[Year 1]

Biology

Q1 SL			
theme	**level of organization**		
	molecules	cells	organisms	ecosystem
unity and diversity	A 1.1 water A 1.2 nucleic acid	A 2.1 origins of cells* A 2.2 cell structure A 2.3 virus*	A 3.1 diversity of organisms A 3.2 classification and cladistics*	A 4.1 evolution and speciation A 4.2 conservation of biodiversity
forms and functions	B 1.1 carbohydrates and lipids B 1.2 proteins	B 2.1 membranes and membrane transport B 2.2 organelles and compartmentalization B 2.3 cell specialization	B 3.1 gas exchange B 3.2 transport B 3.3 muscle and motility*	B 4.1 adaptations to environment B 4.2 ecological niches
interactions and interdependence	C 1.1 enzymes and metabolism C 1.2 cell repiration C 1.3 photosynthesis	C 2.1 chemical signalling* C 2.2 neural signalling	C 3.1 integration of body systems C 3.2 defence against disease	C 4.1 populations and communities C 4.2 transfers of energy and matter
continuity and change	D 1.1 DNA replication D 1.2 protein synthesis D 1.3 mutations and gene editing	D 2.1 cell and nuclear division D 2.2 gene expression* D 2.3 water potential	D 3.1 reproduction D 3.2 inheritance D 3.3 homeostasis	D 4.1 natural selection D 4.2 stability and change D 4.3 climate change

Q1 HL			
theme	**level of organization**		
	molecules	cells	organisms	ecosystem
unity and diversity	A 1.1 water A 1.2 nucleic acid	A 2.1 origins of cells* A 2.2 cell structure A 2.3 virus*	A 3.1 diversity of organisms A 3.2 classification and cladistics*	A 4.1 evolution and speciation A 4.2 conservation of biodiversity
forms and functions	B 1.1 carbohydrates and lipids B 1.2 proteins	B 2.1 membranes and membrane transport B 2.2 organelles and compartmentalization B 2.3 cell specialization	B 3.1 gas exchange B 3.2 transport B 3.3 muscle and motility*	B 4.1 adaptations to environment B 4.2 ecological niches
interactions and interdependence	C 1.1 enzymes and metabolism C 1.2 cell repiration C 1.3 photosynthesis	C 2.1 chemical signalling* C 2.2 neural signalling	C 3.1 integration of body systems C 3.2 defence against disease	C 4.1 populations and communities C 4.2 transfers of energy and matter
continuity and change	D 1.1 DNA replication D 1.2 protein synthesis D 1.3 mutations and gene editing	D 2.1 cell and nuclear division D 2.2 gene expression* D 2.3 water potential	D 3.1 reproduction D 3.2 inheritance D 3.3 homeostasis	D 4.1 natural selection D 4.2 stability and change D 4.3 climate change

Chemistry

Chemistry Q1 SL

Topic #	Topic	Subtopic #	Subtopic
Structure 1	Models of the particulate nature of matter	Structure 1.1	Introduction to the particulate nature of matter
		Structure 1.2	The nuclear atom
		Structure 1.3	Electron configuration
		Structure 1.4	Counting particles by mass: The mole
		Structure 1.5	Ideal gas
Structure 2	The models of bonding and structure	Structure 2.1	The ionic model
		Structure 2.2	The covalent model
		Structure 2.3	The metallic model
		Structure 2.4	From models to materials
Structure 3	Classificaiton of matter	Structure 3.1	The periodic table: Classification of elements

Chemistry Q1 HL

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Structure 3	Classificaiton of matter	Structure 3.1	The periodic table: Classification of elements

Physics

Physics	Week 1	Week 2	Week 3	Week 4
Y1 HL	Tools for Physics	A. Space, Time and Motion (~A.4)		B.1 TFT
Y1 SL	Tools for Physics	A. Space, Time and Motion (~A.3)		B.1 TFT

Economics

2026 Q1 Economics 진도표
1.1 What is economics?
2.1 Demand
2.2 Supply
2.3 Competitive market equilibrium
2.5 Elasticites of demand
2.6 Elasticity of supply
2.7 Role of governments in microeconomies (indirect tax & subsidy)
2.7 Role of governments in microeconomies (price ceiling & price floor)
2.8 Market failure externalities and common pool or common access resources (externalities)
2.8 Market failure externalities and common pool or common access resources (responses to externalities)
2.11 Market failure - market power (HL only)
3.1 Measuring economic activities and its variations
3.2 Variations in economic activity - aggregate demand and aggregate supply
P1 답안 작성법, Economics Guide 사용법, IA Intro 수업도 포함하고 있습니다

