



Bangkok Christian College English Immersion Program

Course Scope for Science & Technology Mathayom 3

Semester 1/2024-2025 Teacher Declan Lightowler



Date	Contents	Comments/ Remarks
13 - 17 May	Introduction and Course Outline	
20 - 24 May	Ecology and the environment: The organism in the environment, Feeding relationships and Cycles within ecosystems	
27-31 May	Ecology and the environment: Human influences on the environment	
3-7 June	Reproduction and inheritance: Reproduction	
10 – 14 June	Reproduction and inheritance: Inheritance	
17 – 21 June	Reproduction and inheritance: Further concepts of Inheritance	
24 – 28 June	Waves: Properties of Waves	
1-5 July	Waves: The electromagnetic spectrum	
8-12 July	Waves: Light and sound	
15-19 July	Student Project & Assessment	
22 – 26 July	Forces and Motion: Fundamental Concepts	
29 July- 2 August	Forces and Motion: Movement and Position	
5 - 9 August	Forces and Motion: Forces, Movement and Shape	
12 – 16 August	Forces and Motion: Forces, Movement and Shape	
19 - 23 August	Principles of chemistry: States of Matter	
26 - 30 August	Principles of chemistry: Elements, compounds and mixtures	
2-6 September	Principles of chemistry: Atomic Structure	
9 -13 September	Principles of chemistry: The periodic table	
16 -20 September	Final Exam Week	



Bangkok Christian College English Immersion Program



Course Scope for PE Mathayom 3

Semester 1/2024-2025 Teacher Colleen Steinbring

Date	Contents	Comments/ Remarks
13-17 May	<ul style="list-style-type: none"> Ice-Breaker/Introduction What you want out of PE? 	
20-24 May	<ul style="list-style-type: none"> Pre-Fitness Test 1 - Full length field sprint 	22 May – Visakha Bucha
27 May – 31 May	<ul style="list-style-type: none"> Sport of Survey Choice 1/4 <ul style="list-style-type: none"> History of sport Famous players Academic work (player, team, etc.) Drills for sport 	
3-7 June	<ul style="list-style-type: none"> Health - Social Etiquette Play Sport of Survey Choice ¼ 	3 June – Queen’s Birthday
10-14 June	<ul style="list-style-type: none"> Pre-Fitness Test 2 - HIIT 	
17-21 June	<ul style="list-style-type: none"> Health - Eating for Goals 	
24 June – 28 June	<ul style="list-style-type: none"> Sport of Survey Choice 2/4 <ul style="list-style-type: none"> History of sport Famous players Academic work (player, team, etc.) Drills for sport 	
1-5 July	<ul style="list-style-type: none"> Post-Fitness Test 1 - Full length field sprint 	
8-12 July	<ul style="list-style-type: none"> Health - Fitness Program 	
15-19 July	<ul style="list-style-type: none"> Play Sport of Survey Choice 2/4 	
22-26 July	<ul style="list-style-type: none"> Post-Fitness Test 2 - HIIT Fitness Game 	22 July - Buddhist Lent Jul 29 - King’s Birthday
29 July – 2 Aug	<ul style="list-style-type: none"> Sport of Survey Choice 3/4 <ul style="list-style-type: none"> History of sport Famous players Academic work (player, team, etc.) Drills for sport 	
5-9 Aug.	<ul style="list-style-type: none"> Health - Stress 	
12-16 Aug.	<ul style="list-style-type: none"> Fitness Game <ul style="list-style-type: none"> Outdoor Tic-Tac-Toe Capture the Flag Play Sport of Survey Choice 3/4 	12 Aug – Mother’s Day
19 Aug. – 23 Aug.	<ul style="list-style-type: none"> Sport of Survey Choice 4/4 <ul style="list-style-type: none"> History of sport Famous players Academic work (player, team, etc.) Drills for sport 	
26 Aug – 30 Aug.	<ul style="list-style-type: none"> Play Sport of Survey Choice 4/4 	
2-6 Sept.	<ul style="list-style-type: none"> Review for Final Exam Play new sport 	
9-13 Sept	In class Final Exam	
16-20 Sept	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for Mathematics Mathayom 3

