### **Course Scope for Southeast Asia 2 Mathayom 5**

### Semester 2/2024-2025 Teacher Andrew Hailstone

Date	Contents	Comments/ Remarks
20 -24 October	Cambodia	
27 October – 31 October	Cambodia	
3 - 7 November	Cambodia	
10 - 14 November	Cambodia	
17 - 21 November	Singapore	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Singapore	
8 – 12 December	Singapore	
15 – 19 December	Indonesia	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Indonesia	
12 – 16 January	Indonesia	
19 - 23 January	Indonesia	
26 – 30 January	Indonesia	
2 – 6 February	Indonesia	
9 – 13 February	Revision	
16 -20 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for AS Mathematics Mathayom 514

### Teacher Mark Street Semester 2/2025-2026

Date	Contents	Comments/ Remarks
20-24 Oct	Reading periodic graphs: identify midline (D), amplitude (A), and period from one full cycle; describe real examples (lighting cues, sales rhythms).	24 Oct - School Opens
27-31 Oct	Phase shift (C) informally: locate peak time from a graph/table and explain left/right shift in words; no algebraic solving.	
3 - 7 Nov	Sine ↔ Cosine equivalence by shift: match a graph to either sine or cosine form and justify choice; write a simple model using degrees.	
10-14 Nov	Build a rough model from key points: choose A, period, D from data; pick a reasonable C using a reference point (e.g., first peak).	
17-21 Nov	Check & improve a model: compare predicted vs observed values; adjust parameters and describe changes qualitatively.	
24-28 Nov	Vectors I: arrows and column vectors; magnitude and direction; add/subtract vectors in context (stage blocking, delivery paths).	
1-5 Dec	Vectors II: scale a vector; simple position vectors; midpoints and parallelism by vectors (interpretation more than proof).	5 Dec King's Birthday
8-12 Dec	Rates from graphs: estimate average/instantaneous rate from a graph; interpret positive/negative slope in context (ticket sales, cooling).	10 Dec Constitution Day
15-19 Dec	Power rule basics: differentiate $x^n$ (n integer $\geq 0$ ); find tangent gradient at a point; write the tangent line with values given.	
22-26 Dec	Increasing/decreasing & turning points (intro): use sign of f' from a graph/table to identify intervals and likely maxima/minima.	25-26 Dec- Christmas Holiday
29 Dec - 2 Jan	School calendar period — review, catch-up, and light practice as appropriate.	29 Dec – 2 Jan Christmas Holiday
5- 9 Jan	Antiderivatives: find $\int x^n dx$ ( $n\neq -1$ ) and recover $f(x)$ from $f'(x)$ with a given point; interpret +C.	
12-16 Jan	Definite integrals as area/total: evaluate simple definite integrals; area under a curve above the x-axis; rectangle/trapezium estimates.	16 Jan – Teacher's Day
19-23 Jan	Exponential growth/decay in everyday data: read parameters from graphs/tables; compare models; simple use of the log key to solve a^x=b.	
26-30 Jan	Key trig angles: 0°, 30°, 45°, 60°, 90°; calculator practice in degree mode; solve $\sin\theta = k$ or $\cos\theta = k$ on 0°–360° using graphs/unit circle facts.	
2-6 Feb	Interpreting semi-log ideas: compare straightening data by logs at a conceptual level; short write-up explaining model choice.	
9-13 Feb	Review for Final	
16-20 Feb	Final Exam Week	

Course Scope for Physical Education Mathayom 5 Semester 2/2025-2026 Teacher Benjamin Fishman

Date	Contents	Comments/ Remarks
25 October	Ice Breaker/What is a health goal?	School Starts
28 October – 1 November	Fitness Test  Burpees  40 yard dash  Max jump height	
4 - 8 November	Supplements 101  Creatine Caffeine and why it's bad but actually good Multi-Vitamin	
11 - 15 November	Football      Handling Drills     Defensive Drills     Live Games	
18 - 22 November	Basketball  Handling Drills Defensive Drills Live Games	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	<ul> <li>(Western) Boxing</li> <li>Why it's the safest but also the most dangerous</li> <li>How to wrap your wrists</li> <li>Other combat sports explained</li> </ul>	
9 – 13 December	Western Boxing Drills  Shadowboxing Footwork	
16 – 20 December	Western Boxing Drills  • Padwork	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	American Football  Rules & Strategies  7 on 7 games	
13 – 17 January	Football 2.0  • Handling Drills • Defensive Drills • Live Games	
20 - 24 January	Nutrition 101  Calculating Caloric Maintenance Safe Weight loss/gain Gaintaing and why it literally never works except for you	
27 – 31 January	Re-do Fitness Test	Results will be compared to the beginning of the semester
3 – 7 February	Capture the Flag	
10 – 14 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for English for Speech Mathayom 5

Date	Contents	Comments/ Remarks
20 -24 October	Review course outlines and classroom expectations	
27 October – 31 October	Unit 1: Advanced Persuasive Speaking Rhetorical appeals (ethos, pathos, logos) + practice mini-speeches.	
3 - 7 November	Unit 1: Advanced Persuasive Speaking Rhetorical devices (repetition, rhetorical questions, analogy).	
10 - 14 November	Unit 1: Advanced Persuasive Speaking Persuasive speeches on contemporary issues planning	
17 - 21 November	Unit 1: Advanced Persuasive Speaking Persuasive speeches on contemporary issues presentations	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Unit 2: Public Speaking for Different Contexts Ceremonial speeches (e.g., welcome, farewell, commemoration).	
8 – 12 December	Unit 2: Public Speaking for Different Contexts Professional speeches (e.g., pitch, motivational talk, workplace setting).	
15 – 19 December	Unit 2: Public Speaking for Different Contexts Entertainment & storytelling (TED-style talk, narrative delivery).	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 3: Model United Nations Introduction to MUN — rules of procedure, roles, sample debates.	
12 – 16 January	Unit 3: Model United Nations Research + Position Papers (each student represents a country).	
19 - 23 January	Unit 3: Model United Nations Drafting Resolutions + Formal Language Practice.	
26 – 30 January	Unit 3: Model United Nations Practice MUN Committee Session (guided with support).	
2 – 6 February	Unit 3: Model United Nations <b>Full MUN Simulation</b> (students debate global issue as delegates).	
9 – 13 February	Speech Final Exam	
16 -20 February	***Final Exams***	

