



Bangkok Christian College English Immersion Program

Course Scope for Core English Mathayom 5

Semester 1/2024-2025 Teacher Scott (Erick) Johnson



Date	Contents	Comments/ Remarks
13 - 17 May	Introduction to the Course Module 5: Travel and Tourism Springboard 1: Transport, Travel & Places to visit. Springboard 2: Places for Tourists	
20 - 24 May	Unit 1: Destinations	22 May Visakha Bucha
27-31 May	Unit 2: Travel	
3-7 June	Unit 3: Accommodation	
10 – 14 June	Unit 4: Responsible Tourism	
17 – 21 June	Unit 5: Advantages & Disadvantages of a Gap Year	
24 – 28 June	Unit 6: Planning a City Tour	
1-5 July	Project: Travel Pamphlet and Info Graphic	
8-12 July	Midterm	
15-19 July	Module 6: The Environment Springboard 1: Environmental Issues Springboard 2: The Natural Environment	
22 – 26 July	Unit 1: Sustainable Development Goals	
29 July- 2 August	Unit 2: Environmental Change	29 July King's Birthday
5 - 9 August	Unit 3: Green Projects	
12 – 16 August	Unit 4: Greenwashing	12 August Mother's Day
19 - 23 August	Unit 5: The Ocean Cleanup	
26 - 30 August	Unit 6: The Circular Economy	
2-6 September	Project: Green Project Pamphlet and Info Graphic	
9 -13 September	Review for Finals	
16 -20 September	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for Biology Mathayom 5

Semester 1/2024-2025 Teacher Rick Reinders



Date	Contents	Comments/ Remarks
13 - 17 May	Unit 1 Circulatory and Respiratory System. 45.1 the Human Body Plan Introduction Anatomy and Physiology Presentation, Worksheet + Project	
20 - 24 May	Student Presentations on Body Systems	
27-31 May	Unit 1 Circulatory and Respiratory System. 46.1 the Circulatory System	
3-7 June	Unit 1 Circulatory and Respiratory System. 46.1 the Circulatory System	
10 – 14 June	Heart dissection	
17 – 21 June	Unit 1 Circulatory and Respiratory System. 46.2 Blood	
24 – 28 June	Unit 1 Circulatory and Respiratory System. 46.2 Blood	
1-5 July	Unit 1 Circulatory and Respiratory System. 46.3 the Respiratory System	
8-12 July	Unit 2 The Body’s Defense Systems. 47.1 Nonspecific Defenses	
15-19 July	Unit 2 The Body’s Defense Systems. 47.21 Specific Defenses	
22 – 26 July	Unit 2 The Body’s Defense Systems. 47.3 HIV/AIDS	
29 July- 2 August	HIV/AIDS symposium	
5 - 9 August	Unit 3 Skeletal, Muscular, and Integumentary System. 45.2 Skeletal System	
12 – 16 August	Unit 3 Skeletal, Muscular, and Integumentary System. 45.3 Muscular System	
19 - 23 August	Unit 3 Skeletal, Muscular, and Integumentary System. 45.4 Integumentary System (Epidermis)	
26 - 30 August	Unit 3 Skeletal, Muscular, and Integumentary System. 45.4 Integumentary System (Dermis)	
2-6 September	Unit 3 Skeletal, Muscular, and Integumentary System. 45.4 Integumentary System (Hypodermis)	
9 -13 September	Problems with Integumentary system Project	
16 -20 September	Review week	
	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for Chemistry Mattayom 5

Semester 1/2024-2025 Teacher Sep Alamouti



Date	Contents	Comments/ Remarks
3 - 17 May	Topic 8: Energetics I (1–5)	
20 - 24 May	Topic 8: Energetics I (6–11)	
27 - 31 May	Topic 9: Kinetics I (1–9)	
3 - 7 June	Topic 10: Equilibrium I (1–4)	
10 - 14 June	Topic 11: Equilibrium II (1–4)	
17 - 21 June	Topic 11: Equilibrium II (1–4)	
24 - 28 June	Topic 12: Acid-base equilibria (1–8)	
1 - 5 July	Topic 12: Acid-base equilibria (9–15)	
8 - 12 July	Topic 12: Acid-base equilibria (16–24)	
15 - 19 July	Topic 13A: Lattice energy (1–11)	
22 - 26 July	Topic 13A: Lattice energy (1–11)	
29 July - 2 Aug	Topic 13B: Entropy (12–17)	
5 - 9 August	Topic 13B: Entropy (18–22)	
12 - 16 August	Topic 14: Redox II (1–6)	
19 - 23 August	Topic 14: Redox II (7–11)	
26 - 30 August	Topic 14: Redox II (12–17)	
2 - 6 September	Topic 14: Redox II (18–19)	
9 - 13 September	Semester Project Week	
16 - 20 September	Semester Review	
23 - 27 September	Final Examination	