Semester 1/2024-2025 Teacher Douglas Dake



Date	Contents	Comments/ Remarks
13 - 17 May	Introduction to class Initial Knowledge Check Glencoe 0-1: Representing Functions Glencoe 0-2: FOIL Glencoe 0-3: Factoring Polynomials Glencoe 0-4: Counting Techniques	
20- 24 May	Glencoe 0-5: Adding Probabilities Glencoe 0-6: Multiplying Probabilities Glencoe 0-7: Congruent and Similar Figures, Glencoe 0-8: The Pythagorean Theorem Glencoe 0-9: Measurement of Center, Spread, and Position	
27 - 31 May	Glencoe 1-1: Solving Linear Equations Glencoe 1-2: Solving Linear Inequalities Glencoe 1-3: Rate of Change and Slope Glencoe 1-4: Writing Linear Equations	
3 - 7 Jun.	Glencoe 1-5: Graphing Linear Inequalities Basic Unit 1 Review / Test Glencoe 1-6: Solving Systems of Equations	3 Jun. – Queen’s Birthday
10 – 14 Jun.	Glencoe 1-7: Solving Systems of Inequalities by Graphing Glencoe 1-8: Optimization with Linear Programming, Glencoe 1-9: Solving Systems of Equations in Three Variables Additional Unit 1 Review / Test	
17 – 21 Jun.	Glencoe 2-1: Functions and Continuity Glencoe 2-2: Linearity and Symmetry Glencoe 2-3: Extrema and End Behavior	
24 - 28 Jun.	Glencoe 2-4: Stretching Graphs of Functions Basic Unit 2 Review / Test Glencoe 2-5: Graphing Special Functions	
1 –5 Jul.	Glencoe 2-6: Transformations of Functions Glencoe 2-7: Solving Equations by Graphing Add Unit 2 Review / Test	
8 - 12 Jul.	Glencoe 3-1: Graphing Quadratic Functions Glencoe 3-2: Solving Quadratic Equations by Graphing Glencoe 3-3: Complex Numbers	
15 - 19 Jul.	Glencoe 3-4: Solving Quadratic Equations by Factoring Basic Unit 3 Review / Test Glencoe 3-5: Solving Quadratic Equations by Completing the Square	
22 - 26 Jul.	Glencoe 3-6: The Quadratic Formula and the Discriminant Glencoe 3-7: Quadratic Inequalities Add Unit 3 Review / Test	22 Jul. – Asalha Puja Day

29 Jul. - 2 Aug.	Glencoe 4-1: Operations with Polynomials Glencoe 4-2: Powers of Binomials Glencoe 4-3: Dividing Polynomials	29 Jul – King’s Birthday
5 - 9 Aug.	Glencoe 4-4: Graphing Polynomial Functions Glencoe 4-5: Analyzing Graphs of Polynomial Functions Basic Unit 4 Review / Test	
12 - 16 Aug.	Glencoe 4-6: Solving Polynomial Equations Glencoe 4-7: Proving Polynomial Identities	12 Aug. – Queen’s Birthday
19 – 23 Aug.	Glencoe 4-8: The Remainder and Factor Theorem, Glencoe 4-9: Roots and Zeros Add Unit 4 Review / Test	
26 - 30 Aug.	Glencoe 5-1: Operations with Functions Glencoe 5-2: Compositions with Functions Glencoe 5-3: Inverse Functions and Relations Basic Unit 5 Review / Test	
2 - 6 Sep.	Glencoe 5-4: Graphing Square Root Functions Glencoe 5-5: Graphing Cube Root Functions Glencoe 5-6: Solving Radical Equations Add Unit 5 Review / Test	
9 – 13 Sep.	Final Exam Preparation	
16 – 20 Sep.	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for Computing Science Mathayom 3

