



MA23102 Foundation Mathematics 6

Teacher	Ms. Mabelle Wong
Contact	EP Teacher Room, 2 nd Floor Colombet Bldg.
Class Time	EP-M3/1: Mon, period 2; Wed, period 2; Thurs, period 4 EP-M3/2: Tues, period 7; Thurs, period 1; Fri, period 2 EP-M3/3: Mon, Period 7; Tues, period 4; Wed, period 4
Credits	1.5

Course Description

This foundation mathematics course focuses on the topics of inequality, quadratic equations, factoring polynomials, trigonometric ratios and circle theorems. 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

IGCSE Cambridge International Mathematics Extended 3rd edition (Haese and Harris Publications)

Course Outline & Objectives

Learning Units	Chapters from Haese and Harris textbook
1. Inequality (Indicator MA1.3 S.3/1) 1. Linear inequality in one variable 2. Solving linear inequality in one variable 3. Problems about linear inequality in one variable	Chapter 19: Linear Inequalities p. 323-327
2. Quadratic equations (Indicators MA1.2 S.3/2, MA1.3 S.3/2) 1. Quadratic equation with one variable 2. Solving quadratic equation with one variable 3. Solving word problems on quadratic equation with one variable	Chapter 23: Quadratic Equations p. 405-420
3. Factoring polynomials (Indicator MA1.2 S.3/1) 1. Factoring cubic equations/third degree polynomials 2. Factor theorem 3. Remainder theorem 4. Synthetic division	Not covered in the textbook Use teacher's notes
4. Trigonometric ratio (Indicator MA2.2 S.3/2) 1. Trigonometric ratio 2. Trigonometric ratios of 30, 45, and 60 degrees 3. Application	Chapter 22: Trigonometry p. 381-404
5. Circle (Indicator MA2.2 S.3/3) 1. Parts of a circle 2. Properties of angles in a circle 3. Properties of chords in a circle 4. Properties about tangent lines to circles 5. Properties of the rectangle inscribed in a circle	Chapter 35: Circle Geometry p. 645-668



Resources

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

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

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.



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)
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 work; 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.



MA20206 Universal Mathematics 6

Teacher Mr. Ryan Rogers

Contact EP Teacher Room, 2nd Floor Colombet Bldg.

Class Time EP-M3/1: Tue, period 5; Wed, period 7

EP-M3/2: Wed, period 3; Fri period 6

EP-M3/3: Tue, period 1; Thur, period 3

Credits 1.0

Course Description

Study foundation mathematics on the topics of Algebraic Manipulation and Formulae, Trigonometry Height and distance, Geometrical properties of Circles. Use mathematical skills and processes which are problem-solving, reasoning, mathematical communication and implication, presentation, mathematical knowledge linking, and creativity with responsibility, disciplines, systematic and accurate working, and self-confidence, positive attitude towards mathematics, honesty, and effort.

Textbook

IGCSE Cambridge International Mathematics Extended 2nd edition (Haese and Harris Publications)

Course Outline & Objectives

Learning Units	Chapters from Haese and Harris textbook
1. Algebraic Manipulation and Formulae 1. Algebraic Fractions 2. Multiplication and division of Algebraic Fractions 3. Addition and Subtraction of Algebraic Fractions 4. Solving Equations involving Algebraic Fractions	Chapter 20: Algebraic Fractions p. 319-332
2. Trigonometry 1. What is trigonometry 2. Trigonometric Ratios 3. Power of Trigonometric Ratios 4. Trigonometric Ratios for Special angles 5. Trigonometric Ratios of Complementary angles	Chapter 22: Trigonometry p. 351-374
3. Height and Distance 1. Angle of elevation 2. Angle of depression	Chapter 22: Trigonometry p. 351-374
4. Geometric Properties of Circles 1. Circles 2. Properties of chords 3. Formulae related to circles	Chapter 31: Circle Geometry p. 523-547



4. Symmetrical properties of circles 5. Angles properties of circles 6. Cyclic quadrilaterals 7. Tangents 8. The Alternate Segment Theorem	
--	--

Resources

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

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

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.

