Bangkok Christian College English Immersion Program

Course Scope for Biology Mathayom 6

Semester 1/2024-2025 Teacher Rick Reinders

Date	Contents	Comments/ Remarks
13 - 17 May	Introduction lesson (Teams, Onenote, teacher, rules, etc)	
20 - 24 May	Digestive and Excretory Systems, Nutrients, 7 classes of nutrients, organic nutrients, vitamins, minerals, and water	
27-31 May	Research nutrients and diet	
3-7 June	Malnourishment (3 types)	
10 – 14 June	Malnutrition Project: Beriberi, Osteoporosis, Rickets, Kwashiorkor	
17 – 21 June	Malnutrition Project: Beriberi, Osteoporosis, Rickets, Kwashiorkor	
24 – 28 June	Digestive System, Alimentary Canal, Oral Cavity, Pharynx and Esophagus	
1-5 July	Digestive System, Stomach: mechanical and chemical digestion of food	
8-12 July	Digestive System, Liver, Gallbladder, Pancreas, Small Intestine, Large Intestine	
15-19 July	Urinary System, Excretory organs, The Renal System	
22 – 26 July	Urinary System, Structure of Kidneys, Nephrons, water regulation	
29 July- 2 August	Urinary System, Elimination of Urine	
5 - 9 August	Laboratory: Kidney dissection	
12 – 16 August	Excretory Project, Comparison human excretory system with another organism	
19 - 23 August	Reproductive System: Mitosis and Meiosis, Spermatogenesis, Oogenesis, Hormones, Fertilization	
26 - 30 August	Male Reproductive System, Anatomy, Scrotum, Testes, Structure of Sperm cells, Epididymis, Vas Deferens, Seminal Vesicles, Glands, Urethra – Penis	
2-6 September	The Female Reproductive System, ovaries, fallopian tubes, uterus, and vagina, mammary glands, hormones involved in lactation. the menstrual, endometrium.	
9 -13 September	Gestation, fertilization, cleavage, implantation, pregnancy, embryo during pregnancy, the effects of unnecessary drug use on development	
16 -20 September	Project Gestation	
	Final Exam Week	

Bangkok Christian College English Immersion Program

Course Scope for Chemistry Mathayom 6

Semester 1/2024-2025 Teacher Sep Alamouti

Date	Contents	Comments/ Remarks
3 - 17 May	Topics 7A (1)): Mass Spectrometry	
20 - 24 May	Topics 7A (1)): Mass Spectrometry	
27 - 31 May	Topics 7B (2): Infrared (IR) Spectroscopy	
3 - 7 June	Topics 7B (2): Infrared (IR) Spectroscopy	
10 - 14 June	Topic 17A: Chirality (1–5)	
17 - 21 June	Topic 17B: Carbonyl compounds (6–8)	
24 - 28 June	Topic 17C: Carboxylic acids (9–16)	
1 - 5 July	Topic 18A: Arenes (1–3)	
8 - 12 July	Topic 18A: Arenes (4–7)	
15 - 19 July	Topic 18B: Amines, amides etc. (8–13)	
22 - 26 July	Topic 18B: Amines, amides etc. (14–17)	
29 July - 2 Aug	Topic 19C: Chromatography (6–8)	
5 - 9 August	Topic 19B: NMR (2–5)	
12 - 16 August	Topic 19A: Mass spectrometry (1)	
19 - 23 August	Topic 18 C: Organic synthesis (18)	
26 - 30 August	Topic 18 C: Organic Synthesis (19–20)	
2 - 6 September	Topic 18 C: Organic Synthesis (22)	
9 - 13 September	Semester Project Week	
16 - 20 September	Semester Review	
23 - 27 September	Final Examination	

Bangkok Christian College English Immersion Program

Course Scope for Composition & Rhetoric Mathayom 6

Semester 1/2024-2025 Teacher George (Djurdje)Spasojevic

Date	Contents	Comments/ Remarks
13 - 17 May	Semester outline and expectations for class.	
20 - 24 May	Introduction: Argument – the students will be able to identify characteristics of a strong argument.	22 May Visakha Bucha
27-31 May	Introduction: Argument – the students will be able to identify characteristics of a strong argument.	
3-7 June	The student will learn and identify characteristics of an effective claim.	
10 – 14 June	The student will learn and identify characteristics of an effective claim.	
17 – 21 June	The student will learn and identify characteristics of an effective claim/opposing view/counterclaim.	
24 – 28 June	The student will learn and identify characteristics of an effective claim/opposing view/counterclaim.	
1-5 July	The student will review the lesson from previous week and take a test.	
8-12 July	Students will work on refining their thesis statements and topic sentences. Review of MLA format – citing and referencing.	
15-19 July	ROUGH DRAFT DUE DATE	
22 – 26 July	Students will be able to delineate and evaluate the argument, specific claims, and reasoning in a text.	
29 July- 2 August	The students will be able to identify logical reasons to support claims, and evaluate evidence used to support reasons.	29 July King's Birthday
5 - 9 August	The students will be able to identify logical reasons to support claims, and evaluate evidence used to support reasons.	
12 – 16 August	Students will be able to use persuasive techniques effectively and appropriately to sway readers.	12 August Mother's Day
19 - 23 August	Students will be able to use persuasive techniques effectively and appropriately to sway readers.	
26 - 30 August	Students will be able to use persuasive techniques effectively and appropriately to sway readers.	
2-6 September	ESSAY (FINAL DRAFT) PEER REVIEW.	
9 -13 September	Final Exam Review Week.	
16 -20 September	Final Exam Week	

