Bangkok Christian College English Immersion Program

Course Scope for Mathematics Mathayom 4 Track 1

Semester 2/2024-2025 Teacher Andrew Jolsin

Date	Contents	Comments/ Remarks
21 - 25 Oct.	Welcome back-Outline Semester 2 course Review Semester 1 Final Exam	21- 23 Oct. Contract Holiday 25 Oct. Students Return
28 Oct. - 1 Nov.	IGCSE Revision Straight lines Book 1 Pure Maths Linear Inequalities Quadratic Inequalities	
4 – 8 Nov.	Book 1 Pure Maths Chapter 3 Inequalities on Graphs IGCSE Revision - Regions	
11 - 15 Nov.	IGCSE- Trigonometry Sohcahtoa 3D Shapes and Trigonometry	
18 - 22 Nov.	IGCSE- Trigonometry Cosine Rule Sine rule	
25 – 29 Nov.	**Mock IGCSE Exams**	
2 - 6 Dec.	Book 1 Pure Maths Chapter 4 Translating Graphs Transforming Functions	5 Dec. – Rama IX Birthday
9 - 13 Dec.	Book 1 Pure Maths Chapter 6 The Sine Rule The Cosine Rule	10 Dec. – Constitution Day
16 - 20 Dec.	Book 1 Pure Maths Chapter 6 Areas of triangles Solving triangle problems	
23 - 27 Dec.	(Holiday – No Classes)	24 Dec. – Christmas Parties 25 – 27 Dec. – Christmas Holiday
30 Dec.- 3 Jan.	(Holiday – No Classes)	30 Dec. – 3 Jan. – Christmas Holiday
6 - 10 Jan.	Book 1 Pure Maths Chapter 6 The Unit circle Graphing Trigonometric Functions	16 Jan. – Teacher's Day
13 - 17 Jan.	Book 1 Pure Maths Chapter 7 Radians	
20 - 24 Jan.	Book 1 Pure Maths Chapter 7 Radians	
27 – 31 Jan.	Book 1 Pure Maths Chapter 8 Differentiation-First principles	
3 - 7 Feb.	Book 1 Pure Maths Chapter 8 Differentiation-First principles	
10 - 14 Feb.	Book 1 Pure Maths Chapter 9 Integration -antidifferentiation	12 Feb – Makha Bucha
17 - 21 Feb.	**Final Exam Week**	

Bangkok Christian College English Immersion Program

Course Scope for English Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 October	Unit 2 Writing Preparation Part 6 Speech and Communication • Finding equivalent expressions • Paraphrasing and summarizing • Communication Verbs	Lessons taken from Ed Excel textbook *English as a Second Language* student book
28 October – 1 November	Unit 2 Writing Preparation Part 6 Speech and Communication • Past continuous verb tense • Past continuous and Past Simple tenses • Would and used to **Assessment**: Test on Writing Preparation Part 6 **Assign project**- students choose a scene from their favorite movie and perform it with additional imagined scene	
4 - 8 November	Unit 3 Listening Preparation Part 1 The World of Work • Discussion of students' ideal job • Listening for the overall message • Different types of speech • Listening for detail	
11 - 15 November	Unit 3 Listening Preparation Part 1 The World of Work • Nouns focusing on the corporate world • *WH* questions and question tags • Sentence inversions **Assessment**: test on Listening preparation Part 1	
18 - 22 November	Listening Preparation Part 2 Pets • Identifying key points and detail • Identifying stated and implied viewpoints • Health and training collocations	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Listening Preparation Part 2 Pets • Prepositions of time • Prepositions of Place and Movement **Assessment:** Test on Listening Preparation Part 2	
9 – 13 December	Listening Preparation Part 3 Games • Statements and implications • Facts and opinions	

	• Adjectives and adverbs • Adverbs of frequency	
16 – 20 December	Listening Preparation Part 4 Shopping *Identifying important information and details * Verbs and expressions related to shopping * Phrasal verbs (separable and non-separable) * Active and passive voice **Assessment**: Test on Listening Preparation Parts 3 and 4	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Speaking Preparation Part 1 Fashion • Pronunciation skills • Intonation and stress • Long and short vowels • Adjectives related to fashion	
13 – 17 January	Speaking Preparation Part 1 Fashion • Past perfect, past continuous, and past simple tenses **Assessment**: Test on Speaking Preparation Part 1	
20 - 24 January	Reading Practice Travel and Hospitality • Distinguishing between facts, opinions, and ideas • Practicing word limits in answers • Summarizing • Nouns and verbs related to buildings • Conditionals (zero, first, second, and third)	
27 – 31 January	Writing Practice Work and Jobs • Email writing language conventions • Phrasal verbs related to the workplace • Perfect continuous tenses **Assessment**: Test on Reading and Writing Practice	
3 – 7 February	**FINAL EXAM REVIEW**	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Anatomy Matthayom 4

Semester 2/2024-2025 Teacher Ian Spellman

Date	Contents	Comments/ Remarks
25 October	Introductions, Semester 1 Recap, Expectations, other important information	
28 October – 1 November	Cell Science Revision – Emerging Perspectives within cell science (Is the Cell *Really* a Machine?)	
4 - 8 November	Cell Science Revision – Emerging Perspectives within cell science (Is the Cell *Really* a Machine?)	
11 - 15 November	Genetics (Molecular Structure of DNA, Central Dogma model, critiques and alternative/competing models of DNA structure and function)	
18 - 22 November	Genetics (Molecular Structure of DNA, Central Dogma model, critiques and alternative/competing models of DNA structure and function)	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Environmental Toxicology (causes and effects of pollution of various forms on human and environmental health)	
9 – 13 December	Environmental Toxicology (causes and effects of pollution of various forms on human and environmental health)	
16 – 20 December	Ecology, Ecosystem Engineering, and Bioremediation	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Ecology, Ecosystem Engineering, and Bioremediation; Introduce Final Project Addressing this topic (details TBD)	
13 – 17 January	Introduction to Organic Chemistry (how to read a Line Angle Representation Molecular Model; Review of the Major Macromolecules and their role in Nutrition)	
20 - 24 January	Introduction to Organic Chemistry (how to read a Line Angle Representation Molecular Model; Review of the Major Macromolecules and their role in Nutrition)	
27 – 31 January	Sociobiology (The intersection of biological sciences and human societies; how can biology help us understand human behavior?)	
3 – 7 February	Sociobiology (The intersection of biological sciences and human societies; how can biology help us understand human behavior?)	
10 – 14 February	Final Projects and Loose Ends	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Biology Matthayom 4

