



MA20204 Universal Mathematics 4

Teacher	Mrs. Suphak Keereepart
Contact	EP Teacher Room, 1 st Floor Colombet Bldg. Suphak.ke@assumption.ac.th
Class Time	EP-M2/1: Tue; period 1, Wed; period 7 EP-M2/2: Wed; period 2; Fri ; period 2
Credits	1.0

Course Description

This universal mathematics course focuses on the topics of angles of polygons, congruence of triangles, exponents and coordinate geometry. The course enables students to use mathematical skills and processes which are problem-solving, reasoning, communications, mathematical implication and presentation, mathematical connections, and creative thinking along with having systematic work, disciplines, responsibilities, caution, self-confidence, and positive attitude toward mathematics.

Textbook

Mastering Mathematics 2A, Aksorn Charoen Taet 2020
ISBN- 8858649136657 & ISBN- 8858649136664

New Mathematics Counts, 2nd Edition, Singapore 2007
ISBN- 978-981-01-6418-8

Course Outline & Objectives

Angles Properties of Polygons (*Indicator MA 3..2, S.3/2*)

- ✓ Polygons
- ✓ The sum of the Interior Angles of any Polygons
- ✓ The sum of the Exterior Angles of a Convex Polygon

Congruence of Triangles (*Indicator MA 3..2, S.3/2*)

- ✓ What is Congruence?
- ✓ Criteria of Congruence of Triangles.

End of Midterm Exam Content – Start of Final Exam Content
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Exponents (*Indicator MA 1.1 S.1/1*)

- ✓ Laws of Exponents
- ✓ Laws of Exponents Applied to Negative Exponents
- ✓ Fractional Exponents
- ✓ Application

Coordinate Geometry (*Indicator MA 1.1 S1/2*)

- ✓ Locate a point with given coordinates.
- ✓ Plot the graph of linear equation.
- ✓ Plot the graph of a non-linear equation



Academic Integrity Policy

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Plagiarism is the act of taking someone else's work or ideas and passing them off as one's own work or ideas. Examples of plagiarism include the failure to give appropriate acknowledgement when repeating another's idea, phrase, sentence or paragraph, or failure to give appropriate acknowledgement when paraphrasing any of those.

Behavioral Expectations

Students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students must speak English in class. Students are expected to be ready at the start of every class (notebooks, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Behaviour is monitored every class. At the end of the semester the points are accumulated and used for the student's behaviour score (10%).

Furthermore, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Be honest and upright
- Proud to be Thai
- Have a sense of public consciousness
- Eager to learn
- Dedicated to work
- Be an AC gentleman

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

An assessment item must be submitted on or before the due date. **An assessment item submitted later than the due date, without an extension from the teacher, will not be graded and will result in an automatic score of zero.** Late homework, however, may be completed and submitted to qualify towards eligibility for exams. At the end of the semester, if the students have not completed a sufficient number of homework assignments to pass this aspect of the course, additional work will be set for them.



Grading

This course adheres to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Online	20%
Projects	10%
Homework/Classwork	20%
Behaviour	10% (program mandated)
Midterm Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

Mathematics can be difficult for many students. All students are encouraged to do the following:

1. Read the course textbook. You may need to read the material multiple times to understand. By reading along at home with the lessons taught at school (typically only a few pages per night), students will be able to responsibly manage the material and gain the most from the course.
2. Complete all forms of assessment and submit all homework and assignments.
3. Search online, in either Thai or English, if you don't understand a topic discussed in class or simply to get a better understanding of the topic.
4. Do not copy the work of your classmates; try to struggle through on your own. This will help you learn.
5. Come see the teacher outside of class time for assistance.
6. Do more than just the bare minimum; do the additional problems in the textbook and the review questions at the end of the chapter and check your answers.
7. Study the notes and vocabulary at least a few minutes every day.



MA20224 Supplemental Mathematics 4

Teacher Mr. Chris Won
Contact EP Teacher Room, 2nd Floor Colombet Bldg.
Class Time EP-M.2/1: Tues, period 7
 EP-M.2/2: Wed, period 4
Credits 0.5

Course Description

This mathematics course focuses on the topics of square roots of real numbers and single variable quadratic equations. This course enables students to learn and use mathematical skills and processes which include problem-solving, reasoning, communications, mathematical implication and presentation, mathematical connections, and creative thinking. Students are encouraged to have responsibility, discipline, self-confidence, and positive attitudes toward mathematics. The course closely follows the content of the Thai syllabus while also exposes students to questions and word problems from an international syllabus.

Textbook

Haese, Michael, et al. Cambridge IGCSE International Mathematics (0607) Extended (2nd Edition). Haese Mathematics Pty, Limited, 2021. ISBN 978-1-925489-65-1

Course Outline & Objectives

Learning Units	Chapters from the textbook
1. Square roots of real numbers <ol style="list-style-type: none"> 1. Find the square roots of real numbers 2. Calculate sum and differences of square roots of real numbers 3. Calculate product and quotient of square roots of real numbers 4. Radical conjugates 	Chapter 8. Surds and other radicals
2. Single variable quadratic equations <ol style="list-style-type: none"> 1. Solve quadratic equations by the factoring method 2. Solve quadratic equations by the quadratic formula 3. Solve word problems involving quadratic equations 	Chapter 23. Quadratic equations

Resources

- Google Classroom
- My Open Math
- A4 plastic portfolio (to keep all student work and handouts)
- A4 paper or notebook
- Ruler
- Writing supplies



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Behavioral Expectations

Students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students must speak English in class. Students are expected to be ready at the start of every class (notebooks, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Behavior is monitored every class. At the end of the semester the points are accumulated and used for the student's behavior score (10%).

Furthermore, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Be honest and upright
- Proud to be Thai
- Have a sense of public consciousness
- Eager to learn
- Dedicated to work
- Be an AC gentleman

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Assignments & Projects

An assessment item must be submitted on or before the due date. **An assessment item submitted later than the due date, without an extension from the teacher, will be subject to a penalty (deduction of marks).** Late homework may be completed and submitted to qualify towards eligibility for exams. At the end of the semester, if the students have not completed a sufficient number of homework assignments to pass this aspect of the course, additional work will be set for them.