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, MS Quizzes, Assignments, and Projects)	50%
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.



THE ENGLISH PROGRAM AT ASSUMPTION COLLEGE
Course Syllabus – Semester 2/2024

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. 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.



MA20226 Supplemental Mathematics 6

Teacher	Dr. Keerthi Prabhakar
Contact	EP Teacher Room, 2 nd Floor Colombet Bldg. epackeerthi@gmail.com
Class Time	EP-M3/1: Tue, period 1 EP-M3/2: Wed, period 1 EP-M3/3: Wed, Period 2
Credits	0.5

Course Description

This course on equations and their applications equips students with essential skills for solving and interpreting a wide range of mathematical problems, both abstract and practical. Starting with linear equations, students learn foundational methods for solving straightforward equations in one variable, a fundamental skill with applications across disciplines.

The course then progresses to quadratic equations, teaching student's techniques to solve equations of degree two using factoring, the quadratic formula, and completing the square. Graphing plays a key role, as students learn to visually represent linear and quadratic equations, enhancing their understanding of solutions and intersections in practical contexts.

A major focus is on solving word problems, where students translate real-life scenarios into mathematical equations. They begin with linear word problems in one variable and advance to more complex systems of linear equations in two variables, applying methods like substitution and elimination. Students also learn to solve word problems involving systems of equations of degree no higher than two, which prepares them to tackle scenarios involving non-linear relationships.

This course builds critical problem-solving skills, enabling students to model, analyze, and solve real-world situations using mathematical equations, essential for further studies in mathematics, physics, engineering, and economics.

Textbook / Worksheets

Mathematics for the International Student: Mathematics SL, 3rd Edition
Teacher will also provide handouts

Course Outline & Objectives

Numbers of Units/Titles of Units	Competencies/Skills/Process/Teaching Methods	Media	Assessment
1. Linear equation 2. Quadratic equation 3. Graphs and applications 5. Solve word problems on linear equations in one variable 6. Solve word problems on systems of linear equations in two variables 7. Solve word problems on systems of equations in the degree not higher than two	1. Lecture 2. Questions and answers 3. Group work process	1. Handouts 2. Worksheets 3. Website	1. Using the characteristics observation form 2. Checking exercises 3. Marking the tests



Resources

- Required
- Ruler
 - Glue stick, stapler, or tape
- Suggested
- Many different coloured pens/markers/highlighters
 - Electronic Thai-English translator (not a phone-based application)

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 education and will not be tolerated. Students involved in any form of academic dishonesty, including any student supplying or allowing copying, will receive a zero.

Plagiarism is taking someone else's work or ideas and passing them off as one's 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 class members, 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 participate throughout the lesson until class is dismissed actively.

Behaviour is monitored daily per the class rules set out at the beginning of the academic year (see the front of your notebooks). Students earn the scores they receive. At the end of the semester the average is taken and used for the student's behavior score (10%).

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

Homework & Classwork

Homework and classwork will be assigned often and must be submitted on or before the due date. If the work is not done by the start of class, a maximum score of 15 will be possible. All late or missed assignments 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:

Quiz & Projects	20%
Home/class work	20%
Affective Domains (Behavior)	10% (program mandated)
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

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

1. Read, read, read the course textbook. Reading the text once is often insufficient, even for native English speakers. You may need to read the material multiple times to understand. Students can responsibly manage the material and gain the most from the course by reading along at home with the lessons taught at school (typically only a few pages per night).
2. Search online, in either Thai or English, if you don't understand a topic discussed in class or to better understand the topic.
3. Get a Thai language introductory mathematics book.
4. Get a math and physics tutor. The tutor should be helping you learn, not doing the work for you!
5. Do **not** copy your classmate's work; struggle through and do the work on your own! This is how you learn!
6. See the teacher outside of class time for assistance.
7. Do more than just the bare minimum; the textbook has plenty of problems. 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.
8. 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.



