



MA30104 Foundation Mathematics 4

Teacher Mr. Keerthi Prabhakar
Contact EP Teacher Room, 2nd Floor Colombet Bldg.
epackeerthi@gmail.com

Class Time EP-M5/1: Tue, period 3; Thu, period 1
EP-M5/2: Mon, period 4 ; Wed, period 1

Credits 1.0

Course Description

Study foundation mathematics on the following topics. Sequence and series: finding the terms of finite sequence, arithmetic sequence and geometric sequence, arithmetic series and geometric series. Probability: basic principles of counting, and probability of events. Use mathematical skills and process which are problem-solving, reasoning, communications, mathematical implication and presentation, mathematical connections, and creative thinking along with possessing the desired characteristics including 1) Love for their country, their King, and faith in their religion, 2) Be honest and upright 3) Possess discipline 4) Eager to learn 5) Be self-sufficient 6) Dedicated to work 7) Proud to be Thai 8) Have a sense of public consciousness.

Textbook / Worksheets

Mathematics for the international Student: Mathematics SL, 3rd Edition
Teacher will also provide hand outs

Course Outline & Objectives

Unit	Topic
1	Fundamental Statistics <ol style="list-style-type: none"> Data collection Basic data analysis Finding central tendency by using the arithmetic mean, median, mode*, harmonic mean, geometric mean, and mid-range Finding relative standing by using quartile, deciles, and percentile Measures of dispersion by using standard deviation Measures of dispersion by using box-and-whisker plots

Resources

- Required
- At least one notebook
 - Scientific calculator (not a phone-based application)
 - Ruler
 - Glue stick, stapler, or tape
- Suggested
- Many different colored 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 academic dishonesty will receive a zero, including any student supplying or allowing the copying to take place.

Plagiarism is 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 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 participate throughout the lesson until class is dismissed.

Behaviour is monitored every day 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 of 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 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:

Quiz & Projects	20%
Home/class work	20%
Affective Domains (Behavior)	10% (program mandated)
STEM	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. You are reading the text once is often 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 can responsibly manage the material and gain the most from the course.
2. Search either Thai or English online if you don't understand a topic discussed in class or to get a better understanding of the topic.
3. Get a Thai language introductory mathematics book.
4. You can get a math and physics tutor if you wish to. 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 for at least a few minutes every day, such as in homeroom or any free time you might have in other classes.



MA30216 Universal Mathematics 4

Teacher Mr. Shiv Kumar

Contact Science Lab, 2nd floor Colombet Building
skkumarshiv100@gmail.com

Class Times M5/1: Wednesday Period-1, Friday Period-2
M5/2: Monday Period-5, Thursday Period-1

Credits 1.5

Course Description

The purpose of this class is to prepare you for the SAT test. In this class, you will be given an SAT style quiz at the beginning of the week every two weeks. Our first quiz will be at the beginning of next week. We will spend class time in between these quizzes going over the answers and learning SAT material and problem solving techniques. We will also review Algebra 2 and lessons associated with the SATs. Each quiz you take will be graded.

However, once we go over the answers in class, you can resubmit your corrected quiz and get a half point for each answer you corrected (you must show your work). For example, if you get a 50% on your quiz, you can change your grade to 75% by re-submitting your corrected quiz. You will also earn class participation by re-submitting your corrected quiz. The idterm test and final test will also be In SAT style format.

Textbook

Mathematics for the International Student SL (Haese Mathematics)
ISBN-978-1-921972-08-9

Course Outline & Objectives

The content we will be learning during this class is:

- Class notes and work sheets -Work on Complex numbers: Equality, Addition, Subtraction, Multiplication and Division Graphing and absolute values of complex numbers and Complex numbers in polar form Polynomial equations.
- Class notes and work sheets -Work on probability, Basic rules about counting, Permutation, Combination and Binomial theorem and Probability and some important rules of probability.
- Class notes and work sheets -Basic of graphing, Euler graphs and some applications of graph.

Resources

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• A plastic folder for worksheets.• White School Notebook• Red and blue pen. |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters• Ruler |



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

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.

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 & Class work

Homework and class work 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 20% 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:

$Final\ Score \geq 80\%$	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	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.



HP30104 M5 Foundation Physical Education and Health Studies

Teacher Mr. Brian Mallon

Contact EP Staff Office, Floor 2
Bmal1332@gmail.com

Class Time EP-M5/1: TBD
EP-M5/2: TBD

Credits 0.5

Course Description

Students will learn to understand about the process for promoting and maintaining the efficiency of the function of digestive system, excretory system, respiratory system, and cardiovascular system, plan and recognize values of planning health care for family members, be aware of risky factors and situations to have sexual intercourse, including nightlife, matchmaking, and Internet relationships. Recognize proper problem-solving methods and skills when disappointed in love, realize proper sexual values including sexual behaviors appropriate to Thai society and culture, know how to avoid and protect oneself from risky situations to having an intentional pregnancy, recognize values of health promotion and disease prevention by following the guidelines for health promotion and disease prevention using Thai wisdom, realize and understand non-contagious diseases which are the important problems of the country and local districts, and protection and solutions for heart diseases, blood vessels, obesity, hepatic disease, realize the importance of health assessment and risky behaviors of oneself and family members. Use analytical process, explanation and demonstration, practice, and apply methods of risk reduction, health promotion, and reduction of risky behaviors of oneself and family members, propose methods for protecting consumer rights, and health products in the schools to create knowledge, understanding, and apply it to real-life situations along with having morality, ethics, honesty, disciplines, responsibility, being free from addictive substances and allurements, sense of personal responsibility to environment in one's own community including proposing methods for protecting and solving environmental problems in the community.

Study volleyball playing, creative movement, basic skills for playing volleyball, participation in recreational activities, physical capacity for different works, concept about different types of movement for playing volleyball, concept from scientific principles, movement when playing sports based on types and categories of sports, acceptance and realization of values of regular exercise and sport playing along with promoting healthy lifestyle, specify creative patterns for attack, defense, and cooperation in sport playing and competition, be responsible for one's duties and responsibilities during participating physical activities and team sports, rights, and rules, regulations, safety, and strategies during sport playing and competition with other people. Use skills and process of physical education which are providing collaboration when participating in physical activities and playing team sports according to specified structures, sportsmanship, spirit in competition, sport aesthetics in sport playing, watching, and competitions to create knowledge, understanding, and apply the knowledge to real-life



situations along with having honesty, diligence, endeavor, disciplines, morality, ethics, attitudes towards physical education, public mind, love of being Thai, self-sufficiency, and proper values.

