

2026 블룸스버리 여름특강 커리큘럼

CLASS Info

강의대상	강의정보	강사
Y10	Y10 0606 월수금(8주) 11:00-13:00(120분)	
김정환 대표원장님		
학력	학사 University College London (UCL/영국) BSc. Mathematics	
담당과목	IB Mathematics AP Calculus AB/BC MYP Mathematics IGCSE Mathematics	

CLASS Curriculum

강의회차	강의내용
Lesson 1	Topic 1: Functions Extended 1.1 Domain and Range 1.2 Inverse Function 1.3 Composite Functions 1.4 Asymptotes & rational functions
Lesson 2	Topic 2: Functions 1.1 Definition of a function 1.2 Domain and Range 1.3 Inverse Function 1.4 Composite Functions
Lesson 3 - 4	1.5 Rational functions and asymptotes 1.6 Function transformation 1.7 Modulus functions and solving inequalities 1.8 Representation of linear inequalities in two variables GDC 활용법
Lesson 5 - 6	Topic 2. Quadratic functions 2.1 Maximum and minimum 2.2 Graph analysis 2.3 Roots and discriminants 2.4 Solving quadratic equations and inequalities
Lesson 7 - 8	Topic 3. Factors and polynomials 3.1 Polynomials of higher degree 3.2 Factor and remainder theorem 3.3 Solving cubic equations 3.4 Vieta's formula 3.5 Simultaneous equations
Lesson 9 - 10	3.6 Partial fraction 3.7 Rational function and aysmptotes 3.8 Graph analysis of polynomial and rational functions GDC 활용법

Lesson 11 - 12	Topic 4. Logarithmic and exponential functions
	4.1 Surds and indicies
	4.2 Laws of logarithm
	4.3 Logarithmic function and its graph
	4.4 Solving log equations
Lesson 13	4.5 Transformation to and from straight-line form
	Topic 5. Circular measure and trigonometry
	5.1 Circular measure
	5.2 Length of an arc
	5.3 Area of a sector
Lesson 14 - 15	5.4 Trigonometric ratios and the unit circle
	5.5 Basic trigonometric identities
	5.6 Solving trigonometric equations using the unit circle
	5.6 Trigonometric function and its graph
	5.7 Trigonometric identities
Lesson 16	5.8 Further trigonometric identities
	Topic 5 심화문제 풀이
Lesson 17	Topic 6. Coordinate geometry of the circle
	6.1 Equation of a circle
	6.2 Topic 6 problem solving
Lesson 18 - 19	Topic 7. Combination and permutation
	7.1 Permutation
	7.2 Combination
	7.3 Problem solving techniques
Lesson 20	Topic 8. Sequence and Series
	8.1 Binomial expansion
	8.2 Sequences
	8.3 Sigma notation
Lesson 21 - 22	8.4 Arithmetic progressions
	8.5 Geometric progressions
Lesson 23 - 24	Topic 9. Statistics and probability
	9.1 Interpretation and analysis of statistical Data
	9.2 Average measures
	9.3 Statistical diagrams
	9.4 Probability

*** 강의진도는 학생들의 수업 이해도에 따라 달라질 수 있습니다.**

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 0606 월수금(8주) 11:00-13:00(120분)	
한인지 부원장님		
학력	학사 Queen Mary University of London (영국) BSc. Mathematics with Finance and accounting	
담당과목	IGCSE Mathematics Key Stage 2-3 Mathematics MYP Mathematics UKMT (영국 수학경시대회)	