BM

Business Management Year 1
Unit 1: Introduction to business management
1.1 What is a business?
1.2 Types of business entities
1.3 Business objectives
1.4 Stakeholders
1.5 Growth and evolution
1.6 Multinational companies (MNCs)
Unit 3: Finance and accounts
3.1 Introduction to finance
3.2 Sources of finance
3.3 Costs and revenues
3.4 Final accounts
3.5 Profitability and liquidity ratio analysis
3.6 Efficiency ratio analysis (HL only)
3.7 Cash flow
3.8 Investment appraisal
3.9 Budgets (HL only)
Unit 4: Marketing
4.1 Introduction to marketing
4.2 Marketing planning
4.3 Sales forecasting (HL only)
4.4 Market research
4.5 The seven Ps of the marketing mix
4.6 International marketing (HL only)

IB Psychology Y1 HL/ SL Summer Course

20 Days | 1.5 hours per class

Week/ Day	Unit Category	Daily Topics
W1 - D1	Intro to Psychology + Research Methods	Intro to Psychology: course overview and IB key concepts such as bias, causality, responsibility
W1 - D2	Research Methods	Experiments: IV, DV, controls
W1 - D3		Sampling methods, reliability and validity
W1 - D4		Correlational studies
W1 - D5		Ethics in psychological research
W2 - D6	Learning Theories	Classical conditioning
W2 - D7		Operant conditioning
W2 - D8		Social Cognitive Theory
W2 - D9	Cognition : Memory Models	Multi-store Memory Model
W2 - D10		Working Memory Model
W3 - D11	Biological Cognition : the Brain	Localization of function: hippocampus and memory
W3 - D12		Localization continued and brain imaging technologies (segment)
W3 - D13		Neurotransmission and behaviour
W3 - D14		Neurotransmission studies and evaluation
W3 - D15	Cognition : Schema	Schema theory
W4 - D16		Schema studies and applications
W4 - D17	Cognition : Thinking & Biases	Cognitive biases
W4 - D18		Strategies to improve cognition / cognitive load
W4 - D19	Human Relationships :SIT & Group behavior	Social Identity Theory
W4 - D20		Conformity and group behaviour