Semester 1/2024-2025 Teacher Dean Landucci



Date	Contents	Comments/ Remarks
13 - 17 May	A welcome introduction to the computer room. Set up passwords, login, accessing Microsoft 365. Enroll in the Teams channel.	
20 - 24 May	Advance photography art project. Understanding of camera features to create specialty photography. Shutter speed, F-stop, double exposures	
27-31 May	Advanced Ps applying filter effects, color adjustments, working with mats, and double exposure effects.	
3-7 June	Concept of 3D environment, understanding of polygons, navigation. Creation of an art gallery. LiDar scan techniques, rendering and publishing objects in exportable files like .obj.	
10 – 14 June	Importing objects into a 3D environment. Scale, size, working with vectors and polygon scans.	
17 – 21 June	Rendering concepts, and publishing the final 3D environment for a user. Present art gallery with personal photographic works.	
24 – 28 June	IGCSE ICT workbooks, types of digital devices. Task 1-3 differences of kinds of computers.	
1-5 July	IGCSE ICT workbooks, Understanding of Internet, IP,ISP, DNS, and hardware to create local area networks..	
8-12 July	Midterm quiz – IGCSE ICT Types of Digital Devices. Internet function. Understanding of hardware to create networks.	
15-19 July	Binary data types, input using a 2-digit ASCII representation of the characters in the hexadecimal range of 0-9, A-F.	
22 – 26 July	IGCSE ICT workbooks understanding of digital video. Frame rates, aspect ratio, file compression formats, file bit rate sizes.	
29 July- 2 August	Digital video editing techniques, pace and speed of edits, working with audio, creation of title effects, Exporting a video project, concepts of rendering files, export settings, and presenting video project.	
5 - 9 August	Students use online documents for answer sheets to supplement worksheets. Create shared links, send work, and receive corrections and comments through shared documents publication tools.	
12 – 16 August	Video production project present – Reporter, and student are given a topic to create a news package. Optional if a student video contest is available for consideration of enrollment.	
19 - 23 August	Advanced Excel – bookkeeping functions, nested functions, statistical and financial functions, pivot tables, solver, and macros	
26 - 30 August	Advanced Excel – bookkeeping functions, nested functions, statistical and financial functions, pivot tables, solver, and macros.	
2-6 September	Excel student budget. Track income with expenders. Apply formulas to create a spending budget, understanding of difference between assets, liabilities, and equity	
9 -13 September	Final Semester Quiz – IGCSE ICT digital devices, concepts of digital video production. Advance Excel.	
16 -20 September	Final Exam Week	



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Course Scope for Free Elective Mathayom 3

Semester 1/2024-2025 Teacher Ian Spellman



Date	Contents	Comments/ Remarks
13 - 17 May	Introductions, Classroom Expectations, Semester Roadmap. Grades will be based on participation in in-class activities and behavior	
20 - 24 May	Further coverage of important info followed by beginning in-class activities	
27-31 May	In class activities + Microscopy Demonstration (plant cells)	
3-7 June	In class activities + Microscopy Demonstration (animal cells)	
10 - 14 June	In class activities + Microscopy Demonstration (sample collection)	
17 - 21 June	In class activities + Microscopy Demonstration (slide preparation)	
24 - 28 June	In class activities + Fungal Plating sample collection	
1-5 July	In class activities + Flow Hood demonstration and sample preparation	
8-12 July	In class activities + Fungal sample observation (dissection scope), colony isolation?	
15-19 July	In class activities + Four Fundamental Forces Lesson	
22 - 26 July	In class activities + Four Fundamental Forces Lesson (continued)	
29 July- 2 August	In class activities + Electromagnetism demonstration – Tesla’s plasma globe	
5 - 9 August	In class activities + Geomagnetism, earthing demonstration (out of classroom)	
12 - 16 August	In class activities + Piezoelectricity Lesson (demonstration if materials can be acquired)	
19 - 23 August	In class activities + Sound Resonance demonstration, “can sound heal?” – tuning forks	
26 - 30 August	In class activities + Some chemistry demonstration (TBD)	
2-6 September	In class activities + Some chemistry demonstration (TBD)	
9 -13 September	In class activities + Dissections	
16 -20 September	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for FE introduction to Biology Mathayom 3