CLASS Curriculum

강의회차	강의내용
Lesson 1	Simple operations with indices with surds, including rationalising the denominator
Lesson 2	2.1 Quadratic Functions (Maximum and Minimum)
Lesson 3	2.2 Discriminant
Lesson 4	2.3 Simultaneous equations in two unknowns by elimination or substitution 2.4 Modulus Functions
Lesson 5	2.3 Simultaneous equations in two unknowns by elimination or substitution 2.4 Modulus Functions
Lesson 6	2.5 Inequalities (Linear and Quadratic) 2.6 Factors and Polynomials
Lesson 7	2.7 Factor and Remainder theorem 2.8 Cubic Functions and Graphical methods
Lesson 8	3.1 Straight line (Parallel and Perpendicular) 3.2 Mid-point and line segment (including perpendicular bisector)
Lesson 9	3.3 Equations of a circle 3.4 Circle and Straight line Analysis
Lesson 10	4.1 Combinations and Permutations
Lesson 11	4.1 Combinations and Permutations
Lesson 12	4.2 Binomial Expansions
Lesson 13	4.2 Binomial Expansions
Lesson 14	4.3 Arithmetic, Geometric Sequence and Quadratic Sequence
Lesson 15	4.5 Sum to infinity of a convergent geometric progression
Lesson 16	5.1 Domain, range (image set), one-one functions
Lesson 17	5.2 Inverse and composite functions (Graph drawing)
Lesson 18	5.3 Logarithmic and exponential functions
Lesson 19	5.4 Linearity
Lesson 20	6.1 Radian measure (Arc, sector area of a circle)
Lesson 21	6.2. Six trigonometric functions (sine, cosine, tangent, secant, cosecant and cotangent)
Lesson 22	6.2. Six trigonometric functions (sine, cosine, tangent, secant, cosecant and cotangent)
Lesson 23	6.3 Draw and Use the graphs (Amplitude, vertical shift and Period)
Lesson 24	6.3 Draw and Use the graphs (Amplitude, vertical shift and Period)

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 0607 화목토(8주) 9:00-11:00(120분)	
한인지 부원장님		
학력	학사 Queen Mary University of London (영국) BSc. Mathematics with Finance and accounting	
담당과목	IGCSE Mathematics Key Stage 2-3 Mathematics MYP Mathematics UKMT (영국 수학경시대회)	

CLASS Curriculum

강의회차	강의내용
Lesson 1	1.1 Notation for different sets of numbers / Absolute value
Lesson 2	1.2 HCF and LCM 1.3 Ratio and proportion
Lesson 3	1.4 Equivalences between decimals, fractions and percentages
Lesson 4	1.5 Estimation and Approximation 1.6 Calculation of powers and roots
Lesson 5	1.7 Standard form
Lesson 6	1.8 Rules of exponents and Surds 1.9 Surds rationalisation
Lesson 7	1.10 Percentages (Profit and Loss, Discount, Instalment and GST)
Lesson 8	1.11 Percentages (Simple and Compound interest)
Lesson 9	1.12 Speed (Graphical methods)
Lesson 10	Topic 2. Algebra 2.1 Expansion and Factorisation
Lesson 11	2.2 Indices
Lesson 12	2.3 Algebraic fractions
Lesson 13	2.4 Derivation, rearrangement and evaluation of formulae
Lesson 14	2.5 Solution of linear equations (Fractional expressions)
Lesson 15	2.6 Solution of simultaneous linear equations in two variables
Lesson 16	2.7 Solution of Quadratic equations (by factorisation, graphic display calculator (GDC 사용법))
Lesson 17	2.8 Inequalities (Linear and Quadratic)
Lesson 18	"2.9 Sequences (Determination of nth term) Linear sequence, Quadratic sequence and cubic sequence"
Lesson 19	2.10 Direct and inverse proportion
Lesson 20	Topic 3. Coordinate Geometry 3.1 Gradient of a line segment / Equation of a straight line
Lesson 21	3.2 Distance between two points / Mid points of a line segment / Symmetry of diagrams or graphs in the Cartesian plane 3.3 Linear inequalities in the Cartesian plane
Lesson 22	4.1 Domain and Range 4.2 Understanding of the concept of asymptotes and graphical identification of simple graphs parallel to the axes / Inverse functions
Lesson 23	4.3 Description and identification, using the language of transformations, of the changes to the graph to the graph of $y=f(x)$ when $y=f(x)+k$; $y=hf(x)$; and $y=f(x+k)$
Lesson 24	4.5 Logarithmic function as the inverse of the exponential function

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 0606 월-금(4주) 15:30-17:00(90분)	
김수민 선생님		
학력		
학사	Imperial College London(영국) BSc.Mathematics	
박사	University College London(UCL/영국) MSc. Computational Finance	
담당과목		
IB, IGCSE Mathematics STEP, MAT 시험대비		