Bangkok Christian College English Immersion Program

Course Scope for Computer Studies Mathayom 6

Semester 1/2024-2025 Teacher James Cookson

Date	Contents	Comments/ Remarks
13 - 17 May	JavaScript – Node.js Introduction	
20 - 24 May	JavaScript – Node.js Modules 1	
27-31 May	JavaScript – Node.js Modules 2	
3-7 June	JavaScript – Node.js Events	
10 – 14 June	JavaScript – Express Introduction	
17 – 21 June	Node.js – Creating a web server	
24 – 28 June	Node.js – HTML Gets	
1-5 July	Node.js – HTML Puts	
8-12 July	Node.js – HTML Posts	
15-19 July	Node.js – HTML Deletes	
22 – 26 July	Node.js – Building RESTful API 1	
29 July- 2 August	Node.js – Building RESTful API 1	
5 - 9 August	Node.js – Building RESTful API 1	
12 – 16 August	Node.js – Building RESTful API 1	
19 - 23 August		
26 - 30 August	Node.js – Project Introduction	
2-6 September	Final Project	
9 -13 September	Final Project	
16 -20 September	Final Project	

Bangkok Christian College English Immersion Program

Course Scope for Literature Studies Mathayom 6

Semester 1/2024-2025 Teacher George (Djurdje) Spasojevic

Date	Contents	Comments/ Remarks
13 - 17 May	Semester outline and class expectations. Getting to know the students.	
20 - 24 May	Maritas Bargain by Malcolm Gladwell.	22 May Visakha Bucha
27-31 May	Central ideas in Maritas Bargain.	
3-7 June	Central ideas and text analysis in Maritas Bargain.	
10 – 14 June	Marita's Bargain Test.	
17 – 21 June	Don't Eat the Fortunes Cookie, speech by Michael Lewis.	
24 – 28 June	Pair activity for the speech. Analysis.	
1-5 July	Writing activity.	
8-12 July	Don't Eat the Fortunes Cookie Test.	
15-19 July	The Secret to Raising Smart Kids, by Carol S. Dweck.	
22 – 26 July	Analyze and evaluate the structure.	
29 July- 2 August	Analyze and evaluate the structure.	29 July King's Birthday
5 - 9 August	Determine the meaning of words and phrases as they are used in a text.	
12 – 16 August	Determine the meaning of words and phrases as they are used in a text.	12 August Mother's Day
19 - 23 August	M6 Final project – Literary Analysis	
26 - 30 August	M6 Final project – Literary Analysis	
2-6 September	M6 Final project – Literary Analysis	
9 -13 September	Exam Review Week.	
16 -20 September	Final Exam Week	

Bangkok Christian College English Immersion Program

Course Scope for PE Mathayom 6

Semester 1/2024-2025 Teacher Collen Steinbring

Date	Contents	Comments/ Remarks
13-17 May	• Ice-Breaker/Introduction • What you want out of PE?	
20-24 May	• Pre-Fitness Test 1 ○ Full length field sprint	22 May – Visakha Bucha

27 May – 31 May	• Sport of Survey Choice 1/4
	  ○ History of sport
	  ○ Famous players
	  ○ Academic work (player, team, etc.)
	  ○ Drills for sport	

3-7 June	• Health - Sex Ed	3 June – Queen's Birthday
10-14 June	• Pre-Fitness Test 2 - HIIT	

17-21 June	• Health
	  ○ Uni Life
	  ○ Essay	

24 June – 28 June	• Sport of Survey Choice 2/4
	  ○ History of sport
	  ○ Famous players
	  ○ Academic work (player, team, etc.)
	  ○ Drills for sport	

1-5 July	• Post-Fitness Test 1 ○ Full length field sprint	
8-12 July	• Health - Social Health	
15-19 July	• Play Sport of Survey Choice 2/4	
22-26 July	• Post-Fitness Test 2 - HIIT	22 July - Buddhist Lent Jul 29 - King's Birthday