### **Course Scope for English & Literature Mathayom 5**

Date	Contents	Comments/ Remarks
20 -24	Davier	
October	Review course outlines and classroom expectations	
27 October –	Pearson GCSE paper 1 mock exam	
31 October	Unit 5 - Macbeth Act 1	
3 - 7	Pearson GCSE paper 1 mock exam results and notes	
November	Unit 5 - Macbeth Act 2	
10 - 14	Pearson GCSE paper 2 mock exam	
November	Unit 5 - Macbeth Act 3	
17 - 21	Pearson GCSE paper 2 mock exam results and notes	
November	Unit 5 - Macbeth Act 4	
24 – 28	***Doorgon Evers Week**	
November	***Pearson Exams Week***	
1 – 5	Creative Adaptations - Introduction	
December	Unit 5 - Macbeth Act 5	
8 – 12	Creative Adaptations - Script Writing	
December	Unit 5 - Macbeth exam	
15 – 19	Creative Adaptations - Performance	
December	Macbeth movie	
22 – 26	***Christmas ceremonies, followed by the beginning of Christmas	
December	holiday on the 24 <sup>th</sup> **	
29 December	***Christmas Holiday***	
– 2 January	· · · Christinas Holiday · · ·	
5 – 9 January	Myths and Legends - Exploring World Myths Unit 6 - Letter from Birmingham Jail	
12 – 16	Myths and Legends - Archetypes and Themes	
January	Unit 6 - Letter from Birmingham Jail	
19 - 23 January	Myths and Legends - Modern Re-tellings Unit 6 - Revolution 2.0	
26 – 30	Myths and Legends - Writing Workshop	
January	Unit 6 - Letter to Viceroy, Lord Irwin	
2 – 6	Myths and Legends - Sharing and Publishing	
February	Unit 6 - No Other Land documentary	
9 – 13 February	Review for Finals	
16 -20 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for English for Multi-media Mathayom 5

Date	Contents	Comments/
Date	Contents	Remarks
20 -24 October	Review course outlines and classroom expectations	
27 October – 31 October	Unit 1: Early Film & Visual Comedy Slapstick Comedy – exaggerated gestures, physical gags (Charlie Chaplin, Buster Keaton)	
3 - 7 November	Unit 1: Early Film & Visual Comedy  Camera Tricks & Stunts – forced perspective, pratfalls, physical illusions  (Keaton's Sherlock Jr.)	
10 - 14 November	Unit 1: Early Film & Visual Comedy  Silent Storytelling – facial expressions, pantomime, title cards (The Kid)	
17 - 21 November	Unit 1: Early Film & Visual Comedy  Editing for Comedy – chase scenes, rhythm of cuts, repetition (short Chaplin chase sequences)	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Mini Project #1: 1-minute silent comedy video using slapstick + expressive acting	
8 – 12 December	Unit 2: Hollywood Classic Techniques  Continuity Editing (The 180° Rule) – shot/reverse shot, eye-line match	
15 – 19 December	Unit 2: Hollywood Classic Techniques  Montage – Soviet montage (Eisenstein), meaning through editing (Battleship  Potemkin)	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 2: Hollywood Classic Techniques  Lighting & Shadows – German Expressionism, Film Noir moods	
12 – 16 January	Unit 2: Hollywood Classic Techniques  Sound in Film – transition from silent to sound, using diegetic vs non-diegetic sound	
19 - 23 January	Unit 3: Modern Techniques  Cinematography Basics – framing, shot sizes, camera angles (close-up, long shot, POV)	
26 – 30 January	Unit 3: Modern Techniques  Genre Study: Horror, Thriller and Action Techniques	
2 – 6 February	Mini Project #2: Students pick a genre (thriller, horror, action) and replicate its techniques in a 1–2 minute clip showing continuity editing and intentional sound design.	
9 – 13 February 16 -20	Multi-Media Final exam  ***Final Exams***	
February	r mai Exams	

### Course Scope for Southeast Asia 2 Mathayom 5

### Semester 2/2024-2025 Teacher Andrew Hailstone

Date	Contents	Comments/ Remarks
20 -24 October	Cambodia	
27 October – 31 October	Cambodia	
3 - 7 November	Cambodia	
10 - 14 November	Cambodia	
17 - 21 November	Singapore	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Singapore	
8 – 12 December	Singapore	
15 – 19 December	Indonesia	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Indonesia	
12 – 16 January	Indonesia	
19 - 23 January	Indonesia	
26 – 30 January	Indonesia	
2 – 6 February	Indonesia	
9 – 13 February	Revision	
16 -20 February	***Final Exams***	

### Course Scope for Mathematics Mathayom 5 Track 1 Semester 2/2025-2026 Teacher Mark Street

Date	Contents	Comments/
Date	Contents	Remarks
20-24 Oct	Course introduction. Review modelling periodic phenomena with sine/cosine: amplitude (A), period (B), vertical shift (D); real-world periodic data (day/night, tides).	24 Oct - School Opens
27-31 Oct	Extend to horizontal (phase) shift C in A·sin(B(x + C))+D and A·cos(B(x + C))+D. Rewriting between sine/cosine forms; mixed exercises.	
3 - 7 Nov	Trigonometric identities & equations: angles in all four quadrants; exact values of common trigonometric ratios (30°, 45°, 60°).	
10-14 Nov	Core identities $(\tan\theta = \sin\theta/\cos\theta, \sin^2\theta + \cos^2\theta = 1)$ . Simple trigonometric equations of the form $\sin\theta = k$ , $\cos\theta = k$ , $\tan\theta = k$ ; solving in given intervals.	
17-21 Nov	Harder trigonometric equations; equations and identities; applications and modelling with trig equations; mixed practice.	
24-28 Nov	Vectors I: vectors in 2D; column vectors and arithmetic; representing vectors; magnitude and direction.	
1-5 Dec	Vectors II: position vectors; solving geometric problems; modelling with vectors.	5 Dec King's Birthday
8-12 Dec	Differentiation I: gradients of curves; first principles for x^n; using derivative to find tangents and normals; increasing/decreasing functions.	10 Dec Constitution Day
15-19 Dec	Differentiation II: second derivative; stationary points and their nature; sketching gradient functions; modelling with differentiation.	
22-26 Dec	Consolidation & mixed differentiation exercises; short project: interpret a rate-of-change graph from context.	25-26 Dec- Christmas Holiday
29 Dec - 2 Jan	Christmas Holiday — no classes.	29 Dec – 2 Jan Christmas Holiday
5- 9 Jan	Integration I: integrate $x^n$ ; indefinite integrals; finding functions given $f'(x)$ and a point on the curve.	
12-16 Jan	Integration II: definite integrals; areas under curves and the x-axis; areas between curves and straight lines.	16 Jan – Teacher's Day
19-23 Jan	Exponentials & logarithms I: exponential functions including y=a^x and y=e^x; transformations; exponential modelling.	
26-30 Jan	Exponentials & logarithms II: logarithms and laws of logarithms; solving equations using logarithms.	
2-6 Feb	Exponentials & logarithms III: natural logarithm; working with ln; logarithms in non-linear data; mixed exercise.	
9-13 Feb	Review for Final	
16-20 Feb	Final Exam Week	