Grading

This course adheres to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Formative (Tests, Quizzes, Assignments)	50%
Behavior	10%
Midterm Exam	20%
Final Exam	20%

Recommendations for Success

Mathematics can be difficult for many students. All students are encouraged to do the following:

1. Read the provided course notes. You may need to read the material multiple times to understand. By reading along at home with the lessons taught at school, students will be able to responsibly manage the material and gain the most from the course.
2. Complete all forms of assessment and submit all homework and assignments.
3. Search online, in either Thai or English, if you don't understand a topic discussed in class or simply to get a better understanding of the topic.
4. Do not copy the work of your classmates' work; try to struggle through on your own. This will help you learn.
5. Seek the teacher for assistance.
6. Do more than just the bare minimum; do the additional problems in the textbook and the review questions at the end of the chapter and check your answers.
7. Study the notes and vocabulary daily.



EN22102 Foundation English 4

Teacher Mr. Nathan Hunter

Contact EP Teacher Room, 3rd Floor Colombet Bldg.
Nathan.hu@assumption.ac.th

Credits 1.5

Course Description

The Foundation English Course focuses on the skills of reading, writing with correct grammar. In semester 2 M2 students will continue using the two books from the first semester. By the end of the year the students should also be able to write a short essay with more than one paragraph using appropriate vocabulary along with various types of sentences. Each chapter focuses on one particular topic and applies writing skills towards this topic. Each week will have a specific grammar skill to focus on. Students will be given assignments from classwork exercises in the student book to doing homework in the workbook. A midterm will be given on week 10 of the course and a final exam on the 20th week. All classes will use Schoology to keep track of assignments and grades.

A second book called, “Strategic Reading 2” will be used. This book will aim at improving students’ reading ability and developing skills to help in different areas of study. We will include videos, vocabulary, and group work in using this book. Assignments for this book will usually be in the form of a KWL chart done in class and also on exercises text itself with a few assignments in the pink notebook.

Students will have a novel to read and book report to do. The novel we are reading is ‘the Shadow Cipher’.

TEXT BOOK:

“Think 3, Student Book” Marcus C. Thompson

ISBN-13: 978-981-48-2392-0

“Think 3, Workbook,” Marcus C. Thompson

ISBN- 978-981-48-2395-1

“The Sign of Four” Macmillain Readers

978-0-230-03521-8

“Shadow Cipher,” Laura Ruby

ISBN: 978-0-230694

Resources

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• 2 notebooks.(Pink and White)• Dictionary (English to English, not a translating one)• Access to the internet for quizlet, edmodo, and emails for grades• Longman’s Writing Series Book 2• Strategic Reading Book 2 (Green Color)• A clear folder for English to hold handouts and quizzes to study. |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters |



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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (notebooks, textbook, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed. Students will be given points for having the class materials ready for class on their desks.

Behavior is monitored every day as per the class rules that are set out at the beginning of the academic year (see the front of your note books). At the end of the semester the average is taken and used for the student's behavior score (10%). Students *earn* the scores they receive. Students scores will also be calculated weekly in giving points for behavior on occasion.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Proud to be Thai
- Be an A.C. gentleman
- Eager to learn
- Dedicated to work
- Have a sense of public consciousness
- Be honest and upright

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated.

In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and class work will be assigned often and must be submitted on or before the due date for a score of 20 % of the final grade. If the work is not done for the start of class, a maximum score of 15 will be possible. After more than one day has lapsed, a maximum score of 10 will be available. Late assignments can be submitted for a maximum of 50% (10 points) up until the last week of the term. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.



Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Reading Ability	5%
Writing	5%
Grammar	5%
Worksheets/Exercises	15%
Tests/Quizzes	20%
Behavior (Affective Domain)	10%
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20%

Weeks:	Units/Content	Skills focus:	Reading:	Assignments:	Quizzes:
1-2	Think Book: Unit 6: p. 56-66, Passive Voice Novel: Shadow Cipher Sign of Four	Reading/Writing Listening Writing. Reading	Think Book: (SB) p. 58-59 Think Book (WB) P. 60-61 Chapter 4-5 p. 20-51 Chapters 1-4	(SB) p.70-71 (WB) p. 54-55 Worksheet. Summary/ Vocabulary Points of Understanding	Quiz Quiz
3-4	Think Book: Unit 9 Modals of the Past	Reading/Writing	Think Book: Unit 9 (SB) p. 89 (WB) p. 84	Summary	Quiz



	Fictional Novel: “The Shadow Cypher” Chapter 4 p. 74 Novel: A Sign of Four	Listening Reading	P. 88 “The Dress” Shadow CIPHER Chp. 6-7 Chapters: 5-8	Points of Understanding	Quiz
5-6	Using Semicolons and in lists and in sentences. Novel: “The Shadow Cypher” A Sign of Four	Reading/Writing Reading Reading	Notes. Novel: “Shadow Cypher” Chapter 7-8 Chapters 9-12.	Worksheet Summary Vocabulary Worksheet Questions	Quiz Quiz
Week 7-8	Adverbial Clauses/ Novel: “The Shadow Cypher” Novel: A Sign of Four	Reading/Writing Reading Reading	Notes Novel: Chapter 9-10 p. 102-116 Chapters 13-15	Worksheet Summary Vocabulary Short Summary	Quiz Quiz
Weeks:	Units and Chapters	Skills focus:	Reading:	Assignments:	Quizzes:
9-10	Review Week	Reading Writing	No Reading	Catch up on previous assignments.	Midterm Review
Week 10	Midterm Exams				
11-12	Adjective Clauses Shadow CIPHER	Reading/Writing	Note Shadow CIPHER: Chapter 11-12 (p. 117-126)	Worksheet Chapter questions	Quiz



