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M.5

Course Syllabus

Semester 1/2024

Name

Class

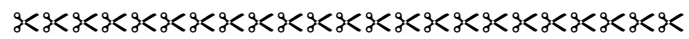
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EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Physics 2 (SCI32205)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Ms. Apiwan Rattanawan

Contacts: E-Mail address: apiwan.r@gmail.com

1.2 Course Description :

Knowledge: This course covers four main concepts of physics (Simple Harmonic Motion , wave motion, wave interactions light and optics). Simple harmonic motion and its related properties, tension and vibration of mass-spring and pendulum systems, energy in simple harmonic motion systems, damped oscillations, natural frequency and resonance, wave properties, reflection, refraction, and total internal reflection, standing waves, superposition, interference, diffraction, diffraction grating, images formed in curved mirrors and thin lenses, the eye, dispersion, color formation and optics in daily life.

Process: Students will be using different scientific methodologies by experimenting, observing, researching, discussing and drawing conclusions to enhance their knowledge, as well as understanding different concepts, critical thinking skills and communication skills.

Attitude: By the end of the course, these attributes and applications of different teaching techniques and classroom strategies will positively influence the students' daily lives.

1.3 Textbook (s) and Course Materials

1.3.1 Required Text: Serway Textbook

Physics: AP Physics A and B

1.3.2 Additional Materials: SAT Physics

Cambridge IGCSE: Physics Coursebook

Part 2) Student Learning Outcomes

- 2.1 Explain what is meant by a simple harmonic motion.
- 2.2 Investigate and describe simple harmonic motion in mass-spring and pendulum systems, as well as determine different related parameters.
- 2.3 Draw and use graphical representations of simple harmonic motion.
- 2.4 Describe energy changes during simple harmonic motion.
- 2.5 Explain natural frequency, damping and resonance phenomena.
- 2.6 Explain wave phenomena, types of waves and properties of waves.
- 2.7 Calculate the speed, wavelength, amplitude, frequency and period of wave.
- 2.8 Describe the relationship between amplitude and intensity of wave.
- 2.9 Describe the Huygens' principle and wave interference.
- 2.10 Explain how reflection, refraction and total internal reflection occurs.
- 2.11 Investigate and use Snell's law to calculate for refractive indices or angles.
- 2.12 Explain what are meant standing waves, coherence and superposition.
- 2.13 Describe the phenomena of diffraction and interference through a single-slit as well as interference through double-slits and diffraction grating.
- 2.14 Illustrate how waves are reflected from plane and curved mirrors using ray diagrams.
- 2.15 Investigate and use ray diagrams to predict the type of image formed from concave and convex lenses.
- 2.16 Use thin lens equation to calculate for an image magnification.
- 2.17 Explain how humans perceive color of objects, color formation and color-blindness.
- 2.18 Explain how natural phenomena such as rainbows, mirage images and different colors of the sky occur.

(Ms. Apiwan Rattanawan)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-4	Simple harmonic motion (SHM)	<ul style="list-style-type: none"> - Definition of simple harmonic motion - Hooke's law - Graphical representations of SHM - Damping, Mass-spring, Pendulum systems - Forced Oscillations, Natural frequency, Resonance
5-8	Wave Motion	<ul style="list-style-type: none"> - Types of waves and properties - Analysis Model - The Speed of Waves - Huygens's principle - Wave properties and Superposition - Snell's law
8	Midterm Examination	
9-11	Wave light	<ul style="list-style-type: none"> - The Nature of Light - Young's slit Experiment - Interference single - Interference double slit -Diffraction single slit - Diffraction grating
12-15	Ray optics	<ul style="list-style-type: none"> - Ray optics, light ray - Reflection and Refraction of light Ray-Plane mirrors - Reflection in curved mirrors and thin lenses - Thin lens and curved mirrors equation - The eye - The light natural phenomena in daily lives
16	Final Examination	

(Ms. Apiwan Rattanawan)

Instructor

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Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1: SHM equation	8	Objective Evaluation (Problem Solution)	8
2	Lab: SHM Pendulum	7	a) Materials and methods b) Data and processing c) Evaluating d) Report quality	7

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Assignment and Homework	5	a) Accuracy b) Punctuality	5
2	Concept check	3	Objective Evaluation (Speed test)	3
3	Note Taking	7	a) Inclusiveness b) Punctuality	7

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Understanding the definition and able to calculate some value	14	Objective evaluation (Multiple Choice)	14
2	Critical thinking	6	Objective evaluation (Problem Solution)	6

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1: Diffraction of light	5	Objective Evaluation (Problem Solution)	5
2	Quiz 2: Thin lens equation	5	Objective Evaluation (Problem Solution)	5
3	Poster: Phenomenon of light in daily life	5	a) Accuracy b) Inclusiveness c) Punctuality	5

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Assignment and Homework	5	b) Accuracy b) Punctuality	5
2	Concept check	3	Objective Evaluation (Speed test)	3
3	Note Taking	7	a) Inclusiveness b) Punctuality	7

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Understanding the definition and able to calculate some value	10	Objective evaluation (Multiple Choice)	10
2	Critical thinking	10	Objective evaluation (Multiple Choice)	10

Part 5) Improving Scores Policy (Physics 2)

- 1) If failing on any quiz, the students have a chance to ask for retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retest for the second time.
- 2) In terms of subjective assessments (notetaking, lab report, poster), the teacher will consider the work in the first place. In case there are still some room for improving scores as stated in the rubric, the teacher will ask students to resend his works within an designated period of time. Without doing so, the students' scores will not be improved without any condition.

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(Ms. Apiwan Rattanawan)

Instructor

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs

Head of EP Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Chemistry II (SCI32225)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Dr. Sukhum Poommarinvarakul

Contacts: E-Mail address: sukhum.acp@gmail.com

Line ID: achulas

1.2 Course Description:

Knowledge: This course covers the study of Gas laws, Chemical kinetic, and Chemical equilibrium. This is related to the following topics: ideal gas law, kinetic molecular theory of matter, rate of chemical reaction, collision theory, factor effect to reaction rate, static & dynamic equilibrium, equilibrium concentration, equilibrium constant, and Le Chatelier's principle.

Process: To gain knowledge and understanding concerning. Different types of activities including scientific processes; information retrieval; and exploration are used in classrooms. The course enables the students to utilize knowledge and principles, link and explain phenomena or solve daily life problems, compile and analyze information, communicate knowledge, make decisions and solve problems, and have scientific minds, together with ethics, morality, and appropriate values.

