

Course Scope for Mathematics for Engineers-M611, M612 and M613

Semester 2/2024-2025 Teacher Vincent



# M6 Students will start Semester 2 preparing themselves for Pearson's Standardised Test which will be held from: Monday 25<sup>th</sup> November to

# Friday 29th November.

During this preparation students' will practice Mock exam style questions.

Also M6 students will have online lessons on Monday and Friday of each

week and attend school Tuesday, Wednesday and Thursday.

Date	Contents	Comments/
Date	Contents	Remarks
24 – 28 Oct.	StatisticsStudents can draw interpret scatter graphs.They can decide if there is a relationship between variables.Use and interpret linear regression.Students can calculate least squares linear regression.They can calculate and interpret the product moment correlationcoefficient.Students can use coding to simplify calculation of the linear regressionand the product moment correlation coefficient.Statistics book 1 chapter 5	24 Oct – Chulalongkorn Day
31 Oct 4 Nov.	StatisticsStudents can understand what discrete random variables are and how they arise.They can find the cumulative distribution function for a discrete random variable.Students find the expected value of a discrete random variable.They find the expected value and variance of a function x.Students solve problems involving random variables.They use discrete uniform distribution as a model for the probability distribution of the outcomes of certain experiments.Statistics book 1 chapter 6	
7 - 11 Nov.	StatisticsStudents understand the normal distribution curve and its characteristicsThey use tables to find the probabilities of the standard normal distribution $Z$ .Students use the tables to find the z given a probability. They understand the standard normal distribution and calculate $\mu$ and $\sigma$ . Statistics book 1 chapter 7.	
14 - 18 Nov.	Statistics Students understand the Binomial distribution as a model and comment on appropriateness. They calculate individual probabilities for the binomial distribution.	

	Students calculate cumulative probabilities for the binomial distribution.	
	They understand and use the mean and variance of the binomial distribution.	
	Statistics book 2 chapter 1	
	Statistics	
21 – 25 Nov.	Students use the Poisson distribution to model real – world situations. They use the additive property of the Poisson distribution. Students understand and use the mean and variance of the Poisson distribution.	
	Statistics book 2 chapter 2	
28 Nov. – 2 Dec	Algebraic methods Students complete Algebraic operations with Algebraic fractions. They use improper fractions. Pure Maths Book 3 chapter 1.	
	Functions and graphs.	
	Students use the modulus function.	
	They complete functions and graphs.	
	Students use composite functions.	
	They use inverse functions.	
5 – 9 Dec.	Students use the following $y = lf(x)l \text{ AND } y = f( x )$	
	COMBINING TRANSFORMATIONS	5 Dec – King
	SOLVING MODULUS PROBLEMS	Bhumibol
	Pure Maths book 3 chapter 2	Birthday
	Trigonometric functions	2
	Students understand Secant, Cosecant and Cotangent.	
1. 1.	They produce graphs using sec x, cosec x and cot x.	
12 – 16	Students using sec x, cosec x and cot x.	
Dec.	They recognize trigonometric identities	12 Dec –
	Students use inverse trigonometric functions.	Constitution
	Pure maths book 3 chapter 3	Day
	Trigonometric addition formulae	
	Students use the Addition formulae	
	They can also apply the addition angle formulae	
19 – 23	Students use the double – angle formulae	
Dec.	They solve Trigonometric equations	23 Dec –
	Simplifying a cos x +- b sin x	Class
	Proving trigonometric identities.	Christmas
	Pure maths book 3 chapter 4	Parties
	Statistics	
	Students use the Poisson distribution as an approximation to the	
	binomial distribution.	
26 - 30	They approximate a binomial distribution using a normal distribution.	
Dec.	Students approximate a Poisson distribution using a normal distribution	26 20 D
	They select appropriate distributions and solve real-life problems.	26 – 30 Dec.
	Statistics book 2 chapter 3	Christmas
	Statistics	Holiday 2 Jan – New
2 6 Iam	Statistics	
2 – 6 Jan.	Students understand and use probability density function for a	Year
	continuous random variable.	Observed