CLASS Curriculum

강의회차	강의내용
Lesson 1	Topic 1: Function 1.1 Mappings 1.2 Definition of a Function 1.3 Composite Functions 1.4 Modulus Functions
Lesson 2	1.5 Graphs of Modulus Functions 1.6 Inverse Functions 1.7 The graph of a function and its inverse
Lesson 3	1.8 Function Transformation 1.9 Usage of GDC
Lesson 4	Topic 2: Quadratics 2.1 Simultaneous Equations with Quadratics 2.2 Max and Min values of a Quadratic 2.3 Modulus on Quadratic
Lesson 5	2.4 Quadratic Inequalities 2.5 Roots of Quadratic Equations
Lesson 6	2.6 Discriminants 2.7 Vieta's Formula 2.8 Definite Quadratics 2.9 Intersection of a line and a curve with Graphs
Lesson 7	Topic 3: Indices and Surds 3.1 Simplifying Expressions involving Indices 3.2 Solving Equations involving Indices
Lesson 8	3.3 Surds 3.4 Rationalisation 3.5 Solving Equations involving Surds

Lesson 9	Topic 4: Exponentials & Logarithm 4.1 Logarithms with base 10, a, e 4.2 Laws of Logarithms 4.3 Solving Logarithmic Equations
Lesson 10	4.4 Change of base of logarithms 4.5 Graphs of simple Log & transformations
Lesson 11	4.6 Solving Exponential Equations 4.7 Practical Applications of Exponential Equations
Lesson 12	4.8 Graphs of simple Exp & transformation 4.9 Inverse of Log and Exp functions
Lesson 13	Topic 5: Factors and Polynomials 5.1 Polynomials of higher degree 5.2 Division of polynomials 5.3 Factor Theorem
Lesson 14	5.4 Cubic Expressions and Equations 5.5 Remainder Theorem 5.6 Synthetic Division
Lesson 15	Topic 6: Coordinate Geometry & Circles 6.1 Straight-line graphs 6.2 Parallel and Perpendicular Lines 6.3 Areas of rectilinear figures 6.4 Different Types of Graphs
Lesson 16	6.5 Equation of a Circle 6.6 Problems Involving intersection of lines and circles
Lesson 17	6.6 Circular Measure 6.7 Length of an arc 6.8 Area of a Sector
Lesson 18	Topic 7: Sequence and Series 7.1 Sigma Notation 7.2 Arithmetic Progressions 7.3 Quadratic and Cubic Arithmetic Progressions
Lesson 19	7.4 Geometric Progressions 7.5 Infinite Geometric Progressions
Lesson 20	7.6 Pascal's Triangle 7.7 Permutation 7.8 Combination

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2026 블룸스버리 여름특강 커리큘럼

Y10

Y10 Eng 월수금(7주)
14:00-16:00(120분)

Jack 선생님

경력

학사 University of Liverpool — English Language and Literature (BA)
석사 King's College London — English Literature (MA)
박사 University of Glasgow — English Literature (PhD)

담당과목

IB English Lang Lit, English B
GCSE English, A-level English



CLASS Curriculum

강의회차	강의내용
Lesson 1	Shakespeare — Macbeth Act 1
Lesson 2	Shakespeare — Macbeth Act 2
Lesson 3	Shakespeare — Macbeth Act 3
Lesson 4	Shakespeare — Macbeth Act 4
Lesson 5	Shakespeare — Macbeth Act 5
Lesson 6	Shakespeare — Macbeth review
Lesson 7	Prose (short story) — <i>The Metamorphoses</i> , part 1
Lesson 8	Prose (short story) — <i>The Metamorphoses</i> , part 2
Lesson 9	Prose (short story) — <i>The Metamorphoses</i> , part 3
Lesson 10	Prose (short story) — 'Before the Law' and 'A Fable'
Lesson 11	Prose (short story) — <i>The Metamorphoses</i> , 'Before the Law', and 'A Fable' review
Lesson 12	Poetry (dramatic monologue) — Robert Browning
Lesson 13	Poetry (dramatic monologue) — Robert Browning
Lesson 14	Poetry (dramatic monologue) — T. S. Eliot
Lesson 15	Poetry (dramatic monologue) — T. S. Eliot
Lesson 16	Poetry (dramatic monologue) — T. S. Eliot
Lesson 17	Modern Drama — <i>Journey's End</i> , part 1
Lesson 18	Modern Drama — <i>Journey's End</i> , part 2
Lesson 19	Modern Drama — <i>Journey's End</i> , part 3
Lesson 20	Modern Drama — <i>Journey's End</i> , part 4
Lesson 21	Review: Shakespeare; prose; poetry; drama