Attitude: By the end of the course, the learners will have a positive attitude and a basic understanding of gas laws, chemical reactions, and chemical equilibrium. Learners will be able to discuss other events in the term of chemistry.

1.3 Textbook (s) and Course Materials

1.3.1) Required Text: Chemistry 2

1.3.2) Additional Materials: Online materials

Part 2) Student Learning Outcomes

2.1 To enable students to understand various theories and factors related to ideal and real gases.

2.2 To enable students to understand the factors that affect the reaction rate and how to calculate the reaction rate.

2.3 To enable students to understand the chemical equilibrium of reactions and factors affecting the disturbances of chemical equilibrium.

2.4 To enable students can apply their knowledge and understanding to their daily lives.

(Dr. Sukhum Poommarinvarakul)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-5	Gases	laws of ideal gases, diffusion, the theory of real gas, and laboratory
6-7	Chemical Kinetics (I)	calculation of reaction rates and factors affecting the rate of reaction.
8	Midterm Examination	
9-11	Chemical Kinetics (II)	collision theory and reaction progress, and laboratory
12-15	Chemical Equilibrium	chemical equilibrium and calculation, factors affecting equilibrium, and disturbance of chemical equilibrium, and laboratory model
16	Final Examination	

(Dr. Sukhum Poommarinvarakul)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice work	7	a) In-class participation b) punctuality c) accuracy	7
2	Homework	8	a) punctuality b) accuracy	8

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Test: Gases Chemical Kinetics	8	a) accuracy b) punctuality	8
2	Formal Lab Work: Gases, chemical kinetic	7	a) laboratory skills b) accuracy c) punctuality	7

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Gases, Chemical Kinetics	15	Objective Evaluation (Multiple Choice)	15
2	Gases, Chemical Kinetics	5	Special problem (problem-solving)	5

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice work	7	a) In-class participation b) punctuality c) accuracy	7
2	Homework	8	a) punctuality b) accuracy	8

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Test: Chemical kinetics Chemical equilibrium	9	a) accuracy b) punctuality	9
2	Formal Lab Work: Chemical equilibrium	6	a) skills b) accuracy c) punctuality	6

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Test: Chemical Kinetics, Chemical Equilibria	20	Objective Evaluation (Multiple Choice)	20

Part 5) Improving Scores Policy (Chemistry II)

If failing on any quiz, the students have a chance to ask for a retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retesting for the second time.

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(Dr. Sukhum Poommarinvarakul)

Instructor

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Biology 2 (SCI32245)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Mr. Paninnat Jarueksoontornsakul

Contacts: E-Mail address: p.jarueksoontornsakul@gmail.com

ID Line: jiewkmutt

1.2 Course Description :

Knowledge: The course aims to help students to explore and understand the structures of plants especially on higher plants or angiosperms, which mainly focus on their reproduction, tissues and growth, photosynthesis, nutrients, transportation of food and water, and key plant hormones. Students will experience with interactive experiment to support their understanding.

Process: From the course, students will be able to search for more information to complete the assignments from reference books, online resources, and experiment.

Attitude: By the end of the course, the students will gain more positive attitudes toward science especially biology. The students will be able to look for the reliable pieces of information to fulfill their curiosities and gain more interests in biological topics.

1.3 Textbook (s) and Course Materials

1.3.1) Reece, J. B., & Campbell, N. A. (2011). Campbell biology. Boston: Benjamin Cummings / Pearson.

1.3.2) Course handouts

NCERT Class 11 Biology Books (Chapter 11- 15)

(Online available: <https://www.ncertbooks.guru/ncert-books-class-11-biology/>)

BIO2-BIO3 Assignment handout

Part 2) Student Learning Outcomes

- 2.1. To enable students to understand the systems of plants
- 2.2. To enable students to describe the life cycle of plants
- 2.3. To enable students to describe the relation between each system
- 2.4. To enable students to gain more understanding and working as a team through practical experience in laboratory

(Mr. Paninnat Jarueksoontornsakul)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-2	Plant reproduction	The reproduction of higher plants especially flowering plants and their life cycle, flower structure and fruit
3-5	Plant growth and tissues	Growth and tissues from different parts of the plant e.g., roots, stems, leaves
6-7	Plant transportation	The transportation of water, gases, minerals, and nutrients of plants
8	Midterm	
9-12	Photosynthesis	The mechanism of photosynthesis in molecular level
13-15	Response and hormones	Plant responses on physical and chemical stimulants by hormones
16	Final Examination	

(Mr. Paninnat Jarueksoontornsakul)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Lab 1: Plant Tissue	10	a) Lab Assignment	5
			b) Responsibility	5
2	Assignment 1: Plant transportation	5	Mind mapping	5

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1: Overall, before Midterm topics	10	Objective Evaluation (Multiple choices and Subjective)	10
2	Class attention	5	Class participant	5

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Multiple Choices	15	Objective evaluation	15
2	Subjective	5	Objective evaluation	5

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Lab2: Photosynthesis	10	a) Lab Assignment	5
			b) Responsibility	5
2	Class attention	5	Class participant	5

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Assignment 2: Response and hormones	15	Presentation (Group) - Corrective and inclusive - Punctual - Creative	7 3 5

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Multiple Choices	20	Objective evaluation	20

Part 5) Improving Scores Policy (Biology 2)

- 1) If failing on any quiz, the students may complete a short report (2-3pages) with the quiz-relevance topic.
- 2) In terms of other subjective assessments, the teacher will consider the work in the first place. In case there are still some room for improving scores as stated in the rubric, the teacher will ask students to resend his works within the deadline. Without doing so, the students' scores will not be improved without any condition.

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(Mr. Paninnat Jarueksoontornsakul)

Instructor

.....

(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject : Science for International Achievement SIA 3 (SCI33273)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor: Dr. Narut Gulprasertat

Contacts: E-Mail address: narut.gul@gmail.com

ID Line: mheeyakz

1.2 Course Description :

Knowledge: The objectives of this course are to reinforce knowledge and prepare students for the CU-ATS Chemistry subject test, covering topics such as atomic structure, the periodic table, chemical bonds, chemical compounds, and chemical calculations. Additionally, it introduces the CU-ATS exam and provides real-life experience through mock tests.