Semester 2/2024-2025 Teacher Rick Reinders

Date	Contents	Comments/ Remarks
25 October	Unit 4 – Transport Transport in Unicellular and Multicellular Organisms	
28 October – 1 November	Transport in Plants	
4 - 8 November	Transport in Animals	
11 - 15 November	The Heart and Circulatory System	
18 - 22 November	Review and Quiz Unit 4	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Unit 5 - Excretion Excretion in Plants	
9 – 13 December	Excretory Products in Humans The Kidney and Osmoregulation The Urinary System	
16 – 20 December	The Nephron Regulation of Water Content Composition of Urine	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Unit 6 – Coordination and Response Plant Responses	
13 – 17 January	Coordination in Animals Nervous and Hormonal Communication	
20 - 24 January	The Eye and Vision Skin and Temperature Regulation	
27 – 31 January	Hormonal Control	
3 – 7 February	Unit 7 – Reproduction and Inheritance Types of Reproduction Plant Reproduction	
10 – 14 February	Human Reproduction Inheritance and Genetics	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Chemistry Matthayom 4

Semester 2/2024-2025 Teacher Sepehr Massoumi Alamouti

Date	Contents	Comments/ Remarks
25 October	**Introduction** • Overview of chemical formulae, equations, and amount of substance. • Review of key terms: atom, element, ion, molecule, compound, empirical formula, and molecular formula.	
28 October – 1 November	**Types of Chemical Reactions** • Introduction to types of reactions: Combination, Decomposition, Single & Double Displacement, Combustion, and Neutralization. • Predicting products and identifying reaction types. **Balancing Equations** • Full and ionic equations with state symbols.	
4 - 8 November	**Mole Concept and Calculations Review** • Understanding the mole, Avogadro's constant, and molar mass. • calculating moles. **Empirical and Molecular Formulae**: • Derivation using experimental data. • Practice problems on empirical formulae and mole calculations.	
11 - 15 November	**Reacting Masses and Gas Calculations** • Using chemical equations to calculate reacting masses and identify limiting reagents. **Gas Calculations** • Molar volume of gases at RTP and STP. • Introduction to the ideal gas equation	
18 - 22 November	**Solution Concentrations and Atom Economy** • Calculating concentrations • Using concentration in chemical equations. **Percentage Yield** and **Atom Economy** • Importance in laboratory and industrial processes. • Practice problems: Calculating yield and atom economy.	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	**Relating Ionic and Full Equations to Observations:** • **Displacement Reactions**: Use of metals and halogens.	

	• **Typical Reactions of Acids**: Acid with metals, carbonates, and bases. • **Precipitation Reactions**: Formation of insoluble salts and writing balanced ionic equations.	
9 – 13 December	**Core Practical 1**: Measurement of the molar volume of a gas. • **Activity**: Conduct the experiment, record observations, and calculate results. • **Discussion**: Evaluating experimental errors.	
16 – 20 December	**Core Practicals (Extended)** • **Preparation of a Salt and Yield Calculation**: e.g., ammonium iron(II) sulfate. • **Determination of a Chemical Formula**: e.g., reduction of copper(II) oxide. • **Determination of a Chemical Equation**: e.g., reaction of magnesium with acid. • **Interpreting Results of Test-Tube Reactions**: Relate observations to chemical equations.	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	**Bonding: Review of Ionic Bonding** • Formation of ions in terms of electron loss/gain **Properties of Ionic Compounds** • properties, migration of ions, electron density maps **Ionic Crystals** • Structure and lattice energy.	
13 – 17 January	**Polarisation and Ionic Bonding** • Effects of ionic radius and charge on bonding. • Trends in ionic radii down a group and across a period. **Polarisation and Polarising Power** • Factors affecting polarisation of ions and how it affects ionic bonding. **Polarization and Bond Type**: • Understand the continuum from ionic to covalent bonding.	

20 - 24 January	**Covalent Bonding** • **Covalent bond formation:** Sharing of electron pairs. • **Dot-and-Cross Diagrams** for covalent substances (single, double, and triple bonds). • **Dative Covalent Bonds**: Coordinate bonding in molecules like Al_2Cl_6 and NH_4^+. • **Giant Covalent Structures**: Graphite, diamond, graphene.	
27 – 31 January	**Electronegativity and Polarity** • **Electronegativity Trends**: Factors affecting electronegativity. • **Bond Polarity**: Determining bond polarity based on electronegativity differences. • **Molecular Polarity**: Predicting polarity in molecules. • **Shapes of Molecules**: Electron-Pair Repulsion Theory, bond angles, and predicting shapes of simple molecules.	
3 – 7 February	**Shapes of Molecules and Bond Angles** • **Applying electron-pair repulsion theory** to predict shapes and bond angles in molecules such as $BeCl_2$, BCl_3, CH_4, NH_3 and H_2O. • **Bond Length and Bond Angle**: Definitions and determining factors.	
10 – 14 February	**Metallic Bonding and Properties of Metals** • **Metallic Bonding**: Giant lattice structure of metal ions in a sea of delocalized electrons. • **Properties:** Electrical conductivity, malleability, ductility, and high melting points. • **Relate metallic bonding** to the physical properties of metals.	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Physics Matthayom 4

Semester 2/2024-2025 Teacher Nicholas Barrett

Date	Contents	Comments/ Remarks
25 October	Introduction to Semester Two	
28 October – 1 November	Density, Viscosity and Pressure (of Fluids)	
4 - 8 November	Stoke's Law	
11 - 15 November	Fluids: Laminar and Turbulent Flow	
18 - 22 November	Upthrust and Drag in Fluids	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Hydraulics calculations	
9 – 13 December	Assessment: Fluid Dynamics	
16 – 20 December	Turning moments, couples and torque	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Moment equilibrium and the principle of moments	
13 – 17 January	Centre of mass and application of the three conditions of equilibrium	
20 - 24 January	Assessment: Moments and Equilibrium	
27 – 31 January	Energy resources and generation of electricity	
3 – 7 February	Project: Energy resources and generation of electricity	
10 – 14 February	Unit Test: Fluid dynamics, moments and energy resources	
17 - 21 February	***Final Exams***	