Week 13-14	Think Book Novel: “The Shadow Cipher”	Listening Reading Reading	Think Book: (SB) p. 100 (WB) p. 96 The Shadow Cipher: Chapters 8 (p128-145)	Chapter Questions Crossword Puzzle	Quiz
15-16	Reported Speech Grammar: Colons Supporting Sentences Novel: “Shadow Cipher”	Reading/Writing Writing Writing	Notes Shadow Cipher: Chapter 9	Worksheets Worksheets Summary/Vocabulary	Quiz Quiz
17	Review for Midterm	Writing/Reading		Review Sheet for Midterm	
Week 18	Final Exam Week				



EN20216 M2 Supplemental English 16

Teacher Mr. Paul Griffiths

Contact EP Teacher Room, 2nd Floor Colombet Bldg.
paul_v_griffiths@yahoo.co.uk

Class Time EP-M2 - Three Periods a Week for Each Class

Credits 1.5

Course Description

This class will focus on improving skills in English, in particular reading, writing, listening and speaking. One of the primary goals of the course is to prepare students for the Cambridge PET English exam which we will sit during this semester.

Textbooks

Complete Preliminary 2nd edition – Student’s Book - Cambridge Course book

Complete Preliminary 2nd edition - Workbook - Cambridge Course book

Course Outline & Objectives

Week 1 & 2 Review of final exam, modal verbs, using ‘so’ and ‘too’.

Week 3 & 4 - Complete Preliminary Unit 6 – That’s Entertainment

- Vocabulary – Types of shows /genres
- Grammar – Present Perfect with ‘just’, ‘already’ and ‘yet’
- PET Reading – Selecting Matching Events (*PET part 2*)
- PET Speaking – Making suggestions and reaching a conclusion (*PET part 3 & 4*)

Week 5 – Writing skills (writing a creative story)

Week 6 & 7 - Complete Preliminary Unit 7 – Getting Around

- Vocabulary – weather vocabulary
- Grammar – the future
- PET Reading – Short signs and messages (*PET reading part 1*)
- PET Listening – Long listening (*PET listening part 4*)

Week 8 – Revision of Skills / Catch up on missed classes

Week 9 – Midterm Exams

Christmas / New Year break (week 10)

Week 11 – Speaking skills (PET Speaking parts 1-4)

Week 12-14 – PET Reading and Writing review (before PET exams)

Week 15-17 - Complete Preliminary Unit 8 – Influencers

- Vocabulary – Phrasal verbs / Describing people
- Grammar – 0, 1st & 2nd conditionals / when, if & unless
- PET Reading – Fill in the missing words (*PET reading part 6*)
- PET Listening – Fill in the missing words (*PET listening part 4*)

Week 18 – Revision of Skills and content / Catch up on missed classes

Week 19 – Final Exams



Resources

- Required
- 1 notebook (1 white notebook)
 - Folder for English only (to keep handouts, etc.)
 - Textbooks
 - Blue or black pen + red pen for checking work
 - Dictionary (English to English)

Other resources such as worksheets will be given throughout the semester.

Academic Integrity Policy

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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (notebook, worksheets, English Folder, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Possess discipline
- Eager to learn
- Be an AC gentleman
- Dedicated to work

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. Late assignments can be submitted but some marks will be taken off as a penalty. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.



Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Formative Score	50% or less
Behavior	10% (program mandated)
Midterm Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

English can be a difficult course for many students. All students are encouraged to try the following:

1. Have your materials for English on your desk at the beginning of class.
2. Pay attention and listen carefully while taking notes.
3. Always use English during discussions.
4. Do your homework yourself and do not copy.
5. Come see the teacher outside of class time for assistance.
6. Always do your best.



ST22102 Foundation Science 4

Teacher Mr. Derrick Thompson (Mr. Derrick)
Contact EP Science Lab Office, 2nd Floor Colombet Bldg.
thompsonderrick30@gmail.com
Credits 1.5

Course Description

This is a comprehensive course with a focus on problem solving and active learning. Students are presented with information and then given problems to solve. These problems are usually inspired by real-life situations and careful thought is put into the selection of activities so that they have relevance to students' lives. Critical thinking skills are emphasized and students are encouraged to see the 'Big Picture' and apply the information that they learn to solve problems that face humanity.

Course Outline & Objectives

1. Work and Energy

- 1.1 Work
- 1.2 Power
- 1.3 Simple Machines
 - 1.3.1 Pulley
 - 1.3.2 Lever
 - 1.3.3 Inclined Plane
 - 1.3.4 Screw
 - 1.3.5 Wedge
 - 1.3.6 Wheel and Axle
- 1.4 Energy and Energy Transformation
 - 1.4.1 Kinetic Energy
 - 1.4.2 Potential Energy
 - 1.4.3 Conservation of Energy

End of Midterm Exam Content – Start of Final Exam Content

2. The Earth and Changes on Earth

- 2.1 Fossil Fuels
 - 2.1.1 Formation Processes
 - 2.1.2 Exploitation
- 2.2 Alternative Energy Sources
 - 2.2.1 Light
 - 2.2.2 Wind
 - 2.2.3 Water
 - 2.2.4 Biomass
 - 2.2.5 Geothermal
 - 2.2.6 Hydrogen
 - 2.2.7 Benefits and Limitations of Each Energy Source
- 2.3 The Internal Structure of Earth
- 2.4 Processes on Earth's Crust
 - 2.4.1 Weathering
 - 2.4.2 Erosion
 - 2.4.3 Deposition



2.5 Soil

- 2.5.1 Soil Formation
- 2.5.2 Soil Characteristics
- 2.5.3 Benefits from Soil

2.6 Effects from Changes on Earth's Crust

- 2.6.1 Flooding
- 2.6.2 Coastal Erosion
- 2.6.3 Landslides
- 2.6.4 Sinkholes
- 2.6.5 Subsidence

Resources

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• At least 1 notebook (white)• Folder for Science only (to keep handouts, etc.)• Ruler• Glue stick and stapler• Some type of smart electronic device, such as a smartphone, tablet or ipad |
| Suggested | <ul style="list-style-type: none">• Many different colored pencils/highlighters• A Matthayom-level science practice book in Thai |

Academic Integrity Policy

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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (2 notebooks, textbook, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Possess discipline
- Eager to learn
- Be an AC gentleman
- Dedicated to work

Attendance & Tardiness

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planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.