The course aims to deepen students' understanding of chemical calculations and the properties of chemical substances in various phases, including mixtures.

Process: Various activities, such as scientific processes, information retrieval, and exploration, are utilized in classrooms to enable students to effectively apply principles and knowledge. Additionally, practice problems from real CU-ATS past paper exams are incorporated.

Attitude: By the end of the course, learners will have gained extensive experience and knowledge relevant to the CU-ATS exam. This equips them with the ability to connect and explain phenomena, solve daily problems, compile and analyze information, communicate knowledge effectively, make informed decisions, and approach problem-solving with a scientific mindset.

1.3 Textbook (s) and Course Materials

1.3.1) Required text: -

Part 2) Student Learning Outcomes

2.1 To enable students to know the detail of CU-ATS exam including: time limit, no. of question and scoring system.

2.2 To enable students to recall knowledge of atomic model & related experiment.

2.3 To enable students to recall knowledge of periodic table, including important parameter in periodic table: IE, EN, EA, atomic radius and ionic radius.

2.4 To enable students to recall knowledge of chemical bond, including metallic bond, ionic bond and covalent bond.

2.5 To enable students to recall knowledge of basic chemical stoichiometry.

2.6 To enable students to understand basic of solution chemistry.

(Dr. Narut Gulprasertat)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-2	Atomic structure	<ul style="list-style-type: none"> - Atomic model - Dalton's model - Thompson's model - Rutherford's model - Bohr's model - Quantum mechanical model - Discovery of sub-atomic particles - Isotope, isotone, isobar and isoelectronic - Electron configuration
3-4	Periodic table	<ul style="list-style-type: none"> - Group & period - Properties of metal, non-metal and metalloid - Atomic & ionic radius - IE, EN, EA - Properties of main group element - Properties of transition element
5-7	Chemical bond	<ul style="list-style-type: none"> - Metallic bond - Ionic bond - Covalent bond - Inter molecular force - Naming compound
8	Midterm Examination	
9-12	Chemical calculation	<ul style="list-style-type: none"> - Mole concept - Unit conversion - Stoichiometry - Reaction with limiting agent - Percentage yield
12-15	Solution Chemistry	<ul style="list-style-type: none"> - Suspension, colloidal and solution - Mixture separation: filtration, distillation and chromatography - Solubility of ionic and covalent substance - Qualitative term of concentration - Quantitative term of concentration <ul style="list-style-type: none"> - % concentration - Molarity - Molality - Normality - Mole fraction - ppm & ppb - Boiling point and freezing point of solution - Colligative property
16	Final Examination	

(Dr. Narut Gulprasertat)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1 - Atomic structure - Periodic table - Chemical bond	10	Objective Evaluation (Multiple Choice)	10
2	Work sheet	5	a) Inclusiveness b) Punctuality	3 2

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Note taking	5	a) Inclusiveness b) Punctuality	3 2
2	Class participation	10	a) Cooperation in class b) Class attendance c) Punctuality	3 5 2

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Atomic structure (multiple choices)	6	Objective evaluation (multiple choices)	6
2	Periodic table	6	Objective evaluation (multiple choices)	6
3	Chemical bond	8	Objective evaluation (multiple choices)	8

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 2 - Chemical calculation - Solution	10	Objective Evaluation (Multiple Choice)	10
2	Work sheet	5	a) Inclusiveness b) Punctuality	3 2

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Note taking	5	a) Inclusiveness b) Punctuality	3 2
2	Class participation	10	a) Cooperation in class b) Class attendance c) Punctuality	3 5 2

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Chemical calculation	10	Objective evaluation (Multiple Choice)	10
2	Solution	10	Objective evaluation (Multiple Choice)	10

Part 5) Improving Scores Policy (SIA 3)

- 1) If failing on any quiz, the students have a chance to ask for retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retest for the second time.
- 2) In terms of subjective assessments (notetaking, writing an essay), the teacher will consider the work in the first place. In case there are still some room for improving scores as stated in the rubric, the teacher will ask students to resend his works within an designated period of time. Without doing so, the students' scores will not be improved without any condition

.....

(Dr. Narut Gulprasertrat)

Instructor

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(Dr. Choksarun Setthasuppawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Fundamental Mathematics 3 (MATH32151)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor(s): Ali Thongkamwong

Contacts: E-Mail address: Ali.t@sk.ac.th

ID Line: jabolee

1.2 Course Description:

Knowledge: In this course, students will delve into three fundamental topics: Firstly, they will explore exponents with rational exponents, understanding the meaning and computation of results arising from exponentiation, including addition, subtraction, multiplication, and division of real numbers in exponential form with rational exponents and real numbers in radical form. They will also learn approximation methods for such quantities. Secondly, Students will gain an understanding of sequences and series, including arithmetic and geometric sequences, as well as the general term for both types of sequences. Additionally, they will learn about the sum of the first n terms in arithmetic and geometric series and how to calculate it using formulas. Lastly, students will grasp the concepts of interest, covering simple interest and compound interest, present and future values. And the practical applications of installment payments in everyday calculation. This course aims to provide students with a solid foundation in these mathematical concepts, enabling them to apply their knowledge in various real-world scenarios.

Process: In this course, a variety of teaching methods are employed to ensure comprehensive learning. Firstly, direct instruction from the teacher is utilized to impart foundational knowledge to students. This method involves clear explanations, demonstration, and examples provided by the instructor to facilitate understanding. Secondly, inquiry-based learning is incorporated through posing questions based on real-life scenarios. By contextualizing the content, students are encouraged to critically think and apply their knowledge to practical situations. Additionally, student presentations are integrated into the teaching approach to promote active learning and student engagement. Through presenting their understanding of the material, students can reflect on their comprehension and address any misconception. Furthermore, collaborative learning activities such as group discussions, debates, or problem-solving tasks may be utilized to encourage peer-to-peer learning and foster a supportive learning environment. Overall, the diverse range of teaching methodologies employed in the course aims to cater to different learning styles, enhance student participation, and facilitate deeper understanding and retention of the subject matter.

Attitude: At the end of the course, students will develop a positive attitude towards mathematics, seeing its relevance in everyday life and gaining confidence in their abilities. They will appreciate how mathematical concepts apply to real-world scenarios and view math as a tool for problem-solving. Through the course, they will cultivate a growth mindset, understanding that perseverance leads to success in math. Overall, students will leave with renewed enthusiasm and belief in their mathematical capabilities.