Date	Contents	Comments/ Remarks
21 - 25 Oct.	Welcome back-Outline Semester 2 course Review Semester 1 Final Exam	21- 23 Oct. Contract Holiday 25 Oct. Students Return
28 Oct. - 1 Nov.	IGCSE Revision Straight lines Book 1 Pure Maths Linear Inequalities Quadratic Inequalities	
4 – 8 Nov.	Book 1 Pure Maths Chapter 3 Inequalities on Graphs IGCSE Revision - Regions	
11 - 15 Nov.	IGCSE- Trigonometry Sohcahtoa 3D Shapes and Trigonometry	
18 - 22 Nov.	IGCSE- Trigonometry Cosine Rule Sine rule	
25 – 29 Nov.	**Mock IGCSE Exams**	
2 - 6 Dec.	Book 1 Pure Maths Chapter 4 Translating Graphs Transforming Functions	5 Dec. – Rama IX Birthday
9 - 13 Dec.	Book 1 Pure Maths Chapter 6 The Sine Rule The Cosine Rule	10 Dec. – Constitution Day
16 - 20 Dec.	Book 1 Pure Maths Chapter 6 Areas of triangles Solving triangle problems	
23 - 27 Dec.	(Holiday – No Classes)	24 Dec. – Christmas Parties 25 – 27 Dec. – Christmas Holiday
30 Dec.- 3 Jan.	(Holiday – No Classes)	30 Dec. – 3 Jan. – Christmas Holiday
6 - 10 Jan.	Book 1 Pure Maths Chapter 6 The Unit circle Graphing Trigonometric Functions	
13 - 17 Jan.	Book 1 Pure Maths Chapter 7 Radians	16 Jan. – Teacher's Day
20 - 24 Jan.	Book 1 Pure Maths Chapter 7 Radians	
27 – 31 Jan.	Book 1 Pure Maths Chapter 8 Differentiation-First principles	
3 - 7 Feb.	Book 1 Pure Maths Chapter 8 Differentiation-First principles	
10 - 14 Feb.	Book 1 Pure Maths Chapter 9 Integration -antidifferentiation	12 Feb – Makha Bucha
17 - 21 Feb.	**Final Exam Week**	

Date	Contents	Comments/ Remarks
26th October – 29th	Calculate percentage increase/decrease of various amounts. Use the multiplier and know an increase is great than 1 and a decrease is less than 1.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed.
26th October – 29th	How to express "x" as a percentage of "y". Will be able to find the percentage change.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
26th October – 29th	Will be able to find the original value. Will be able to calculate values using simple and compound interest.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
1st November- 5th November	Convert from unit to another using metric or imperial units. Convert area and volume measurements.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
1st November- 5th November	Solve problems using formulae that includes speed, density and pressure. Be able to solve real life problems.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
1st November- 5th November	Able to calculate angles on triangle, on a straight line, angles around a point and angles in a Quadrilateral. Able to calculate angles that include Parallel lines.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
8th November - 12th November	Translate shapes in the "x" and "y" axes. Use vectors to translate shapes.	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed
8th November - 12th November	Rotate shapes by using angle, direction and centre of rotation Describe their new rotation position	Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file

		Assignments to be completed
8th November - 12th November	Reflect shapes through mirror lines. Draw their new shapes through reflection or equations.	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
8th November - 12th November	**Be able to enlarge shapes by using scale factor and centre of enlargement. Describe their enlargements.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
22nd November -26th	**How to find areas using triangles and quadrilaterals. Know to substitute and rearrange formulae for given values.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
22nd November -26th	**How to find areas of circles by using the formula. How to find circumference, sectors and segments of circles.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
22nd November -26th	**Able to work through exam style questions, relating to previous work. Check their methods are clear**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
29th November – 3rd December	**Identify faces, edges and vertices. Use formula to calculate surface areas.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
29th November – 3rd December	**How to find volumes of cylinders, spheres, pyramids and cones** **Use formulae to calculate values.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**
29th November – 3rd December	**Able to work through exam style questions, relating to previous work.** **Check their methods are clear.**	**Starters/Diagnostic questions. Pupil involvement Powe-point with examples to put in teams-general-file Assignments to be completed**

6th December – 10th December	**Able to find volumes of frustums by using the formula**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
6th December – 10th December	**Be able to know how enlargements affect areas.** **Projections show 3D- Different viewpoints.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
13th December – 17th December	**Construct triangles using pencil, ruler protractor and compass.** **Use SSS,ASA,SAS AND RHS**.	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
13th December – 17th December	**Use the four rules when doing Loci**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
13th December – 17th December	**able to work through exam style questions, relating to previous work** **check their methods are clear.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
20th December – 23rd December	**Constructing accurate angles**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
20th December – 23rd December	**Drawing the perpendicular** • **Students will be able to read and use f(x) notation when working with functions.** • **Students will be able to recognize domain and range.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
4th January – 7th January	**How to use the key words, "FROM" "NORTH LINE" "CLOCKWISE"** **DO REAL LIFE PROBLEMS BY**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**

	DRAWING DIAGRAMS FROM WORDED QUESTIONS.	
4th January – 7th January	**Able to use the rule a² +b² = c² to find lengths of sides in 2-d RIGHT ANGLED TRIANGLES .** **Able to USE THEIR CALCULATORS to solve questions.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
4th January – 7th January	**Able to use SIN, COS and TAN in right angled triangles to find lengths of sides or unknown angles using the 3 ratios.** **Able to use inverse sin -1 etc to find angles.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
10th January – 14th January	**Using Sine and cosine rule**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
10th January – 14th January	**3D Pythagoras**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
10th January – 14th January	**Be able to identify sine and cosine formulae.** **Be able to find lengths of sides in 3D shapes.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
17th January – 21st January	Know that an angle between line and plane can be used to form a right angled triangle. Use trigonometry and Pythagoras to find length of side or angle .	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
17th January – 21st January	**Cosine and sine rules can also be used.** **Able to find lengths or angles with these ratios.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**

