.4 Formative assessment
7	October	National Holiday		
8	October	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6 Modeling with functions AHL3.14 Graph theory 	
9	October	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6 Modeling with functions AHL3.14 Graph theory 	
10	October	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6 Modeling with functions AHL3.15 Adjacency 	
11	October	2 Functions	<ul style="list-style-type: none"> SL2.5, SL2.6 Modeling with functions AHL3.16 Walks, trails, paths, circuits, cycles 	Topic 2 Summative assessment
12	November	5 Calculus	<ul style="list-style-type: none"> SL5.1, SL5.2, SL5.3, SL5.4, SL5.6 Limits and Derivatives, Increasing and decreasing functions, Power rule, Tangents and normals, Optima 	
13	November	5 Calculus	<ul style="list-style-type: none"> SL5.1, SL5.2, SL5.3, SL5.4, SL5.6 Limits and Derivatives, Increasing and decreasing functions, Power rule, Tangents and normals, Optima 	
14	November	5 Calculus	<ul style="list-style-type: none"> SL5.1, SL5.2, SL5.3, SL5.4, SL5.6 Limits and Derivatives, Increasing and decreasing functions, Power rule, Tangents and normals, Optima 	
15	November	5 Calculus	<ul style="list-style-type: none"> SL5.1, SL5.2, SL5.3, SL5.4, SL5.6 Limits and Derivatives, Increasing and decreasing functions, Power rule, Tangents and normals, Optima 	SL5.1, 5.2, 5.3, 5.4, 5.6 Formative assessment

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16	December	5 Calculus	<ul style="list-style-type: none"> SL5.5, SL5.7, SL5.8 Integration, Optimisation, Approximating areas 	
17	December	5 Calculus	<ul style="list-style-type: none"> SL5.5, SL5.7, SL5.8 Integration, Optimisation, Approximating areas 	
18	December	5 Calculus	<ul style="list-style-type: none"> SL5.5, SL5.7, SL5.8 Integration, Optimisation, Approximating areas 	Topic 5 Summative assessment
19	December	Christmas & New Year		
20	January	Christmas & New Year		
21	January	Review	<ul style="list-style-type: none"> Review AHL5.9 More derivatives AHL5.10 Second derivative 	
1	January	Review	<ul style="list-style-type: none"> Review AHL5.11 More integrals AHL5.12 Area and volume 	
2	January	Review	<ul style="list-style-type: none"> Review AHL 5.13 Kinematics 	
3	January	Chinese New Year		
4	February	Chinese New Year		
5	February	DP Mock Examination Review		
6	February	DP Mock Examination		
7	February	Review	<ul style="list-style-type: none"> Review AHL5.14 Differential equations 	
8	March	Review	<ul style="list-style-type: none"> Review AHL5.15 Slope fields 	
9	March	Review	<ul style="list-style-type: none"> Review AHL5.16 Numerical methods 	
10	March	Review	<ul style="list-style-type: none"> Review AHL5.17 Phase portraits 	
11	March	Review	<ul style="list-style-type: none"> Review AHL5.18 Second order differential equations 	
12	March	Review	<ul style="list-style-type: none"> Review 	
13	March	Review	<ul style="list-style-type: none"> Review 	
14	April	Easter Holiday		
15	April	Review	<ul style="list-style-type: none"> Review 	
16	April - May	IB DP May Examination		