1.3 Textbook(s) and Course Materials

1.3.1 We are mainly focused on doing the problems from the worksheet in every lecture.

Part 2) Student Learning Outcomes

2.1 Students will demonstrate an understanding of exponentiation, including operations such as addition, subtraction, multiplication, and division involving real numbers expressed in exponential and radical forms with rational exponential.

2.2 Students will comprehend the concepts of arithmetic and geometric sequences, including identifying patterns, determining the n th term, and calculating the sum of the first n terms.

2.3 Students will grasp the concepts of simple and compound interest, including calculations involving present value, future value, and interest rates.

2.4 Students will apply interest-rated concepts to analyze financial situations, make informed decisions, and solve problems related to loans, investments, and saving, showcasing practical financial literacy skill.

(Ali Thongkamwong)

Instructor

(.....)

Subject Coordinator

Part 3)Topic Outline and Schedule

Week	Topic	Brief Contents
1	Introduction to Exponential	Students study properties of integer and rational exponent.
2	Rationalizing Denominators.	Students will learn the technique of rationalizing denominator by multiplying by the conjugate of the denominator.
3	Binomial Quadratic Surds	Students will learn techniques for rearranging expressions involving binomial quadratic surds. This includes methods for simplifying and manipulating expression containing square roots or quadratic surd.
4	Irrational equation	Students will learn various techniques for solving equations containing radicals or expressions involving roots.
5 – 7	Sequence	Students will explore the differences between arithmetic and geometric sequences, understanding their respective properties and characteristics.
8	Midterm Examination	
9 – 11	Series	Students will learn techniques for finding the sum of arithmetic and geometric series. They will explore formulas and methods for calculating the sum of the first n terms of these sequences.
12 – 15	Interest	Students will explore key financial concepts including simple and compound interest, present and future values, and installment payments.
16	Final Examination	

(Ali Thongkamwong)

Instructor

(.....)

Subject Coordinator

Part 4) Allocation Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Worksheet I	10	a) Properties of power and surd b) Quadratic surds c) Conjugation d) Irrational equation	2 2 3 3
2	Quiz 1	5	a) Addition/Subtraction of surds b) Square root of Quadratic surds c) Conjugation d) Irrational equation	1 1 1 2

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Worksheet II	5	a) Arithmetic sequence b) Geometric sequence	2 3
2	Quiz II	5	a) Distinguish type of sequence b) Solve sequence	2 3
3	Presentation	5	a) Accuracy b) Presentation skill	3 2

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Exponential Properties	7	Objective Evaluation a) Multiple Choice b) Short Answer	5 2
2	Irrational Equation	7	Objective Evaluation a) Multiple Choice b) Demonstrate Problem Solving	5 2
3	Sequence	6	Objective Evaluation a) Multiple Choice b) Short Answer	5 1

4. After Midterm Formative Score I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Worksheet III	10	a) Arithmetic series b) Geometric series	5 5
2	Quiz III	5	a) Distinguish type of series b) Solve series	2 3

5. After Midterm Formative Score II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Worksheet IV	5	a) Interest b) Present value c) Installment payment	1 2 2
2	Quiz IV	5	a) Solve simple and compound interest b) Solve present value problem	2 3
3	Presentation	5	a) Accuracy b) Presentation skill	3 2

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Series	10	Objective Evaluation a) Multiple Choice b) Demonstrate Problem Solving	7 3
2	Interest	10	Objective Evaluation a) Multiple Choice b) Short Answer	8 2

Part 5) Improving Scores Policy (Fundamental Mathematics 3)

1) Students who score lower than 50% on each quiz can retake the quiz once. The maximum score they can achieve is 50% of the full score. If the student scores lower than 50% of the full score on the second attempt, the best score will be used.

2) For assignment grades (homework, presentations), students can only request a rescore up to one week before the midterm or final exam. No grade review will be allowed after this period.

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(Ali Thongkamwong)

Instructor

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Mathematics for International Achievement MIA 3 (MATH32253)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor(s): Ali Thongkamwong

Contacts: E-Mail address: Ali.t@sk.ac.th

ID Line: jabolee

1.2 Course Description:

Knowledge: This course is structured to impart the foundational knowledge necessary for success on the SAT Math examination. Students will gain a comprehensive understanding of key mathematical concepts, including algebra, geometry, trigonometry, and data analysis. Through engaging lessons and interactive activities, they will develop proficiency in solving a variety of math problems commonly encountered on the SAT.

Process: Throughout the course, students will be guided through effective processes and strategies essential for tackling SAT Math questions with confidence and accuracy. They will learn problem-solving techniques, time management skills, and test-taking strategies tailored specifically for the SAT Math section. Through regular practice and feedback, students will refine their approach to problem-solving and enhance their ability to navigate the Sat Math exam efficiently.

Attitude: A positive attitude towards learning and perseverance will be fostered throughout the course. Students will be encouraged to approach SAT Math preparation with determination and confidence. They will develop a growth mindset, viewing challenges as opportunities for growth and improvement. By maintaining a proactive and resilient attitude, students will build the self-assurance and resilience needed to overcome obstacles and achieve success on the SAT Math exam.

1.3 Textbook(s) and Course Materials

1.3.1 We are mainly focused on doing the problems from the worksheet in every lecture.

Part 2) Student Learning Outcomes

2.1 Students will demonstrate a comprehensive understanding of key mathematical concepts tested on the SAT Math section, including algebra, geometry, trigonometry, and data analysis.

2.2 Students will acquire problem-solving skills and strategies specific to SAT Math exam, including process of elimination, back-solving, and estimation.

2.3 Students will recognize the importance of consistent practice, perseverance, and effort in achieving their desired score on the SAT Math exam.

(Ali Thongkamwong)

Instructor

(.....)

Subject Coordinator

Part 3 Topic Outline and Schedule

Week	Topic	Brief Contents
1 – 7	Utilizing Desmos for SAT Math Exam Preparation	Students will receive comprehensive training on leveraging the Desmos graphing calculator platform for SAT Math exam readiness.
8	Midterm Examination	
9 – 15	SAT Math Practice	Students will engage in SAT Math practice sessions featuring timed exercises focused on solving retrospective problems. Through this session, students will have the opportunity to review past SAT Math question, identify areas of strength and weakness, and receive personalized analysis to improve their test-taking skills.
16	Final Examination	

(Ali Thongkamwong)

Instructor

(.....)