Math AA

Topic	Y1 Math AASL	Topic	Y1 Math AAHL	Topic	Y1 Math AAHL Adv
Number and algebra	1.1 Scientific Notation 1.2 Arithmetic Sequence and series 1.3 Geometric Sequences & Series 1.4 Financial Application of Geometric Sequences and Series 1.5 Exponent & Logarithm 1.6 Deductive Proof 1.7 Laws of Exponents & Laws of Logarithms 1.8 Infinite Geometric Series 1.9 Binomial Theorem N/A	Number and algebra	1.1 Scientific Notation 1.2 Arithmetic Sequence and series 1.3 Geometric Sequences & Series 1.4 Financial Application of Geometric Sequences and Series 1.5 Exponent & Logarithm 1.6 Deductive Proof 1.7 Laws of Exponents & Laws of Logarithms 1.8 Infinite Geometric Series 1.9 Binomial Theorem 1.10 Counting principles & Binomial Theorem for Fractional and Negative Indices 1.11 Partial Fractions 1.12 Complex Number Basics 1.13 Modulus-argument Form & Euler Form 1.14 Complex Number Operations and De Moivre's Theorem 1.15 Proof by Mathematical Induction, Contradiction, and Counterexample 1.16 Systems of Linear Equations	Number and algebra	1.1 Scientific Notation 1.2 Arithmetic Sequence and series 1.3 Geometric Sequences & Series 1.4 Financial Application of Geometric Sequences and Series 1.5 Exponent & Logarithm 1.6 Deductive Proof 1.7 Laws of Exponents & Laws of Logarithms 1.8 Infinite Geometric Series 1.9 Binomial Theorem 1.10 Counting principles & Binomial Theorem for Fractional and Negative Indices 1.11 Partial Fractions 1.12 Complex Number Basics 1.13 Modulus-argument Form & Euler Form 1.14 Complex Number Operations and De Moivre's Theorem 1.15 Proof by Mathematical Induction, Contradiction, and Counterexample 1.16 Systems of Linear Equations
Functions	2.1 Straight Line Equation 2.2 Function basics & Inverse 2.3 Function Graph 2.4 Graph Features 2.5 Composite & Identity Functions 2.6 Quadratic Function 2.7 Solving Quadratic Equations & Inequalities 2.8 Reciprocal & Rational Functions 2.9 Exponential & Logarithmic Functions/Graphs 2.10 Using Technology to Solve Equations 2.11 Transformation N/A	Functions	2.1 Straight Line Equation 2.2 Function basics & Inverse 2.3 Function Graph 2.4 Graph Features 2.5 Composite & Identity Functions 2.6 Quadratic Function 2.7 Solving Quadratic Equations & Inequalities 2.8 Reciprocal & Rational Functions 2.9 Exponential & Logarithmic Functions/Graphs 2.10 Using Technology to Solve Equations 2.11 Transformation 2.12 Polynomial Functions 2.13 Rational Functions (Extended) 2.14 Odd/Even Functions & Finding Inverse with Domain Restriction 2.15 Function Inequality 2.16 Absolute Value Function Graph & Higher Level Transformation	Functions	2.1 Straight Line Equation 2.2 Function basics & Inverse 2.3 Function Graph 2.4 Graph Features 2.5 Composite & Identity Functions 2.6 Quadratic Function 2.7 Solving Quadratic Equations & Inequalities 2.8 Reciprocal & Rational Functions 2.9 Exponential & Logarithmic Functions/Graphs 2.10 Using Technology to Solve Equations 2.11 Transformation 2.12 Polynomial Functions 2.13 Rational Functions (Extended) 2.14 Odd/Even Functions & Finding Inverse with Domain Restriction 2.15 Function Inequality 2.16 Absolute Value Function Graph & Higher Level Transformation
Geometry and Trigonometry	3.1 Geometry Basics 3.2 Trigonometric Basics & Rules 3.3 Right/Non-right Angled Trigonometry 3.4 Circle & Radian 3.5 Unit Circle 3.6 Trigonometric Identities 3.7 Trigonometric Graphs 3.8 Solving Trigonometric Equations N/A	Geometry and Trigonometry	3.1 Geometry Basics 3.2 Trigonometric Basics & Rules 3.3 Right/Non-right Angled Trigonometry 3.4 Circle & Radian 3.5 Unit Circle 3.6 Trigonometric Identities 3.7 Trigonometric Graphs 3.8 Solving Trigonometric Equations 3.9 Reciprocal Trigonometric Ratios 3.10 Compound Angle Identities & Tangent Double Angle Identity 3.11 Relationships between Trigonometric Functions 3.12 Vector Basics 3.13 Scalar Product 3.14 Vector Line 3.15 Coincident, Parallel, Intersecting, and Skew Lines 3.16 Vector Product 3.17 Vector Plane 3.18 Line and Plane	Geometry and Trigonometry	3.1 Geometry Basics 3.2 Trigonometric Basics & Rules 3.3 Right/Non-right Angled Trigonometry 3.4 Circle & Radian 3.5 Unit Circle 3.6 Trigonometric Identities 3.7 Trigonometric Graphs 3.8 Solving Trigonometric Equations 3.9 Reciprocal Trigonometric Ratios 3.10 Compound Angle Identities & Tangent Double Angle Identity 3.11 Relationships between Trigonometric Functions 3.12 Vector Basics 3.13 Scalar Product 3.14 Vector Line 3.15 Coincident, Parallel, Intersecting, and Skew Lines 3.16 Vector Product 3.17 Vector Plane 3.18 Line and Plane
Statistics and probability	4.1 Sample & Population 4.2 Data Presentation 4.3 Central Tendency & Quartiles 4.4 Bivariate Statistics 4.5 Probability Basics 4.6 Probability Operations 4.7 Discrete Random Variables 4.8 Binomial Distribution 4.9 Normal Distribution 4.10 Regression 4.11 Conditional Probability Operations 4.12 z-score N/A	Statistics and probability	4.1 Sample & Population 4.2 Data Presentation 4.3 Central Tendency & Quartiles 4.4 Bivariate Statistics 4.5 Probability Basics 4.6 Probability Operations 4.7 Discrete Random Variables 4.8 Binomial Distribution 4.9 Normal Distribution 4.10 Regression 4.11 Conditional Probability Operations 4.12 z-score 4.13 Baye's Theorem 4.14 Discrete Random Variables (Extended) & Continuous Random Variables	Statistics and probability	4.1 Sample & Population 4.2 Data Presentation 4.3 Central Tendency & Quartiles 4.4 Bivariate Statistics 4.5 Probability Basics 4.6 Probability Operations 4.7 Discrete Random Variables 4.8 Binomial Distribution 4.9 Normal Distribution 4.10 Regression 4.11 Conditional Probability Operations 4.12 z-score 4.13 Baye's Theorem 4.14 Discrete Random Variables (Extended) & Continuous Random Variables
Calculus	5.1 Limit & Derivative 5.2 Increasing & Decreasing Functions 5.3 Power Rule 5.4 Tangents & Normals 5.5 Anti-differentiation 5.6 Derivative of Various Expressions/Functions & Differentiation Rules 5.7 Second Derivative 5.8 Maximum, Minimum, and Point of Inflexion 5.9 Kinematics 5.10 Indefinite Integral 5.11 Definite Integral N/A	Calculus	5.1 Limit & Derivative 5.2 Increasing & Decreasing Functions 5.3 Power Rule 5.4 Tangents & Normals 5.5 Anti-differentiation 5.6 Derivative of Various Expressions/Functions & Differentiation Rules 5.7 Second Derivative 5.8 Maximum, Minimum, and Point of Inflexion 5.9 Kinematics 5.10 Indefinite Integral 5.11 Definite Integral 5.12 Continuity/Differentiability, First Principles, Convergence/Divergence, and Higher Derivatives 5.13 l'Hopital's Rule 5.14 Implicit Differentiation 5.15 Derivative & Integral of Various Expressions/Functions (Extended) 5.16 Integration by Substitution/Parts 5.17 Area of Enclosed Region 5.18 Differential Equations & Euler's Method 5.19 Maclaurin Series	Calculus	5.1 Limit & Derivative 5.2 Increasing & Decreasing Functions 5.3 Power Rule 5.4 Tangents & Normals 5.5 Anti-differentiation 5.6 Derivative of Various Expressions/Functions & Differentiation Rules 5.7 Second Derivative 5.8 Maximum, Minimum, and Point of Inflexion 5.9 Kinematics 5.10 Indefinite Integral 5.11 Definite Integral 5.12 Continuity/Differentiability, First Principles, Convergence/Divergence, and Higher Derivatives 5.13 l'Hopital's Rule 5.14 Implicit Differentiation 5.15 Derivative & Integral of Various Expressions/Functions (Extended) 5.16 Integration by Substitution/Parts 5.17 Area of Enclosed Region 5.18 Differential Equations & Euler's Method 5.19 Maclaurin Series