Grading

This course follows the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Homework, Lab Work and Other Formative Assessment	40%
Behavior/Participation (Affective Domain)	10%
Quizzes	10%
Midterm Exam	20%
Final Exam	20%

Recommendations for Success

Science can be a difficult course for many students. All students are encouraged to try the following:

1. Read the textbook and websites that the teacher recommends.
2. When studying, learning in the classroom and doing homework, always try to think about how the topic we are learning fits into the 'Big Picture.'
3. Ask questions when you don't understand. If you don't understand something, there are likely other students who don't understand as well. If you ask, then you will be helping those students as well. If you feel more confident asking a question in private, then you may do so.
4. **Do not copy** any work from anyone. This will damage your potential for thinking and being creative. It will also get you a zero. Don't let other students copy your work either, as it will encourage your friends to be lazy and will harm them in the future.
5. Don't try to rely on memorizing facts alone. Try your best to truly understand the concepts and processes that we discuss in class. Assignments and exams will often require to **use** scientific knowledge, not just have knowledge. It's not always about what you know but, instead, you will often be asked to **use that knowledge** to solve problems.



ST20204 Universal Science 4

Teacher Mr. Derrick Thompson (Mr. Derrick)
Contact EP Science Lab Office, 2nd Floor Colombet Bldg.
thompsonderrick30@gmail.com
Credits 1.0

Course Description

This is an interactive course with a focus on problem solving and active learning. Students are presented with information and then given problems to solve. These problems are usually inspired by real-life situations and careful thought is put into the selection of activities so that they have relevance to students' lives. Critical thinking skills are emphasized and students are encouraged to see the 'Big Picture' and apply the information that they learn to solve problems that face humanity.

Course Outline & Objectives

1. **Light and Matter** (Please buy a protractor for this unit.)
 - 1.1 The Speed of Light
 - 1.2 Plane Mirrors
 - 1.3 Curved Mirrors
 - 1.4 Refraction of Light
 - 1.5 Dispersion of Light
 - 1.6 Lenses and Optical Instruments
2. **The Particulate Model of Matter**
 - 2.1 Particle Motion
 - 2.2 States of Matter
 - 2.3 Temperature

End of Midterm Exam Content – Start of Final Exam Content

3. **Sound**
 - 3.1 How Sound is produced
 - 3.2 How Sound Travels
 - 3.3 How We Hear Sound
 - 3.4 Importance of Sound in Society
 - 3.5 Noise Pollution
4. **Ecology**
 - 4.1 Ecosystem Components
 - 4.2 Balance in Ecosystems
 - 4.3 Nutrient Cycles
 - 4.4 Ecosystem Conservation

Resources

- | | |
|----------|--|
| Required | <ul style="list-style-type: none">• At least 1 notebook (white or pink)• Folder for Science only (to keep handouts, etc.)• Ruler• Protractor• Glue stick and stapler |
|----------|--|



- Suggested
- Many different colored pencils/highlighters
 - A Matthayom-level science practice book in Thai

Academic Integrity Policy

Students are expected to adhere to the Assumption College student handbook. There is to be no plagiarism, no copying, and no cheating of any kind. These and any other acts of academic dishonesty lower the quality of the education and will not be tolerated. Students involved in any form of academic dishonesty, including any student supplying or allowing the copying to take place, will receive a zero.

Plagiarism is the act of taking someone else's work or ideas and passing them off as one's own work or ideas. Examples of plagiarism include the failure to give appropriate acknowledgement when repeating another's idea, phrase, sentence or paragraph, or failure to give appropriate acknowledgement when paraphrasing any of those.

Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (2 notebooks, textbook, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Possess discipline
- Eager to learn
- Be an AC gentleman
- Dedicated to work

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.



Grading

This course follows the Assumption College grading scale:

<i>Final Score</i> $\geq 80\%$	4.0
$75\% \leq \textit{Final Score} < 80\%$	3.5
$70\% \leq \textit{Final Score} < 75\%$	3.0
$65\% \leq \textit{Final Score} < 70\%$	2.5
$60\% \leq \textit{Final Score} < 65\%$	2.0
$55\% \leq \textit{Final Score} < 60\%$	1.5
$50\% \leq \textit{Final Score} < 55\%$	1.0
<i>Final Score</i> $< 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Homework, Lab Work and Other Formative Assessment	40%
Behavior/Participation (Affective Domain)	10%
Quizzes	10%
Midterm Exam	20%
Final Exam	20%

Recommendations for Success

Science can be a difficult course for many students. All students are encouraged to try the following:

1. Read the textbook and websites that the teacher recommends.
2. When studying, learning in the classroom and doing homework, always try to think about how the topic we are learning fits into the 'Big Picture.'
3. Ask questions when you don't understand. If you don't understand something, there are likely other students who don't understand as well. If you ask, then you will be helping those students as well. If you feel more confident asking a question in private, then you may do so.
4. **Do not copy** any work from anyone. This will damage your potential for thinking and being creative. It will also get you a zero. Don't let other students copy your work either, as it will encourage your friends to be lazy and will harm them in the future.



ST20224 Supplemental Science 4

Contact: EP Teacher Room, 2nd Floor Colombet Bldg.

Class Time: EP-M 2/1: Monday period 7
EP-M 2/2: Thursday period 2

Credits: 0.5

Course Description

Study, research, tell, explain, practice, experiment and calculate about the use of basic science equipment, practices for science laboratory use; use and maintenance of microscopes and calculation of microscope magnification; simple experiments in relation to chemistry, biology and physics. Students will apply the scientific process: knowledge search, exploration, investigation, data research, data record, data classification, and discussion. They will acquire knowledge, ideas, and understanding and will be able to present and communicate what is learned. Students will also have the ability to make decisions and apply knowledge to everyday life. Scientific mind, ethics and morals, together with proper social values will be promoted. See course outline and objectives below.