Subject Coordinator

Part 4) Allocation Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice test 1 – 4	10	- Ontime - Accuracy	5 5
2	Quiz 1	5	Objective Evaluation (Demonstrate Problem Solving)	5

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice test 5 – 8	10	- Ontime - Accuracy	5 5
2	Quiz II	5	Objective Evaluation (Demonstrate Problem Solving)	5

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Algebra	10	Objective Evaluation a) Multiple Choice b) Short Answer	8 2
2	Geometry	10	Objective Evaluation a) Multiple Choice b) Short Answer	7 3

4. After Midterm Formative Score I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice test 9 – 12	10	- Ontime - Accuracy	5 5
2	Quiz II	5	Objective Evaluation (Demonstrate Problem Solving)	5

5. After Midterm Formative Score II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice test 13 – 16	10	- Ontime - Accuracy	5 5
2	Quiz II	5	Objective Evaluation (Demonstrate Problem Solving)	5

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Trigonometry	10	Objective Evaluation a) Multiple Choice	10
2	Data analysis	10	Objective Evaluation a) Multiple Choice	10

Part 5) Improving Scores Policy (MIA 3)

1) Students who score lower than 50% on each quiz can retake the quiz once. The maximum score they can achieve is 50% of the full score. If the student scores lower than 50% of the full score on the second attempt, the best score will be used.

2) For assignment grades (homework, presentations), students can only request a rescore up to one week before the midterm or final exam. No grade review will be allowed after this period.

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(Ali Thongkamwong)

Instructor

.....

(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Additional Mathematics 3 (MATH32251)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Asst. Prof. Dr. Krissada Asavaskulkiet

Contacts: E-Mail address: bankachieve@gmail.com

ID Line: bankachieve

1.2 Course Description :

Knowledge: This course provides an introduction to basic exponential and logarithm concepts. Students will be able to apply principles of exponent function, logarithmic function, vector in three dimensions, factoring, scalar product and cross-vector .

Process: From the course, various teaching methods including task-based teaching or proficiency and competency-teaching approaches will be applied in this subject. The students will also learn through collaborative learning with through peer discussion.

Attitude: By the end of the course, the learners will have more positive attitude towards the accuracy of high school mathematics.

1.3 Textbook (s) and Course Materials

1.3.1) Required Text: *Cambridge International IGCSE: Cambridge IGCSE (R) and O Level Additional Mathematics Practice Book*

1.3.2) Additional Materials: *Cambridge IGCSE (TM) Maths Revision Guide*

Part 2) Student Learning Outcomes

2 .1 Students will demonstrate the ability to think critically, research, and reason.
(Ethical Leadership)

2 .2 Students will recognize and differentiate among diverse cultures through the history of mathematics. (Cultural Competence)

2 .3 Students will engage in activities directly benefitting the broader community.
(Community Engagement)

2.4 Students will demonstrate an understanding of the common body of knowledge in mathematics.

2.5 Students will demonstrate the ability to apply analytical and theoretical skills to model and solve mathematical problems.

2 .6 Students will demonstrate the ability to analyze data and draw appropriate statistical conclusions.

2.7 Students will demonstrate the ability to effectively utilize a variety of teaching techniques and classroom strategies to positively influence student learning

(Asst. Prof. Dr. Krissada Asavaskulkiet)

(Instructor)

.....

(Subject Coordinator)

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1	Exponent form and its properties	Students learn about Exponent form and its properties
2	Surd Equation	Students can solve Surd Equation
3	Exponential Function	Students learn about Exponential Function
4	Graph of Exponential Function	Students learn can sketch Graph of Exponential Function
5	Exponential Equation	Students can solve Exponential Equation
6	Logarithm Function	Students learn about Logarithm Function
7	Graph of Logarithm Function	Students learn can sketch Graph of Logarithm Function
8	Midterm Examination	
9	Logarithm Equation	Students can solve Logarithm Equation
10	Natural Logarithm	Students learn about Natural Logarithm
11	Matrix and its operation	Students learn about Matrix and its operation
12	Determinant and its properties	Students learn about Determinant and its properties
13	Co-factor of Matrix	Students learn about Co-factor of Matrix
14	Inverse of Matrix	Students learn about Inverse of Matrix
15	Solve the Equation by Matrix	Students can solve the Equation by Matrix
16	Final Examination	

(Asst. Prof. Dr. Krissada Asavaskulkiet)

(Instructor)

.....

(Subject Coordinator)

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1	5 points	- Exponent form and its properties - Surd Equation - Exponential Equation	5 points
2	Homework 1,2	5 points	Surd Equation Exponential Function	5 points
3	Worksheet in class 1	5 points	- Exponent form and its properties - Surd Equation Exponential Function	5 points

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 2	5 points	- Exponential Equation Logarithm Function	5 points
2	Homework 3,4	5 points	Graph of Exponential Function Exponential Equation	5 points
3	Worksheet in class 2	5 points	- Exponential Equation Logarithm Function	5 points

3. Midterm Formative Scores (20 points)

No	Assessment tools	Mark Allocation
1	Exponent form and its properties	20 points
2	Surd Equation	
3	Exponential Function	
4	Graph of Exponential Function	
5	Exponential Equation	
6	Logarithm Function	
7	Graph of Logarithm Function	

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 3	5 points	- Logarithm Equation - Natural Logarithm - Matrix and its operation Determinant and its properties	5 points
2	Homework 5,6	5 points	- Logarithm Equation Natural Logarithm	5 points
3	Worksheet in class 3	5 points	- Logarithm Equation - Natural Logarithm - Matrix and its operation Determinant and its properties	5 points

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 4	5 points	- Determinant and its properties Inverse of Matrix	5 points
2	Homework 7,8	5 points	Determinant and its properties Co-factor of Matrix	5 points
3	Worksheet in class 4	5 points	- Determinant and its properties Inverse of Matrix	5 points

6. Final Examination Scores (20 points)

No	Content of Assessment	Mark Allocation
1	Logarithm Equation	20 points
2	Natural Logarithm	
3	Matrix and its operation	
4	Determinant and its properties	
5	Co-factor of Matrix	
6	Inverse of Matrix	
7	Solve the Equation by Matrix	

Part 5) Improving Scores Policy (Additional Mathematics 3)

- 1) If failing on any quiz, the students have a chance to ask for retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retest for the second time.
- 2) In terms of subjective assessments (notetaking, writing an essay), the teacher will consider the work in the first place. In case there are still some room for improving scores as stated in the rubric, the teacher will ask students to resend his works within an designated period of time . Without doing so, the students' scores will not be improved without any condition

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(Asst. Prof. Dr. Krissada Asavaskulkiet)

(Instructor)

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Fundamental English 3 (ENG32151)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Mr. Adrian Wellington

Contacts: E-mail address: adrian.w@sk.ac.th

ID Line: adewellington

1.2 Course Description:

Knowledge: The aim of this course is to develop core English language communication skills in listening and speaking to a level which will enable students to complete various speaking tasks.