Textbook

No textbook required for this unit

Physical Education Indicators

1. Analyze the concept about different patterns of movement for playing sports.
2. Use personal ability to promote team capability, and consider the effects on other people and society.
3. Play at least one type of Thai sports and international sports both individual and team sports.
4. Show movements creatively.
5. Joint recreational activities outside schools and use the principles and concepts to improve and develop the quality of one's life and society.
6. Do the exercise and play sports properly to a personal capacity regularly and use personal ability to increase team capacity, reduce ego, and consider effects on the society.
7. Explain and practice rights, rules, regulations, and tactics during the games and competitions with other people, conclude them as guidelines, and use them in daily life continuously.
8. Express good manners of watching, playing, and competing sports with sportsmanship and use them in daily life continuously.
9. Enjoy physical activities and play sports happily and admire the values and beauty of sports.

Physical Education Course Outline & Objectives

1. Exercises and Playing Sports / Physical Fitness Test / Games [Indicators – 1, 2, 4, 6, 7, 8, 9]

- Test of Physical Fitness
- Exercises, playing sports or games
- Test of Physical Fitness
- Exercises, playing sports or games
- Practice form and technique for MOE physical fitness testing.

2. Movements in Exercising and Playing Sports Creatively [Indicators – 1, 2, 3, 4, 5, 6, 7]

- Physical movement in practicing athletic skills and exercises.
- Physical connection in practicing athletic skills and exercises.
- Physical connection and movement to warm-up for athletics.
- Physical connection and movement in practicing volleyball skills
- Physical connection and movement in practicing basketball skills

4. General Knowledge about Playing Basketball and Futsal [Indicators – 1, 2, 4, 6, 7, 8, 9]



- Skills, Rules, Regulations, and physical benefits of playing.
- Analyze concepts related to movements and techniques.
- Passing, shooting, defense, etc.
- Good Sportsmanship

Health Indicators

1. Explain warning symptoms from disorders, and guidelines for correctly preventing diseases occurring in different systems in the body.
2. Analyze constant effects of diseases occurring in different systems in the body correctly.
3. Analyze causes of improper personal practices on health care of family members.
4. Realize the importance of personal practices to take care of family members' health to help them have good health.
5. Provide information about maintaining a good relationship with family, friends, and community.
6. Realize the importance of proper sexual expression and maintaining a good relationship with family, friends, and community.
7. Realize signification of values and sexual behavior proper to the culture.
8. Realize the importance of local wisdom using herbal plants to cook food.
9. Analyze product and service purchasing, terms and conditions of products and service, and realize the importance of the protection of consumer rights.
10. Summarize data about diseases that are crucial problems for Thai people and correct preventions and treatments.
11. Realize the importance of health promotion and disease prevention using Thai wisdom.

Health Course Outline & Objectives

1. Work Efficiency of System of Body Composition [Indicators – 1, 2, 3, 11]

- Digestive system
- Excretory system
- Respiratory system
- Cardiovascular system

2. Planning for Individual Health Care of Family Members [Indicators – 3, 4, 5, 6]

- Planning for health care of family members
- Guidelines for health care of a person and his/ her family members

3. Development of Living Skills & Characteristics Required in Teenagers [Indicators –6, 7]

- Living skills development and promotions of required characteristics in teenagers

4. Development and Promotion of Sexual Health [Indicators – 7, 10, 11]

- Self-protection from risky situations
- Sexual intercourse and unintentional pregnancy
- Proper problem-solving methods and skills
- When disappointed in love
- Proper values and sexual behaviors to cultures

5. Personal Care and Health Promotion for Disease Prevention [Indicators – 7, 8, 9, 10, 11]

- Significant contagious & non-contagious diseases of the country and their preventions



- Guidelines and self -practice for health promotion and disease prevention using Thai wisdoms

Resources

Required

- School Physical Education Uniform (a note explaining why the student is out of uniform is required or a behavior score of 0 for this lesson) Needed by the end of online classes when school starts.

Pink resource booklet for note taking (Reminder that any handouts must be stapled or glued into the pink resource). Needed by the end of online classes when school starts.

Suggested

- Fitness and sport activities at least 1-hour each day

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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 (in PE uniform) 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

For online classes, attendance will be determined by whether the student completed the weekly work or not. In the case where you know you will not be able to submit an assignment on time, please notify the teacher as far in advance as possible. Students are expected to catch up on all missed work.



Homework & Classwork

Homework in Physical Education is limited, however any Homework 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

Classwork, Fitness Tests, and Participation	50%
Midterm Exam	20%
Final Exam	20%
Affective Domain	10%

Recommendations for Success

Physical Education is to be enjoyed. All students are encouraged to try the following:

1. Look to do some form of Physical Activity every day.
2. Look to visit parks and tracks where the required fitness testing can be practiced.
3. Come see the teacher outside of class time for assistance.
4. Try new sports. We all have different sports we like and different sports we are good at. We encourage students to learn more about their favorite sports on 'YouTube' and other media platforms. If you never try, you will never know if you like it!
5. See PE and movement as an *opportunity* to improve your health and well- being, not a chore. Your teenage years are the most important years to be active and can affect the quality of life you have as an adult.



PAGE 26 QUESTION [12]	bracketing commas again
PAGE 27 QUESTION [13]	listing commas another use
PAGES 28 – 31 QUESTION [14]	using a dash
PAGES 32 – 35 QUESTION [15]	quotations and punctuation
PAGES 38 - 63 GRAMMAR TOPICS EXPLAINED	
PAGES 42 QUESTION [16]	independent clause
PAGES 42 – 44 QUESTION [17]	compound sentence
PAGES 45-46 QUESTION [18].	modifiers
PAGES 47 – 48 QUESTION [19].	have, has & had
PAGES 49 – 50 QUESTION [20].	active/passive 1
PAGE 51 QUESTION [21].	active/passive 2
PAGE 51 QUESTION [22].	pronoun agreement
PAGE 52 QUESTION [23]	verb tense/ pronoun
PAGE 53 QUESTION [24]	verb tense 1
PAGE 54 QUESTION [25]	verb tense 2
PAGE 54 QUESTION [26].	active/passive 3
PAGES 55 QUESTION [27]	plural noun 2
PAGE 55 QUESTION [28]	fragments
PAGE 56 QUESTION [29]	ends with a preposition
PAGE 57 QUESTION [30]	pronouns for clarity
PAGES 58-59 QUESTION [31]	who or whom?
STYLE & ORGANISATION TOPICS EXPLAINED: PAGE 64	
PAGES 65 – 67 QUESTION [32] (33)	redundancy
PAGE 68 -69 QUESTION (34)	supporting detail
PAGE 70 QUESTION (35)	logical sequence
PAGE 71 QUESTION (36)	focus & relevance
PAGE 72 QUESTION (37)	moving the clause
PAGES 73 - 74 QUESTION (38)	parallel structure
PAGE 75 QUESTION (39)	supporting detail 2
PAGE 76 QUESTION (40)	concluding sentence
PAGE 77 QUESTION (41)	supporting detail 3
PAGES 78– 79 QUESTION (42)	graphs & charts
PAGES 80 SENTENCE PLACEMENT AND OTHER EDITS	
PAGES 82 83 QUESTION [43]	best placement would
PAGES 83 – 84 QUESTION [44]	should the writer delete
PAGES 85 QUESTION [45]	best placement would 2
PAGES 86 QUESTION [46]	placement underlined ...
PAGES 87 – 91 QUESTION [47]	placement paragraph 1
PAGES 92 – 93 QUESTION [48]	placement paragraph 2
PAGE 94 QUESTION [49]	should the writer delete
PAGE 95 QUESTION [50]	kept or deleted?
PAGE 96 QUESTION [51]	adding a sentence...
PAGE 97 QUESTION [52]	replacing underlined
PAGE 98 QUESTION [53]	remove the clause...