Course Scope for AS Mathematics Mathayom 514 Semester 2/2025-2026 Teacher Mark Street

	Semester 2/2023-2020 Teacher Wark Street	Commental
Date	Contents	Comments/ Remarks
20-24 Oct	Reading periodic graphs: identify midline (D), amplitude (A), and period from one full cycle; describe real examples (lighting cues, sales rhythms).	24 Oct - School Opens
27-31 Oct	Phase shift (C) informally: locate peak time from a graph/table and explain left/right shift in words; no algebraic solving.	
3 - 7 Nov	Sine ↔ Cosine equivalence by shift: match a graph to either sine or cosine form and justify choice; write a simple model using degrees.	
10-14 Nov	Build a rough model from key points: choose A, period, D from data; pick a reasonable C using a reference point (e.g., first peak).	
17-21 Nov	Check & improve a model: compare predicted vs observed values; adjust parameters and describe changes qualitatively.	
24-28 Nov	Vectors I: arrows and column vectors; magnitude and direction; add/subtract vectors in context (stage blocking, delivery paths).	
1-5 Dec	Vectors II: scale a vector; simple position vectors; midpoints and parallelism by vectors (interpretation more than proof).	5 Dec King's Birthday
8-12 Dec	Rates from graphs: estimate average/instantaneous rate from a graph; interpret positive/negative slope in context (ticket sales, cooling).	10 Dec Constitution Day
15-19 Dec	Power rule basics: differentiate $x^n$ (n integer $\geq 0$ ); find tangent gradient at a point; write the tangent line with values given.	
22-26 Dec	Increasing/decreasing & turning points (intro): use sign of f' from a graph/table to identify intervals and likely maxima/minima.	25-26 Dec- Christmas Holiday
29 Dec - 2 Jan	School calendar period — review, catch-up, and light practice as appropriate.	29 Dec – 2 Jan Christmas Holiday
5- 9 Jan	Antiderivatives: find $\int x^n dx$ ( $n\neq -1$ ) and recover $f(x)$ from $f'(x)$ with a given point; interpret +C.	
12-16 Jan	Definite integrals as area/total: evaluate simple definite integrals; area under a curve above the x-axis; rectangle/trapezium estimates.	16 Jan – Teacher's Day
19-23 Jan	Exponential growth/decay in everyday data: read parameters from graphs/tables; compare models; simple use of the log key to solve a^x=b.	
26-30 Jan	Key trig angles: 0°, 30°, 45°, 60°, 90°; calculator practice in degree mode; solve $\sin\theta = k$ or $\cos\theta = k$ on 0°–360° using graphs/unit circle facts.	
2-6 Feb	Interpreting semi-log ideas: compare straightening data by logs at a conceptual level; short write-up explaining model choice.	
9-13 Feb	Review for Final	
16-20 Feb	Final Exam Week	

# Bangkok Christian College English Immersion Program Course Scope for General Science Mathayom 5

Semester 2/2025-2026 Teacher Steven Fournier

Date	Contents	Comments/ Remarks
24 October	Physics Unit 7: Radioactivity and Particles: (pg 657-669) Atoms and Radioactivity	Kemarks
27-31 October	Physics Unit 7: Radioactivity and Particles (pg 669-677) Radiation and Half-life. Worksheet 1: Half life.	
3 - 7 November	Physics Unit 7: Radioactivity and Particles: (pg 677-694) Applications of Radioactivity and Fission/Fusion Quiz 1: Online. (657-694)	
10 - 14 November	One period for research, then Lab: Debate: Should Thailand invest in Nuclear energy. Points for and against with 4 teams: (For (current tech), Against (current tech), For (future tech [fusion, microfission], Against (future tech [fusion, microfission])	
17 - 21 November	Debate continued if needed, Review + Test 1 (Radioactivity and Particles).	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Biology Review: Units 1-4. Animal Physiology, Plant Physiology, Ecology	
8 – 12 December	Biology Review: Units 5/6 DNA and Microorganisms. Lab: Making Sauerkraut/Kimchi.	
15 – 19 December	Testing Sauerkraut/Kimchi Test 2: Biology Test Optional Activity: Planting seeds.	
22 – 26 December	Finish up work, present Lab results, review Term 2 part 1 Christmas Party.	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Chemistry Unit 2: Alkali Metals, Halogens, and Gases in the Atmosphere (345-358). Acids and Bases. (386-398)	
12 – 16 January	Chemistry Lab: Red Cabbage indicator. Quiz 2: Online Quiz on Chemistry.	
19 - 23 January	Test 2: Demonstration Test. Testing for pH. Worksheet 2 on chemical changes of acids and bases. Test 3	
26 – 30 January	Physics 8: Astrophysics. Introduction, looking at orbits, debating the need for space.  Worksheet: Opinion on the future of space.	
2 – 6 February	Physics 8: Astrophysics: Motion of the Universe. Pg 695-701. Calculating orbits, looking at satalites.	
9 – 13 February	Physics Unit 8: Astrophysics: Stellar formation. Look at stages of a star, planets, stars, galaxies, and universe Test 4 + Review for exam.	
16 - 19 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for Physics Mathayom 5 Semester 2/2025-2026 Teacher Nicholas Barrett