1		1 1
	They understand and use cumulative distribution function for a	
	continuous random variable.	
	Students find the mean, variance, mode, median and percentiles of a	
	continuous random variable.	
	Statistics book 2 chapter 4	
9 – 13 Jan.		
	Statistics	
	Students understand, use and model situations using the continuous	
	uniform distribution.	
16 – 20 Jan.	Statistics book 2 chapter 5	
	Review chapters 1, 2, 3 and 4	
		16 Jan –
		Teacher's Day
	Statistics	
	Students understand the terms population, sample and census and	
23 – 27 Jan.	comment on the advantages and disadvantages of each.	
20 27 Juli	They understand what a statistic is.	
	Students find the sample distribution of a sample statistic.	
	Statistics book 2 chapter 6	
	Statistics	
	Understand the language and concept of hypothesis testing	
30 Jan – 3	Understand that a sample is used to make an inference about a	
Feb.	population.	
	Find critical values of a binomial distribution using tables.	
	Statistics book 2 chapter 7	
	Statistics	
	Carry out one – tailed and two-tailed tests for proportion of the	
	binomial distribution and interpret the results.	
6 – 10 Feb.	Carry out one-tailed and two-tailed tests for the rate of the Poisson	
	distribution and interpret results.	
	Carry out one-tailed and two-tailed tests using an approximation, when	
	appropriate.	
	Statistics book 2 chapter 7	
13 – 17		
Feb.	Revision for final exams.	
	ACVISION IOF IIIIAI CXAIIIS.	20 – 23 Feb.
20 – 24 Feb.		20 – 23 Feb. Final Exams
20 – 24 red.		Fillal Exams





**Course Scope for Biology Matthayom 6** 

### Semester 2/2024-2025 Teacher Rick Reinders



Date	Contents	Comments/ Remarks
25 October	Unit 5 MSI Practice Medical School Interview Skills Introduction to Medical School Interviews	
28 October – 1 November	Ethical Decision-Making	
4 - 8 November	Critical Thinking and Communication	
11 - 15 November	Mock Interviews	
18 - 22 November	Personal Statement Review and Refinement	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Unit 6 Medical Conditions Selecting a Medical Condition	
9 – 13 December	Researching Causes and Symptoms Diagnosis and Treatment	
16 – 20 December	Public Speaking and Presentation Skills Peer Feedback and Reflection	
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	Unit 7 Dissections Introduction to Dissection Techniques	
13 – 17 January	Dissection of Biological Specimens	
20 - 24 January	Dissection of Biological Specimens	
27 – 31 January	Experiments on Physiological Processes Analyzing Results	
3 – 7 February	Scientific Reporting	
10 – 14 February	Review and in class Final Exam	
17 - 21 February	***Final Exams***	

Course Scope for M6 Chemistry



# Semester 2/2024-2025 Teacher Sepehr Massoumi Alamouti

Date	Contents	Comments/ Remarks
25 October	Introduction	
28 October – 1 November	<ul> <li>Types of Chemical Reactions</li> <li>Introduction to reaction types: Combination, Decomposition, Single. Double Displacement, Combustion, and Neutralisation reactions.</li> <li>Identifying reaction types and predicting products.</li> <li>Practical: Simple test-tube experiments to classify reaction types.</li> </ul>	
4 - 8 November	<ul> <li>Balancing Chemical Equations</li> <li>Balancing Full Equations: Introduction to balancing methods for various reactions.</li> <li>Ionic Equations: Writing and balancing ionic equations for precipitation and redox reactions.</li> <li>State Symbols: Incorporating state symbols in balanced equations.</li> </ul>	
11 - 15 November	<ul> <li>Oxidation Numbers and Redox Basics</li> <li>Definition of oxidation number and rules for assigning them.</li> <li>Calculating Oxidation Numbers: For elements in compounds, ions, peroxides, and metal hydrides.</li> <li>Indicating oxidation numbers using Roman numerals</li> </ul>	
18 - 22 November	<ul> <li>Oxidation and Reduction Reactions</li> <li>Oxidation and reduction in terms of electron transfer.</li> <li>Understanding oxidising and reducing agents.</li> <li>Introduction to common redox reactions in s-block and p-block elements.</li> </ul>	