SAT & IELTS Syllabus is matched with the Thai curriculum Indicators:

M5	INDICATORS	STRANDS
LISTENING	1. All types 8. opinions 17. Analyze 18. skim/scan 20. investigate/search 21. community/national	Strand 2: Language and Culture F2.1 F2.2 Strand:3 F3.1 Strand 4: Language and Relationship with Community and the World F4.1
WRITING	3. answer in sentences 6. explain 7. life skills 8. opinions 10. news 11. Summarize 12. social, and global 14. ideas, beliefs 15. grammar 16. grammar 17. Analyze 19. academic topics 20. investigate/search 21. community/national	Strand 1: Language for Communication F1.1 F1.2 F1.3 Strand 2: Language and Culture F2.1 F2.2 Strand:3 F3.1 Strand 4: Language and Relationship with Community and the World F4.1
SPEAKING	5. All types 6. explain 7. life skills 8. opinions 9. All types 10. news 11. Summarize 12. social, and global 13. purpose 14. ideas, beliefs 17. Analyze 19. academic topics 20. investigate/search 21. community/national	Strand 1: Language for Communication F1.1 F1.2 F1.3 Strand 2: Language and Culture F2.1 F2.2 Strand:3 F3.1 Strand 4: Language and Relationship with Community and the World F4.1

ESSENTIAL KNOWLEDGE

Present perfect versus past simple--Present tenses to describe books and films--Present continuous--Past perfect and continuous-- Prepositions of time --Prepositions of place --Future simple tense --Sentences, simple and compound –conjunctions--Passive voice--adjectives -- Superlatives



LEARNING MATERIALS

News, announcements, fictions, non-fictions, media, diagrams, graphs, personal experience, topical events, stories, manners and culture, traditions, festivals, language structures, idioms, life skills, native speakers,

LANGUAGE SKILLS,

conceptualization, analysis, communication problem-solving, critical thinking & technology.

DESIRED CHARACTERS – 1) Love for the country and the king, faith in the religion 2) Be honest and upright 3) Possess discipline 4) Eager to learn 5) Be self-sufficient 6) Dedicated to work 7) Love for Thainess 8) Have a sense of public consciousness and 9) Be an AC gentleman.

RESOURCES:

Textbooks, Handouts, exam papers, worksheets, student notebooks, presentations, information technology

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- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• notebooks.• Dictionary |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters |

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

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 (20%). 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 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 classwork will be assigned often and must be submitted on or before the due date.. 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% 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
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$60\% \leq Final\ Score < 65\%$	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:

Total Score of all Formative Assessment*	50%
Behavior	10%
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

* This total score shall be reflected by the cumulative points scored by students on all class assignments, homework, extra credit work, etc.



Assessment determination:

This syllabus is based on the important skills that students will need to successful pass the IELTS test at level 6 . The assessment will be based on students understanding of what is expected in the different modules of the test (Listening, Reading, Writing & Speaking).

Recommendations for Success

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

1. Be on task during class. Focus and follow instructions and do the required activities to your best abilities. Do not worry about making mistakes as they are the best way for us to incorporate the materials into our long-term memories.
2. Search online (in English) if you don't understand a topic discussed in class to get a better understanding of the topic.
3. Do not copy your classmate's 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. Revise your work, as recommended by your teacher and work to continuously improve your work. Learning is a process, not a product.
6. If you don't understand then ask your friends, communication is vital for success in English, communicate with your classmates in English, you'll be surprised how quickly your English improves just by doing this.

Weekly Session**	<u>Content</u>
1 st	Introduction to Course objectives and structures. Teacher and student expectations. Survey of students, desired course outcomes and needs.
2 nd	Understanding and responding to questions; outlining responses and preparing answers.
3 rd	WRITING – extended academic level
4 th	READING - context & evidence
5 th	WRITING – SAT Writing & Language test materials.
6 th	READING –vocabulary building, comprehension.
7 th	WRITING – punctuation & Grammar
8 th	WRITING Style and Organisation
9 TH	Writing Assignment - tests
10 th	Midterm review
	MIDTERMS



EN30204 ENGLISH READING WRITING 5

EP(5)-1-2 (Health) Teacher: Mr. Steven Raine

COURSE DESCRIPTION:

Throughout this semester we focus on SAT reading and IELTS Writing. We will prepare students for the **SAT READING & IELTS WRITING** a prerequisite for joining a university international program. These skills will be used to master examination question types. Through a series of skill based and enriching lessons using Mr. Raine’s expertise and selected authentic test materials, students will strengthen their core knowledge. This course is intensive. Students will have many opportunities to participate, and skill will be demonstrated in assessments, homework, and examinations. The course is at an advanced/pre-intermediate level (CEFR C1 & C2 level)

COURSE OBJECTIVES:

The main objectives of this syllabus are:

- Language for Communication
- Language and Culture
- Language and Relationship with Other Learning Areas
- Language and relationship with Community and the World

COURSE OUTLINE:

Syllabus is matched with the Thai curriculum Indicators:

M5	INDICATORS	STRANDS
READING	1. All types 2. comprehension 4. supporting ideas 8. opinions 14. ideas, beliefs 17. Analyze 18. skim/scan 20. investigate/search 21. community/national	Strand 1: Language for Communication F1.1 F1.2 F1.3
WRITING	3. answer in sentences 6. explain 7. life skills 8. opinions 10. news 11. Summarize 12. social, and global 14. ideas, beliefs 15. grammar 16. grammar 17. Analyze 19. academic topics	Strand 1: Language for Communication F1.1 F1.2 F1.3 Strand 2: Language and Culture F2.1 F2.2 Strand:3 F3.1 Strand 4: Language and Relationship with Community and the World F4.1



	20. investigate/search 21. community/national	
SPEAKING	5. All types 6. explain 7. life skills 8. opinions 9. All types 10. news 11. Summarize 12. social, and global 13. purpose 14. ideas, beliefs 17. Analyze 19. academic topics 20. investigate/search 21. community/national	Strand 1: Language for Communication F1.1 F1.2 F1.3 Strand 2: Language and Culture F2.1 F2.2 Strand:3 F3.1 Strand 4: Language and Relationship with Community and the World F4.1

SPECIFIC SKILLS:

IELTS READING (40 questions and 23 correct equals level 6) which includes: recognizing argument and counter-argument; distinguishing between main information and supporting detail, fact and opinion, hypothesis versus evidence; summarizing and note-taking.