17th January – 21st January	**Able to solve problems with real life problems.**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
24th January – 28th January	**Use vector notation**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
24th January – 28th January	**Use vector notation**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
24th January – 28th January	**Use vector notation**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
7th February – 11th February - Week	**Problem solving/exam style questions 1**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
7th February – 11th February - Week	**Problem solving/exam style questions 2**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**
7th February – 11th February - Week	**Problem solving/exam style questions 3**	**Starters/Diagnostic questions.** **Pupil involvement** **Powe-point with examples to put in teams-general-file** **Assignments to be completed**

Bangkok Christian College English Immersion Program

Course Scope for Physics Matthayom 4

Semester 2/2024-2025 Teacher Nicholas Barrett

Date	Contents	Comments/ Remarks
25 October	Introduction to Semester Two	
28 October – 1 November	Density, Viscosity and Pressure (of Fluids)	
4 - 8 November	Stoke's Law	
11 - 15 November	Fluids: Laminar and Turbulent Flow	
18 - 22 November	Upthrust and Drag in Fluids	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Hydraulics calculations	
9 – 13 December	Assessment: Fluid Dynamics	
16 – 20 December	Turning moments, couples and torque	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Moment equilibrium and the principle of moments	
13 – 17 January	Centre of mass and application of the three conditions of equilibrium	
20 - 24 January	Assessment: Moments and Equilibrium	
27 – 31 January	Energy resources and generation of electricity	
3 – 7 February	Project: Energy resources and generation of electricity	
10 – 14 February	Unit Test: Fluid dynamics, moments and energy resources	
17 - 21 February	***Final Exams***	

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Course Scope for General Science Matthayom 4

Semester 2/2024-2025 Teacher Steven Fournier

Date	Contents	Comments/ Remarks
25 October	Biology Unit 3: Plant Physiology: pg 145-162. Chemical Coordination, reproduction.	
28 October – 1 November	**Biology Unit 3: Plant Physiology Online Quiz 2, submit Lab 1** **Project 1 on Energy: How plants give us energy (food chain, motion of energy).**	
4 - 8 November	Test 3: Plant Physiology. Check progress of seeds (Lab 2) Physics: Unit 3: Waves. Properties of Waves (pg 559-568)	
11 - 15 November	Test 1 + Feedback. Lab on Plants under a microscope.	
18 - 22 November	**Physics Unit3: Waves: The electromagnetic spectrum (568-575). Worksheet 3: uses of the electromagnetic spectrum. Project 1 due.**	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Physics: Unit 3: Waves. Properties of Waves (pg 559-568) Project 2: Demonstration of Sound or Light.	
9 – 13 December	Physics Unit 3: Light and Sound waves. Test 2: Waves. Review:	
16 – 20 December	Biology Unit 3, Physics Unit 3, Plant worksheets due,	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Physics Unit 2: Electricity. Pg 529-545. Mains Electricity. Power= Current x Voltage, Ohm's Law (V=IR) Worksheet 2 on Ohm's Law.	
13 – 17 January	Physics Unit 2: Electricity. Pg 545-558. Finish up electricity, look at circuits, make online with Phet, Project 1: Doing an experiment with a battery.	
20 - 24 January	**Physics lab 1: Work. Comparing physical work to electrical work.**	
27 – 31 January	Chemistry Unit 1: 276-290 review, moving forward into empirical formula, stoichiometry, + energetics (if time) pg 413-428.	
3 – 7 February	Chemistry Supplemental: Batteries. How they work, storing energy, transferring energy. Project 2: Doing an experiment with a battery. Making your own circuit.	
10 – 14 February	Review of Work Done: Mock Exam (Test 4) on Biology, Chemistry, and Physics.	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Anatomy Matthayom 4

Semester 2/2024-2025 Teacher Ian Spellman

Date	Contents	Comments/ Remarks
25 October	Introductions, Semester 1 Recap, Expectations, other important information	
28 October – 1 November	Cell Science Revision – Emerging Perspectives within cell science (Is the Cell *Really* a Machine?)	
4 - 8 November	Cell Science Revision – Emerging Perspectives within cell science (Is the Cell *Really* a Machine?)	
11 - 15 November	Genetics (Molecular Structure of DNA, Central Dogma model, critiques and alternative/competing models of DNA structure and function)	
18 - 22 November	Genetics (Molecular Structure of DNA, Central Dogma model, critiques and alternative/competing models of DNA structure and function)	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Environmental Toxicology (causes and effects of pollution of various forms on human and environmental health)	
9 – 13 December	Environmental Toxicology (causes and effects of pollution of various forms on human and environmental health)	
16 – 20 December	Ecology, Ecosystem Engineering, and Bioremediation	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Ecology, Ecosystem Engineering, and Bioremediation; Introduce Final Project Addressing this topic (details TBD)	
13 – 17 January	Introduction to Organic Chemistry (how to read a Line Angle Representation Molecular Model; Review of the Major Macromolecules and their role in Nutrition)	
20 - 24 January	Introduction to Organic Chemistry (how to read a Line Angle Representation Molecular Model; Review of the Major Macromolecules and their role in Nutrition)	
27 – 31 January	Sociobiology (The intersection of biological sciences and human societies; how can biology help us understand human behavior?)	
3 – 7 February	Sociobiology (The intersection of biological sciences and human societies; how can biology help us understand human behavior?)	
10 – 14 February	Final Projects and Loose Ends	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program
Course Scope for Science and Technology (Projects) Matthayom
Semester 2/2024-2025 Teacher Steven Fournier