29 July – 2 Aug	• Sport of Survey Choice 3/4
	  ○ History of sport
	  ○ Famous players
	  ○ Academic work (player, team, etc.)
	  ○ Drills for sport	

5-9 Aug.	• Health - Drugs, PED, Alcohol, Cigarette	
12-16 ug.	• Fitness Game - Never Have I Ever	12 Aug – Mother's Day

19 Aug. – 23 Aug.	• Sport of Survey Choice 4/4
	  ○ History of sport
	  ○ Famous players
	  ○ Academic work (player, team, etc.)
	  ○ Drills for sport	

26 Aug – 30 Aug.	• Play Sport of Survey Choice 4/4	
2-6 Sept.	• Review for Final Exam • Play new sport	
9-13 Sept	In class Final Exam	
16-20 Sept	Final Exam Week	

Bangkok Christian College English Immersion Program

Course Scope for Physics Mathayom 6

Semester 1/2024-2025 Teacher Nicholas Barrett

Date	Contents	Comments/ Remarks
13 - 17 May	Magnetic fields and interactions	
20 - 24 May	Induced magnetism	
27-31 May	Experiment: The interactions of ferromagnetic material	
3-7 June	Electromagnetism	
10 – 14 June	Forces on a current-carrying wire	
17 – 21 June	Electric Motors	
24 – 28 June	Electromagnetic Induction	
1-5 July	Faraday's Law	
8-12 July	Lenz's Law	
15-19 July	Generators	
22 – 26 July	Transformers	
29 July- 2 August	Experiment: Electromagnetic effects of Motors and Generators	
5 - 9 August	Test: Electromagnetism and Induction	
12 – 16 August	Electrostatic interactions and the triboelectric effect	
19 - 23 August	The triboelectric effect	
26 - 30 August	Coulomb's law and Electric fields	
2-6 September	Maxwell's equations and the unifying concept of electromagnetism	
9 -13 September	Quantum Physics introduction, featuring the general form of Faraday's law	
16 -20 September	Final Exam	

Christian College English Immersion Program

Course Scope for..Project Science (Science and Tech) Mathayom.6

Semester 1/2024-2025 TeacherSteven Fournier

Date	Contents	Comments/ Remarks
13 - 17 May	As Level Physics Topic 1: Further Mechanics. Pg 8-22. Review Momentum, Collisions, Energy in collisions and real collisions. Introduce Project 1: Angular displacement	
20 - 24 May	As Level Physics Topic 1: Further Mechanics (continued) Pg 25-31. Circular Motion. Angular displacement, centripetal force, motion in amusement parks. (Worksheet 1: Questions from 1.1 and 1.2)	
27-31 May	More examples of rpm and radians calculations. Project 1: Create a device that exhibits motion and angular displacement. Groups are expected to demonstrate. Some class time given to prepare + **Test 1.**	
3-7 June	Discussion on use of angular displacement in space to create zero gravity, Past paper practice (High Tier) on the topic and Presentation of Projects. **Project 1 due**	
10 – 14 June	As Level Physics Topic 3: Particle Physics. Intro (76-82) Looking at matter. The origins of how atoms were conceived, different advancements, electrons from atoms.	
17 – 21 June	Video/Online Quiz 1: Reviewing how particles are made (quarks, neutrinos, positrons, protons made of 2 upquarks and a down to create +1, neutrons made up of 2 downs and an up to create 0)…expanding on our ideas of the known world.	
24 – 28 June	As Level Physics Topic 3: Partical accelerators: (pg 85-94) Usages in medical (radioactive isotopes) and the LHC (Large Hadron Collider) Relevance to future technologies **Test 2.**	
1-5 July	Start of Particle interaction and expand on creation, the bricks of matter and get to the standard model. Review for grade feedback and past papers on the particle physics.	
8-12 July	Review Topics 1 and 3: Time for outstanding work/projects. +Midterms	
15-19 July	Reviewing Topic 3 and relating this to A level Topic 7 Astrophysics.(170-196) How a neutron star is formed, how stars are formed through particle interactions.	
22 – 26 July	7.1 Gravitational fields; (172-178) Worksheet 2: Gravity and its effects on possible colonization efforts. How the body interacts with gravity.	
29 July- 2 August	A level Topic 7 continued: 7.2 Starshine, (pg 175-181) expanding on stellar properties, classifying stars, Debate: Are we/Should we colonize other planets? (Also look at star naming sites)	
5 - 9 August	7.3 Hubble's law. Distances of stars using the Doppler effect, the age of the universe and future. Video Quiz 2: The birth and death of the universe and how the big bang is controversial. (FermiLabs)	
12 – 16 August	Past papers on Topics 7.1, 7.2 and 7.3 and **Test 3** Introduce Project 2:Space Advancement/Patents	
19 - 23 August	Project 2: Space Advancements, Patents and Future adaptations. Presentations and discussion on research funding for these ideas. Is space research better done by companies or by governments.	
26 - 30 August	Following current space efforts: Artemis program, New Gateway station, India and Japanese programs, the fate of the ISS, the fate of the Hubble telescope, the James Webb Telescopes achievements and the coming of the Nancy Grace Telescope.	
2-6 September	Prep + Mock Exam on Topics 1 (Further Mechanics), 3 (Particle Physics), and 7 (Astrophysics) (Test 4)	
9 -13 September	Feedback from mock exam +Review of all topics and getting late work completed, plus counseling on scores.	
16 -20 September	Final Exams on all topics	
23 -27 Sept.		