IELTS WRITING TASK TWO

Writing has two tasks, a report and an essay, both adding up to an overall IELTS writing score of 0-9 and includes: Essay content and structure (patterns of organization, paragraphing, discussion – argument/counter-argument, advantages and disadvantages, topic sentence and supporting ideas, coherence and cohesion,

IELTS WRITING TASK ONE

Writing includes: Functions (generalization, definitions, classification, comparison and contrast, cause and effect, process and procedure, interpretation of data).

SAT READING TEXT BOOK

PAGES 114 –118

PAGES 119 QUESTION [63]

PAGES 120 QUESTION [64]

PAGES 121– 122 QUESTION [65]

PAGE 123 QUESTION [66]

PAGES 124 – 125 QUESTION [67]

PAGES 126 – 127 QUESTION [68]

PAGES 128 – 129 QUESTION [69]

PAGES 130 – 131 QUESTION [70]

PAGES 132 – 133 QUESTION [71]

PAGES 134 – 135 QUESTION [72]

PAGES 136 – 137 QUESTION [73]

READING TOPICS EXPLAINED

reasonably inferred

reasonably inferred 2

reasonably inferred 3

reasonably inferred 4

it can be inferred from...

it can be inferred from 2

it can be inferred from 3

it can be inferred from 4

it can be inferred from 5

supports this conclusion

the author implies...



PAGES 138 – 139 QUESTION [74]	paragraph implies that...
PAGES 140 – 141 QUESTION [75]	the author implies...2
PAGES 142 – 143 QUESTION [76]	the passage implies ...
PAGES 144 QUESTION [77]	the passage implies 2
PAGES 145 – 146 QUESTION [78]	the narrator implies...
PAGES 147– 149 QUESTION [79]	the character implies...
PAGES 150 WORD MEANING EXPLAINED	
PAGES 153 QUESTION [80]	most nearly means...
PAGE 154 QUESTION [81]	most nearly means 2
PAGE 155 QUESTION [82]	closest in meaning to...
PAGE 156 QUESTION [83]	most nearly means...2
PAGE 157 QUESTION [84]	most nearly means...3
PAGE 158 QUESTION [85]	most nearly means...4
PAGE 159 QUESTION [86]	most nearly means...5
PAGE 160 QUESTION [87]	closest in meaning to...2
PAGE 161 QUESTION [88]	most nearly means...6
PAGE 162 QUESTION [89]	most nearly means...7
PAGE 163 ACCORDING TO THE TABLE, GRAPH, CHART, ETC. EXPLAINED	
PAGES 164 – 165 QUESTION [90]	according to the table
PAGE 166 QUESTION [91]	table
PAGES 167 – 169 QUESTION [92]	the previous question
PAGES 169 – 170 QUESTION [93]	previous question...
PAGES 170 – 171 QUESTION [94]	it can be inferred 6
PAGES 172 – 173 QUESTION [95]	author likely agree..
PAGES 173 – 174 QUESTION [96]	previous question...
PAGES 175 – 176 QUESTION [97]	the central idea
PAGES 176 – 177 QUESTION [98]	evidence previous
PAGES 178 – 179 QUESTION [99]	strongly suggests
PAGES 179 – 180 QUESTION [100]	evidence previous
PAGES 181 – 182 QUESTION [101]	reasonably inferred 5
PAGES 182 – 183 QUESTION [102]	evidence previous
PAGES 184 – 185 QUESTION [103]	primarily concerned with
PAGES 185 – 186 QUESTION [104]	evidence previous
Page 187 OTHER READING QUESTION TYPES AND WHAT TO DO	
PAGES 188 – 191 QUESTION [105]	summarizes
PAGE 192 QUESTION [106]	majority negative view
PAGES 192 – 193 QUESTION [107]	maybe a cause of
PAGES 193 QUESTION [108]	most likely consider the
PAGES 194 QUESTION [109]	the chart suggests
PAGES 195 – 197 QUESTION [110]	inclusion of
PAGE 198 QUESTION [111]	uses the image of

LEARNING MATERIALS

News, announcements, fictions, non-fictions, media, diagrams, graphs, personal experience, topical events, stories, manners and culture, traditions, festivals, language structures, idioms, life skills, native speakers,



LANGUAGE SKILLS,

conceptualization, analysis, communication problem-solving, critical thinking & technology.

DESIRED CHARACTERS – 1) Love for the country and the king, faith in the religion 2) Be honest and upright 3) Possess discipline 4) Eager to learn 5) Be self-sufficient 6) Dedicated to work 7) Love for Thainess 8) Have a sense of public consciousness and 9) Be an AC gentleman.

RESOURCES:

Textbooks, Handouts, exam papers, worksheets, student notebooks, presentations, information technology

- | | |
|-----------|--|
| Required | <ul style="list-style-type: none">• notebooks.• Dictionary |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters• |

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

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 (20%). 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 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 classwork will be assigned often and must be submitted on or before the due date.. 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% 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:

Total Score of all Formative Assessment*	50%
Behavior	10%
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

* This total score shall be reflected by the cumulative points scored by students on all class assignments, homework, extra credit work, etc.

Assessment determination:

This syllabus is based on the important skills that students will need to successful pass the IELTS test at level 6 . The assessment will be based on students understanding of what is expected in the different modules of the test (Listening, Reading, Writing & Speaking).

Recommendations for Success



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

1. Be on task during class. Focus and follow instructions and do the required activities to your best abilities. Do not worry about making mistakes as they are the best way for us to incorporate the materials into our long-term memories.
2. Search online (in English) if you don't understand a topic discussed in class to get a better understanding of the topic.
3. Do not copy your classmate's 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. Revise your work, as recommended by your teacher and work to continuously improve your work. Learning is a process, not a product.
6. If you don't understand then ask your friends, communication is vital for success in English, communicate with your classmates in English, you'll be surprised how quickly your English improves just by doing this.

Weekly Session**	<u>Content</u>
1 st	Introduction to Course objectives and structures. Teacher and student expectations. Survey of students, desired course outcomes and needs.
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3 rd	WRITING – extended academic level
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6 th	READING –vocabulary building, comprehension.
7 th	WRITING – punctuation & Grammar
8 th	WRITING Style and Organisation
9 TH	Writing Assignment - tests
10 th	Midterm review
	MIDTERMS



Teacher: Mr. Joshua Bolen, J.D. (Mr. Bolen)

COURSE DESCRIPTION:

Welcome to English for Life Skills M5! Through a series of engaging and enriching lessons using Mr. Bolen's selected materials, students will continue to strengthen their core knowledge of the language.