Date	Contents	Comments/ Remarks
25 October	Quick Review of Units 1: Velocity, Energy, Deep dive into some kinematic velocity questions. Worksheet 1.	
28 October – 1 November	Unit 1: Velocity. Breaking questions. Solving multiple part questions continued. How velocity is converted to electricity.	
4 - 8 November	Physics Unit 2: Electricity. (pg. 59-95) Mains Electricity. Project 1: Making circuits. Look at complex systems and try to establish what is going on. Rectifiers, capacitors, inductor	
11 - 15 November	Physics Unit 2: Electricity. Current and Voltage. Electrical Resistance (Worksheet 2) Groupwork on making circuits.	
18 - 22 November	Test 1: Electricity and practice with past papers in prep for pearson exam.	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Physics Unit 3: Waves. Properties of waves. Pg 559-568. Review wavelength, types of waves, aspects of reflection and the Doppler effect. Physics Unit 3: Waves. The electromagnetic spectrum. Pg 568- 574.	
9 – 13 December	Physics Unit 3: Waves: The electromagnetic spectrum/light and sound pg 568-587. Quiz 1 online. Project 1 due.	
16 – 20 December	**Lab 1: Internal reflection using sims.** **https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_en.html** **Making a prism to make a rainbow. or make a periscope** **https://www.youtube.com/watch?v=N0LqI77DFBY** **Make a report in a team with and demonstrate your prism making a rainbow.+ Physics Unit 3: Waves review → Test 1 and feedback**	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Project 2: Use two or more of the units we have covered to demonstrate an idea or invention. (Groups 6 max)	
13 – 17 January	Review of Chapters 1-4 with IGCSE papers. Online quiz 2: Chapters 1-4 (like a mini BMAT)	
20 - 24 January	**Review of Chapter 1-4 with IGCSE past papers.** **Worksheet 2:**	
27 – 31 January	Presentation of projects.	
3 – 7 February	**Presenting projects continued if time, IGCSE content from Units 1-4 , Student interviews on concept questions and situational questions. (Presentation 1)**	
10 – 14 February	Student interviews (Presentation 1) continued + Test 2: Units 1-4 Mock exam + practice questions. Prep for Exam	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Chemistry Matthayom 4

Semester 2/2024-2025 Teacher Sepehr Massoumi Alamouti

Date	Contents	Comments/ Remarks
25 October	**Introduction** • Overview of chemical formulae, equations, and amount of substance. • Review of key terms: atom, element, ion, molecule, compound, empirical formula, and molecular formula.	
28 October – 1 November	**Types of Chemical Reactions** • Introduction to types of reactions: Combination, Decomposition, Single & Double Displacement, Combustion, and Neutralization. • Predicting products and identifying reaction types. **Balancing Equations** • Full and ionic equations with state symbols.	
4 - 8 November	**Mole Concept and Calculations Review** • Understanding the mole, Avogadro's constant, and molar mass. • calculating moles. **Empirical and Molecular Formulae**: • Derivation using experimental data. • Practice problems on empirical formulae and mole calculations.	
11 - 15 November	**Reacting Masses and Gas Calculations** • Using chemical equations to calculate reacting masses and identify limiting reagents. **Gas Calculations** • Molar volume of gases at RTP and STP. • Introduction to the ideal gas equation	
18 - 22 November	**Solution Concentrations and Atom Economy** • Calculating concentrations • Using concentration in chemical equations. **Percentage Yield** and **Atom Economy** • Importance in laboratory and industrial processes. • Practice problems: Calculating yield and atom economy.	
25 – 29 November	***Pearson Exams Week***	

2 – 6 December	**Relating Ionic and Full Equations to Observations:** • **Displacement Reactions**: Use of metals and halogens. • **Typical Reactions of Acids**: Acid with metals, carbonates, and bases. • **Precipitation Reactions**: Formation of insoluble salts and writing balanced ionic equations.	
9 – 13 December	**Core Practical 1**: Measurement of the molar volume of a gas. • **Activity**: Conduct the experiment, record observations, and calculate results. • **Discussion**: Evaluating experimental errors.	
16 – 20 December	**Core Practicals (Extended)** • **Preparation of a Salt and Yield Calculation**: e.g., ammonium iron(II) sulfate. • **Determination of a Chemical Formula**: e.g., reduction of copper(II) oxide. • **Determination of a Chemical Equation**: e.g., reaction of magnesium with acid. • **Interpreting Results of Test-Tube Reactions**: Relate observations to chemical equations.	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	**Bonding: Review of Ionic Bonding** • Formation of ions in terms of electron loss/gain **Properties of Ionic Compounds** • properties, migration of ions, electron density maps **Ionic Crystals** • Structure and lattice energy.	
13 – 17 January	**Polarisation and Ionic Bonding** • Effects of ionic radius and charge on bonding. • Trends in ionic radii down a group and across a period. **Polarisation and Polarising Power** • Factors affecting polarisation of ions and how it affects ionic bonding.	

	Polarization and Bond Type: • Understand the continuum from ionic to covalent bonding.	
20 - 24 January	**Covalent Bonding** • **Covalent bond formation:** Sharing of electron pairs. • **Dot-and-Cross Diagrams** for covalent substances (single, double, and triple bonds). • **Dative Covalent Bonds**: Coordinate bonding in molecules like Al_2Cl_6 and NH_4^+. • **Giant Covalent Structures**: Graphite, diamond, graphene.	
27 – 31 January	**Electronegativity and Polarity** • **Electronegativity Trends**: Factors affecting electronegativity. • **Bond Polarity**: Determining bond polarity based on electronegativity differences. • **Molecular Polarity**: Predicting polarity in molecules. • **Shapes of Molecules**: Electron-Pair Repulsion Theory, bond angles, and predicting shapes of simple molecules.	
3 – 7 February	**Shapes of Molecules and Bond Angles** • **Applying electron-pair repulsion theory** to predict shapes and bond angles in molecules such as $BeCl_2$, BCl_3, CH_4, NH_3 and H_2O. • **Bond Length and Bond Angle**: Definitions and determining factors.	
10 – 14 February	**Metallic Bonding and Properties of Metals** • **Metallic Bonding**: Giant lattice structure of metal ions in a sea of delocalized electrons. • **Properties:** Electrical conductivity, malleability, ductility, and high melting points. • **Relate metallic bonding** to the physical properties of metals.	
17 - 21 February	***Final Exams***	

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Course Scope for Biology Matthayom 4