Bangkok Christian College English Immersion Program
Course Scope for Mathematics Mathayom 6
Semester 1/2024-2025 Teacher Vincent Ellison

Date	Contents	Comments/ Remarks
16-20 May	**Algebraic methods** **Students will know how to solve:** 1.1 ALGEBRAIC FRACTIONS 1.2 DIVIDING POLYNOMIALS 1.3 THE FACTOR THEOREM	16 May – Visakha Bucha
23-27 May	**Algebraic methods** **Students will know how to solve:** 1.4 THE REMAINDER THEOREM 1.5 MATHEMATICAL PROOF 1.6 METHODS OF PROOF	
30 May – 3 June	**Coordinate geometry in the (x,y) plane:** **Students will be able to find:** 2.1 MIDPOINTS AND PERPENDICULAR BISECTORS 2.2 EQUATION OF A CIRCLE 2.3 INTERSECTIONS OF STRAIGHT LINES AND CIRCLES	3 June – Queen's Birthday
6-10 June	**Coordinate geometry in the (x,y) plane** **Students will be able to know how to:** 2.4 USE TANGENT AND CHORD PROPERTIES 2.5 CIRCLES AND TRIANGLES	
13-17 June	**Trigonometric identities and equations** **Students will be able to know how to use:** 3.1 EXPONENTIAL FUNCTIONS 3.2 LOGARITHMS 3.3 LAWS OF LOGARITHMS	
20-24 June	**Trigonometric identities and equations** **Students will be:** 3.4 SOLVING EQUATIONS USING LOGARITHMS 3.5 CHANGING THE BASE OF A LOGARITHM	
27 June – 1 July	**The Binomial expansion** **Students will be solving:** 4.1 PASCAL'S TRIANGLE 4.2 FACTORIAL NOTATION 4.3 THE BINOMIAL EXPANSION **Students will be:** 4.4 SOLVING BINOMIAL PROBLEMS 4.5 BINOMIAL ESTIMATION	
4-8 July	**Sequences and series** **Students will be able to solve:** 5.1 ARITHMETIC SEQUENCES 5.2 ARITHMETIC SERIES 5.3 GEOMETRIC SEQUENCES 5.4 GEOMETRIC SERIES	

11-15 July	**Sequences and series** **Students will be able to:** 5.5 SUM TO INFINITY 5.6 SIGMA NOTATION 5.7 RECURRENCE RELATIONS 5.8 MODELLING WITH SERIES	Jul 13-15 Asalha Bucha / Bhuddist Lent Holidays
18-22 July	**Trigonometric identities and equations** **Students will be able to calculate:** 6.1 ANGLES IN ALL FOUR QUADRANTS 6.2 EXACT VALUES OF TRIGONOMETRICAL RATIOS 6.3 TRIGONOMETRIC IDENTITIES	
25-29 July	**Trigonometric identities and equations** **Students will be able to calculate:** 6.4 SOLVE SIMPLE TRIGONOMETRIC EQUATIONS 6.5 HARDER TRIGONOMETRIC EQUATIONS 6.6 EQUATIONS AND IDENTITIES	Jul 28-29 King's Birthday
1-5 Aug. **8-12 Aug.**	**Differentiation** **Students will identify:** 7.1 INCREASING AND DECREASING FUNCTIONS 7.2 STATIONARY POINTS	Aug 12 – Queen's Birthday
15-19 Aug.	**Differentiation** **Students will identify:** 7.3 SKETCHING GRADIENT FUNCTIONS 7.4 MODELLING WITH DIFFERENTIATION	
22-26 Aug.	**Catch up with Assignments and review work.**	
29 Aug. – 2 Sept.	**Integration** **Students will be able to:** 8.1 DEFINITE INTEGRALS 8.2 AREAS UNDER CURVES 8.3 AREAS UNDER THE x-AXIS	
5-9 Sept.	**Integration** **Students will be able to:** 8.4 AREAS BETWEEN CURVES AND LINES 8.5 AREAS BETWEEN TWO CURVES 8.6 THE TRAPEZIUM RULE	
12-16 Sept.	**Review all chapters and catch up with incomplete assignments**	
19-23 Sept	**Prepare for exams**	