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 Bio 월수금(8주) 19:00-21:00(120분)	
정지원 부원장님		
학력	고등 뉴질랜드 Kristin School - IB 수석 졸업 NZ IB Top Scholar Award 수여	
학사	University of Cambridge, Clare College (영국) BSc. Natural Sciences (Biology, Chemistry)	
담당과목	Biology / Chemistry : IB, IGCSE	

CLASS Curriculum

강의회차	강의내용
Lesson 1	Topic 7 Human nutrition Subtopic: 7.1 Diet – balanced diet; sources and importance of carbohydrates, fats, proteins, vitamins, mineral ions, fibre and water
Lesson 2	Topic 7 Human nutrition Subtopic: 7.1 Diet – malnutrition, scurvy and rickets
Lesson 3	Topic 7 Human nutrition Subtopic: 7.2 Digestive system – organs of the alimentary canal and associated organs
Lesson 4	Topic 7 Human nutrition Subtopic: 7.2 Digestive system – ingestion, digestion, absorption, assimilation and egestion
Lesson 5	Topic 7 Human nutrition Subtopic: 7.3 Physical digestion – mechanical breakdown of food and role of bile in emulsification
Lesson 6	Topic 7 Human nutrition Subtopic: 7.4 Chemical digestion – breakdown of large insoluble molecules into small soluble molecules
Lesson 7	Topic 7 Human nutrition Subtopic: 7.4 Chemical digestion – digestion of starch and protein; role of amylase, maltase, pepsin and trypsin
Lesson 8	Topic 7 Human nutrition Subtopic: 7.5 Absorption – absorption in the small intestine; villi, microvilli, capillaries and lacteals
Lesson 9	Topic 9 Transport in animals Subtopic: 9.1 Circulatory systems – circulatory system; single and double circulation

Lesson 10	Topic 9 Transport in animals Subtopic: 9.2 Heart – structure of the mammalian heart
Lesson 11	Topic 9 Transport in animals Subtopic: 9.2 Heart – heart function, monitoring heart activity, effect of exercise on heart rate
Lesson 12	Topic 9 Transport in animals Subtopic: 9.2 Heart – coronary heart disease and risk factors
Lesson 13	Topic 9 Transport in animals Subtopic: 9.3 Blood vessels – arteries, veins and capillaries; structure and function
Lesson 14	Topic 10 Diseases and immunity Subtopic: 10.1 Diseases and immunity – pathogens, transmissible diseases and methods of transmission
Lesson 15	Topic 10 Diseases and immunity Subtopic: 10.1 Diseases and immunity – body defences, immune response, vaccination and cholera
Lesson 16	Topic 11 Gas exchange in humans Subtopic: 11.1 Gas exchange in humans – gas exchange surfaces and structure of the breathing system
Lesson 17	Topic 11 Gas exchange in humans Subtopic: 11.1 Gas exchange in humans – ventilation, breathing mechanism, inhaled vs exhaled air, effect of exercise, mucus and cilia
Lesson 18	Topic 12 Respiration Subtopic: 12.1 Respiration – uses of energy in living organisms; respiration in yeast
Lesson 19	Topic 12 Respiration Subtopic: 12.2 Aerobic respiration – definition and word / balanced equations
Lesson 20	Topic 12 Respiration Subtopic: 12.3 Anaerobic respiration – yeast and muscle cells; oxygen debt
Lesson 21	Topic 13 Excretion in humans Subtopic: 13.1 Excretion in humans – lungs, kidneys, ureters, bladder and urethra; nephron, liver, deamination and urea formation
Lesson 22	Topic 14 Coordination and response Subtopic: 14.1–14.4 Coordination and response – nervous system, reflex arc, eye, hormones and homeostasis
Lesson 23	Topic 15 Drugs Subtopic: 15.1 Drugs – definition of a drug, antibiotics, antibiotic resistance, effects of alcohol and tobacco smoke
Lesson 24	Paper 6 Preview

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 Phy 월수금(8주) 16:00-18:00(120분)	
김의민 선생님		
학력		
학사	서울대학교 기계항공공학	
담당과목	Physics: AP, IB, IGCSE Chemistry: AP, IGCSE	