25 – 29 November	***Pearson Exams Week***	
	<b>Oxidation Number in Redox Reactions</b>	
2 – 6 December	<ul> <li>Application of oxidation numbers to identify redox reactions.</li> <li>Writing and balancing redox equations using oxidation</li> </ul>	
	<ul><li>understanding disproportionation reactions.</li></ul>	
9 – 13 December	<ul> <li>Half-Equations and Full Equations</li> <li>Writing ionic half-equations for oxidation and reduction.</li> <li>Constructing full ionic equations from half-equations.</li> <li>Practice balancing redox reactions in acidic and basic media.</li> </ul>	
16 – 20 December	Redox Unit Test	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> ***	
30 December – 3 January	***Christmas Holiday***	
	Redox Equilibria	
	Redox Reactions of d-Block Elements	
6 – 10 January	• Application of redox concepts to reactions of d-block elements.	
	• Introduction to standard electrode potentials, Eo.	
	• Conditions for measuring standard electrode potentials.	
	Standard Hydrogen Electrode and Measurement of Electrode Potentials	
10 15	• Features of the standard hydrogen electrode.	
13 – 17 January	• Different methods of measuring standard electrode potentials.	
	<ul> <li>Constructing standard cells using various metal/ion systems.</li> </ul>	

20 - 24 January	<ul> <li>Electrochemical Cells</li> <li>CORE PRACTICAL: Investigating electrochemical cells.</li> <li>Calculating standard emf, by combining two standard electrode potentials.</li> <li>Writing cell diagrams for various electrochemical cells using conventional notation.</li> </ul>	
27 – 31 January	<ul> <li>Applications of Electrode Potentials</li> <li>Predicting feasibility of reactions using values</li> <li>Understanding limitations of predictions based on Eovalues.</li> <li>Use of standard potentials to predict disproportionation reactions.</li> </ul>	
3 – 7 February	<ul> <li>Redox Titrations</li> <li>Introduction to redox titration principles</li> <li>CORE PRACTICAL: Redox titrations with iron(II) ions and potassium manganate(VII), and sodium thiosulfate with iodine.</li> </ul>	
10 – 14 February	<ul> <li>Fuel Cells and Industrial Applications</li> <li>Introduction to fuel cells and their operation.</li> <li>Hydrogen-Oxygen Fuel Cell: Electrode reactions and operating conditions.</li> <li>Industrial applications of fuel cells and redox reactions.</li> </ul>	
17 - 21 February	***Final Exams***	



Course Scope for Mathematics for Engineers-M611, M612 and M613

Semester 2/2024-2025 Teacher Vincent



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# Friday 29th November.

During this preparation students' will practice Mock exam style questions.

Also M6 students will have online lessons on Monday and Friday of each

week and attend school Tuesday, Wednesday and Thursday.

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Date	Contents	Remarks
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31 Oct 4 Nov.	StatisticsStudents can understand what discrete random variables are and how they arise.They can find the cumulative distribution function for a discrete random variable.Students find the expected value of a discrete random variable.They find the expected value and variance of a function x.Students solve problems involving random variables.They use discrete uniform distribution as a model for the probability distribution of the outcomes of certain experiments.Statistics book 1 chapter 6	
7 - 11 Nov.	Statistics         Students understand the normal distribution curve and its characteristics         They use tables to find the probabilities of the standard normal distribution Z.         Students use the tables to find the z given a probability.         They understand the standard normal distribution and calculate μand φ.         Statistics book 1 chapter 7.	
14 - 18 Nov.	Statistics Students understand the Binomial distribution as a model and comment on appropriateness. They calculate individual probabilities for the binomial distribution.	