EN23102 M3 Foundation English 6

Teacher Mr. Paul Griffiths

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

Class Time EP-M3 - Three Periods a Week for Each Class

Credits 1.5

Course Description

This class will aim to improve the general English of students. We will focus on the four skills of speaking, listening, reading and writing. We will also cover grammar and vocabulary. It is another goal of the course to encourage reading for pleasure and we will read 'The Thief of Always' (or a different book that the student chooses) in semester two and students will write a book report about it.

Textbooks + Novels

Think 4 – Student Book

Think 4 – Workbook

The Lion, the Witch and the Wardrobe – Novel by C.S. Lewis

The Thief of Always – Novel by Clive Barker

Course Outline & Objectives

Week 1 – Vocabulary Games and thinking outside the box.

Weeks 2-3 – **Think Unit 4 – The Art of Thinking** (*finish from semester 1*)

- Vocabulary – expressions with 'good' and adverbial phrases
- Grammar – Adverbs
- Reading – True or False
- Functional Language – Expressing Frustration

Week 4 – **Introduction to Book Report in Semester 2**

Weeks 5-7 – **Think Unit 5 – Too much Tech?**

- Vocabulary – Technology nouns and verbs
- Grammar – Modal verbs
- Reading – Reading for detailed understanding
- Writing – Instructions.
- Functional Language – Advice and obligation

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

Week 9 – **Midterm Exams**

Christmas / New Year break (week 10)

Weeks 11-14 – **Think Unit 6 – Better Together**

- Vocabulary – Ways of Speaking and Friendship idioms
- Grammar – Comparatives and showing contrast
- Reading – True, False or Not Given
- Writing – An essay. Using the correct punctuation.
- Functional Language – Using intensifying comparatives



Week 15 – Work on book report (finish book report)

Week 16 – Revision of Skills and content / Catch up on missed classes

Week 17 – Final Exams

Resources

- | | |
|----------|--|
| Required | <ul style="list-style-type: none">• 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

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 (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*:

- | | |
|---|--|
| <ul style="list-style-type: none">• Possess discipline• Be an AC gentleman | <ul style="list-style-type: none">• Eager to learn• 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.



EN20218 M3 Supplemental English 18

Teacher Mr. Andrew Neale
Contact EP Teacher Room, 2nd Floor Colombet Bldg.
simon.an@assumption.ac.th
Class Time EP-M1/M2/M3: Three periods a week for each class
Credits 1.5

Course Description

One of our primary course goals this semester is to prepare students for the Cambridge First English exam. This class will therefore focus on improving all four skills in English, in particular reading, writing, listening and speaking.

Textbook

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

Course Outline & Objectives

Week 1 & 2 - Introduction

- Vocabulary: Meet the teacher, the UK, the world, volunteerism & travel
- Speaking: Introduce your friend, discuss how to be the best student
- Listening: Tongue twisters - write what you hear
- Pronunciation: practice with difficult phonetic blends
- Reading: Quick review of last semester
- Writing & Presentation: “*What I learnt last semester?*”

Week 3 & 4 - Complete First Unit 4: *Food Glorious Food*

- First Reading: *Are Insects the future?*
- Vocabulary: Types of food, describing & working with food, diet & health.
- Grammar: ‘So’ versus ‘such’, ‘too’ versus ‘enough’.
- First Speaking: Talking about healthy eating
- Listening: *Working in a kitchen*

Week 5 - Writing practice

- ‘*Teach Mr Andy about Bangkok*’: Review your favorite place.
- Title and body; eye catching headings, paragraph use, telling a story.