Bangkok Christian College English Immersion Program
Course Scope for General Science Mathayom5
Semester 1/2024-2025 Teacher Steven Fournier



Date	Contents	Comments/ Remarks
13 - 17 May	Biology: Review: Ecology and the Environment. (163-195) Project 1: Give examples of where animals/plants have had extremely positive or extremely negative interactions with their environment.	
20 - 24 May	Biology: Variation and Selection. (197-210) Look at chromosomes, genes and dna. Look at mitosis and meiosis and how cells are made.	
27-31 May	Lab —Extracting DNA from a strawberry. Live class demo. Biology. Variation and Selection. (Genes and Inheritance) Genes and inheritance, passing of good and bad genes, natural selection evolution and selective breeding. (211-236)	
3-7 June	Review Units 4 and 5 and have Quiz 1 . Present Project 1 after quiz	
10 – 14 June	Physics: Solids, liquids and gases. Discuss density and pressure (pg 612-622) Worksheet 1	
17 – 21 June	Physics: (623-635) Solids, Liquids and gases. Energies involved in changed states as well as gas laws, $p_1v_1 = p_2v_2$, absolute zero, the kelvin scale. Students will be given concept questions based on aspects of density and pressure and asked to answer in presentation like format.	
24 – 28 June	Concept questions presentations. Review for Quiz 2	
1-5 July	Quiz 2 on Pressure. Prepare for Midterms based on Unit 4 and 5 in Biology and Unit 5 in Physics. Students have time to catch up on due work.	
8-12 July	Midterms	
15-19 July	Physics Unit 6: Magnetism and Electromagnetism. Pg 639-646. Investigating a magnetic field, creating a magnetic field. Explaining how a circuit breaker uses excessive energy to turn off a switch.	
22 – 26 July	Physics Unit 6: Page 646-655. Electric motors and induction, look at how a generator makes current.	28 Jul – King’s Birthday
29 July- 2 August	Quiz 3: on Unit 6. Presentation 1 of concept questions on Magnetism plus some orienteering fun (learning how to use a compass).	
5 - 9 August	Chemistry: Review Unit 1: Balancing Equations, calculating moles/g, relative mass. Calculations. 290-315.	
12 – 16 August	Worksheet 2. Stoichiometry. Figuring out how much reactant you need if given an amount of a sample. Quiz: Chemistry Test.	14 Aug – Queen’s Birthday
19 - 23 August	Chemistry: Ionic Bonding, Covalent Bonding 316-342.	
26 - 30 August	Chemistry: Acids and Bases, 386-397. Lab —making a natural indicator with red cabbage. Test 4: Chemistry	
2-6 September	Review Biology 4,5 and Chemistry 1. Project 4: Presentation of a chemical reaction in class with safety and explanation.	
9 -13 September	Review: Biology Units 4 and 5, Physics 5, 6 Chemistry 1 and acids and bases. Mock exams and time given to get students caught up.	
16 -20 September	Final Exam Week	



Bangkok Christian College English Immersion Program

Course Scope for Computer Studies Mattayom 5

Semester 1/2024-2025 Teacher James Cookson



Date	Contents	Comments/ Remarks
13 - 17 May	Python Programming Introduction	
20 - 24 May	Python - Variables	
27-31 May	Python – Basic Math	
3-7 June	Python – Data types	
10 – 14 June	Python – Strings/Inputs	
17 – 21 June	Python – If/Else	
24 – 28 June	Python – Arrays	
1-5 July	Python – Dictionaries	
8-12 July	Python – Midterm Exam	
15-19 July	Python - Functions	
22 – 26 July	Python – Functions 2	
29 July- 2 August	Python –For Loops	
5 - 9 August	Python – While Loops	
12 – 16 August	Python – Shop and Basket App	
19 - 23 August	Python – Shop and Basket App 2	
26 - 30 August	Python – Introduction to Group Final Project	
2-6 September	Python - Group Final Project	
9 -13 September	Python - Group Final Project	
16 -20 September	Python - Group Final Project	