	Students calculate cumulative probabilities for the binomial distribution.	
	They understand and use the mean and variance of the binomial distribution.	
	Statistics book 2 chapter 1	
	Statistics	
21 – 25 Nov.	Students use the Poisson distribution to model real – world situations. They use the additive property of the Poisson distribution. Students understand and use the mean and variance of the Poisson distribution.	
	Statistics book 2 chapter 2	
28 Nov. – 2 Dec	Algebraic methods Students complete Algebraic operations with Algebraic fractions. They use improper fractions. Pure Maths Book 3 chapter 1.	
	Functions and graphs.	
	Students use the modulus function.	
	They complete functions and graphs.	
	Students use composite functions.	
	They use inverse functions.	
5 – 9 Dec.	Students use the following $y = lf(x)l \text{ AND } y = f( x )$	
	COMBINING TRANSFORMATIONS	5 Dec – King
	SOLVING MODULUS PROBLEMS	Bhumibol
	Pure Maths book 3 chapter 2	Birthday
	Trigonometric functions	2
	Students understand Secant, Cosecant and Cotangent.	
1. 1.	They produce graphs using sec x, cosec x and cot x.	
12 – 16	Students using sec x, cosec x and cot x.	
Dec.	They recognize trigonometric identities	12 Dec –
	Students use inverse trigonometric functions.	Constitution
	Pure maths book 3 chapter 3	Day
	Trigonometric addition formulae	
	Students use the Addition formulae	
	They can also apply the addition angle formulae	
19 – 23	Students use the double – angle formulae	
Dec.	They solve Trigonometric equations	23 Dec –
	Simplifying a cos x +- b sin x	Class
	Proving trigonometric identities.	Christmas
	Pure maths book 3 chapter 4	Parties
	Statistics	
	Students use the Poisson distribution as an approximation to the	
	binomial distribution.	
26 - 30	They approximate a binomial distribution using a normal distribution.	
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	Statistics	Holiday 2 Jan – New
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	They understand and use cumulative distribution function for a	
	continuous random variable.	
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	continuous random variable.	
	Statistics book 2 chapter 4	
9 – 13 Jan.		
	Statistics	
	Students understand, use and model situations using the continuous	
	uniform distribution.	
16 – 20 Jan.	Statistics book 2 chapter 5	
	Review chapters 1, 2, 3 and 4	
		16 Jan –
		Teacher's Day
	Statistics	
	Students understand the terms population, sample and census and	
23 – 27 Jan.	comment on the advantages and disadvantages of each.	
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	Students find the sample distribution of a sample statistic.	
	Statistics book 2 chapter 6	
	Statistics	
	Understand the language and concept of hypothesis testing	
30 Jan – 3	Understand that a sample is used to make an inference about a	
Feb.	population.	
	Find critical values of a binomial distribution using tables.	
	Statistics book 2 chapter 7	
	Statistics	
	Carry out one – tailed and two-tailed tests for proportion of the	
	binomial distribution and interpret the results.	
6 – 10 Feb.	Carry out one-tailed and two-tailed tests for the rate of the Poisson	
	distribution and interpret results.	
	Carry out one-tailed and two-tailed tests using an approximation, when	
	appropriate.	
	Statistics book 2 chapter 7	
13 – 17		
Feb.	Revision for final exams.	
		20 – 23 Feb.
20 – 24 Feb.		20 – 23 Feb. Final Exams
20 – 24 red.		Fillal Exams



**Course Scope for Physics Matthayom 6** 

#### Semester 2/2024-2025 Teacher Nicholas Barrett



Date	Contents	Comments/ Remarks
25 October	Introduction to Semester Two	
28 October – 1 November	The Characteristics of Electromagnetic Radiation (and the spectrum)	
4 - 8 November	Blackbody Radiation and Wien's Displacement Law	
11 - 15 November	The Ultraviolet Catastrophe and the Introduction to Energy Quanta	
18 - 22 November	The Photoelectric Effect	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	The Photon Model of Light	
9 – 13 December	Threshold Frequency, and Work Function of Different Metals	
16 – 20 December	Classical vs Quantum Physics: Analysis of Frequency and Intensity	
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	Project: The Photoelectric Effect and Photon Model of Light	
13 – 17 January	The Compton Effect	
20 - 24 January	The Double-Slit Experiment (And Quantum Eraser)	
27 – 31 January	Wave-Particle Duality (The Observer Effect and Copenhagen Interpretation)	
3 – 7 February	Further Theories in Quantum Physics (Schrodinger's Cat and the Many Worlds Interpretation)	
10 – 14 February	Unit Test: Quantum Physics	
17 - 21 February	***Final Exams***	



#### **Course Scope for Physical Education Matthayom6**



#### Semester 2/2024-2025 Teacher Ben Fishman

Date	Contents	Comments Remarks
25 October	Ice Breaker/What is a health goal?	School Starts
28 October – 1 November	Fitness Test <ul> <li>Burpees</li> <li>40 yard dash</li> <li>Max jump height</li> </ul>	
4 - 8 November	Supplements 101 <ul> <li>Creatine</li> <li>Caffeine and why it's bad but actually good</li> <li>Multi-Vitamin</li> </ul>	
11 - 15 November	Football <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
18 - 22 November	Basketball <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
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 <ul> <li>Shadowboxing</li> <li>Footwork</li> </ul>	
16 – 20 December	Western Boxing Drills     Padwork	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the $24^{\text{th}***}$	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	American Football <ul> <li>Rules &amp; Strategies</li> <li>7 on 7 games</li> </ul>	
13 – 17 January	Football 2.0 <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
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 17 - 21	End of Unit Assessments ***Final Exams***	_
February		