Semester 1/2024-2025 Teacher Rick Reinders



Date	Contents	Comments/ Remarks
13 - 17 May	Introduction lesson (Teams, Onenote, expectations, skills, rules etc)	
20 - 24 May	Overview of biology and its branches Scientific method and experimental design	
27-31 May	Introduction to the characteristics of living organisms	
3-7 June	Cell structure and function	
10 – 14 June	Cell organelles and their roles Cell membrane structure and transport	
17 – 21 June	Mendelian genetics and inheritance patterns	
24 – 28 June	Chromosomal basis of inheritance	
1-5 July	DNA structure and replication	
8-12 July	Protein synthesis: transcription and translation	
15-19 July	The theory of evolution by natural selection	
22 – 26 July	Mechanisms of evolutionary change	
29 July- 2 August	Evidence for evolution	
5 - 9 August	Speciation and the origin of species	
12 – 16 August	Classification and phylogenetic relationships	
19 - 23 August	Overview of prokaryotic and eukaryotic organisms	
26 - 30 August	Introduction to plant and animal diversity	
2-6 September	Principles of ecology	
9 -13 September	Population ecology	
16 -20 September	Community ecology	
	Final Exam Week	



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Course Scope for English Mathayom 3

Semester 1/2024-2025 Teacher Mark Hartman



Date	Contents	Comments/ Remarks
13 - 17 May	Using Context for Understanding using Unit 1, Section 1 focusing on Reading Skills	
20 - 24 May	Nonfinite Clauses using Unit 1 Section 2 focusing on the use of Structures	22 May Visakha Bucha
27-31 May	Exploring Inference using Unit 1 Section 4 focusing on Reading Skills	
3-7 June	Varying Sentence starts using Unit 1 Section 4 focusing on the use of Structures.	
10 – 14 June	Working in a Formal Register using Unit 1 Section 5 focusing on Writing skills	
17 – 21 June	Relative Clauses using Unit 1 Section 8 focusing on the use of Structures	
24 – 28 June	Adverbials for Comparison using Unit 1 Section 10 focusing the development of vocabulary	
1-5 July	Modal Verbs using Unit 2 Section 1 focusing on the development of vocabulary	
8-12 July	Adverbials for Emphasis and contrast using Unit 2 Section 4 focusing on the development of vocabulary	
15-19 July	The suffixes -ful and -ly using Unit 2 Section 6 focusing on the development of vocabulary	
22 – 26 July	Experimenting with Sentence Structure using Unit 2 Section 7 focusing on the use of Structures	
29 July- 2 August	Commas and Clauses using Unit 2 Section 8 focusing the Mechanics of punctuation	29 July King's Birthday
5 - 9 August	Writing in Informal Register using Unit 2 Section 9 focusing on Writing Skills	
12 – 16 August	Eliminating Errors using Unit 2 Section 10, focusing on Spelling accuracy	12 August Mother's Day
19 - 23 August	Spelling Strategies using Unit 3 Section 1, focusing on Spelling accuracy	
26 - 30 August	Tricky Terminology using Unit 3 Section 4 focusing on Spelling accuracy	
2-6 September	Nonfinite clauses using Unit 3 Section 8 focusing on the use of Structures	
9 -13 September	Synonyms to refer back to using Unit 3 Section 9 focusing on the development of vocabulary	
16 -20 September	Final Exam Week	