The students will study and listen to a range of English texts. The students will study and learn how to give effective presentations. They will use learning skills in the 21st century, which encourages the students to be able to have listening, critical thinking and problem-solving skills. The learning skills will be used to make students possess learners' key competencies, which are thinking capability, problem solving capability, capability in applying life skills and capability in technological application. This will be done through the teaching and learning focusing on promoting Thai wisdom with respect to the language and literature and religion and tradition. Teaching and learning also promotes students to live under the Sufficiency Economy Philosophy. Students will be provided with desirable characteristics such as love of nation, religion and king, honesty and integrity and self-discipline. Additional important characteristics are avidity for learning, observance of principles of Sufficiency Economy Philosophy in one's way of life, dedication and commitment to work, cherishing Thai-ness, public-mindedness and gentlemen of Assumption College.

COURSE OBJECTIVES:

Indicators

1. Listen to speakers from a range of countries, using different accents and talking in a range of contexts and situations.
2. Predict content before a listening exercise. Use contextual clues to anticipate topics, potential vocabulary and potential grammatical structures before listening.
3. Listen for gist. Show an understanding of the main ideas of a listening exercise after one listen.
4. Understand signposting language when listening. Show a knowledge and understanding of signposting language and how and why it is used. Make lists of the most common signposting language.
5. Listen for detail. Pick out specific information in a listening passage.
6. Infer relevant details when listening. Use contextual clues to gather information about meaning, who is speaking, what is happening and other questions appropriate to the listening exercise.
7. Practice listening activities that are connected to relevant international exams. Some of these should be done with past-paper questions and done in exam conditions.
8. Explain/discuss how listening can be improved, what techniques can be used and useful sources of practice material.
9. Watch examples of good and bad presentations. Have an accurate understanding of the characteristics of good and bad presentations and be able to plan presentations using the good characteristics and avoiding the bad characteristics. The focus should be on presentation skills that may be useful for university admissions and studying at university.



10. Use verbal communication to effectively present information. Use various techniques such as variation of tone of voice and the stress of important words to convey ideas more clearly and concisely.
11. Use non-verbal communication effectively. Use various techniques such as body language and eye contact to show confidence to the audience.
12. Use signposting language effectively when presenting. Show a knowledge and understanding of signposting language and how and why it is used. Make lists of the most common signposting language that are used during presentations.

Learning Contents

Study English on the topics of news, announcements, poems, skits, pictures, different non-text information styles such as maps, graphs, and initiatives. Study non-fictions, fictions, personal information, various experiences, incidents, themes from analyzed stories, languages, voices, social manners and cultures, traditions and customs, festivals, language structures, idioms, proverbs, poems, ways of life, beliefs and cultures of native speakers, and information related to other learning content groups. Use process of establishing knowledge and understanding, reading process, process of establishing practical skills, working process, process of language skills, process of establishing attitudes, process of conceptualization, process of analysis, process of establishing realization, and process of establishing communicative knowledge and understanding to create knowledge and understanding, communicative ability, thinking ability, problem-solving ability, life skills, and ability to use technology. At the same time, students will have the following intended characteristics which are nationalism, religiosity, loyalty, disciplines, diligence, self-sufficiency, endeavor, love of being Thai, and public mind.

Resources

- | | |
|-----------|---|
| Required | <ul style="list-style-type: none">• At least 1 white notebook.• Dictionary (English to English, not a translating one)• Extra lines A4 paper for written assignments. |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters |

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.

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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.

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 (20%). 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 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 classwork will be assigned often and must be submitted on or before the due date for a score of 20 points. 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:

<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:

Total Score of all Assessment	Homework 80%
Behavior	10%
Attendance	10%



Recommendations for Success

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

1. Be on task during class. Focus and follow instructions and do the required activities to your best abilities. Do not worry about making mistakes as they are the best way for us to incorporate the materials into our long-term memories.
2. Watch Movies, or TV shows, or YouTube with British / Australian accents, with the English subtitles is a good way to improve your speaking and listening skills; it also helps with vocabulary too.
3. Search online (in English) if you don't understand a topic discussed in class to get a better understanding of the topic.
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. Revise your work, as recommended by your teacher and work to continuously improve your work. Learning is a process, not a product.

Precise resources:

- **Teacher** Handouts, Worksheets, Presentations.
- Whiteboards & Projector.

Week	Content
1	IELTS Reading – Summary Completion
2	IELTS Reading – True, False, Not Given
3	IELTS Reading – Sentence completion
4	IELTS Reading – Matching headings
5	IELTS Reading – Matching paragraphs questions
6	IELTS Reading – Multiple choice
7	IELTS Reading – T/F/NG
8	IELTS Reading – Matching headings
9	IELTS Reading – List selection
10	MIDTERM EXAMS
11	IELTS Reading – Summary Completion
12	IELTS Reading – True, False, Not Given
13	IELTS Reading – Sentence completion
14	IELTS Reading – Matching headings
15	IELTS Reading – Matching paragraphs questions
16	IELTS Reading – Multiple choice
17	IELTS Reading – T/F/NG
18	IELTS Reading – Matching headings
19	IELTS Reading – List selection
20	FINAL EXAMS



OC30106 Foundation Occupational Works 3

Teacher	Dr. Hermann Gruenwald	
Contact	EP Teacher Room, 2 nd Floor Colombet Building DrHermann365@gmail.com	
Website	https://app.schoology.com/ https://app.schoology.com/course/6399785445/materials https://app.schoology.com/course/6399787284/materials	
Class Time	EP-M 5/1: Fridays	P3
	EP-M 5/2: Fridays	P6
Credits	0.5	

Course Description

Students will study about the principles on how to operate the information services organizations; important components of the information services organizations; operations of organization; policy making and planning, human resource management, document management; budgeting and finance; buildings and sites; standards and quality assurance; evaluation and report; partnership with industry. Students will learn through the analytic thinking process, problem solving process, practices, group work, and attitude building process. Students are expected to subsequently develop the ability to communicate, to think, and to solve problems. Life skills and the use of technology are also to be enhanced. Students will additionally be developed learning skills and skills to create innovation -- think creatively, demonstrate innovation, use critical thinking, solve problems wisely, communicate effectively, and be willing to work with others. Information-related skills will also be included in this course. Students are expected to learn about technological media, to keep themselves updated with news and information, to have good judgment on media, to be a well-rounded individual in the field of information technology and to communicate wisely. Another skill that will be fostered is life and career skills which cover flexibility, adaptability, creativity, self-responsibility and social skills. As for the students' desired characteristics, the course will focus on honesty, discipline, avidity for learning, dedication for work and public-mindedness.

Learning Outcome:

1. Apply concepts and principles to effectively manage an organization or the information services organization.
2. Explain the principles of operations, policy making, and planning for running organizations or the information services organizations.
3. Present how to work and put them into practice in the area of document management, finance, office supplies, building and maintenance.
4. Know the principles of quality assurance and evaluate the organizations or information services organizations with morality and ethics.