**Course Scope for M6 Chemistry** 



#### Semester 2/2024-2025 Teacher Sepehr Massoumi Alamouti

Date	Contents	Comments/ Remarks
25 October	Introduction	
28 October – 1 November	<ul> <li>Types of Chemical Reactions</li> <li>Introduction to reaction types: Combination, Decomposition, Single. Double Displacement, Combustion, and Neutralisation reactions.</li> <li>Identifying reaction types and predicting products.</li> <li>Practical: Simple test-tube experiments to classify reaction types.</li> </ul>	
4 - 8 November	<ul> <li>Balancing Chemical Equations</li> <li>Balancing Full Equations: Introduction to balancing methods for various reactions.</li> <li>Ionic Equations: Writing and balancing ionic equations for precipitation and redox reactions.</li> <li>State Symbols: Incorporating state symbols in balanced equations.</li> </ul>	
11 - 15 November	<ul> <li>Oxidation Numbers and Redox Basics</li> <li>Definition of oxidation number and rules for assigning them.</li> <li>Calculating Oxidation Numbers: For elements in compounds, ions, peroxides, and metal hydrides.</li> <li>Indicating oxidation numbers using Roman numerals</li> </ul>	
18 - 22 November	<ul> <li>Oxidation and Reduction Reactions</li> <li>Oxidation and reduction in terms of electron transfer.</li> <li>Understanding oxidising and reducing agents.</li> </ul>	

• Introduction to common redox reactions in s-block and p- block elements.	
***Pearson Exams Week***	
Oxidation Number in Redox Reactions	
• Application of oxidation numbers to identify redox reactions.	
• Writing and balancing redox equations using oxidation numbers.	
• Understanding disproportionation reactions.	
<ul> <li>Half-Equations and Full Equations</li> <li>Writing ionic half-equations for oxidation and reduction.</li> <li>Constructing full ionic equations from half-equations.</li> <li>Practice balancing redox reactions in acidic and basic media.</li> </ul>	
Redox Unit Test	
***Christmas ceremonies, followed by the beginning of Christmas holiday on the 24 <sup>th</sup> **	
***Christmas Holiday***	
-	
<b>Redox Reactions of d-Block Elements</b>	
• Application of redox concepts to reactions of d-block elements.	
• Introduction to standard electrode potentials, Eo.	
• Conditions for measuring standard electrode potentials.	
Standard Hydrogen Electrode and Measurement of Electrode Potentials	
• Features of the standard hydrogen electrode.	
• Different methods of measuring standard electrode potentials.	
• Constructing standard cells using various metal/ion systems.	
	***Pearson Exams Week***          Oxidation Number in Redox Reactions         • Application of oxidation numbers to identify redox reactions.         • Writing and balancing redox equations using oxidation numbers.         • Understanding disproportionation reactions.         • Understanding disproportionation reactions.         • Mriting ionic half-equations for oxidation and reduction.         • Orstructing full ionic equations from half-equations.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions in acidic and basic media.         • Practice balancing redox reactions of ablock furthers         • Application of redox concepts to reactions of d-block elements.         • Introduction to standard electrode potentials, Eo.         • Introduction to standard electrode potentials, Eo.         • Conditions for measuring standard electrode potentials.         • Conditions for measuring standard electrode.         • Introduction to standard hydrogen electrode.