Week 6 & 7 - Complete First Unit 5: *Study Time*

- Vocabulary: Related phrasal verbs, find out, get to know, take part in...
- Grammar: zero / first / second conditionals
- First Reading: ‘*Making the Most of Your Summer*’ article, essay comparison
- First Writing: Essay writing – book or movie review (opening paragraph)
- Pronunciation: word stress

Week 8 - Revision of content / Skill development / Catch up on missed work

Week 9 - Midterm Exams

Week 10 - Christmas / New Year break

Week 11-15 - Complete First Unit 6: *My First Job*

- First Reading: ‘*Voluntary work*’
- Vocabulary: collocations with job & work, ‘fun’ vs ‘funny’, ‘job’ vs ‘work’
- Grammar: Countable versus uncountable nouns, articles.
- First Speaking: describing what people enjoy about different jobs
- First Listening: *Weekend work*



Week 16 – Revision of content / Skill development / Catch up on missed work

Week 17 – 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

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 (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. Remember your commitment on how to be the best student (in week 1).
2. Have your materials for English on your desk at the beginning of class.
3. Pay attention and listen carefully while taking notes.
4. Always use English during discussions.
5. Do your homework yourself and do not copy.
6. Come see the teacher outside of class time for assistance.
7. Give feedback to, and share ideas with, Mr. Andy to help maximize your learning.
8. Always try your best.



ST23102 Foundation Science 6

Teacher Mr. Steven Kuhn

Contact EP Teacher Room, 2nd Floor Colombet Bldg.

Credits 1.0

Course Description

Understand the definition of energy, energy transformation, energy transfer, interaction between matter and energy, energy in everyday life, nature of wave, phenomena related to sound, light and electromagnetic waves and apply knowledge gained for useful purposes.

Textbook

M.3 Science Textbook, Pelangi 2019

ISBN: 978-81-250-6203-5

Course Outline & Objectives

Unit 1: Light and Image Formation [Indicator 1]

- 1.1: Formation of Waves [Indicator 1]
- 1.2: The Law of Reflection
- 1.3: The Law of Refraction
- 1.4: Image formation by mirrors
- 1.5: Image formation by Lenses
- 1.6: Dispersion of Light through a Prism
- 1.7: Brightness that affects eyes
- 1.8: Devices that measure light

End of Midterm Exam Content – Start of Final Exam Content

Unit 2: Stars [Indicator 5]

- 4.1: Orbits of planets [Indicator 5]
- 4.2: Formation of Seasons [Indicator 5]
- 4.3: Formation of moonrise and tides [Indicator 5]
- Explain rock sedimentation and sedimentary rocks.
- 4.4: Space technology [Indicator 5]

Resources

- Required
- Notebook
 - Scientific calculator (not a phone-based application)
 - 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.

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 (Notebook, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

A behavior score (out of 5 points) is taken every day. At the end of the semester the average is taken and used for the student’s behavior score (10%).

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.

Assignments & Classwork

Assignments 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

Foundation Earth Stars & Universe 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:

Assignments/Notebook/Lab	25%
Quiz/Test	15%
STEM	10%
Behavior	10% (program mandated)
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)



Recommendations for Success

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 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.



ST20206 Universal Science 6

Teacher Mr. Michael Dew

Contact Laboratory office, 2nd Floor Colombet Bldg.

Class Time EP-M 3/1: Wednesday 5th period; Thursday 3rd period

EP-M 3/2: Tuesday 7th period; Thursday 7th period

EP-M 3/3: Monday 1st period; Tuesday 1st period

Credits 1.5

Course Description

The Universal Science course encompasses a multidisciplinary approach to learning. The course embraces the unique spirit of Assumption in delivering both a dynamic and holistic approach to learning; addresses the needs of individual students at varying academic levels. The new teaching and learning of science focuses on students themselves, allowing them to discover the knowledge mostly by themselves. With their fundamental knowledge and the results from their scientific investigations, students can construct their own principles, conceptual ideas and understandings systematically. Universal science topics include chemical equations, types of chemical reactions, endothermic and exothermic reactions, organic chemistry, introduction to acids, bases, and salts, polymers, ceramics, nuclear reactions, and nuclear fusion and fission. Enhanced knowledge and understanding of scientific processes and developing skills in observation, experimentation and the interpretation of data, and production of conclusions. Students will understand the importance of applying knowledge to real-life situations with responsibility, honesty, integrity, discipline, creativity, self-sufficiency, a scientific mind and attitude. See course outline and objectives below.