Textbook

Science Fusion - Module K: Introduction to Science and Technology, ISBN:
9780547589343

Course Outline & Objectives

[Indicator 1 - 4]

UNIT 2: Measurement and Data [Indicator 1]

Lesson 1: Representing data – Weeks 1-3

- ✓ Understand tables, graphs and models.
- ✓ Explain the characteristics of graphs
- ✓ Define what is involved with scientific models
- ✓ Understand the importance of representing data correctly
- ✓ Visual Summary – Representing data

Lesson 2: Scientific Tools and Measurement [Indicator 3] – Week 4-5

- ✓ Understand how to use different measurement systems
- ✓ Explain what a measurement tool is used for.
- ✓ Differentiate between scientific tool and measurement tool.
- ✓ Understand the scientific tool uses.
- ✓ Visual Summary – Scientific Tools and Measurement.

Lesson 3: Models and Simulations [Indicators 1] – Week 6 -7

- ✓ Understand the types of models.
- ✓ Describe different models and simulations.
- ✓ Explain where we use models and simulations.
- ✓ Difference between models and simulations
- ✓ Visual Summary – Models and simulations

Midterm Exam Week

Using the Microscope: [Indicators Standard 3] – Week 11-13



- ✓ Explain how scientists use microscopes.
- ✓ Describe what microscopes do and how they get evidence.
- ✓ Understand how microscopes have changed over time.
- ✓ Visual Summary – Microscopes

Conducting experiments [Indicator 4] – Week 14 -15

- ✓ Explain how science experiments are to be conducted.
- ✓ Evaluate how bad experiments are done.
- ✓ Describe the different scientific experiments.
- ✓ Learn how to ask scientific questions and then test it.
- ✓ Explain how the different sciences use experiments
- ✓ Visual Summary – Conducting experiments.

Inquiry base project [Indicator 4] – Week 16 - 17

- ✓ Explore the scientific method by doing their own project.
- ✓ Test their project and make adjustments.
- ✓ Present their work to the class.
- ✓ Explain the process of the scientific method.
- ✓ Visual Summary – My project

Final Exam Week

Resources

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none"><input type="checkbox"/> 1 notebook<input type="checkbox"/> 1 plastic folder for course materials<input type="checkbox"/> Science Text Book<input type="checkbox"/> Red and blue pen. Liquid paper. Pencils. Ruler<input type="checkbox"/> Internet -Schoology<input type="checkbox"/> Headphones |
| Suggested | <ul style="list-style-type: none"><input type="checkbox"/> many different colored pens/markers/highlighters<input type="checkbox"/> Electronic Thai-Eng translator / calculator (phone-based application acceptable after teacher approval) |

Academic Integrity Policy

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Plagiarism is the act of taking someone else's work or ideas and passing them off as one's own work or ideas. Examples of plagiarism include the failure to give appropriate acknowledgement when repeating another's idea, phrase, sentence or paragraph, or failure to give appropriate acknowledgement when paraphrasing any of those.

Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for



themselves and their actions. Students are expected to be ready at the start of every class and to actively participate throughout the lesson until class is dismissed.

All students are given a full score for behavior (10 points) which must be maintained throughout the course of the subject. Any student whose behavior score slips below 5 points over the course of time will be referred to the discipline master.

All Thai students are expected to embrace the following *desired characteristics*

- Possess discipline
- Eager to learn
- be an AC gentleman
- Dedicated to work

Attendance & Tardiness

Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Class work

Homework will be assigned intermittently by the teacher. Any late work submitted may result in point's penalization. A student may request for more time to complete their homework which may or may not be granted by the subject teacher. This is granted at the discretion of the subject teacher.

Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Class work & homework	10%
Labs and quiz's	10%
Essays and projects	20%
Notebook work	10%
Behavior (speaking in English / on task / punctual)	10% (program mandated)
Midterm Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

Don't play games or watch TV until your homework is done. Don't stay up late. You should be in bed at 9 pm so you can get a good night sleep. If you can't get a good 8 hours of sleep per night, it will affect both your attention span in class and your overall ability to learn.



ST22103 Technology and Computer Science 2

Teacher Mr. Dave Thomas

Contact EP Teacher Room, 2nd Floor Colombet Bldg.

Credits 0.5

Course Description

Further study into intermediate level of knowledge of robots and robotics. Student centered learning using a STEM framework to create mobile robots and automatic mechanical systems. Explore how the mechanics of robots work and can be developed. Deeper understanding of the use of and development of international standard pseudo-code and control flow charts in program planning stage. Additional study into current effects of automation. Development of analytical and technological processes to create knowledge and understanding, communicative ability, thinking ability, ability to use technology and apply the knowledge to real-life situations with morality, ethics, endeavor, and studiousness.

Course Outline & Objectives

Indicators [1, 2, 3, 4, 5]

Topics include:

Roles and Operation of Robots [Indicator 1, 2]

Numbering systems

Boolean logic

Algorithms to aid problem solving

Creation and Development [Indicator 3, 4, 5]

Advance constructions in robotics

Robotic appendages

Sensors: acting on and reacting to the environment

Programming [Indicator 1, 3, 4, 5]

Intermediate level programming

Variables-use in programming

Advancement of the concept of planning to program (pseudo-code and control flow, Logical systems)

Resources

- Required
- EP Computer Lab
 - Robots

Academic Integrity Policy

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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. A behavior score (out of 10 points) is taken every day. At the end of the semester the average is taken and used for the student’s behavior score (10%). Students *earn* the scores they receive.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Proud to be Thai
- Be an AC gentleman
- Eager to learn
- Dedicated to work
- Have a sense of public consciousness
- Be honest and upright

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. Late assignments can be submitted for a maximum of 50% up until the last week of the term. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.

Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

STEM	10%
Homework/Classwork	10%
Quiz	10%
Coursework	20%
Behavior	10% (program mandated)
Midterm Exam/Project	20% (program mandated)
Final Exam	20% (program mandated)



Recommendations for Success

Information technology can be a difficult course for many students. All students are encouraged to try the following:

1. Read, read, read the textbook. Oftentimes, reading the text once is not enough even for native English speakers. You may need to read the material multiple times to understand. By reading along at home with the lessons taught at school (typically only a few pages per night), students will be able to responsibly manage the material and gain the most from the course.
2. Search online, in either Thai or English, if you don't understand a topic discussed in class or simply to get a better understanding of the topic.
3. Do **not** copy your classmates work; struggle through and do the work on your own! This is how you learn!
4. Come see the teacher outside of class time for assistance.
5. Do more than just the bare minimum; there are plenty of problems in the textbook. We only have time for so many of them. Do the review questions at the end of the chapter and see the teacher for the answers.
6. Study the notes and vocabulary at least a few minutes every day, such as in homeroom or during any free time you might have in other classes.



ST20253 & ST20254 Computer for Education 3 & 4

Teacher	Mr. Matt Harris
Contact	Location: 5th Floor Computer Lab
Class Time	EP-M 2/1: Friday 10:20 – 11:10/ 12:10 – 13:00
Credits	1.0

Course Description

Study basic knowledge of robots and robotics. Student centered learning using a STEM framework to create mobile robots. Explore how the mechanics of robots work and can be developed. Understand use of Pseudo-code and control flow charts in program planning stage, Investigate how robots can be programmed to interact and react to the environment and environmental changes. To study knowledge of how robots are used in the modern world as well as current and future impact of robotics on society. Use analytical and technological processes to create knowledge and understanding, communicative ability, thinking ability, ability to use technology and apply the knowledge to real-life situations with morality, ethics, endeavor, and studiousness.

Course Outline & Objectives

Indicators

1. Discuss principles of operation, roles, and advantages of robots.
2. Explore knowledge of how to create and develop robots.
3. Explore knowledge of how to create and develop basic programs for robotics.

Computer for Education 3 & 4 [Indicators 1, 2, 3]

Data Communications & Networking

Week 1-2: Number Systems for Computers

- Binary number system
- Floating point arithmetic

Week 3-7: Networking

- Physical
- Network
- Transport
- Application
- Client-server architecture
- TCP/IP
- Networks Topologies

Midterm Exam (Week 8 and 9; Dec 15-23)

Week 10-15: Web Technologies

- JavaScript/ HTML/ CSS
- Developer tools
- Network/ Resource monitoring
- Databases

Final Exam (Week 16; Feb 8–12)



Resources

- | | |
|-----------|-------------------|
| Required | • EP Computer Lab |
| Suggested | • Headphones |

Academic Integrity Policy

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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. A behavior score (out of 10 points) is taken every day. At the end of the semester the average is taken and used for the student's behavior score (10%). Students *earn* the scores they receive.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Proud to be Thai
- Be an AC gentleman
- Eager to learn
- Dedicated to work
- Have a sense of public consciousness
- Be honest and upright

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. Late assignments can be submitted for a maximum of 50% up until the last week of the term. All late or missed assignments that are not turned in *before* the last week of the term will receive a zero.



Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

STEAM	10%
Homework/Classwork	30%
Coursework	30%
Behavior	10% (program mandated)
Midterm Exam/Project	10% (program mandated)
Final Exam	10% (program mandated)

Recommendations for Success

Information technology can be a difficult course for many students. All students are encouraged to try the following:

1. Read, read, read the teacher's online notes. Oftentimes, reading the text once is not enough even for native English speakers. You may need to read the material multiple times to understand. By reading along at home with the lessons taught at school (typically only a few pages per night), students will be able to responsibly manage the material and gain the most from the course.
2. Search online, in either Thai or English, if you don't understand a topic discussed in class or simply to get a better understanding of the topic.
3. Do **not** copy your classmates work; struggle through and do the work on your own! This is how you learn!
4. Come see the teacher outside of class time for assistance.
5. Do more than just the bare minimum; there are plenty of problems in the teacher's online notes. We only have time for so many of them. Do the review questions at the end of the chapter and see the teacher for the answers.
6. Study the notes and vocabulary at least a few minutes every day, such as in homeroom or during any free time you might have in other classes.



OC22103 **Foundation Occupational Works 4**
Teacher Dr. Hermann Gruenwald
Contact EP Teacher Room, 2nd Floor Colombet Building
 DrHermann365@gmail.com

Class Time EP-M2/1: Wednesdays, Period 4
 EP-M2/2: Wednesdays, Period 3

Credits 0.5

Course Description

This course is broken down into three segments which focus on clothing and apparel, mechanical works and agricultural works. The course builds on the knowledge and skill set acquired in the previous semester and expands on it. It provides opportunities to explore and practice more in depth the three areas of apparel, mechanical and agricultural work with interesting projects.

The goals of the Occupational Works subject are to:

- endow students with creative opportunities and curiosity
- refine skills for individual and group working processes such as management, teamwork, problem-solving and attention to detail
- develop and apply research and investigation skills to coursework
- improve awareness of human impact on the environment for one's life and family
- acquire technological knowledge for occupational development
- promote awareness of nationalism, religiosity, royalty, honesty, self-discipline, studiousness, self-sufficiency, endeavor, love of being Thai, and public-mindedness.

Course Outline & Objectives

Strand 1: Living and Family

Standard O1.1: Understanding of concept of work; endowment with creativity and skills for various aspects and work processes, management, teamwork, investigation for seeking knowledge, morality, diligence, and awareness of the need to economise on the use of energy and the environment for one's life and for family

Indicators

1. Apply skills in seeking knowledge for work development.
2. Apply skills for problem-solving processes when working.
3. Have awareness and economically and cost- effectively use resources when working.