Semester 2/2024-2025 Teacher Rick Reinders

Date	Contents	Comments/ Remarks
25 October	Unit 4 – Transport Transport in Unicellular and Multicellular Organisms	
28 October – 1 November	Transport in Plants	
4 - 8 November	Transport in Animals	
11 - 15 November	The Heart and Circulatory System	
18 - 22 November	Review and Quiz Unit 4	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Unit 5 - Excretion Excretion in Plants	
9 – 13 December	Excretory Products in Humans The Kidney and Osmoregulation The Urinary System	
16 – 20 December	The Nephron Regulation of Water Content Composition of Urine	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Unit 6 – Coordination and Response Plant Responses	
13 – 17 January	Coordination in Animals Nervous and Hormonal Communication	
20 - 24 January	The Eye and Vision Skin and Temperature Regulation	
27 – 31 January	Hormonal Control	
3 – 7 February	Unit 7 – Reproduction and Inheritance Types of Reproduction Plant Reproduction	
10 – 14 February	Human Reproduction Inheritance and Genetics	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for English Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 October	Unit 2 Writing Preparation Part 6 Speech and Communication • Finding equivalent expressions • Paraphrasing and summarizing • Communication Verbs	Lessons taken from Ed Excel textbook *English as a Second Language* student book
28 October – 1 November	Unit 2 Writing Preparation Part 6 Speech and Communication • Past continuous verb tense • Past continuous and Past Simple tenses • Would and used to **Assessment**: Test on Writing Preparation Part 6 **Assign project**- students choose a scene from their favorite movie and perform it with additional imagined scene	
4 - 8 November	Unit 3 Listening Preparation Part 1 The World of Work • Discussion of students' ideal job • Listening for the overall message • Different types of speech • Listening for detail	
11 - 15 November	Unit 3 Listening Preparation Part 1 The World of Work • Nouns focusing on the corporate world • *WH* questions and question tags • Sentence inversions **Assessment**: test on Listening preparation Part 1	
18 - 22 November	Listening Preparation Part 2 Pets • Identifying key points and detail • Identifying stated and implied viewpoints • Health and training collocations	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Listening Preparation Part 2 Pets • Prepositions of time • Prepositions of Place and Movement **Assessment:** Test on Listening Preparation Part 2	
9 – 13 December	Listening Preparation Part 3 Games • Statements and implications	

	• Facts and opinions • Adjectives and adverbs • Adverbs of frequency	
16 – 20 December	Listening Preparation Part 4 Shopping *Identifying important information and details * Verbs and expressions related to shopping * Phrasal verbs (separable and non-separable) * Active and passive voice **Assessment**: Test on Listening Preparation Parts 3 and 4	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Speaking Preparation Part 1 Fashion • Pronunciation skills • Intonation and stress • Long and short vowels • Adjectives related to fashion	
13 – 17 January	Speaking Preparation Part 1 Fashion • Past perfect, past continuous, and past simple tenses **Assessment**: Test on Speaking Preparation Part 1	
20 - 24 January	Reading Practice Travel and Hospitality • Distinguishing between facts, opinions, and ideas • Practicing word limits in answers • Summarizing • Nouns and verbs related to buildings • Conditionals (zero, first, second, and third)	
27 – 31 January	Writing Practice Work and Jobs • Email writing language conventions • Phrasal verbs related to the workplace • Perfect continuous tenses **Assessment**: Test on Reading and Writing Practice	
3 – 7 February	**FINAL EXAM REVIEW**	
10 – 14 February	***Final Exams***	

Date	Contents	Comments/ Remarks
25 October	**Short story**- *Lamb to the Slaughter* • Introduction-explanation of dark humor, discussion about how people respond to unexpected change • vocabulary	
28 October – 1 November	**Short story**- *Lamb to the Slaughter* • Read story	
4 - 8 November	**Short story**- *Lamb to the Slaughter* • Read story • Students answer questions	
11 - 15 November	**Assessment**- *Lamb to the Slaughter* test • Introduction to *An Occurrence at Owl Creek Bridge*-brief explanation of the US Civil War	
18 - 22 November	**Short story**-*An Occurrence at Owl Creek Bridge* • Vocabulary • Begin reading	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	**Short story**-*An Occurrence at Owl Creek Bridge* • Read Story	
9 – 13 December	**Short story**-*An Occurrence at Owl Creek Bridge* • Finish reading • Students answer questions	
16 – 20 December	**Assessment**- *An Occurrence at Owl Creek Bridge* test • Introduction to *Contents of a Dead Man's Pocket* short story-discussions about ambition, work/life balance, and risking one's life	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	**Short Story**-*Contents of a Dead Man's Pocket* • Read story	
13 – 17 January	**Short Story**-*Contents of a Dead Man's Pocket* • Read story	
20 - 24 January	**Short Story**-*Contents of a Dead Man's Pocket* • Finish reading • Students answer questions	
27 – 31 January	**Assessment**- Test on *Contents of a Dead Man's Pocket* • Read and discuss poem *When I heard the Learn'd Astronomer*	
3 – 7 February	**Assessment**- Test on *When I heard the Learn'd Astronomer* • Final exam review	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Poetry and Music Lyrics Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 ctober	Review Course Outline and Expectations The Beatles *A Day In the Life* • Discussion of song/students answer questions	
28 October – 1 November	Robert Frost-*Nothing Gold Can Stay* • Discussion of poem • Students answer questions	
4 - 8 November	Rush- *The Trees* • Discussion of song • Students answer questions **Assign project**- Students in groups make a music video to a song of their choice	
11 - 15 November	Robert Hayden- *Those Winter Sundays* *Discussion of poem * Students answer questions	
18 - 22 November	**Assessment**-Test on *A Day in the Life, Nothing Gold Can Stay, The Trees,* and *Those Winter Sundays* Green Day *Good Riddance* • Discussion of song • Students answer questions	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Steve Coleman- *I wanna Hear a Poem* • Introduction to slam poetry • Discussion of poem • Students answer questions	
9 – 13 December	Jake Miller *White Night* • Discussion of song • Students answer questions	
16 – 20 December	** Music video group project presentations**	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Emily Dickinson- *Success is Counted Sweetest* *Discussion of poem *Students answer questions	
13 – 17 January	The Smashing Pumpkins *Bullet With Butterfly Wings* • Discussion of song • Students answer questions	
20 - 24 January	**Assessment**-Test on *I Wanna Hear a Poem*, *White Night*, *Success is Counted Sweetest*, *Bullet with Butterfly Wings*, *Good Riddance* Jason Walsh- Renegade • Discussion of song • Students answer questions	
27 – 31 January	**Final Exam Review**	
3 – 7 February	**Final Exam**	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Speech Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 October	• Introduction to course/go over course outline • Introduction to public speaking • Public Speaking tips/suggestions	
28 October – 1 November	Study of Martin Luther King's *I have a Dream* Speech • Discussion of speech • Students answer questions on the content of speech and analyze why it is one of the greatest speeches of all time	
4 - 8 November	*Presentation on Persuasive Speeches * study example persuasive speech * Go over speech outline *Assign Persuasive Speech	
11 - 15 November	**Students give their persuasive speeches**	
18 - 22 November	• Presentation on entertainment speeches • Study example entertainment speech • Assign entertainment speech	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	**Students give their entertainment speeches**	
9 – 13 December	**Assessment**- Test on public speaking techniques, persuasive, and entertainment speeches ** Students finish giving their entertainment speeches**	
16 – 20 December	**Assign project**- students research a conspiracy theory and give a persuasive speech on whichever side of that theory they agree with • Students work on their projects	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	** Students deliver their conspiracy theory persuasive speeches**	
13 – 17 January	**Students finish delivering their persuasive speeches** • Introduction to group debate activity • Students Prep for group debate	
20 - 24 January	• **Group Debate activity**-students in groups debate both sides of an issue • Teacher decides which group wins the debate, announces the winner, and explains the winning team was victorious.	
27 – 31 January	** Final Exam Review**	
3 – 7 February	**Final exam**	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Economic and Geography Matthayom 4