Date	Contents	Comments/ Remarks
24 October	Introduction to Semester Two	
27-31 October	The Fundamentals and Conservation of Electric Charge	
3 - 7 November	The Triboelectric Effect and Polarisation	
10 - 14 November	Coulomb's Law and Electrostatic Forces	
17 - 21 November	Electric Fields	
24 – 28 November	Insulation and Semiconducting Properties	
1 – 5 December	Electrostatics Lab	
8 – 12 December	Electric Current in Parallel and Series Circuits	
15 – 19 December	Potential Difference, Resistance and Ohm's Law	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Resistivity	
12 – 16 January	Further Characteristics of Electrical Circuits (Internal Resistance, Thermistors, LDR's and more)	
19 - 23 January	The Potential Divider	
26 – 30 January	Electricity: Project	
2 – 6 February	Electrical Work, Power, and Graphical interpretations of components in circuits	
9 – 13 February	Unit Test: Electrostatics and Electricity	
16 - 19 February	***Final Exams***	

### Bangkok Christian College English Immersion Program Course Scope for Physics (Science and Technology) Mathayom 5 Semester 2/2025-2026 Teacher Steven Fournier

Data	Contacts	Comments/
Date	Contents	Remarks
24 October	IGSCE: Unit 7: Radioactivity and Particles. Chapter 1 Atoms and Radioactivity. History/units/ pg 657-668	
27-31 October	IGSCE: Unit 7: Radioactivity and Particles. Chapter 2. Radiation and Half- Life. 669-677	
3 - 7 November	Worksheets on Alpha, Beta and Gamma decay (2 worksheets) + halflife worksheets (1). Prepare for Test.	
10 - 14 November	Test 1. Radioactivity and Particles: decay, halflife, and atomic structure.  Project 1: How does a nuclear reactor work?	
17 - 21 November	IGSCE: Unit 7: Applications of Radioactivity. Look at a cyclotron used for making radioactive tracers. Pg 677-686	
24 – 28 November	***Pearson Exams Week*** or Project Presentions	
1 – 5 December	IGSCE: Unit 7: Fission and Fusion. Review of all chapters	
8 – 12 December	Test 2 on all chapters, plus research time for debate: Is Thailand ready for Nuclear Power? Why or Why not Build evidence and avoid bias.	
15 – 19 December	Debate: Is Thailand ready for Nuclear Power? Why or why not? Forum discussion. (Speaking Assessment) Project 2.	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 8: IGSCE Astrophysics. Talk about how old cultures looked at the sky.  Project 3 Create a poster of a space story/catastrophe. Pg 259-265	
12 – 16 January	Unit 8: IGSCE Astrophysics: Gravity, calculations and 4 fundamental forces.  Stellar evolution. Pg 265-271	
19 - 23 January	Review of topics and worksheets on gravity. Worksheet 2	
26 – 30 January	IGCSE: Unit 8: Cosmology, 271-274. Big bang.	
2 – 6 February	Project 3 due, Test 3 on GCSE chapters + feedback on scores	
9 – 13 February	Mock Final Exam(Test 4) on Units 5,6,7,8: Feedback on scores, wait for missing work/worksheet.	
16 - 19 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for Biology Mathayom 5 Semester 2/2025-2026 Teacher Rick Reinders

Date	Contents	Comments/ Remarks
24 October	Unit 4 – Ecology and the Environment Energy Flow in Ecosystems Food Chains and Food Webs	
27-31 October	Trophic Levels and Pyramids of Number, Biomass, and Energy	
3 - 7 November	The Carbon Cycle	
10 - 14 November	The Nitrogen Cycle	
17 - 21 November	The Water Cycle	
24 – 28 November	Unit 5 – Human Influence on the Environment Human Population Growth and Its Consequences	
1 – 5 December	Pollution of Air (Carbon Dioxide and Sulfur Dioxide)	
8 – 12 December	Pollution of Water (Chemical Waste, Fertilisers, Untreated Sewage)	
15 – 19 December	Pollution by Non-biodegradable Plastics	
22 – 26 December	Greenhouse Gases and the Enhanced Greenhouse Effect	
29 December – 2 January	Deforestation and Its Effects Conservation of Habitats and Specie	
5 – 9 January	Unit 6 – Biological Resources Agricultural Practices and Crop Production	
12 – 16 January	Fertilisers and the Need for Mineral Ions Pest Control (Chemical and Biological)	
19 - 23 January	Selective Breeding in Plants and Animals	
26 – 30 January	***Christmas Holiday***	
2 – 6 February	Genetic Engineering and Biotechnology Fish Farming and Sustainable Food Production	
9 – 13 February	Microorganisms in Biotechnology (Fermentation, Antibiotics, Enzymes)	
16 - 19 February	***Final Exams***	

## Bangkok Christian College English Immersion Program Course Scope for Chemistry Mathayom 5

Semester 2/2025-2026 Teacher Senehr Massoumi Alamouti

Semester 2/2025-2026 Teacher Sepehr Massoumi Alamouti Comments/			
Date	Contents	Remarks	
24 October	Introduction	Content and Assessment:  Course scope review Reviewing the objective checklist Setting goals activity	
27-31 October	Energetics  know that chemical reactions in which heat energy is given out are described as exothermic, and those in which heat energy is taken in are described asendothermic	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions	
10 - 14 November	$\label{eq:combined} \textbf{Energetics}$ $\label{eq:combined} \textbf{Describe} \mbox{ simple calorimetry experiments for reactions such as combustion, displacement, dissolving and neutralisation}$ $\mbox{ Calculate the heat energy change from a measured temperature change using the expression $Q = mc\Delta T$}$	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions	
10 - 14 November	draw and explain energy level diagrams to represent exothermic and endothermic reactions  know that bond-breaking is an endothermic process and that bond-making is an exothermic process  use bond energies to calculate the enthalpy change during a chemical reaction	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions	
17 - 21 November	Energetics  practical: investigate temperature changes accompanying some of the following types of change: • salts dissolving in water • neutralisation reactions • displacement reactions • combustion reactions.	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions	