Strand 4: Occupation

Standard O4.1: Understanding and acquisition of necessary skills and experiences; proper perception of future career; technological application for occupational development; endowment with morality and favourable attitude towards occupations

Indicators

4. Explain about strengthening occupational skills.
5. Specify self-preparation for entering employment.
6. Have basic skills required for taking up occupations of interest.



Resources

- | | |
|------------|---|
| Required | <ul style="list-style-type: none">• A blank-paper sketchbook (minimum A4 size)• Basic stationary (pen, pencil, eraser, ruler, sharpener etc)• Extra stationary (glue stick, stapler, tape, liquid paper etc.) |
| Suggested | <ul style="list-style-type: none">• Various colored pens / markers / highlighters / pencils |
| Occasional | <ul style="list-style-type: none">• Drinks ingredients, decorations and glassware• Craftwork materials or items <p><i>The above will be requested a week in advance of use</i></p> |

Academic Integrity Policy

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Behavioral Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (sketch book, basic stationary, materials, ingredients etc.) and to actively participate throughout the lesson until class is dismissed.

Behavior and participation is monitored during every class and points are deducted for misbehaviour, non-participation or disruption to the class. This is averaged throughout the semester and calculated as a score of 10 at the end of semester.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- | | |
|---|---|
| <ul style="list-style-type: none">• Possess discipline• Be an AC gentleman• Be honest and upright | <ul style="list-style-type: none">• Be eager to learn• Be dedicated to work• Have a sense of public-consciousness |
|---|---|

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time. Refer to schoology for the content covered in the lecture and the in-class assignments and homework,



Homework & Class Work

Homework and class work will be assigned often, must be completed to a high standard and be submitted on or before the due date. Late assignments are subject to 50% less marks for each week they are late. All missed assignments will receive a zero and will dramatically reduce the averaged class work and homework scores of the individual.

Grading

This course follows to the Assumption College grading scale:

<i>Final Score</i> $\geq 80\%$	4.0
$75\% \leq \textit{Final Score} < 80\%$	3.5
$70\% \leq \textit{Final Score} < 75\%$	3.0
$65\% \leq \textit{Final Score} < 70\%$	2.5
$60\% \leq \textit{Final Score} < 65\%$	2.0
$55\% \leq \textit{Final Score} < 60\%$	1.5
$50\% \leq \textit{Final Score} < 55\%$	1.0
<i>Final Score</i> $< 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Behavior & Participation	20%	Affective Domain
Formative 1 Class Work & Home Work	15%	Formative
Formative 2 Class Work & Home Work	15%	Formative
STEM	10%	Formative
Midterm Exam	20 %	Exams
Final Exam	20%	Exams

Recommendations for Success

1. Bring all the materials that are needed to complete projects on the day of class
2. Be creative and work hard for your own success and learning.
3. Don't be afraid to experiment and have fun studying
4. Plan projects carefully and have the required materials for your project
5. Keep your notebook tidy, attractive and up-to-date and submit work on time



HP22103 Foundation Health Studies 3

Teacher: Mr. Grant Shorten
Contact: Teachers Room, 2nd Floor Colombet Building.
grant.sh@assumption.ac.th
Class Time: EP-M2/1-2
Credits: 0.5

Course Description

The M2 Foundation Health Studies course provides students with essential knowledge and skills to understand and address mental and emotional health challenges. This course focuses on identifying and managing mental health problems, coping with stress and emotions, assisting individuals struggling with addiction, and learning strategies to avoid risky behaviours and situations. Through theoretical knowledge and practical applications, students will gain the tools needed to promote mental well-being and support those in need.

Textbook

Think Big Plus

External Resources

Course Outline & Objectives

- 1. Mental and Health Problems:**
 - Explore common mental health issues, such as anxiety, depression, and other mood disorders.
 - Understand the causes, symptoms, and effects of mental health problems on individuals and communities.
 - Learn the importance of early identification and intervention, as well as resources available for mental health support.
- 2. The Management of Emotions and Stress:**
 - Study the role of emotions in mental and physical health.
 - Learn effective stress management techniques such as mindfulness, relaxation exercises, and time management.
 - Understand how emotional regulation contributes to overall well-being and how to apply these strategies in daily life.
- 3. Assistance and Rehabilitation for Drug Addicts:**
 - Gain insight into the process of addiction recovery and rehabilitation.
 - Explore the different types of support available for drug addicts, including counselling, therapy, and medical treatment.
 - Study the role of community, family, and rehabilitation centres in supporting individuals through recovery.
- 4. Avoiding Risky Behaviours and Risky Situations:**
 - Identify common risky behaviours, such as substance abuse, unsafe sexual practices, and reckless driving.
 - Learn strategies to avoid risky situations and make informed decisions to protect health and well-being.
 - Discuss the role of peer pressure and social influence on risky behaviour, and how to build resilience against them.



Learning Outcomes:

By the end of the course, students will be able to:

- Recognize and understand the signs of mental health problems and the importance of seeking help.
- Effectively manage stress and emotions through practical techniques and strategies.
- Understand the rehabilitation process for drug addicts and how to provide support.
- Identify risky behaviours and situations and apply prevention strategies to avoid them.

If you have questions about the class or your grade you can email me at:

grant.sh@assumption.ac.th

Resources Required

A plastic folder for worksheets.

White School Notebook

Black and blue pen

Ruler

Academic Integrity Policy

Students are expected to adhere to the Assumption College student handbook. There is to be no plagiarism, no copying, and no cheating of any kind. These and any other acts of academic dishonesty lower the quality of the education and will not be tolerated. Students involved in any form of academic dishonesty, including any student supplying or allowing the copying to take place, will receive a zero. Students should be expected to earn their scores. Scores of pass should not be given unless the student has attained sufficient knowledge to earn a passing grade.

Plagiarism is the act of taking someone else's work or ideas and passing them off as one's own work or ideas. Examples of plagiarism include the failure to give appropriate acknowledgement when repeating another's idea, phrase, sentence or paragraph, or failure to give appropriate acknowledgement when paraphrasing any of those.