20 - 24 January	<ul> <li>Electrochemical Cells</li> <li>CORE PRACTICAL: Investigating electrochemical cells.</li> <li>Calculating standard emf, by combining two standard electrode potentials.</li> <li>Writing cell diagrams for various electrochemical cells using conventional notation.</li> </ul>	
27 – 31 January	<ul> <li>Applications of Electrode Potentials</li> <li>Predicting feasibility of reactions using values</li> <li>Understanding limitations of predictions based on E∘ values.</li> <li>Use of standard potentials to predict disproportionation reactions.</li> </ul>	
3 – 7 February	<ul> <li>Redox Titrations</li> <li>Introduction to redox titration principles</li> <li>CORE PRACTICAL: Redox titrations with iron(II) ions and potassium manganate(VII), and sodium thiosulfate with iodine.</li> </ul>	
10 – 14 February	<ul> <li>Fuel Cells and Industrial Applications</li> <li>Introduction to fuel cells and their operation.</li> <li>Hydrogen-Oxygen Fuel Cell: Electrode reactions and operating conditions.</li> <li>Industrial applications of fuel cells and redox reactions.</li> </ul>	
17 - 21 February	***Final Exams***	



**Course Scope for Biology Matthayom 6** 

#### Semester 2/2024-2025 Teacher Rick Reinders



Date	Contents	Comments/ Remarks
25 October	Unit 5 MSI Practice Medical School Interview Skills Introduction to Medical School Interviews	
28 October – 1 November	Ethical Decision-Making	
4 - 8 November	Critical Thinking and Communication	
11 - 15 November	Mock Interviews	
18 - 22 November	Personal Statement Review and Refinement	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Unit 6 Medical Conditions Selecting a Medical Condition	
9 – 13 December	Researching Causes and Symptoms Diagnosis and Treatment	
16 – 20 December	Public Speaking and Presentation Skills Peer Feedback and Reflection	
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	Unit 7 Dissections Introduction to Dissection Techniques	
13 – 17 January	Dissection of Biological Specimens	
20 - 24 January	Dissection of Biological Specimens	
27 – 31 January	Experiments on Physiological Processes Analyzing Results	
3 – 7 February	Scientific Reporting	
10 – 14 February	Review and in class Final Exam	
17 - 21 February	***Final Exams***	



#### **Course Scope for Literature Studies Matthayom 6**



# Semester 2/2024-2025 Teacher Djurdje (George) Spasojevic

Date	Contents	Comments/ Remarks
25 October	Writing Personal Statements and SOP's	
28 October – 1 November	Writing Personal Statements and SOP's	
4 - 8 November	<ul> <li>*Explosion of the Space Shuttle Challenger: Address to the Nation"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
11 - 15 November	<ul> <li><b>*Explosion of the Space Shuttle Challenger: Address to the Nation</b>"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
18 - 22 November	<ul> <li>*Explosion of the Space Shuttle Challenger: Address to the Nation"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Graduation Speech Writing	
9 – 13 December	Graduation Speech Writing	
16 – 20 December	"The Deep" Determine themes in a story and analyze the role of setting	
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	"The Deep" Determine themes in a story and analyze the role of setting	
13 – 17 January	"The Mosquito Solution" Support inferences and draw conclusions from a scientific article	
20 - 24 January	<b>"The Mosquito Solution"</b> Support inferences and draw conclusions from a scientific article	
27 – 31 January	End of Text Performance Tasks/ Language & Style <ul> <li>Argument Writing Activity</li> </ul> OR End of Collection Performance Tasks Present a Speech End of Text Performance Tasks/ Longuage & Stele	
3 – 7 February	End of Text Performance Tasks/ Language & Style <ul> <li>Argument Writing Activity</li> <li>OR</li> </ul> End of Collection Performance Tasks Present a Speech	
10 – 14 February	***Final Exams***	



#### Course Scope for Current World Events Matthayom 6



Date	Contents	Comments/ Remarks
25 October	Definitions and use of Justice	
28 October – 1 November	Use of Justice	
4 - 8 November	Use of Justice	
11 - 15 November	Understanding of Human Rights	
18 - 22 November	Understanding of Human Rights	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Understanding of Human Rights	
9 – 13 December	Analysis of the situation in Syria and its origins	
16 – 20 December	Introduction of the concepts of empathy and sympathy	
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	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
13 – 17 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
20 - 24 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
27 – 31 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
3 – 7 February	Test on positions and review	
10 – 14 February	***Final Exams***	