Textbook

Focus Smart plus Science Mathayom 3

Fusion: Matter and Energy. Holt McDougal

Course Outline & Objectives

Chapter 1: Chemistry

- 1.1 Periodic Table
- 1.2 Chemical Equations and formulas
- 1.3 Balancing Chemical Equations
- 1.4 Acids, Bases, and Salts

Chapter 2: Chemical Reactions and Rate of Reactions

- 2.1 Exothermic Reactions
- 2.2 Endothermic Reactions
- 2.3 Rate of Chemical Reactions

End of Mid-Term Exam Content - Start of Final Exam Content

Chapter 2: Organic Chemistry

- 2.1 Introduction to Organic Chemistry
- 2.2 Carbon based Chemistry Organic Chemistry Functional Groups
- 2.3 Organic Chemistry Functional Groups
- 2.4 Organic Chemistry and Hydrocarbon



Chapter 3: Chemistry Materials

- 3.1 Polymers
- 3.2 Ceramics
- 3.3 Composite materials
- 3.4 Flow of charges
- 3.5 Atmospheric electricity

Chapter 4: Nuclear Reactions

- 4.1 Alpha, Beta and Gamma decay
- 4.2 Applications of radioactivity in medicine
- 4.3 Nuclear fission and nuclear fusion

Resources

- | | |
|----------|--|
| Required | <ul style="list-style-type: none">• 1 notebook• 1 plastic folder for course materials• Science Text Book• Science work Book• Red and blue pen. Liquid paper. Pencils.• Internet -Schoology• Headphones• 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.

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

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 & Class work

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:

Assignments/Classwork/Lab	30%
Quiz/Test	15%
Notebook	5%
Behavior	10% (program mandated)
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

All students are encouraged to try the following:

1. Read as much as possible, your textbook and workbook at home. Reading the text once is not enough! Even native English speakers usually need to read more than once. You may need to read the material multiple times to understand. Read and study at home the lessons taught at school.
2. (Students will be able to responsibly manage the material and gain the most from the course.
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 your classmates' work; struggle through and do the work on your own! This is how you learn!
5. Come see the teacher outside of class time for assistance if you need help.
6. Do the review questions at the end of the chapter and see the teacher for the answers. Study the notes and vocabulary at least a few minutes every day, such as in the homeroom or during any free time you might have in other classes.



ST20226 Supplemental Science 6
Teacher Mr. Michael Salutin
Contact EP Teacher Room, 2nd Floor, Colombet Bldg.
Class Time EP-M 3/1~3 Mon, Tue
Credits 0.5 (1 Class/week)

Course Description

This is a supplemental course designed to give students experience in the development of a STEM project. Students will learn about the scientific method, including experimental design. Students will engage in hypothesis formulation, literature review, conducting an experiment, data collection and analysis, and writing/presentation of a final report with a physical model.

Textbook

- *There is no textbook for this class. The teacher will provide all learning materials.*

Course Outline & Objectives

Unit 1: Introduction to Scientific Method

- Hypothesis
- Theory
- Independent and Dependent Variables
- Bias
- Controlled and Placebo-Controlled Experiments
- Correlations
- Evaluating Scientific Information

Unit 2: Literature Review

- What is it?
- How to do it
- Practical Experience: Conducting their own literature review

End of Midterm Exam Content – Start of Final Exam Content

Unit 3: Conducting the Experiment

- Collecting and analyzing data

Unit 4: Final Report

- How to present data
- Writing the final report
- Presenting the final report

Resources

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• Assumption Notebook (2)• Binder/ folder |
| Suggested | <ul style="list-style-type: none">• tablet |

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 (Notebook, textbook, scientific calculator, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

A behavior score (out of 5 points) is taken every day. At the end of the semester the average is taken and used for the student's behavior score (10%).