Course Outline & Objectives

Business Management (*Indicators 1, 2, 3, 4, 6, 8, 10, 11*)

- Learn basic principles for business management.
- Discuss and apply management techniques.

Unit 1: Management of the information services organizations

1. *General administration*
2. *Information services organization management*
3. *Definition/Components of administration*
4. *Types and characteristics of the administrator*
5. *Role and responsibilities of the administrator*
6. *Qualifications of the administrator*

Unit 2: Management principles and theories for the information services organization

1. *Good characteristics of the information services organization*
2. *Administration theories for the information services organizations*
3. *Principles of personnel management*
4. *Writing a project*
5. *Organizations and management*
6. *Organizational structure of the information services organization*

Unit 3: Policy, budget plan, and finance

1. *Policy and planning*
2. *Budget and finance*
3. *Types of budget*
4. *Budget administration policy and standards*
5. *Budget spending of the information services organization*

Unit 4: Personnel management

1. *Principles of personnel management*
2. *Personnel in the information services organization*
3. *Selection of personnel for information services work*
4. *Personnel development*

Unit 5: Management of supplies and equipment

1. *Meaning and importance of supply*
2. *Cycle of supply administration*
3. *Principle for managing and specifying needs for supplies and equipment*
4. *Maintenance of supplies and equipment*



Unit 6: General administrative work and document control in the information services organization

1. *Meaning and importance of the document control work*
2. *Types, kinds, and forms of documents*
3. *Drafting and typing the documents or letters*
4. *Storage and destruction of documents*

Unit 7: Building and site administration

1. *Meaning, objectives and importance of buildings and sites*
2. *Location and management of buildings and sites*
3. *Place decoration*

Unit 8: Statistics, reports and public relations

1. *Meaning and the importance of statistics and reports*
2. *Preparing statistics and reports*
3. *Meaning and the importance of public relations*
4. *Media and public relations*
5. *Qualifications and codes of ethics of public relations professionals*

Unit 9: Quality assurance for the information services institute

1. *Meaning, objectives and benefits*
2. *Quality assurance system selected*
3. *Components of the system*
4. *Implementation of the quality assurance system*

Unit 10: Evaluation and development of the information services organization

1. *Meaning, importance and objectives of evaluation*
2. *Steps and methods of evaluation*
3. *Problems and solutions*
4. *Developing the information services organization*

Resources

Required	<ul style="list-style-type: none">• A pink A.C. notebook (minimum A4 size)• Basic stationary (pen, pencil, eraser, ruler, sharpener etc.)• Extra stationary (glue stick, stapler, tape, liquid paper etc.)• AC Portfolio A4 with clear front cover
Suggested	<ul style="list-style-type: none">• Various colored pens / markers / highlighters / pencils
Occasional	<ul style="list-style-type: none">• Smart phones for research in class• USB thumb drives to save typed work onto• Materials potentially needed for special projects



The above will be requested a week in advance of use

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 misbehavior, 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*:

- Possess discipline
- Be an AC gentleman
- Be honest and upright
- 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 check schoology for the content of the lectures and the in-class assignments and homework and project assignments.

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	10%	Affective Domain
Class Work	10%	Formative
Home Work	10%	Formative
Presentation	10%	Formative
Portfolio	10%	Formative
Team Work	10%	Formative
		50% 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
6. Check schoology.com for assignments and course materials and grades



ST30283 Innovation Project

Teacher	Mr. Nicholas Crook
Contact	EP Teacher Room, 2 nd Floor Colombet Bldg.
Email	epacnic@gmail.com
Class Time	EP-M 5/2: Thurs, period 4
Credits	0.5

Course Description

Searching for information, analyzing and selecting important points from the academic documents and developing the selected points to be the student's own science project topic. Planning and designing the experiment to outline personalized science project. Presenting the outline or draft of the student's personalized science project in a creative and reliable way. Carrying out the student's own science project and writing up the complete report with the teacher advisor's guidance. Students are expected to **use** the scientific skills, critical thinking and problem solving skills, creative and innovative thinking skills, as well as collaborative, teamwork and leadership skills. This is **for students to** gain knowledge and understanding, to possess the scientific skills and to be able to apply knowledge in solving problems and obstacles by creating their own innovation. In addition, students will **gain competencies** in thinking, communicating, and using technology efficiently. Students will also learn to avoid performing any behaviors that will lead to negative interpersonal relationships. The course is additionally **aimed for** students to demonstrate the following characteristics: having self-discipline, having avidity for learning, having value for self-sufficiency principle, being dedicated for work, being honest, and having social responsibility.

Textbook

Internet research; self-study.

Course Outline & Objectives

1. Search for information, analyze, and select the important points in academic documents from various database to develop the topic and design the fundamental personalized science project.
2. Draft the outline of science project and provide literature review.
3. Present the draft of personalized science project.
4. Write a complete report of personalized science project and present it to the teacher mentor.
5. Plan to work systematically and search for knowledge or ways to efficiently solve problems that arise when working on the project.
6. Take part in teamwork with creativity, and show good relationship towards other group members and mentor.



Resources

Required

- Plastic Folder for Biology only (to keep handouts, etc.)

Suggested Many different colored pens/markers/highlighters

- Electronic Thai-English translator (not a phone-based application)

- Ruler

- Glue stick, stapler, or tape

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 (textbook, plastic folder for handouts, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

A behavior score (out of 3 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*:

- 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 ontime, 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. No late assignments will be accepted unless the student is absent the day the assigned work is due. If a student is absent the day an assignment is due, the assigned work will be due at the beginning of the following class. Remember- it is the student's responsibility to remember what and when assignments are due.

Evaluation and Assessment

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

Homework/Classwork	100%
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Recommendations for Success

1. 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.
2. Get a Thai language introductory biology book.
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.



ST30203 Electricity and Magnetism

Teacher Mr. Glenn Thomas

Contact EP Teacher Room, 2nd Floor Colombet Bldg.

Class Time EP-M5/2 (Health)

Course Description

This course focuses on continuation of electricity studies from semester 1.

The course offers both a conceptual foundation and an algebra-based presentation of Physics. Critical thinking skills in solving problems will be the emphasis with a sound basic understanding of conventional Mathematics. The course will closely follow the order and content of the latest version of the American high school textbook, Holt *Physics*. The course is prerequisite to Sc30204 Physics.

Students are encouraged to read widely from different resources which include the Internet, various Physics (both British and American), books published for improving examination skills as well as from Thai Physics books. They can always approach the teacher for references should they require.

Textbook (as a base)

Physics, Holt McDougal 2012

ISBN-13: 978-0-547-58669-4; ISBN-10: 0-547-58669-8

Miscellaneous references available from the teacher upon request.

Course Outline & Objectives

Unit 1 D.C. circuitry (Resistance)

- Definitions of Ohm's Law, potential difference, resistance, resistivity,
- Resistors in series and in parallel. Illustration with multiple complicated circuitry and finding the total resistance.
- Calculation of potential difference, resistance, and current.
- Problem solving involving current and voltage division.
- Kirchoff's current and voltage laws with circuit analysis.