#### Course Scope for News Reading Matthayom 6



Date	Contents	Comments/ Remarks
25 October	Group work; whereby they team up with students with as similar positions as them as is possible	
28 October – 1 November	Group work development of political manifesto for their political party for the election exercise	
4 - 8 November	Group work development of political manifesto for their political party for the election exercise	
11 - 15 November	Group work development of political manifesto for their political party for the election exercise	
18 - 22 November	Election analysis of the group work	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	English Media and Newspapers	
9 – 13 December	Analysis of English Media	
16 – 20 December	Analysis of English Media	
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	Political Spectrum of Media and Analysis of Thai Media and how people consume news	
13 – 17 January	Class project analysis of Thai news consumption	
20 - 24 January	Class project analysis of Thai news consumption	
27 – 31 January	Class project analysis of Thai news consumption	
3 – 7 February	Group presentations of projects	
10 – 14 February	***Final Exams***	



**Course Scope for Rhetoric and Composition Matthayom 6** 



#### Semester 2/2024-2025 Teacher Rick Diaz

Date	Contents	Comments/ Remarks
25 October	Simile Metaphor Personification Hyperbole (1 day week)	
28 October – 1 November	Topic: Similes & Metaphors	
4 - 8 November	Topic: Personification & Hyperbole	
11 - 15 November	Topic: Writing Emails (Colleague, Employer)	
18 - 22 November	College Prospects – Programs, Majors, Admissions, Requirements	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Topic: Internet Research Methods	
9 – 13 December	Topic: Writing a College Application	
16 – 20 December	Topic: Writing a Personal Statements	
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	Topic: Writing a Cover Letter	
13 – 17 January	Writing Topic: Fiction	
20 - 24 January	Writing Topic: Nonfiction	
27 – 31 January	Final Exam Review	
3 – 7 February	In Class Final Exam	
10 – 14 February	***Final Exams***	



# Course Scope for Current World Events Matthayom 6



Date	Contents	Comments/ Remarks
25 October	Definitions and use of Justice	
28 October – 1 November	Use of Justice	
4 - 8 November	Use of Justice	
11 - 15 November	Understanding of Human Rights	
18 - 22 November	Understanding of Human Rights	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Understanding of Human Rights	
9 – 13 December	Analysis of the situation in Syria and its origins	
16 – 20 December	Introduction of the concepts of empathy and sympathy	
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	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
13 – 17 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
20 - 24 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
27 – 31 January	Analysis of student's responses regarding pictures from the Syrian conflict and the elicitation of sympathy/empathy	
3 – 7 February	Test on positions and review	
10 – 14 February	***Final Exams***	



# **Course Scope for Literature Studies Matthayom 6**



# Semester 2/2024-2025 Teacher Djurdje (George) Spasojevic

Date	Contents	Comments/ Remarks
25 October	Writing Personal Statements and SOP's	
28 October – 1 November	Writing Personal Statements and SOP's	
4 - 8 November	<ul> <li>*Explosion of the Space Shuttle Challenger: Address to the Nation"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
11 - 15 November	<ul> <li>*Explosion of the Space Shuttle Challenger: Address to the Nation"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
18 - 22 November	<ul> <li>*Explosion of the Space Shuttle Challenger: Address to the Nation"</li> <li>Determine the author's purpose and delineate and evaluate an argument</li> </ul>	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Graduation Speech Writing	
9 – 13 December	Graduation Speech Writing	
16 – 20 December	<b>"The Deep"</b> Determine themes in a story and analyze the role of setting	
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	<b>"The Deep"</b> Determine themes in a story and analyze the role of setting	
13 – 17 January	"The Mosquito Solution" Support inferences and draw conclusions from a scientific article	
20 - 24 January	"The Mosquito Solution" Support inferences and draw conclusions from a scientific article	
27 – 31 January	End of Text Performance Tasks/ Language & Style <ul> <li>Argument Writing Activity</li> <li>OR</li> </ul> <li>End of Collection Performance Tasks <ul> <li>Present a Speech</li> </ul> </li>	
2 7 Falmer	<ul> <li>End of Text Performance Tasks/ Language &amp; Style</li> <li>Argument Writing Activity</li> <li>OR</li> </ul>	
3 – 7 February	End of Collection Performance Tasks	
10 – 14 February	Present a Speech ***Final Exams***	