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 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 class 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:

Homework/Classwork/Projects	100%
-----------------------------	------

Recommendations for Success

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

1. Read the materials provided. 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. Get a Thai language introductory chemistry book.
4. Do **not** copy your classmate's work; struggle through and do the work on your own! This is how you learn!
5. Come see the teacher outside of class time for assistance.
6. 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.
7. 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.



HP23103 Foundation Health Studies 6

Teacher: Mr. Grant Shorten

Contact: Teachers Room, 2nd Floor Colombet Building.
grant.sh@assumption.ac.th

Class Time: EP-M3/1-3

Credits: 0.5

Course Description

The M3 Foundation Health Studies course explores the interconnectedness of sports, violence, media influence, and alcohol consumption in shaping health behaviours. Students will gain a comprehensive understanding of how these factors impact physical and mental well-being, as well as public health. This course is designed to equip students with the knowledge and critical thinking skills to make informed health choices and recognize harmful behaviours related to media, violence, and substance abuse.

Textbook

Think Big Plus

External Resources

Course Outline & Objectives

1. Sports:

- Study the role of sports in promoting physical health, mental well-being, and social development.
- Examine the benefits of regular physical activity, including cardiovascular health, strength, and stress reduction.
- Explore the potential risks associated with sports, such as injuries, overtraining, and competitive pressures.

2. Violence:

- Understand the different forms of violence, including physical, emotional, and psychological violence.
- Explore the causes and effects of violence on individuals and communities.
- Study prevention strategies, conflict resolution techniques, and the role of education in reducing violence.

3. Influence of the Media on Behaviours Related to Health and Violence:

- Analyse how media, including television, social media, and advertising, shape public perceptions of health and violence.
- Explore the effects of media portrayals of unhealthy behaviours, body image issues, and violence.
- Learn to critically assess media content and develop media literacy skills to make informed health decisions.

4. Alcoholic Drinks on Health and Causing Accidents:

- Study the effects of alcohol on the body, including short-term and long-term health consequences.
- Understand how alcohol consumption contributes to accidents, including motor vehicle crashes and other injuries.



- Explore strategies for responsible alcohol consumption and prevention of alcohol-related harm.

Learning Outcomes:

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

- Understand the benefits and risks associated with sports participation and its impact on health.
- Recognize the causes and effects of violence and apply prevention strategies.
- Critically evaluate the influence of media on health behaviours and develop media literacy.
- Identify the health risks of alcohol consumption and the role it plays in causing accidents and propose prevention strategies.

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% ≤ <i>Final Score</i> < 80%	3.5
70% ≤ <i>Final Score</i> < 75%	3.0
65% ≤ <i>Final Score</i> < 70%	2.5
60% ≤ <i>Final Score</i> < 65%	2.0
55% ≤ <i>Final Score</i> < 60%	1.5
50% ≤ <i>Final Score</i> < 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)



Recommendations for Success

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

1. Read, read, read the course textbook. Often, 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. Get a Thai language introductory mathematics book.
4. Do **not** copy your classmates work; struggle through and do the work on your own! This is how you learn!
5. Come see the teacher outside of class time for assistance.
6. 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.
7. 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.



OC23103 Foundation Occupational Works 6

Teacher Dr. Hermann Gruenwald

Contact EP Teacher Room, 2nd Floor Colombet Building
DrHermann365@gmail.com

Website Google Classroom

Class Time EP-M3/1: Tuesdays, Period 2
EP-M3/2: Mondays, Period 7
EP-M3/3: Thursdays, Period 2

Credits 0.5

Course Description

During this semester the students will be learning to propagate and nurture plants, which will then be transferred to the garden area.

There will be a section on business and identifying types of businesses that the students may be interested in for the future.

Finally, students will learn about job seeking and identifying possible careers of interest for the future. They will identify qualifications that are needed for entry into different careers and practice researching for job vacancies. Students will also complete a CV of their experiences and achievements thus far and their future goals.