The students will develop listening skills to enable them to selectively extract the relevant information from a conversation thereby enabling them to participate in a two-way conversation.

The students speaking skills will be developed to enable them to develop accuracy and fluency in spoken English. They will be able to respond to questions about themselves and their surroundings as well as talking for 3 minutes on a broad range of topics. Student skills in two-way conversation will be developed to enable them to complete the speaking task in international standardized tests such as IELTS.

1.3 Textbook (s) and Course Materials.

1.3.1 Additional resources

- The Official Cambridge Guide to IELTS

Part 2) Student Learning Outcomes

2.1 To be able to respond to questions about themselves and their surroundings as well as talking for 3 minutes on a broad range of topics accurately and concisely.

2.2 To be able to response to an argument or point of view, on a broad range of topics displaying coherence and cohesion as well as an appropriate grammatical range and accuracy.

2.3 To be able to use listening skills to selectively extract the relevant information from a conversation thereby enabling them to fully participate in the conversation.

2.4 To enable students to engage in a two-way conversation displaying accuracy and fluency in spoken English to enable them to complete the speaking task in international standardized tests such as IELTS.

(Mr. Adrian Wellington)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-2	Getting ready to listen and following a conversation (listening)	Understanding the context, spelling and writing numbers. Identifying speakers, functions and categories
3-4	Reading strategies (reading)	Features of a reading passage. Skimming and speed reading
5-6	Describing a chart, table, graph (writing)	Understanding graphs, tables and charts. More complex charts. Compare and contrast.
7	IETLS speaking test (speaking)	Getting ready to speak. Speaking about familiar topics. Using correct grammatical range and accuracy
8	Mid-Term Examination	
9-10	Paraphrasing. Describing places and things (listening)	Identifying distractors. Paraphrasing, Directions and labeling a map
11-12	Understanding main ideas. Locating and matching information (reading)	Understanding main ideas, main points and matching information. Identifying types of information and how ideas are connected
13-14	Describing diagrams and maps (writing)	Describing maps and processes, lexical resource and grammatical accuracy
15	Giving a talk (speaking)	Understanding tasks, improving fluency and coherence. Organizing notes and talks
16	Final Examination	

(Mr. Adrian Wellington)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1&2 Before Midterm Formative Scores I (30 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	In-class mock IELTS listening test 1	15	Multiple Choice questions	15
2	In-class mock IELTS listening test 2	15	Multiple Choice questions	15

3. Midterm Exam (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Full IELTS reading test	20	Multiple choice	20

4&5 After Midterm Formative Scores I (30 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	In-class mock IELTS listening test 3	15	Multiple Choice	15
2	In-class mock IELTS listening test 4	15	Multiple Choice	15

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Full IELTS reading test	20	Multiple choice	20

Part 5) Improving Scores Policy (Fundamental English 3)

- 1) If failing any quiz or assignment, the students have a chance to ask for retest to reach 50% of the total scores one time only. If they still fail, there will be no chance for a retest a second time.
- 2) In terms of subjective assessments (note taking, essay writing), the teacher will consider the work first. In case there is still some room for improving scores as stated in the rubric, the teacher will ask students to resend the work within a specified period of time. Without doing so, the students' scores will not be improved under any condition.

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(Mr. Adrian Wellington)

Instructor

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(Dr. Choksarun Setthasuppawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Communication in English 3 (ENG32251) (Public Speaking)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Mr. Adrian Wellington

Contacts: E-mail address: adrian.w@sk.ac.th

1.2 Course Description:

Knowledge: This performance-based course emphasizes the practical skill of public speaking designed to help students perform effectively in public speaking situations. It will enable participants to draw on their previously acquired communicative resources and strengths to give different types of speeches (persuasive, informative, special occasion and debate skills).

Process: From the course, various teaching methods including task-based teaching or proficiency and competency-teaching approaches will be applied in this subject. The students will also learn through collaborative learning with through peer discussion.

Attitude: By the end of the course, the learners will have more positive attitude towards the accuracy of language usage together with awareness of using language in terms of morphology, syntax, pragmatic contents as specified in the International Standard.

1.3.1 Additional resources

The Art of Public Speaking 11th ed, Stephen Lucas,
plus resources to be provided by lecturer. In addition,
students will have the autonomy to gather their own
learning materials

Part 2) Student Learning Outcomes

2.1 To be able to plan, prepare and deliver speeches that target different types of audiences.

2.2 To be able to response to an argument or point of view, on a broad range of topics displaying coherence and cohesion as well as an appropriate grammatical range and accuracy.

2.3 To be able to understand, explain and apply the basic principles of critical thinking, and ethical listening/speaking.

2.4 To be able to conduct meaningful research as part of speech and debate preparation and execution.

(Mr. Adrian Wellington)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-2	Introduction to public speaking	The power of public speaking, critical thinking and communication processes
3-4	Listening and critical thinking	Listening and critical thinking. Become a better listener
5	Giving your first speech	Preparing and delivering your first speech
6-7	Self-introductory speeches	Mid-term introductory speeches
8		
9-10	Selecting a topic and purpose	Choosing a topic. Determining the general and specific purpose, phrasing the central idea
11-12	Gathering materials and supporting examples	Research, interviewing, referencing and taking notes/ Leadership and responsibilities in small groups
13-14	Speaking in small groups	The Reflective-Thinking method
15	Informative Speeches	Final informative speeches
16		

(Mr. Adrian Wellington)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1&2 Before Midterm Formative Scores I (30 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Essay	15	-Task achievement -Grammar -Vocabulary -Creativity	15
2	Reflection paragraph	15	-Reflection -Textual evidence -Language -Grammar	15

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Introductory speech	20	-Hook -Connect with audience -Creativity -Organization -Language	20

4&5 After Midterm Formative Scores I (30 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	News presentation	15	-Organisation -Delivery -Creativity -Time limit	15
2	Informative speech outline/research	15	-Reflection -Textual evidence -Language -Grammar	15

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Informative speech	20	Debate teams /democratically graded by the audience using a rubric handout	20

Part 5) Score Improvement Policy (Communication in English 3)

- 1) If failing any quiz or assignment, the students have a chance to ask for retest to reach 50% of the total scores one time only. If they still fail, there will be no chance for a retest a second time.
- 2) In terms of subjective assessments (note taking, essay writing), the teacher will consider the work first. In case there is still some room for improving scores as stated in the rubric, the teacher will ask students to resend the work within a specified period of time. Without doing so, the students' scores will not be improved under any condition.