Semester 2/2024-2025 Teacher Andrew Hailstone

Date	Contents	Comments/ Remarks
25 October	Decolonization	
28 October – 1 November	Nation Creation	
4 - 8 November	Civil Wars	
11 - 15 November	Nation States Definitions	
18 - 22 November	Nation States Yugoslavia and Rwanda	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Nation States Ukraine and China	
9 – 13 December	Nation States Ireland, UK and France	
16 – 20 December	Nationalism	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Multi-Culturalism	
13 – 17 January	The Collapse of the Soviet Union	
20 - 24 January	Soviet based causes	
27 – 31 January		
3 – 7 February	US based causes	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Economic and Geography Matthayom 4

Semester 2/2024-2025 Teacher Andrew Hailstone

Date	Contents	Comments/ Remarks
25 October	Decolonization	
28 October – 1 November	Nation Creation	
4 - 8 November	Civil Wars	
11 - 15 November	Nation States Definitions	
18 - 22 November	Nation States Yugoslavia and Rwanda	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Nation States Ukraine and China	
9 – 13 December	Nation States Ireland, UK and France	
16 – 20 December	Nationalism	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Multi-Culturalism	
13 – 17 January	The Collapse of the Soviet Union	
20 - 24 January	Soviet based causes	
27 – 31 January		
3 – 7 February	US based causes	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Literature Studies Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 October	**Short story**- *Lamb to the Slaughter* • Introduction-explanation of dark humor, discussion about how people respond to unexpected change • vocabulary	
28 October – 1 November	**Short story**- *Lamb to the Slaughter* • Read story	
4 - 8 November	**Short story**- *Lamb to the Slaughter* • Read story • Students answer questions	
11 - 15 November	**Assessment**- *Lamb to the Slaughter* test • Introduction to *An Occurrence at Owl Creek Bridge*-brief explanation of the US Civil War	
18 - 22 November	**Short story**-*An Occurrence at Owl Creek Bridge* • Vocabulary • Begin reading	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	**Short story**-*An Occurrence at Owl Creek Bridge* • Read Story	
9 – 13 December	**Short story**-*An Occurrence at Owl Creek Bridge* • Finish reading • Students answer questions	
16 – 20 December	**Assessment**- *An Occurrence at Owl Creek Bridge* test • Introduction to *Contents of a Dead Man's Pocket* short story-discussions about ambition, work/life balance, and risking one's life	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	**Short Story**-*Contents of a Dead Man's Pocket* • Read story	
13 – 17 January	**Short Story**-*Contents of a Dead Man's Pocket* • Read story	
20 - 24 January	**Short Story**-*Contents of a Dead Man's Pocket* • Finish reading • Students answer questions	
27 – 31 January	**Assessment**- Test on *Contents of a Dead Man's Pocket* • Read and discuss poem *When I heard the Learn'd Astronomer*	
3 – 7 February	**Assessment**- Test on *When I heard the Learn'd Astronomer* • Final exam review	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Poetry and Music Lyrics Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 ctober	Review Course Outline and Expectations The Beatles *A Day In the Life* • Discussion of song/students answer questions	
28 October – 1 November	Robert Frost-*Nothing Gold Can Stay* • Discussion of poem • Students answer questions	
4 - 8 November	Rush- *The Trees* • Discussion of song • Students answer questions **Assign project**- Students in groups make a music video to a song of their choice	
11 - 15 November	Robert Hayden- *Those Winter Sundays* *Discussion of poem * Students answer questions	
18 - 22 November	**Assessment**-Test on *A Day in the Life, Nothing Gold Can Stay, The Trees,* and *Those Winter Sundays* Green Day *Good Riddance* • Discussion of song • Students answer questions	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Steve Coleman- *I wanna Hear a Poem* • Introduction to slam poetry • Discussion of poem • Students answer questions	
9 – 13 December	Jake Miller *White Night* • Discussion of song • Students answer questions	
16 – 20 December	** Music video group project presentations**	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Emily Dickinson- *Success is Counted Sweetest* *Discussion of poem *Students answer questions	
13 – 17 January	The Smashing Pumpkins *Bullet With Butterfly Wings* • Discussion of song • Students answer questions	
20 - 24 January	**Assessment**-Test on *I Wanna Hear a Poem*, *White Night*, *Success is Counted Sweetest*, *Bullet with Butterfly Wings, Good Riddance* Jason Walsh- Renegade • Discussion of song • Students answer questions	
27 – 31 January	**Final Exam Review**	
3 – 7 February	**Final Exam**	
10 – 14 February	***Final Exams***	