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

Unit 1: Agricultural Work (*Indicator 1, 2, 3*)

- Importance and methodology of propagating plants.
- Understand the tools, equipment and process of propagating plants.
- Design and build plant propagators and grow seedlings.
- Transfer seedlings to the vertical garden project completed in M2.

Unit 2: Business (*Indicators 1, 2, 3*)

- Learn about the meaning of business and its advantages.
- Recognize different types of business and ones that interest the students personally.

Unit 3: Occupational Works (*Indicators 4, 5, 6*)

- Recognize different strategies and methods of job searching and finding suitable vacancies.
- Complete online career tests to suggest possibilities for the future.



- Research job vacancies for careers of interest from electronic (online) and printed (newspapers) media.
- Identify qualifications needed to pursue careers of interest and be highly employable.
- Write a curriculum vitae of experience gained up to M3 with a section on future targets and goals.

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.)• AC 3 ring binder with clear front cover as portfolio |
| Suggested | <ul style="list-style-type: none">• Various colored pens / markers / highlighters / pencils |
| Occasional | <ul style="list-style-type: none">• Garments to practice folding in unit 2• Craftwork materials or items for unit 4• Cooking equipment and ingredients for unit 3 <p><i>The above will be requested a week in advance of use</i></p> |

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 (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.

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:

$Final\ Score \geq 80\%$	4.0	A
$75\% \leq Final\ Score < 80\%$	3.5	B+
$70\% \leq Final\ Score < 75\%$	3.0	B
$65\% \leq Final\ Score < 70\%$	2.5	C+
$60\% \leq Final\ Score < 65\%$	2.0	C
$55\% \leq Final\ Score < 60\%$	1.5	D+
$50\% \leq Final\ Score < 55\%$	1.0	D
$Final\ Score < 50\%$	0.0	F

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



ST23103 Technology and Computer Science 3

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.

Advanced use of algorithms in the design and planning stage of programs

Logic Gates, Boolean operations and advanced number systems

Development of computational thinking to use in 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

Topics include:

Indicators [1,2,3]

Roles and Operation of Robots [Indicator 1, 2]

Variable Arrays.

Use of Boolean operations in robot programming

Representing Data hexadecimal, binary and denary

Creation and Development [Indicator 1, 2]

Advance constructions

Robotic appendages

Sensors: acting on and reacting to the environment

Programming [Indicator 2, 3]

Intermediate level programming

Wires and “MyBlocks”

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

Computational thinking in the field of problem solving

Resources

- Required
- EP Computer Lab
 - Robots



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. 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.



ST20255 & ST20256 Computer for Project 1 & 2

Teacher Mr. Matt Harris
Contact Location: 5th Floor Computer Lab

Class Time EP-M 3/3: Wednesday 13:00 – 14:50

Credits 1.0

Course Description

This course is designed to provide students with fundamental programming skills and an introduction to the semantics of the Python programming language. The course will focus on elementary computer science principles, basic and intermediate python syntax, and applications of python.

Students will build a repository of knowledge about computer science, the python programming language, and how python can be applied to solve problems. A thorough exploration of the features of the python programming language will be conducted. Students will be introduced to principles of computer science such as program design, abstraction, and performance. Students will apply knowledge to create interesting programs.

Course Outline & Objectives

Topics include: [Indicator 1,2]

Computer for Project 1 & 2 [Indicator 1, 2]

Programming
Week 1-2: Programming languages, Algorithms, Data types
Week 2-4: Data Structures and Control flow
Week 5-7: Functions
Midterm Exam (Week 8 and 9; Dec 15-23)
Week 10-13: OOP, Modules, File I/O, Error Handling
Week 14-15: Program design
Final Exam (Week 16; Feb 8–12)

Resources

Required	<ul style="list-style-type: none"> EP Computer Lab
----------	---

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 dishonestly 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. 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	• Eager to learn
• Be self-sufficient	• Dedicated to work
• Proud to be Thai	• Have a sense of public consciousness
• Be an AC gentleman	• 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.