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(Mr. Adrian Wellington)

Instructor

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: English for International Achievement EIA 3 (ENG32253)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): Dr. Choksarun Setthasupawat

Contacts: E-Mail address: choksarunfirst@gmail.com

ID Line: drfirststep

1.2 Course Description :

Knowledge : This class mainly focuses on fundamental IELTS skills comprising of Reading, and Writing skills. According to the IELTS test specification, the Reading section assesses the test taker's skill in reading as she/he answers the questions (multiple choice, sentence completion, summary writing, matching information, short-answers etc.) Regarding to IELTS Academic Writing: Academically describe a graph, table, chart or diagram and summaries or explain the information in your own words, describe the stages of a process, and how something works or describe an object or event.

Process: Throughout the course, the students will be exposed to both competency approach and task-based teaching methodology to improve their academic writing and reading competency.

Attitude: By the end of the course, students will have positive attitude in communicating by using English as a medium of interaction.

1.3 Textbook (s) and Course Materials

1.3.1) Required Text: IELTS Supplementary Materials written by Dr. Choksarun Setthasupawat

Part 2) Student Learning Outcomes

M. 1.3 Students are able to assess the test taker's skill in reading as she/he answers the questions (multiple choice, sentence completion, summary writing, matching information, short-answers etc.)

M.1.4 Students are able to academically describe a graph, table, chart or diagram and summaries or explain the information in your own words, describe the stages of a process, and how something works or describe an object or event.

(Dr. Choksarun Setthasupawat)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-7	Line Graph, Comparative Writing, Bar Graphs	There are fundamental up to advanced language patterns the students need for IELTS writing to elevate their writing competency
8	MidTerm Examination	
9-15	Pie Charts, Table, Process, and Mapping	There are fundamental up to advanced language patterns the students need for IELTS writing to elevate their writing competency
16	Final Examination	

(Dr. Choksarun Setthasupawat)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1 - Line Graph, Comparative Writing	8	Subjective Evaluation (Pattern, Coherence, Unity, Naturalness, Word choices)	8
2	IELTS Collection	7	a) Inclusiveness b) Punctuality	5 2

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Comparative Study II, Bar Graph	8	Subjective Evaluation (Pattern, Coherence, Unity, Naturalness, Word choices)	5 3
2	IELTS Collection	7	a) Inclusiveness b) Punctuality	5 2

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Line Graph and Bar Graph	20	Subjective Evaluation 1. Sentence Patterns 2. Graph Description	20

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Table, Pie Charts	8	Subjective Evaluation (Pattern, Coherence, Unity, Naturalness, Word choices)	8
2	IELTS Collection	7	a) Inclusiveness b) Punctuality	5 2

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Process, Maps, Multiple Graphs	8	Subjective Evaluation (Pattern, Coherence, Unity, Naturalness, Word choices)	8
2	IELTS Collection	7	a) Inclusiveness b) Punctuality	5 2

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Process, Maps, and Multiple Graphs	20	Subjective Evaluation 1. Sentence Patterns 2. Graph Description	20

Part 5) Improving Scores Policy (EIA 3)

- 1) If failing on any quiz, the students have a chance to ask for retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retest for the second time.
- 2) In terms of subjective assessments (notetaking, writing an essay), the teacher will consider the work in the first place. In case there are still some room for improving scores as stated in the rubric, the teacher will ask students to resend his works within an designated period of time . Without doing so, the students' scores will not be improved without any condition

.....

(Dr. Choksarun Setthasuppawat)

Instructor

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(Dr. Choksarun Setthasuppawat)

Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Independent Study 3 (I32255)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor: Dr.Sukhum Poommarinvarakul

Contacts: E-Mail address: sukhum.acp@gmail.com

Line: achulas

1.2 Course Description:

Knowledge: This independent study 3 course is designed to provide students with a comprehensive understanding of fundamental concepts of statistical research and research design.

Process: To gain knowledge and understanding concerning. Engaging in lectures, discussions, and interactive sessions to explore theoretical concepts. Designing research studies, including formulating research questions, selecting appropriate methodologies, and planning data collection procedures.

Attitude: By the end of the course, students will cultivate attitudes conducive to effective research practice, including curiosity, critical thinking, ethical responsibility resilience, and collaboration:

1.3 Textbook (s) and Course Materials

1.3.1) Required Text: -

1.3.2) Additional Materials: Online materials

Part 2) Student Learning Outcomes

2.1 To understand the fundamental concepts of statistical research and research design.

2.2 To develop proficiency in applying statistical techniques to analyze data.

2.3 To learn how to design research studies that are methodologically sound and ethically responsible.

2.4 To critically evaluate research literature and identify strengths and limitations of different research designs.

(Dr. Sukhum Poommarinvarakul)

Instructor

(.....)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-2	Introduction to Statistical Research	<ul style="list-style-type: none"> - Types of research designs - Basic principles of statistical analysis.
3-4	Descriptive Statistics	<ul style="list-style-type: none"> - Measures of central tendency and dispersion - Frequency distributions and graphical representations.
5-6	Inferential Statistics	<ul style="list-style-type: none"> - Probability distributions - Hypothesis testing and confidence intervals
7	Progress report	- Students update and progress their projects.
8	Midterm Examination	
9-10	Research Design	<ul style="list-style-type: none"> - Experimental vs. non-experimental designs - Sampling techniques and sample size determination
11-12	Data Collection and Measurement	<ul style="list-style-type: none"> - Survey design and administration - Instrument development and validation
13-14	Data Analysis	<ul style="list-style-type: none"> - Regression analysis - Analysis of variance (ANOVA)
15	Progress report	- Students update and progress their projects.
16	Final Examination	