24 – 28 November 1 – 5 December	Kinetics  Kinetics  Kinetics  describe experiments to investigate the effects of changes in surface area of a solid, concentration of a solution, temperature and the use of a catalyst on the rate of a reaction  describe the effects of changes in surface area of a solid, concentration of a solution, pressure of a gas, temperature and the use of a catalyst on the rate of a reaction	Content and Assessment: IGCSE Chemistry Student Textbook:  Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook:  Lab Book: Pages N/A Formative Assessments:  Exam Style Questions  Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:
	explain the effects of changes in surface area of a solid, concentration of a solution, pressure of a gas and temperature on the rate of a reaction in terms of particle collision theory	Exam Style Questions
8 – 12 December	Kinetics  know that a catalyst is a substance that increases the rate of a reaction, but is chemically unchanged at the end of the reaction  know that a catalyst works by providing an alternative pathway with lower activation energy	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:
	$\mbox{\bf draw}$ and explain reaction profile diagrams showing $\Delta H$ and activation energy	Exam Style Questions
15 – 19 December	Kinetics  practical: investigate the effect of changing the surface area of marble chips and of changing the concentration of hydrochloric acid on the rate of reaction between marble chips and dilute hydrochloric acid  practical: investigate the effect of different solids on the catalytic decomposition of hydrogen peroxide solution"	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
22 – 26 December	Kinetics Unit Test 2 Unit Test Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239) Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
29 December – 2 January	***Christmas Holiday***	

5 – 9 January	Dynamic Equilibrium  know that some reactions are reversible and this is indicated by the symbol ≠ in equations	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
12 – 16 January	Dynamic Equilibrium  describe reversible reactions such as the dehydration of hydrated copper(II) sulfate and the effect of heat on ammonium chloride	Content and Assessment: IGCSE Chemistry Student Textbook: 240-247 Required Problems: 1-3 (Pages 246-247) Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
19 - 23 January	Dynamic Equilibrium  know that a reversible reaction can reach dynamic equilibrium in a sealed container	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
26 – 30 January		Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
2 – 6 February	Dynamic Equilibrium  Unit Test 3  Unit Test Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)
9 – 13 February	Semester Project Due Final Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 248-253 Required Problems: 1-7 (Pages 248-253)  Reviewing the content from unit test 1, 2 & 3  Unit test 1&2: 20% Unit Test 3: 80%
16 - 19 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for Computer Mathayom 5 Semester 2/2025-2026 Teacher James Cookson

Date	Contents	Comments/ Remarks
24 October	Introduction to JavaScript (JS) Programming	
27-31 October	JS – Variables	
3 - 7 November	JS - Datatypes	
10 - 14 November	JS- Conditional Statements	
17 - 21 November	JS – While Loops	
24 – 28 November	JS – For Loops	
1 – 5 December	JS – Data Structures - Arrays	
8 – 12 December	JS – Data Structures – Array Methods	
15 – 19 December	JS – Data Structures - Dictionaries	
22 – 26 December	JS – Midterm Assessment	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	JS – Functions 1	
12 – 16 January	JS – Functions 2	
19 - 23 January	JS – Data Structures - Objects	
26 – 30 January	JS – DOM interaction 1	
2 – 6 February	JS – DOM interaction 2	
9 – 13 February	JS – Final Assessment	
16 - 19 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for Physical Education Mathayom 5

Semester 2/2025-2026 Teacher Benjamin Fishman

Date	Contents	Comments/ Remarks
25 October	Ice Breaker/What is a health goal?	School Starts
28 October – 1 November	Fitness Test  Burpees  40 yard dash  Max jump height	
4 - 8 November	Supplements 101  Creatine Caffeine and why it's bad but actually good Multi-Vitamin	
11 - 15 November	Football  Handling Drills Defensive Drills Live Games	
18 - 22 November	Basketball      Handling Drills     Defensive Drills     Live Games	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	<ul> <li>(Western) Boxing</li> <li>Why it's the safest but also the most dangerous</li> <li>How to wrap your wrists</li> <li>Other combat sports explained</li> </ul>	
9 – 13 December	Western Boxing Drills  Shadowboxing Footwork	
16 – 20 December	Western Boxing Drills  ● Padwork	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	American Football  Rules & Strategies  7 on 7 games	
13 – 17 January	Football 2.0  Handling Drills Defensive Drills Live Games	
20 - 24 January	Nutrition 101  Calculating Caloric Maintenance Safe Weight loss/gain Gaintaing and why it literally never works except for you	
27 – 31 January	Re-do Fitness Test  Burpees  40 yard dash  Max jump height	Results will be compared to the beginning of the semester
3 – 7 February	Capture the Flag	
10 – 14 February	***Final Exams***	

## Course Scope for Mathematics Mathayom 5 Track 1 Semester 2/2025-2026 Teacher Mark Street

Date	Contents	Comments/
		Remarks
20-24 Oct	Course introduction. Review modelling periodic phenomena with sine/cosine: amplitude (A), period (B), vertical shift (D); real-world periodic data (day/night, tides).	24 Oct - School Opens
27-31 Oct	Extend to horizontal (phase) shift C in A·sin(B(x + C))+D and A·cos(B(x + C))+D. Rewriting between sine/cosine forms; mixed exercises.	
3 - 7 Nov	Trigonometric identities & equations: angles in all four quadrants; exact values of common trigonometric ratios (30°, 45°, 60°).	
10-14 Nov	Core identities $(\tan\theta = \sin\theta/\cos\theta, \sin^2\theta + \cos^2\theta = 1)$ . Simple trigonometric equations of the form $\sin\theta = k$ , $\cos\theta = k$ , $\tan\theta = k$ ; solving in given intervals.	
17-21 Nov	Harder trigonometric equations; equations and identities; applications and modelling with trig equations; mixed practice.	
24-28 Nov	Vectors I: vectors in 2D; column vectors and arithmetic; representing vectors; magnitude and direction.	
1-5 Dec	Vectors II: position vectors; solving geometric problems; modelling with vectors.	5 Dec King's Birthday
8-12 Dec	Differentiation I: gradients of curves; first principles for x^n; using derivative to find tangents and normals; increasing/decreasing functions.	10 Dec Constitution Day
15-19 Dec	Differentiation II: second derivative; stationary points and their nature; sketching gradient functions; modelling with differentiation.	
22-26 Dec	Consolidation & mixed differentiation exercises; short project: interpret a rate-of-change graph from context.	25-26 Dec- Christmas Holiday
29 Dec - 2 Jan	Christmas Holiday — no classes.	29 Dec – 2 Jan Christmas Holiday
5- 9 Jan	Integration I: integrate $x^n$ ; indefinite integrals; finding functions given $f'(x)$ and a point on the curve.	
12-16 Jan	Integration II: definite integrals; areas under curves and the x-axis; areas between curves and straight lines.	16 Jan – Teacher's Day
19-23 Jan	Exponentials & logarithms I: exponential functions including y=a^x and y=e^x; transformations; exponential modelling.	
26-30 Jan	Exponentials & logarithms II: logarithms and laws of logarithms; solving equations using logarithms.	
2-6 Feb	Exponentials & logarithms III: natural logarithm; working with ln; logarithms in non-linear data; mixed exercise.	
9-13 Feb	Review for Final	
16-20 Feb	Final Exam Week	