CLASS Curriculum

CLASS Curriculum

강의회차	강의내용	강의주제
Lesson 1	Topic 2.1 Kinetic particle model of matters [이론]	
Lesson 2	Topic 2.1 Kinetic particle model of matters [이론]	
Lesson 3	Topic 2.1 Kinetic particle model of matters [문제풀이]	
Lesson 4	Topic 2.2 Thermal properties and temperature [이론]	
Lesson 5	Topic 2.2 Thermal properties and temperature [이론]	
Lesson 6	Topic 2.2 Thermal properties and temperature [문제풀이]	
Lesson 7	Topic 2.3 Transfer of thermal energy [이론]	
Lesson 8	Topic 2.3 Transfer of thermal energy [문제풀이]	
Lesson 9	Mid-course Exam 1	
Lesson 10	Topic 3.1 General properties of waves [이론]	
Lesson 11	Topic 3.1 General properties of waves [이론]	
Lesson 12	Topic 3.1 General properties of waves [문제풀이]	
Lesson 13	Topic 3.2 Light [이론]	
Lesson 14	Topic 3.2 Light [이론]	
Lesson 15	Topic 3.2 Light [문제풀이]	
Lesson 16	Topic 3.3 Electromagnetic spectrum [이론]	
Lesson 17	Topic 3.4 Sound [이론]	
Lesson 18	Topic 3.3 Electromagnetic spectrum [문제풀이] Topic 3.4 Sound [문제풀이]	
Lesson 19	Mid-course Exam 2	
Lesson 20	Topic 6.1 Earth and the Solar system [이론]	
Lesson 21	Topic 6.1 Earth and the Solar system [문제풀이]	
Lesson 22	Topic 6.2 Stars and the Universe [이론]	
Lesson 23	Topic 6.2 Stars and the Universe [이론]	
Lesson 24	Topic 6.2 Stars and the Universe [문제풀이]	

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CLASS Info

강의대상	강의정보	강사
Y10	Y10 Chem 월수금(8주) 9:00-11:00(120분)	
김의민 선생님		
학력		
학사	서울대학교 기계항공공학	
담당과목	Physics: AP, IB, IGCSE Chemistry: AP, IGCSE	

CLASS Curriculum

CLASS Curriculum

강의회차	강의내용	강의주제
Lesson 1	Topic 2 : Atoms, elements and compounds [이론]	첫 주에는 Y9 내용 리뷰 진행됩니다.
Lesson 2	Topic 3 : Stoichiometry [이론]	첫 주에는 Y9 내용 리뷰 진행됩니다.
Lesson 3	Topic 2 : Atoms, elements and compounds [문제풀이] Topic 3 : Stoichiometry [문제풀이]	첫 주에는 Y9 내용 리뷰 진행됩니다.
Lesson 4	Topic 5 : Chemical energetics [이론]	
Lesson 5	Topic 5 : Chemical energetics [이론]	
Lesson 6	Topic 5 : Chemical energetics [문제풀이]	
Lesson 7	Topic 6.1 Physical and chemical changes [이론]	
Lesson 8	Topic 6.2 Rate of reaction [이론]	
Lesson 9	Topic 6.2 Rate of reaction [문제풀이]	
Lesson 10	Topic 6.4 Redox [이론]	
Lesson 11	Topic 6.4 Redox [이론]	
Lesson 12	Topic 6.4 Redox [문제풀이]	
Lesson 13	Topic 8 : The Periodic Table [이론]	
Lesson 14	Topic 10 : Chemistry of the environment [이론]	
Lesson 15	Topic 8 : The Periodic Table [문제풀이] Topic 10 : Chemistry of the environment [문제풀이]	
Lesson 16	Topic 9 : Metal [이론]	
Lesson 17	Topic 9 : Metal [이론]	
Lesson 18	Topic 9 : Metal [문제풀이]	
Lesson 19	Topic 11.1-11.3 : Organic chemistry [이론]	
Lesson 20	Topic 11.1-11.3 : Organic chemistry [이론]	
Lesson 21	Topic 11.1-11.3 : Organic chemistry [문제풀이]	
Lesson 22	Topic 12 : Experimental techniques and chemical analysis [이론]	
Lesson 23	Topic 12 : Experimental techniques and chemical analysis [이론]	
Lesson 24	Topic 12 : Experimental techniques and chemical analysis [문제풀이]	

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