# Course Scope for News Reading 2 Matthayom 6



Date	Contents	Comments/ Remarks
25 October	Group work; whereby they team up with students with as similar positions as them as is possible	Kennar Kö
28 October – 1 November	Group work development of political manifesto for their political party for the election exercise	
4 - 8 November	Group work development of political manifesto for their political party for the election exercise	
11 - 15 November	Group work development of political manifesto for their political party for the election exercise	
18 - 22 November	Election analysis of the group work	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	English Media and Newspapers	
9 – 13 December	Analysis of English Media	
16 – 20 December	Analysis of English Media	
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	Political Spectrum of Media and Analysis of Thai Media and how people consume news	
13 – 17 January	Class project analysis of Thai news consumption	
20 - 24 January	Class project analysis of Thai news consumption	
27 – 31 January	Class project analysis of Thai news consumption	
3 – 7 February	Group presentations of projects	
10 – 14 February	***Final Exams***	





**Course Scope for Physics Matthayom 6** 

# Semester 2/2024-2025 Teacher Nicholas Barrett



Date	Contents	Comments/ Remarks
25 October	Introduction to Semester Two	
28 October – 1 November	The Characteristics of Electromagnetic Radiation (and the spectrum)	
4 - 8 November	Blackbody Radiation and Wien's Displacement Law	
11 - 15 November	The Ultraviolet Catastrophe and the Introduction to Energy Quanta	
18 - 22 November	The Photoelectric Effect	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	The Photon Model of Light	
9 – 13 December	Threshold Frequency, and Work Function of Different Metals	
16 – 20 December	Classical vs Quantum Physics: Analysis of Frequency and Intensity	
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	Project: The Photoelectric Effect and Photon Model of Light	
13 – 17 January	The Compton Effect	
20 - 24 January	The Double-Slit Experiment (And Quantum Eraser)	
27 – 31 January	Wave-Particle Duality (The Observer Effect and Copenhagen Interpretation)	
3 – 7 February	Further Theories in Quantum Physics (Schrodinger's Cat and the Many Worlds Interpretation)	
10 – 14 February	Unit Test: Quantum Physics	
17 - 21 February	***Final Exams***	



**Course Scope for Rhetoric and Composition Matthayom 6** 

#### Semester 2/2024-2025 Teacher Rick Diaz



Date	Contents	Comments/ Remarks
25 October	Simile Metaphor Personification Hyperbole (1 day week)	
28 October – 1 November	Topic: Similes & Metaphors	
4 - 8 November	Topic: Personification & Hyperbole	
11 - 15 November	Topic: Writing Emails (Colleague, Employer)	
18 - 22 November	College Prospects – Programs, Majors, Admissions, Requirements	
25 – 29 November	***Pearson Exams Week***	
2 – 6 December	Topic: Internet Research Methods	
9 – 13 December	Topic: Writing a College Application	
16 – 20 December	Topic: Writing a Personal Statements	
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	Topic: Writing a Cover Letter	
13 – 17 January	Writing Topic: Fiction	
20 - 24 January	Writing Topic: Nonfiction	
27 – 31 January	Final Exam Review	
3 – 7 February	In Class Final Exam	
10 – 14 February	***Final Exams***	



# **Course Scope for Physical Education Matthayom6**

#### Semester 2/2024-2025 Teacher Ben Fishman



Date	Contents	Comments Remarks
25 October	Ice Breaker/What is a health goal?	School Starts
28 October – 1 November	Fitness Test <ul> <li>Burpees</li> <li>40 yard dash</li> <li>Max jump height</li> </ul>	
4 - 8 November	Supplements 101 <ul> <li>Creatine</li> <li>Caffeine and why it's bad but actually good</li> <li>Multi-Vitamin</li> </ul>	
11 - 15 November	Football <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
18 - 22 November	Basketball <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
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 <ul> <li>Shadowboxing</li> <li>Footwork</li> </ul>	
16 – 20 December	Western Boxing Drills     Padwork	
23 – 27 December	***Christmas ceremonies, followed by the beginning of Christmas holiday on the $24^{\text{th}***}$	
30 December – 3 January	***Christmas Holiday***	
6 – 10 January	American Football <ul> <li>Rules &amp; Strategies</li> <li>7 on 7 games</li> </ul>	
13 – 17 January	Football 2.0 <ul> <li>Handling Drills</li> <li>Defensive Drills</li> <li>Live Games</li> </ul>	
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	<ul> <li>Re-do Fitness Test</li> <li>Burpees</li> <li>40 yard dash</li> <li>Max jump height</li> </ul>	Results will be compared to the beginning of the semester
3 – 7 February	Capture the Flag	
10 – 14 February 17 - 21	End of Unit Assessments	-
February	***Final Exams***	