### Bangkok Christian College English Immersion Program Course Scope for Physics (Science and Technology) Mathayom 5 Semester 2/2025-2026 Teacher Steven Fournier

Date	Contents	Comments/
Dute		Remarks
24 October	IGSCE: Unit 7: Radioactivity and Particles. Chapter 1 Atoms and Radioactivity. History/units/ pg 657-668	
27-31 October	IGSCE: Unit 7: Radioactivity and Particles. Chapter 2. Radiation and Half- Life. 669-677	
3 - 7 November	Worksheets on Alpha, Beta and Gamma decay (2 worksheets) + halflife worksheets (1). Prepare for Test.	
10 - 14 November	Test 1. Radioactivity and Particles: decay, halflife, and atomic structure.  Project 1: How does a nuclear reactor work?	
17 - 21 November	IGSCE: Unit 7: Applications of Radioactivity. Look at a cyclotron used for making radioactive tracers. Pg 677-686	
24 – 28 November	***Pearson Exams Week*** or Project Presentions	
1 – 5 December	IGSCE: Unit 7: Fission and Fusion. Review of all chapters	
8 – 12 December	Test 2 on all chapters, plus research time for debate: Is Thailand ready for Nuclear Power? Why or Why not Build evidence and avoid bias.	
15 – 19 December	Debate: Is Thailand ready for Nuclear Power? Why or why not? Forum discussion. (Speaking Assessment) Project 2.	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 8: IGSCE Astrophysics. Talk about how old cultures looked at the sky. Project 3 Create a poster of a space story/catastrophe. Pg 259-265	
12 – 16 January	Unit 8: IGSCE Astrophysics: Gravity, calculations and 4 fundamental forces.  Stellar evolution. Pg 265-271	
19 - 23 January	Review of topics and worksheets on gravity. Worksheet 2	
26 – 30 January	IGCSE: Unit 8: Cosmology, 271-274. Big bang.	
2 – 6 February	Project 3 due, Test 3 on GCSE chapters + feedback on scores	
9 – 13 February	Mock Final Exam(Test 4) on Units 5,6,7,8: Feedback on scores, wait for missing work/worksheet.	
16 - 19 February	***Final Exams***	

### **Course Scope for English & Literature Mathayom 5**

Date	Contents	Comments/ Remarks
20 -24 October	Review course outlines and classroom expectations	
27 October – 31 October	Pearson GCSE paper 1 mock exam Unit 5 - Macbeth Act 1	
3 - 7 November	Pearson GCSE paper 1 mock exam results and notes Unit 5 - Macbeth Act 2	
10 - 14 November	Pearson GCSE paper 2 mock exam Unit 5 - Macbeth Act 3	
17 - 21 November	Pearson GCSE paper 2 mock exam results and notes Unit 5 - Macbeth Act 4	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Creative Adaptations - Introduction Unit 5 - Macbeth Act 5	
8 – 12 December	Creative Adaptations - Script Writing Unit 5 - Macbeth exam	
15 – 19 December	Creative Adaptations - Performance  Macbeth movie	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Myths and Legends - Exploring World Myths Unit 6 - Letter from Birmingham Jail	
12 – 16 January	Myths and Legends - Archetypes and Themes Unit 6 - Letter from Birmingham Jail	
19 - 23 January	Myths and Legends - Modern Re-tellings Unit 6 - Revolution 2.0	
26 – 30 January	Myths and Legends - Writing Workshop Unit 6 - Letter to Viceroy, Lord Irwin	
2 – 6 February	Myths and Legends - Sharing and Publishing Unit 6 - No Other Land documentary	
9 – 13 February	Review for Finals	
16 -20 February	***Final Exams***	

### Course Scope for Physics Mathayom 5 Semester 2/2025-2026 Teacher Nicholas Barrett

Date	Contents	Comments/ Remarks
24 October	Introduction to Semester Two	
27-31 October	The Fundamentals and Conservation of Electric Charge	
3 - 7 November	The Triboelectric Effect and Polarisation	
10 - 14 November	Coulomb's Law and Electrostatic Forces	
17 - 21 November	Electric Fields	
24 – 28 November	Insulation and Semiconducting Properties	
1 – 5 December	Electrostatics Lab	
8 – 12 December	Electric Current in Parallel and Series Circuits	
15 – 19 December	Potential Difference, Resistance and Ohm's Law	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Resistivity	
12 – 16 January	Further Characteristics of Electrical Circuits (Internal Resistance, Thermistors, LDR's and more)	
19 - 23 January	The Potential Divider	
26 – 30 January	Electricity: Project	
2 – 6 February	Electrical Work, Power, and Graphical interpretations of components in circuits	
9 – 13 February	Unit Test: Electrostatics and Electricity	
16 - 19 February	***Final Exams***	