Unit 2 D.C. Circuitry (Resistance and Capacitance)

- Definitions of capacitance, farad, time constant and mathematics of exponential decay.
- Phenomenon of charging and discharging capacitors; illustration with corresponding graphs.



- Capacitors in series and in parallel

Unit 3 Alternating Current

- Definitions of root mean square value as application to current and voltage in A.C. circuits

- Definition of Inductance.

- RC, RI and RCI A.C. circuits

Resources

- | | |
|-----------|---|
| Required | <ul style="list-style-type: none">• Notebooks• Scientific calculator (not a phone-based application)• Ruler |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters• Electronic Thai-English translator (not a phone-based application)• A Matayom-level physics practice book in Thai |

Academic Integrity Policy

Students are expected to following the guidelines laid down in the Assumption College Student Handbook in terms of academic pursuits and excellence. They are strongly and constantly reminded that it is of paramount importance to understand one topic intensively before being able to move on to the next one. However, all the topics are inter-related.

Therefore, any forms of idleness of poor attitude in learning Physics will not be tolerated and remedial actions immediately instigated to rectify the situation. Students are always welcome to consult the teacher for guidance of whatever issues related to learning which may arise.

Behavioral Expectations

A good sense of behavioral awareness in the classroom will be strictly reinforced which is essential to the ultimate success of the learning process. Students are not allowed to do other subjects in the Physics class or play with electronic gadgets not related to what is being taught in the classroom. Infraction of behavioral rules will be handled accordingly.

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

Foundation Physics 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:

Classwork/Lab	30%
Quiz	20%
Behavior	10% (program mandated)
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

Physics can be a difficult course for many students. All students are should do the following:

1. Take good notes in the classroom. Go home and revise the notes; make sure every single part is clearly understood. For any doubts, queries, clarifications, the student should immediately note down and ask the teacher either in the classroom or individually in the teachers' room.
2. Students are encouraged to read widely-from various textbooks available in the market, from the school library and from the Internet. (e.g Youtube, google, etc.)
3. They should do the prescribed homework.
4. It is useful to organize small study group among the students.
5. Students can consult me individually for techniques in getting high or full scores in external Physics tests like CU-ATS and SAT Subject Tet.
6. Ability for find the time to read Thai Physics (e.g. from the library) would be an additional asset.



ST30233 Universal Chemistry 3

Teacher	Mrs. Anumol Sunny
Contact	EP Teacher Room, 2- Floor Colombet Bldg
Class	EP-M 5/1 (Tuesday, Thursday & Friday) EP-M 5/2 (Monday, Tuesday & Thursday)
Credits	1.5

Course Description

Although this course is technically called Universal Chemistry 3, in reality, it is the fourth installment within the comprehensive Chemistry program offered here at Assumption College English Program. At this point in the student's progression within the discipline, course material will gradually advance into more concrete, fundamental areas of Chemistry. Within this semester, chemical quantities (the concept of the "mole"), Stoichiometry, Chemical reactions, and Kinetic Theory as it applies to the physical properties of the States of Matter are all introduced.

Demonstrations, computer-simulated activities and laboratory sessions will allow students to learn basic laboratory techniques, lab safety and get a hands-on experience of the theories and concepts learned in the lectures. As with many courses within the English Program, critical thinking skills are emphasized over those of rote learning and BMAT-style questions are a part of the evaluation process. The course is a prerequisite to ST30234 Universal Chemistry 4.

Textbook

- *Chemistry Reading and Study Workbook*, Pearson (2012), by Wilbraham, Staley, Matta, and Waterman.
- *Chemistry*, Pearson (2012), by Wilbraham, Staley, Matta, and Waterman.

Supplementary:

- *BMAT Past Paper Worked Solutions (2003-2017)* 2018 by Black Stone Tutors

Course Outline & Objectives

Oxidation and Reduction Reactions (Chapter 20)

Section 20.1: Describe how oxidation numbers are used to identify redox reactions.

- Define oxidation and reduction in terms of the loss or gain of oxygen and the loss or gain of electrons.
- State the characteristics of a redox reaction and identify the oxidizing agent and reducing agent.
- Describe what happens to iron when it corrodes.



Section 20.2: Oxidation Numbers

- Determine the oxidation number of an atom of any element in a pure substance.
- Define oxidation and reduction in terms of a change in oxidation number and identify atoms being oxidized or reduced in redox reactions.

Section 20.3: Balancing Redox Reactions

- Describe how oxidation numbers are used to identify redox reactions.
- Balance a redox equation using the oxidation-number-change method.
- Balance a redox equation by breaking the equation into oxidation and reduction half-reactions, and then using the half-reaction method.

The Behavior of Gases (Chapter 14)

Section 14.1: Properties of Gases

- Identify the three factors that affect gas pressure

Section 14.2: The Gas Laws

- Describe the relationship among the pressure, volume, and temperature of a gas.
- Calculate the pressure, temperature, and volume of a gas using gas laws.

Section 14.3: Ideal Gases

- Calculate the amount of a contained gas when the pressure, volume, and temperature are specified.
- Calculate the molar mass of a gas using the ideal gas law.

Section 14.4: Gases: Mixtures and Movements

- Relate the total pressure of a mixture of gases to the partial pressures of the component gases.
- Explain how the molar mass of a gas affects the rate at which gas diffuses and effuses.

Thermochemistry (Chapter 17)

Section 17.1: The Flow of Energy

- What happens to the universe during a chemical and physical process?
- What are the factors of the heat capacity of an object?

Section 17.2: Measuring and Expressing Enthalpy Changes

- How to Measure changes in the enthalpy of a reaction.
- Express enthalpy changes for a chemical reaction in a chemical equation.

Section 17.3: Heat in Change of State

- Relationship between molar heat of fusion and molar heat of solidification.



- Relationship between molar heat of vaporization and molar heat of condensation.
- Predict the thermochemical changes that happen during a solution formation

Section 17.4: Calculating Heats of Reaction

- Hess's Law of heat summation
- Calculate standard heat of formation.

Electro Chemistry (Chapter 21)

Section 21.1: Electrochemical Cells

- Electrochemical Process
- Electrochemical Cells
- Voltaic cell and its representation
- Application of Voltaic cell
- Types of Dry cells
- Fuel Cells

Section 21.2: Half Cells and Cell Potential

- Electrical Potential
- Standard reduction potential
- Calculating standard cell potentials
- Calculating cell reaction spontaneity
- Calculating standard cell potential

Section 21.3: Electrolytic Cells & Electrolysis

- Electrolysis
- Electrolysis of water
- Electrolysis of brine
- Electrolysis of molten compounds
- Electrolysis in Industries and their application.