Bangkok Christian College English Immersion Program
Course Scope for Mathematics Mathayom 5
Semester 1/2024-2025 Teacher Andrew Joslin



Date	Contents	Comments/ Remarks
13 - 17 May	Review 2023 Semester 2 Final Exam Review Chapter 6 Trigonometry Sine rule and Cosine rule Area of triangles	
20 - 24 May	Book 1 Pure Maths Chapter 7 Radians The Unit Circle Radian measure	
27-31 May	Book 1 Pure Maths Chapter 7 Radians Areas of Sectors and segments Arc length	
3-7 June	Book 1 Pure Maths Chapter 6 Trigonometry Graphs of Sine, Cosine and Tangent	
10 – 14 June	Book 1 Pure Maths Chapter 6 Trigonometry Review of transforming graphs and functions Transforming trigonometric graphs	
17 – 21 June	Book 1 Pure Maths Chapter 8 Differentiation First principles of differentiation Rules of differentiation	
24 – 28 June	Book 1 Pure Maths Chapter 8 Differentiation Gradients, tangents and normals Second order derivatives	
1-5 July	Book 1 Pure Maths Chapter 9 Integration Anti-differentiation Indefinite integration	
8-12 July	Book 2 Pure Maths Chapter 1 Algebraic Methods Algebraic fractions Dividing polynomials	
15-19 July	Book 2 Pure Maths Chapter 1 Algebraic Methods The factor theorem The remainder theorem	
22 – 26 July	Book 2 Pure Maths Chapter Algebraic Methods Mathematic proof	
29 July- 2 August	Book 2 Pure Maths Chapter 2 Coordinate Geometry Midpoints and perpendicular bisectors Equation of a circle	
5 - 9 August	Book 2 Pure Maths Chapter 2 Coordinate Geometry Straight lines and circles Tangent and chord properties Circles and triangles	
12 – 16 August	Book 2 Pure Maths Chapter 3 Exponentials and Logarithms Exponential functions Logarithms	
19 - 23 August	Book 2 Pure Maths Chapter 3 Exponentials and Logarithms Laws of logarithms Changing the base of a logarithm	
26 - 30 August	Book 2 Pure Maths Chapter 4 The Binomial Expansion Pascals triangle Factorial notation The binomial expansion	
2-6 September	Book 2 Pure Maths Chapter 4 The Binomial Expansion Solving Binomial problems Binomial Estimation	
9 -13 September	Review	
16 -20 September	Final Exam Week	



Bangkok Christian College English Immersion Program
Course Scope for PE Mathayom 5
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 	21 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 - Sex Ed 	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 <ul style="list-style-type: none"> ○ Uni Life ○ Essay 	
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 - Social Health 	
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 	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 - Drugs, PED, Alcohol, Cigarette 	
12-16 ug.	<ul style="list-style-type: none"> • Fitness Game - Never Have I Ever 	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 Physics Mathayom 5

Semester 1/2024-2025 Teacher Nicholas Barrett



Date	Contents	Comments/ Remarks
13 - 17 May	Experiment: Stress and Strain of a Spring	
20 - 24 May	Experiment: The period of a pendulum	
27-31 May	Experiment: The period of a mass-spring system	
3-7 June	Simple Harmonic Motion	
10 – 14 June	The motion graphs of bodies exhibiting $F = -kx$	
17 – 21 June	Free and forced oscillations and their real-life applications	
24 – 28 June	Resonance and damping	
1-5 July	Hooke's Law	
8-12 July	Stress, Strain, Elastic potential and how Forces affect material shape	
15-19 July	Turning effects of forces	
22 – 26 July	The principle of moments	
29 July- 2 August	The three conditions of equilibrium for static objects	
5 - 9 August	Test: Forces and static equilibrium	
12 – 16 August	Classical Wave Theory	
19 - 23 August	Phase difference and path difference of waves	
26 - 30 August	Wave interference	
2-6 September	Young's double-slit experiment	
9 -13 September	Experiment: Standing waves and harmonics	
16 -20 September	Final Exam	