(Dr. Sukhum Poommarinvarakul)

Instructor

(.....)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice work	10	a) In-class participation b) punctuality c) accuracy	10
2	Homework	10	a) punctuality b) accuracy	10

2. Before Midterm Formative Scores II (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Progress report	10	a) updating results b) discussion	10
2	Draft report	10	a) structure b) agreement c) language	10

3. Midterm Formative Scores (10 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Test: Statistical research	10	Special problem (problem-solving)	10

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Practice work	10	a) In-class participation b) punctuality c) accuracy	10
2	Homework	10	a) punctuality b) accuracy	10

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Progress report	10	a) updating results b) discussion	10
2	Draft report	10	a) structure b) agreement c) language	10

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Test: Research design	10	Special problem (problem-solving)	10

Part 5) Improving Scores Policy (Independent Study 3)

If failing on any quiz and failing to present, the students can ask for a retest and present again to reach 50% of the total scores for one time. If they still fail, there will be no chance for retesting for the second time.

.....
 (Dr. Sukhum Poommarinvarakul)
 Instructor

.....
 (Dr. Choksarun Setthasupawat)
 Head of EPLUS Academic Affairs



EPLUS+ Course Syllabus

Suankularb Wittayalai School

Subject: Social Studies 3 (SOC32151) (Geography)

Semester: 1/2024

Part 1) Course Information

1.1 Instructor (s): A. Nutthapong Chandanasiri

Contacts: E-Mail address: nutthapong.c@sk.ac.th

ID Line: nc-pound

1.2 Course Description:

Knowledge: This course aims to Understanding of the physical characteristics of the earth and the inter-relationship of various things in the natural system that affect one another; the utilization of maps and geographical instruments for searching, analyzing, drawing conclusions, and efficient utilization of geo-data and information. Understanding the interrelationship between man and the physical environment leads to cultural creativity.

Process: From the course, various teaching methods including task-based teaching or proficiency and competency-teaching approaches will be applied in this subject. The students will also learn through collaborative learning with through peer discussion.

Attitude: By the end of the course, the learners will have a more positive attitude towards the accuracy of geography and be aware of and participate in the conservation of resources and the environment for sustainable development.

1.3 Textbook (s) and Course Materials

1.3.1) Required Text: Social Studies 3

Part 2) Student Learning Outcomes

2.1 To use geographical instruments to collect, analyze and efficiently present geo-data and information.

2.2 To analyze the interaction between the physical environment and human activities in creating the way of life of local people in Thailand and various regions of the world and realize the importance of the environment affecting human life.

2.3 To analyze the situation, causes, and effects of changes in natural resources and the environment in Thailand and various regions of the world.

2.4 To analyze and participate in problem-solving and leading lives along the line of conservation of the resources and the environment for sustainable development.

(Nutthapong Chandanasiri)

Instructor

(Chintana Mangkornkan)

Subject Coordinator

Part 3) Topic Outline and Schedule

Week	Topic	Brief Contents
1-7	Fundamental Geography, Maps, and Climate	The physical characteristics of the earth and the interrelationship of various things in the natural system affect one another; the utilization of maps and geographical instruments for searching, analyzing, drawing conclusions, and efficient utilization of geo-data and information
8	Midterm Examination	
9-15	Maps, Terrains, Landforms, Resources and Environment	The interrelationship between man and the physical environment leads to cultural creativity; and the awareness of and the participation in conservation of resources and the environment for sustainable development.
16	Final Examination	

(Nutthapong Chandanasiri)

Instructor

(Chintana Mangkornkan)

Subject Coordinator

Part 4) Assessment Process

1. Before Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Quiz 1: Fundamental Geography	5	Objective Evaluation (Multiple Choice)	5
2	Group Work & Presentation (Climatic Maps)	10	a) Comprehensive accuracy & Punctuality b) Presentation	8 2

2. Before Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Group Work & Presentation (Contour Maps)	10	a) Comprehensive accuracy & Punctuality b) Presentation	8 2
2	Note Taking (Climate)	5	a) Inclusiveness b) Punctuality	3 2

3. Midterm Formative Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Test (Fundamental Geography)	12	- Objective evaluation (Multiple Choice) - Short Answer	10 2
2	Test (Maps)	2	- Objective evaluation (Multiple Choice)	2
3	Test (Climate)	6	- Objective evaluation (Multiple Choice) - Short Answer	3 3

4. After Midterm Formative Scores I (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Group Work & Presentation (Terrains & Landforms)	15	a) Comprehensive accuracy & Punctuality b) Presentation	10 5

5. After Midterm Formative Scores II (15 points)

No	Assessment Tools	Mark Allocation	Rubric	Scores
1	Group Work & Presentation Resources and Environment	15	a) Comprehensive accuracy & Punctuality b) Presentation	10 5

6. Final Examination Scores (20 points)

No	Assessment Tools	Mark Allocation	Test Specification	Scores
1	Test (Terrains and Landforms)	10	Objective evaluation (Multiple Choice)	10
2	Test (Maps)	6	Objective evaluation (Multiple Choice)	6
3	Test (Resources and Environment)	4	Objective evaluation (Multiple Choice)	4

Part 5) Improving Scores Policy (Social Studies 3)

- 1) If failing any quiz, the students have a chance to ask for a retest to reach 50% of the total scores for one time. If they still fail, there will be no chance for retesting for the second time. However, a request for retesting must be no later than 1 week after the scores are announced.
- 2) In terms of subjective assessments (Note taking, Group Work & Presentation), the teacher will consider the work in the first place. In case there is still some room for improving scores as stated in the rubric, the teacher will ask students to resend their work within a designated period. Without doing so, the student's scores will not be improved without any conditions. But not exceed 70% of the scores.
- 3) In the case of the midterm, Students will be required to take a new test which is a subjective test. If the student's score does not reach the specified criteria, the student will have to do additional work to make up for the missing points of 50%.
- 4) If the student does not submit work within the specified time, the student will not be able to request an improvement.
- 5) In the case of absences except for sickness with a doctor's certificate and direct school activities with a letter from the school attesting, exceeding 20%, the student will not be able to request an improvement.

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(Nutthapong Chandanasiri)

Instructor

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(Dr. Choksarun Setthasupawat)

Head of EPLUS Academic Affairs