Math AI

		Y1 Math AI HL
Number and Algebra	1.1	Scientific Notation
	1.2	Arithmetic Sequence and Series
	1.3	Geometric Sequence and Series
	1.4	Financial Application of Geometric Sequences and Series
	1.5	Exponent & Logarithm
	1.6	Approximation & Estimation
	1.7	Amortization & Annuities
	1.8	System of Linear Equations & Polynomial Equations
	1.9	Laws of Logarithms
	1.10	Simplifying Expressions
	1.11	Infinite Geometric Series
	1.12	Complex Number Basics
	1.13	Modulus-argument Form & Euler Form
	1.14	Matrix Basics
	1.15	Eigenvalues & Eigenvectors + Matrix Operations
Functions	2.1	Straight Line Equation
	2.2	Function basics & Inverse
	2.3	Function Graph
	2.4	Graph Features
	2.5	Modeling with Different Functions
	2.6	Mathematical Modeling Skills
	2.7	Composite Functions & Inverse (Extended)
	2.8	Transformation
	2.9	Mathematical Modeling Skills (Extended)
	2.10	Scaling & Linearization
Geometry and Trignometry	3.1	Geometry Basics
	3.2	Trigonometry Basics + Cosine & Sine Rules + Area of Triangle
	3.3	Pythagoras' Theorem + Angles of Elevation & Depression
	3.4	Circle, Arc, & Sector
	3.5	Equations of Perpendicular Bisectors
	3.6	Voronoi Diagrams
	3.7	Radians
	3.8	Unit Circle & Trigonometric Operations
	3.9	2D Geometric Transformation Using Matrices & Geometric Interpretation of The Determinant of A Transformation Matrix
	3.10	Vector basics
	3.11	Vector: Line
	3.12	Vector Applications to Kinematics
	3.13	Vector Operations
	3.14	Graph Theory
	3.15	Graph and Matrices
	3.16	Applications of Graph Theory
Statistics and Probability	4.1	Sample & Population
	4.2	Data Presentation
	4.3	Central Tendency & Quartiles
	4.4	Bivariate Statistics
	4.5	Probability Basics
	4.6	Probability Operations
	4.7	Discrete Random Variables
	4.8	Binomial Distribution
	4.9	Normal Distribution
	4.10	Regression
	4.11	Hypothese, p-values, and Various Tests
	4.12	Data Collection, Data Organization, Reliability, and Validity
	4.13	Regression (Extended)
	4.14	Unbiased Estimation & Transformation of A Variable
	4.15	Linear Combination of Normal Random Variables & Central Limit Theorem
	4.16	Confidence Intervals
	4.17	Poisson Distribution
	4.18	Critical Values & Regions + Type I & II Errors + More Statistical Tests
	4.19	Transition Matrices & Markov Chains
Calculus	5.1	Limit & Derivative
	5.2	Increasing & Decreasing Functions
	5.3	Power Rule
	5.4	Tangents & Normals
	5.5	Anti-differentiation
	5.6	Maximum & Minimum
	5.7	Optimisation
	5.8	Trapezoidal Rule
	5.9	Derivatives of Different Functions, Chain Rule, Quotient Rule, and Related Rates
	5.10	Second Derivative
	5.11	Definite & Indefinite Integration
	5.12	Area of Enclosed Region & Volumes of Revolution
	5.13	Kinematic Calculus
	5.14	Differential Equation
	5.15	Slope Fields
	5.16	Euler's Method & Numerical Solution of Coupled System
	5.17	Phase Portrait + Distinct/Real/Complex/Imaginary Eigenvalues + Equilibrium Points & Stable Populations & Saddle Points
	5.18	Euler's method (Extended)

AI의 경우, 학생들의 진도가 학교마다 크게 상이한 경우가 많으므로 상황에 따라 유연하게 진도를 수정할 수도 있습니다.

TOEFL

TOEFL Intensive Course

Week	Session	Main Topic	Vocabulary Focus	Grammar Focus	Skill Focus	Practice
Week 1	Day 1	Introduction to TOEFL Reading	Academic verbs	Complex sentence structure	Identifying main idea vs supporting details	Short academic passage analysis
Week 1	Day 2	Academic Paragraph Structure	Transition words	Subordinate clauses	Recognizing argument structure	Paragraph summary practice
Week 1	Day 3	Inference and Author's Purpose	Evaluation language	Relative clauses	Inference questions	TOEFL style MC reading questions
Week 2	Day 4	Cause and Effect in Academic Texts	Cause effect verbs	Participial phrases	Identifying causal relationship	Passage mapping exercise
Week 2	Day 5	Comparison and Contrast	Comparison markers	Parallel structure	Comparison analysis	Sentence completion questions
Week 2	Day 6	Academic Evidence and Reasoning	Research vocabulary	Academic Writing	Identifying supporting evidence	TOEFL reading set practice
Week 3	Day 7	Integrated Writing Strategy	Reporting verbs	Paraphrasing structures	Reading listening integration	Note taking and writing response
Week 3	Day 8	Academic Paragraph Writing	Argument vocabulary	Topic sentence formation	Developing supporting evidence	Academic paragraph writing
Week 3	Day 9	Coherence and Cohesion	Linking devices	Sentence variety	Logical flow in writing	Editing and revision practice
Week 4	Day 10	Advanced Reading Strategies	Academic collocations	Complex sentence analysis	Eliminating distractors	Timed reading practice
Week 4	Day 11	Writing Under Time Pressure	Academic phrasing	Sentence clarity and conciseness	Essay organization	Timed writing task
Week 4	Day 12	TOEFL Mini Simulation	Review of key vocabulary	Grammar review	Test strategy	TOEFL MOCK