### Course Scope for Computer Mathayom 5 Semester 2/2025-2026 Teacher James Cookson

Date	Contents	Comments/
Date	Contents	Remarks
24 October	Introduction to JavaScript (JS) Programming	
27-31 October	JS – Variables	
3 - 7 November	JS - Datatypes	
10 - 14 November	JS- Conditional Statements	
17 - 21 November	JS – While Loops	
24 – 28 November	JS – For Loops	
1 – 5 December	JS – Data Structures - Arrays	
8 – 12 December	JS – Data Structures – Array Methods	
15 – 19 December	JS – Data Structures - Dictionaries	
22 – 26 December	JS – Midterm Assessment	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	JS – Functions 1	
12 – 16 January	JS – Functions 2	
19 - 23 January	JS – Data Structures - Objects	
26 – 30 January	JS – DOM interaction 1	
2 – 6 February	JS – DOM interaction 2	
9 – 13 February	JS – Final Assessment	
16 - 19 February	***Final Exams***	

### Course Scope for English for Multi-media Mathayom 5 Semester 2/2025-2026 Teacher Drew Schwarzer

Date	Contents	Comments/
	Contents	Remarks
20 -24 October	Review course outlines and classroom expectations	
27 October – 31 October	Unit 1: Early Film & Visual Comedy  Slapstick Comedy – exaggerated gestures, physical gags (Charlie Chaplin,  Buster Keaton)	
3 - 7 November	Unit 1: Early Film & Visual Comedy  Camera Tricks & Stunts – forced perspective, pratfalls, physical illusions  (Keaton's Sherlock Jr.)	
10 - 14 November	Unit 1: Early Film & Visual Comedy Silent Storytelling – facial expressions, pantomime, title cards ( <i>The Kid</i> )	
17 - 21 November	Unit 1: Early Film & Visual Comedy  Editing for Comedy – chase scenes, rhythm of cuts, repetition (short Chaplin chase sequences)	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Mini Project #1: 1-minute silent comedy video using slapstick + expressive acting	
8 – 12 December	Unit 2: Hollywood Classic Techniques  Continuity Editing (The 180° Rule) – shot/reverse shot, eye-line match	
15 – 19 December	Unit 2: Hollywood Classic Techniques  Montage – Soviet montage (Eisenstein), meaning through editing (Battleship  Potemkin)	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 2: Hollywood Classic Techniques  Lighting & Shadows – German Expressionism, Film Noir moods	
12 – 16 January	Unit 2: Hollywood Classic Techniques  Sound in Film – transition from silent to sound, using diegetic vs non-diegetic sound	
19 - 23 January	Unit 3: Modern Techniques  Cinematography Basics – framing, shot sizes, camera angles (close-up, long shot, POV)	
26 – 30 January	Unit 3: Modern Techniques Genre Study: Horror, Thriller and Action Techniques	
2 – 6 February	Mini Project #2: Students pick a genre (thriller, horror, action) and replicate its techniques in a 1–2 minute clip showing continuity editing and intentional sound design.	
9 – 13 February 16 -20	Multi-Media Final exam	
February	***Final Exams***	

### Course Scope for Biology Mathayom 5 Semester 2/2025-2026 Teacher Rick Reinders

Date	Contents	Comments/
	Unit 4 – Ecology and the Environment	Remarks
24 October	Energy Flow in Ecosystems	
	Food Chains and Food Webs	
27-31 October	Trophic Levels and Pyramids of Number, Biomass, and Energy	
3 - 7 November	The Carbon Cycle	
10 - 14 November	The Nitrogen Cycle	
17 - 21 November	The Water Cycle	
24 – 28 November	Unit 5 – Human Influence on the Environment Human Population Growth and Its Consequences	
1 – 5 December	Pollution of Air (Carbon Dioxide and Sulfur Dioxide)	
8 – 12 December	Pollution of Water (Chemical Waste, Fertilisers, Untreated Sewage)	
15 – 19 December	Pollution by Non-biodegradable Plastics	
22 – 26 December	Greenhouse Gases and the Enhanced Greenhouse Effect	
29 December – 2 January	Deforestation and Its Effects Conservation of Habitats and Specie	
5 – 9 January	Unit 6 – Biological Resources Agricultural Practices and Crop Production	
12 – 16 January	Fertilisers and the Need for Mineral Ions Pest Control (Chemical and Biological)	
19 - 23 January	Selective Breeding in Plants and Animals	
26 – 30 January	***Christmas Holiday***	
2 – 6 February	Genetic Engineering and Biotechnology Fish Farming and Sustainable Food Production	
9 – 13 February	Microorganisms in Biotechnology (Fermentation, Antibiotics, Enzymes)	
16 - 19 February	***Final Exams***	

# Bangkok Christian College English Immersion Program Course Scope for Chemistry Mathayom 5 Semester 2/2025-2026 Teacher Sepehr Massoumi Alamouti

Comments/		
Date	Contents	Remarks
24 October	Introduction	Content and Assessment:  Course scope review Reviewing the objective checklist Setting goals activity
27-31 October	Energetics  know that chemical reactions in which heat energy is given out are described as exothermic, and those in which heat energy is taken in are described asendothermic	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
10 - 14 November	$\label{eq:comb} \textbf{Energetics}$ $\label{eq:combustion} \textbf{Describe} \mbox{ simple calorimetry experiments for reactions such as combustion, displacement, dissolving and neutralisation}$ $\mbox{ Calculate the heat energy change from a measured temperature change using the expression $Q = mc\Delta T$}$	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
10 - 14 November	draw and explain energy level diagrams to represent exothermic and endothermic reactions  know that bond-breaking is an endothermic process and that bond-making is an exothermic process  use bond energies to calculate the enthalpy change during a chemical reaction	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226) Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
17 - 21 November	Energetics  practical: investigate temperature changes accompanying some of the following types of change:	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 207-226 Required Problems: 1-8 (Pages 224-226) Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions

	Energetics	Content and Assessment: IGCSE Chemistry Student Textbook:
24 – 28 November	Unit Test Unit Test 1 Review	Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook:  Lab Book: Pages N/A Formative Assessments:
		Exam Style Questions
1 – 5 December	Kinetics  describe experiments to investigate the effects of changes in surface area of a solid, concentration of a solution, temperature and the use of a catalyst on the rate of a reaction  describe the effects of changes in surface area of a solid, concentration of a solution, pressure of a gas, temperature and the use of a catalyst on the rate of a reaction  explain the effects of changes in surface area of a solid, concentration of a solution, pressure of a gas and temperature on the rate of a reaction in terms of particle collision theory	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
8 – 12 December	Kinetics  know that a catalyst is a substance that increases the rate of a reaction, but is chemically unchanged at the end of the reaction  know that a catalyst works by providing an alternative pathway with lower activation energy  draw and explain reaction profile diagrams showing ΔH and activation energy	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
15 – 19 December	Kinetics  practical: investigate the effect of changing the surface area of marble chips and of changing the concentration of hydrochloric acid on the rate of reaction between marble chips and dilute hydrochloric acid  practical: investigate the effect of different solids on the catalytic decomposition of hydrogen peroxide solution"	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239) Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
22 – 26 December	Kinetics  Unit Test 2  Unit Test Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 227-239 Required Problems: 1-3 (Pages 238-239)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
29 December – 2 January	***Christmas Holiday***	

5 – 9 January	Dynamic Equilibrium  know that some reactions are reversible and this is indicated by the symbol   in equations	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
12 – 16 January	Dynamic Equilibrium  describe reversible reactions such as the dehydration of hydrated copper(II) sulfate and the effect of heat on ammonium chloride	Content and Assessment: IGCSE Chemistry Student Textbook: 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:
19 - 23 January	Dynamic Equilibrium  know that a reversible reaction can reach dynamic equilibrium in a sealed container	Exam Style Questions  Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
26 – 30 January		Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)  Revision Textbook: Lab Book: Pages N/A Formative Assessments:  Exam Style Questions
2 – 6 February	Dynamic Equilibrium  Unit Test 3  Unit Test Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 240-247 Required Problems: 1-3 (Pages 246-247)
9 – 13 February	Semester Project Due Final Review	Content and Assessment: IGCSE Chemistry Student Textbook: Pages 248-253 Required Problems: 1-7 (Pages 248-253)  Reviewing the content from unit test 1, 2 & 3  Unit test 1&2: 20% Unit Test 3: 80%
16 - 19 February	***Final Exams***	

### Course Scope for General Science Mathayom 5 Semester 2/2025-2026 Teacher Steven Fournier

Date Contents		Comments/
Date	Contents	Remarks
24 October	Physics Unit 7: Radioactivity and Particles: (pg 657-669) Atoms and Radioactivity	
27-31 October	Physics Unit 7: Radioactivity and Particles (pg 669-677) Radiation and Half-life. Worksheet 1: Half life.	
3 - 7 November	Physics Unit 7: Radioactivity and Particles: (pg 677-694) Applications of Radioactivity and Fission/Fusion Quiz 1: Online. (657-694)	
10 - 14 November	One period for research, then Lab: Debate: Should Thailand invest in Nuclear energy. Points for and against with 4 teams: (For (current tech), Against (current tech), For (future tech [fusion, microfission], Against (future tech [fusion, microfission])	
17 - 21 November	Debate continued if needed, Review + Test 1 (Radioactivity and Particles).	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Biology Review: Units 1-4. Animal Physiology, Plant Physiology, Ecology	
8 – 12 December	Biology Review: Units 5/6 DNA and Microorganisms. Lab: Making Sauerkraut/Kimchi.	
15 – 19 December	Testing Sauerkraut/Kimchi Test 2: Biology Test Optional Activity: Planting seeds.	
22 – 26 December	Finish up work, present Lab results, review Term 2 part 1 Christmas Party.	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Chemistry Unit 2: Alkali Metals, Halogens, and Gases in the Atmosphere (345-358). Acids and Bases. (386-398)	
12 – 16 January	Chemistry Lab: Red Cabbage indicator. Quiz 2: Online Quiz on Chemistry.	
19 - 23 January	Test 2: Demonstration Test. Testing for pH. Worksheet 2 on chemical changes of acids and bases. Test 3	
26 – 30 January	Physics 8: Astrophysics. Introduction, looking at orbits, debating the need for space.  Worksheet: Opinion on the future of space.	
2 – 6 February	Physics 8: Astrophysics: Motion of the Universe. Pg 695-701. Calculating orbits, looking at satalites.	
9 – 13 February	Physics Unit 8: Astrophysics: Stellar formation. Look at stages of a star, planets, stars, galaxies, and universe Test 4 + Review for exam.	
16 - 19 February	***Final Exams***	

### Course Scope for English for Speech Mathayom 5 Semester 2/2025-2026 Teacher Drew Schwarzer

Date	Contents	Comments/ Remarks
20 -24 October	Review course outlines and classroom expectations	
27 October – 31 October	Unit 1: Advanced Persuasive Speaking Rhetorical appeals (ethos, pathos, logos) + practice mini-speeches.	
3 - 7 November	Unit 1: Advanced Persuasive Speaking Rhetorical devices (repetition, rhetorical questions, analogy).	
10 - 14 November	Unit 1: Advanced Persuasive Speaking Persuasive speeches on contemporary issues planning	
17 - 21 November	Unit 1: Advanced Persuasive Speaking Persuasive speeches on contemporary issues presentations	
24 – 28 November	***Pearson Exams Week***	
1 – 5 December	Unit 2: Public Speaking for Different Contexts Ceremonial speeches (e.g., welcome, farewell, commemoration).	
8 – 12 December	Unit 2: Public Speaking for Different Contexts Professional speeches (e.g., pitch, motivational talk, workplace setting).	
15 – 19 December	Unit 2: Public Speaking for Different Contexts Entertainment & storytelling (TED-style talk, narrative delivery).	
22 – 26 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
29 December – 2 January	***Christmas Holiday***	
5 – 9 January	Unit 3: Model United Nations Introduction to MUN — rules of procedure, roles, sample debates.	
12 – 16 January	Unit 3: Model United Nations Research + Position Papers (each student represents a country).	
19 - 23 January	Unit 3: Model United Nations Drafting Resolutions + Formal Language Practice.	
26 – 30 January	Unit 3: Model United Nations Practice MUN Committee Session (guided with support).	
2 – 6 February	Unit 3: Model United Nations <b>Full MUN Simulation</b> (students debate global issue as delegates).	
9 – 13 February	Speech Final Exam	
16 -20 February	***Final Exams***	