Date	Contents	Comments/ Remarks
25 October	Quick Review of Units 1: Velocity, Energy, Deep dive into some kinematic velocity questions. Worksheet 1.	
28 October – 1 November	Unit 1: Velocity. Breaking questions. Solving multiple part questions continued. How velocity is converted to electricity.	
4 - 8 November	Physics Unit 2: Electricity. (pg. 59-95) Mains Electricity. Project 1: Making circuits. Look at complex systems and try to establish what is going on. Rectifiers, capacitors, inductor	
11 - 15 November	Physics Unit 2: Electricity. Current and Voltage. Electrical Resistance (Worksheet 2) Groupwork on making circuits.	
18 - 22 November	Test 1: Electricity and practice with past papers in prep for pearson exam.	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Physics Unit 3: Waves. Properties of waves. Pg 559-568. Review wavelength, types of waves, aspects of reflection and the Doppler effect. Physics Unit 3: Waves. The electromagnetic spectrum. Pg 568- 574.	
9 – 13 December	Physics Unit 3: Waves: The electromagnetic spectrum/light and sound pg 568-587. Quiz 1 online. Project 1 due.	
16 – 20 December	**Lab 1: Internal reflection using sims.** **https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_en.html** **Making a prism to make a rainbow. or make a periscope** **https://www.youtube.com/watch?v=N0LqI77DFBY** **Make a report in a team with and demonstrate your prism making a rainbow.+ Physics Unit 3: Waves review → Test 1 and feedback**	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Project 2: Use two or more of the units we have covered to demonstrate an idea or invention. (Groups 6 max)	
13 – 17 January	Review of Chapters 1-4 with IGCSE papers. Online quiz 2: Chapters 1-4 (like a mini BMAT)	
20 - 24 January	**Review of Chapter 1-4 with IGCSE past papers. Worksheet 2:**	
27 – 31 January	Presentation of projects.	
3 – 7 February	**Presenting projects continued if time, IGCSE content from Units 1-4 , Student interviews on concept questions and situational questions. (Presentation 1)**	
10 – 14 February	Student interviews (Presentation 1) continued + Test 2: Units 1-4 Mock exam + practice questions. Prep for Exam	
17 - 21 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for Speech Matthayom 4

Semester 2/2024-2025 Teacher Jeffrey Tedlow

Date	Contents	Comments/ Remarks
25 October	• Introduction to course/go over course outline • Introduction to public speaking • Public Speaking tips/suggestions	
28 October – 1 November	Study of Martin Luther King's *I have a Dream* Speech • Discussion of speech • Students answer questions on the content of speech and analyze why it is one of the greatest speeches of all time	
4 - 8 November	*Presentation on Persuasive Speeches * study example persuasive speech * Go over speech outline *Assign Persuasive Speech	
11 - 15 November	**Students give their persuasive speeches**	
18 - 22 November	• Presentation on entertainment speeches • Study example entertainment speech • Assign entertainment speech	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	**Students give their entertainment speeches**	
9 – 13 December	**Assessment**- Test on public speaking techniques, persuasive, and entertainment speeches ** Students finish giving their entertainment speeches**	
16 – 20 December	**Assign project**- students research a conspiracy theory and give a persuasive speech on whichever side of that theory they agree with • Students work on their projects	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	** Students deliver their conspiracy theory persuasive speeches**	
13 – 17 January	**Students finish delivering their persuasive speeches** • Introduction to group debate activity • Students Prep for group debate	
20 - 24 January	• **Group Debate activity**-students in groups debate both sides of an issue • Teacher decides which group wins the debate, announces the winner, and explains the winning team was victorious.	
27 – 31 January	** Final Exam Review**	
3 – 7 February	**Final exam**	
10 – 14 February	***Final Exams***	

Bangkok Christian College English Immersion Program

Course Scope for General Science Matthayom 4

Semester 2/2024-2025 Teacher Steven Fournier

Date	Contents	Comments/ Remarks
25 October	Biology Unit 3: Plant Physiology: pg 145-162. Chemical Coordination, reproduction.	
28 October – 1 November	**Biology Unit 3: Plant Physiology Online Quiz 2, submit Lab 1** **Project 1 on Energy: How plants give us energy (food chain, motion of energy).**	
4 - 8 November	Test 3: Plant Physiology. Check progress of seeds (Lab 2) Physics: Unit 3: Waves. Properties of Waves (pg 559-568)	
11 - 15 November	Test 1 + Feedback. Lab on Plants under a microscope.	
18 - 22 November	**Physics Unit3: Waves: The electromagnetic spectrum (568-575). Worksheet 3: uses of the electromagnetic spectrum. Project 1 due.**	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Physics: Unit 3: Waves. Properties of Waves (pg 559-568) Project 2: Demonstration of Sound or Light.	
9 – 13 December	Physics Unit 3: Light and Sound waves. Test 2: Waves. Review:	
16 – 20 December	Biology Unit 3, Physics Unit 3, Plant worksheets due,	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24th***	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	Physics Unit 2: Electricity. Pg 529-545. Mains Electricity. Power= Current x Voltage, Ohm's Law (V=IR) Worksheet 2 on Ohm's Law.	
13 – 17 January	Physics Unit 2: Electricity. Pg 545-558. Finish up electricity, look at circuits, make online with Phet, Project 1: Doing an experiment with a battery.	
20 - 24 January	**Physics lab 1: Work. Comparing physical work to electrical work.**	
27 – 31 January	Chemistry Unit 1: 276-290 review, moving forward into empirical formula, stoichiometry, + energetics (if time) pg 413-428.	
3 – 7 February	Chemistry Supplemental: Batteries. How they work, storing energy, transferring energy. Project 2: Doing an experiment with a battery. Making your own circuit.	
10 – 14 February	Review of Work Done: Mock Exam (Test 4) on Biology, Chemistry, and Physics.	
17 - 21 February	***Final Exams***	