Behavioural Expectations

For the sake of all the members of the class, students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students are expected to be ready at the start of every class (Notebooks, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Behaviour is monitored every day as per the class rules that are set out at the beginning of the academic year (see the front of your note books). At the end of the semester the average is taken and used for the student's behaviour score (10%). Students *earn* the scores they receive.

Additionally, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Proud to be Thai
- Be an AC gentleman
- Eager to learn
- Dedicated to work
- Have a sense of public consciousness
- Be honest and upright



Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher in as far in advance as possible. Students are expected to catch up on all missed work outside of class time.

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date for a full score of 10 points. Late work without excuse will be deducted at the rate of 10% per day until the maximum possible score is zero. All work must be turned in before the last week of each term. Late work is discouraged.

Grading

This course follows to the Assumption College grading scale:

<i>Final Score</i> ≥ 80%	4.0
$75\% \leq \textit{Final Score} < 80\%$	3.5
$70\% \leq \textit{Final Score} < 75\%$	3.0
$65\% \leq \textit{Final Score} < 70\%$	2.5
$60\% \leq \textit{Final Score} < 65\%$	2.0
$55\% \leq \textit{Final Score} < 60\%$	1.5
$50\% \leq \textit{Final Score} < 55\%$	1.0
<i>Final Score</i> < 50%	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Class work	20%
Class Participation	10%
Note book	10%
Behavior	10%
Quizzes	10%
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)



MA22102 **Foundation Mathematics 4**
Teacher Mr. Ryan Rogers
Contact EP Teacher Room, 2nd Floor Colombet Bldg.
Class Time EP-M2/1: Mon, period 3; Wed, period 2; Thurs, period 4
 EP-M2/2: Mon, period 2; Tue, period 7; Fri, period 4

Credits 1.5

Textbook

Mastering Mathematics Secondary 2A & 2B edition (Shing Lee Publishers)

Course Outline & Objectives

Learning Units	Chapters from Mastering Mathematics Secondary 2A & 2B edition textbook
1. Pythagorean Theorem 1. Pythagorean theorem 2. The converse of the Pythagorean theorem 3. Its application	<i>2B Edition, Chapter 2: Pythagoras' Theorem p. 52-97</i>
2. Surface Area and Volume 1. Surface area of a prism 2. Volume of a prism 3. Surface area of a cylinder 4. Volume of a cylinder	<i>2B Edition, Chapter 3: Prisms and Cylinders p. 98-151</i>
3. Building Fundamental Knowledge of Geometry 1. Building fundamental knowledge in geometry 2. Construct a line segment equal to the length of a given line segment 3. Divide a line segment given in half	<i>2B Edition, Chapter 5: Reasoning in Geometric Constructions p. 228-281</i>
4. Geometric Transformations 1. Geometric transformation 2. Parallel translation 3. Reflection 4. Rotation	<i>2A Edition, Chapter 4: Geometric Transformations p. 154-211</i>
5. Statistics and Probability 1. Basic statistics concepts 2. Upper and lower class boundaries 3. Frequency histograms and polygons 4. Stem-and-leaf diagram 5. Central tendency	<i>2B Edition, Chapter 4: Statistics p. 152-226</i>



Resources

- A4 plastic portfolio
(to keep all student work and handouts)
- A4 lined paper or notebook
- A4 graph paper
- Ruler
- Writing supplies

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Behavioral Expectations

Students are expected to respect themselves, their classmates, the teacher, and the facilities. Students must accept responsibility for themselves and their actions. Students must speak English in class. Students are expected to be ready at the start of every class (notebooks, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

Behavior is monitored every class. At the end of the semester the points are accumulated and used for the student's behavior score (10%).

Furthermore, all Thai students are expected to embrace the following *desired characteristics*:

- Love for the country and the King, faith in religion
- Possess discipline
- Be self-sufficient
- Be honest and upright
- Proud to be Thai
- Have a sense of public consciousness
- Eager to learn
- Dedicated to work
- Be an AC gentleman

Attendance & Tardiness

Attendance will be taken at the start of every class. Students are expected to be in class on-time, every time. Unexcused absences or tardiness will not be tolerated. In the case of planned absences, please notify the teacher as far in advance as possible. Students are expected to catch up on all missed work outside of class time.



Assignments & Projects

An assessment item must be submitted on or before the due date. **An assessment item submitted later than the due date, without an extension from the teacher, will be subject to a penalty (deduction of marks).** Late homework may be completed and submitted to qualify towards eligibility for exams. At the end of the semester, if the students have not completed a sufficient number of homework assignments to pass this aspect of the course, additional work will be set for them.

Grading

This course adheres to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq Final\ Score < 80\%$	3.5
$70\% \leq Final\ Score < 75\%$	3.0
$65\% \leq Final\ Score < 70\%$	2.5
$60\% \leq Final\ Score < 65\%$	2.0
$55\% \leq Final\ Score < 60\%$	1.5
$50\% \leq Final\ Score < 55\%$	1.0
$Final\ Score < 50\%$	0.0

Evaluation and Assessment

The final semester grade for this course out of 100% is broken down as follows:

Formative (Tests, Google Classroom Quizzes, and Assignments)	40%
STEAM	10% (program mandated)
Behavior	10% (program mandated)
Midterm Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

Mathematics can be difficult for many students. All students are encouraged to do the following:

1. Read the course textbook. You may need to read the material multiple times to understand. By reading along at home with the lessons taught at school (typically only a few pages per night), students will be able to responsibly manage the material and gain the most from the course.
2. Complete all forms of assessment and submit all homework and assignments.
3. Search online, in either Thai or English, if you don't understand a topic discussed in class or simply to get a better understanding of the topic.
4. Do not copy the work of your classmates; try to struggle through on your own. This will help you learn.
5. Come see the teacher outside of class time for assistance.
6. Do more than just the bare minimum; do the additional problems in the textbook and the review questions at the end of the chapter and check your answers.
7. Study the notes and vocabulary at least a few minutes every day.