Bangkok Christian College English Immersion Program
Course Scope for Project Science (Science and Tech) Mathayom 5
Semester 1/2024-2025 Teacher Steven Fournier



Date	Contents	Comments/ Remarks
13 - 17 May	Physic review of Units 1-4. Introduction into Unit 5: Solid, Liquids and gases. States of Matter (Chemistry_ 259-266) Project 1: Create a machine that uses pressure to perform a task. (3 weeks)	
20 - 24 May	Physics: Unit 5: Solids, liquids and gases. Pg 621-628. Density, pressure, and pressures at depths.	
27-31 May	Worksheet 1: Pressure. Physics: Unit 5: Finish 628 and do unit questions in groups	
3-7 June	Project 1: Presentation of pressure projects.	
10 – 14 June	Unit 5; Solids, Liquids, and Gases. Pg 629-637, Gas Laws, $p_1v_1=p_2v_2$, absolute zero. Kelvin scale Quiz 1: Pressure.	
17 – 21 June	Unit 5: Concept Questions + Presentations (groups of 2 max) based on pressure questions. Worksheet 2: Interview of individual students on Concept questions for an oral score	
24 – 28 June	Finish Unit 5 and do final Unit questions in class. Also some sample questions from past papers to test comprehension.	
1-5 July	Quiz 2: Pressure + Fluid dynamics (from concept questions). Review Unit 5	
8-12 July	Review + catch up on missing assignments. Council on grades + Midterms.	
15-19 July	Introductions of Fluids (via Teams) and look at situations of Pressure and states of change.	
22 – 26 July	External material on teams of Fluid (chapter 15) to States of change and (chapter 16) and Laws of Thermodynamics (Unit 17)	
29 July- 2 August	States of Change and Thermodynamics	
5 - 9 August	Project 2: Demonstrate examples of states of change in industry and explain their usefulness. (Groups up to 4 max)	
12 – 16 August	Laws of Thermodynamics, introduction to concepts and calculations. Worksheet 2	
19 - 23 August	Presentation 1: Concept Questions on Fluids, States of Change, and Laws of Thermodynamics. Students will be presented with a question and explain using presentation material and demonstrations if possible.	
26 - 30 August	Project 2 Demonstrations, live class presentations. Exhibit work done by pressure.	
2-6 September		
9 -13 September	Quiz 4: on Chapters of Fluids, States of Change, and Laws of Thermodynamics.	
16 -20 September	Review of Unit 5, Fluid dynamics, States of Change, Thermodynamics (from Walker) + Students finishing outstanding work and council on grades.	
16 -20 September	Final Exam Week	



Angkok Christian College English Immersion Program
Course Scope for Mathematics Mathayom 514 track 2
Semester 1/2024-2025 Teacher Andrew Joslin



Date	Contents	Comments/ Remarks
13 - 17 May	Review 2023 Semester 2 Final Exam Review Chapter 6 Trigonometry Sine rule and Cosine rule Area of triangles	
20 - 24 May	The Unit Circle Radian measure	
27-31 May	Areas of Sectors and segments Arc length	
3-7 June	Graphs of Sine, Cosine and Tangent	
10 – 14 June	Review of transforming graphs and functions Transforming trigonometric graphs	
17 – 21 June	First principles of differentiation Rules of differentiation	
24 – 28 June	Gradients, tangents and normals Second order derivatives	
1-5 July	Anti-differentiation Indefinite integration	
8-12 July	Algebraic fractions Dividing polynomials	
15-19 July	The factor theorem	
22 – 26 July	The remainder theorem	
29 July- 2 August	Midpoints and perpendicular bisectors Equation of a circle	
5 - 9 August	Straight lines and circles Tangent and chord properties Circles and triangles	
12 – 16 August	Exponential functions Logarithms	
19 - 23 August	Laws of logarithms Changing the base of a logarithm	
26 - 30 August	Pascals triangle Factorial notation The binomial expansion	
2-6 September	Solving Binomial problems Binomial Estimation	
9 -13 September	Review	
16 -20 September	Final Exam Week	