Resources

- | | |
|-----------|---|
| Required | <ul style="list-style-type: none">• Assumption Notebook (2)• Binder/ folder• Scientific calculator (not a phone-based application)• Ruler |
| Suggested | <ul style="list-style-type: none">• Many different colored pens/markers/highlighters• Electronic Thai-English translator (not a phone-based application)• A Matayom-level chemistry 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 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 acknowledgment 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 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

Foundation Chemistry 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:

Classwork/Labs	20%
Assignments	30%
Behavior	10% (program mandated)
Midterm Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

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

1. Read, read, read the Chemistry 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. 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.



ST30248	Plant Physiology
Teacher	Mr. Nicholas Crook
Contact	EP Teacher Room, 2 nd Floor Colombet Bldg.
Email	epacnic@gmail.com
Class Time	EP-M 5/2: Mon, period 4; Wed, period 2 & 3; Thurs, period 1
Credits	1.5

Course Description

Students will study the following topics: - Types and characteristics of plant tissue; the internal structure of monocotyledonous roots (monocot) and dicotyledon (dicot) roots; the internal structure of the monocot stem and of the dicot stem; the internal structure of leaf blade from a cross section. - Gas exchange and transpiration in plants; the mechanism of the conduction of water and nutrients in plants; the importance of nutrients; examples of important nutrients that affect growth of plants; the mechanism of transport of nutrients in plants. - The experiments about the photosynthesis conducted by scientists in the past; the steps in the photosynthesis process of C₃ plants; the mechanism of the carbon dioxide fixation occurred in C₃, C₄ and CAM plants; the factors relative to light intensity, carbon dioxide intensity and temperature that affect the photosynthesis of plants. - The life cycle with alternation of generations of the flowering plants; the production process of male and female reproductive cells in the flowering plants and their fertilization. - The formation of seeds and fruit in flowering plants; structure of seed and fruit; examples of uses of different structures of seed and fruit; various factors affecting the sprouting of seed and seed dormancy and methods used to overcome the seed dormancy. - Roles and functions of auxin, cytokinin, gibberellin, ethylene and abscisic acid; application of this knowledge for agricultural use; the external stimuli that affect growth in plants. - The innate behavior and the learned behavior of animals; the relationship between behavior and the evolution of nervous system; the communication between animals that cause their behaviors.

Textbook

Biology, by Pearson (ISBN-13: 978-0-328-92512-4)

Course Outline & Objectives

Chapter 22: What is a Plant?

- 22.1 The Plant [Indicators 1-3]
 - Describe plants.
 - Explain the characteristics of a plant.
 - Research different types of plant.
- 22.2 The Seedless Plants [Indicators 4-6]
 - Describe the structure & function of the seedless plants.
 - Explain how seedless plants reproduce.
 - Describe the different types of seedless plant.
- 22.3 The Seed Plants [Indicators 7-9, 38]
 - Describe the structure & function of the seed plants.
 - Describe the different types of seed plants.

Chapter 23: The Structure & Function of Flowering Plants.

- 23.1 Plant Tissues [Indicators 13-14, 40]
 - State the functions and identify the structures of plant tissues.



- Lab to study and classify plant tissues.
- 23.2 Plant Roots [Indicators 13-14, 40]
 - State the functions and identify the structures of plant roots.
 - Lab to study the structure & function of plant roots.
- 23.3 Plant Stem [Indicators 13-14, 40]
 - State the functions and identify the structures of plant stems.
 - Lab to study the structure & function of plant stems.
- 23.4 Plant Leaves [Indicators 13-14, 40]
 - State the functions and identify the structures of plant leaves.
 - Lab to study the structure & function of plant leaves.
- 23.5 Transport of Nutrients in Plants [Indicators 13-14, 40]
 - Describe transpiration, translocation, and nutrients in plants.
 - Explain how water & nutrients are transported in plants.

End of Midterm Exam Content – Start of Final Exam Content

Chapter 8: Plant Photosynthesis

- 8.2 Photosynthesis [Indicators 15-19]
 - Research photosynthesis.
 - Describe the photosynthetic process.
 - Explain light reaction & carbon fixation.
 - Lab on photosynthesis and factors affecting plant photosynthetic rates.
 - Explain photorespiration.
 - Describe the mechanism of the increase in carbon in C4 plants.

Chapter 24: Reproduction in Flowering Plants

- 24.1 Reproduction [Indicator 29]
 - Research life cycle with alternation of generations.
 - Describe the structure of flowers.
 - Describe the different types of flower.
 - Lab on the structure of flowers.
 - Explain gametogenesis in flowering plants.
 - Describe sexual reproduction of flowering plants.
- 24.2 Fruits & Seeds [Indicators 33-35]
 - Describe the formation of fruits and seeds.
 - Describe the structure of fruits and seeds.
 - Describe the different types of fruit.
 - Lab on the structure of fruit.
 - Explain how seeds sprout and factors affecting sprouting of seeds.
- 24.3 Control of Plant Growth & Response [Indicators 36-37]
 - Investigate the chemicals that control the growth of plants.
 - Explain how plants respond to their environment.
 - Discuss factors affecting the growth of plants.
 - Lab to study influences of plant hormones & stimuli on plants.

Resources

- Required Textbook: *Biology*, by Pearson
 Plastic Folder for Biology only (to keep handouts, etc.)



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

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.

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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 (textbook, plastic folder for handouts, writing utensils, etc.) and to actively participate throughout the lesson until class is dismissed.

A behavior score (out of 3 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*:

- 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 ontime, 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. No late assignments will be accepted unless the student is absent the day the assigned work is due. If a student is absent the day an assignment is due, the assigned work will be due at the beginning of the following class. Remember- it is the student's responsibility to remember what and when assignments are due.



Grading

This course follows to the Assumption College grading scale:

$Final\ Score \geq 80\%$	4.0
$75\% \leq$	3.5
$70\% \leq$	3.0
$65\% \leq$	2.5
$60\% \leq$	2.0
$55\% \leq$	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	30%
Quizzes	20%
Behavior	10% (program mandated)
Midterm (Summative) Exam	20% (program mandated)
Final Exam	20% (program mandated)

Recommendations for Success

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

1. Read, read, read the *Biology*, by Pearson 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. Get a Thai language introductory biology 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.



ST30288 Biology Laboratory

Teacher Mr. Michael Dew
Contact EP Teacher's office, 2nd Floor Colombet Bldg.

Class Time EP-M 5/2: Thursday 1st period

Credits 1.5

Course Description

The 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 this biology lab course 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. Biology Lab topics include an introduction to laboratory procedure of laboratory studies and equipment, concentration of solutions effect on cells, movement of substances through cell membranes, plant transpiration and photosynthesis, cellular respiration of yeast, vapor pressure and latent heat of vaporization, cell division with light microscope, insect behavior microbiology techniques, and laboratory skills in biology and microbiology. Enhanced knowledge and understanding of scientific processes and developing skills in observation, experimentation and the interpretation of data, statistical inference, 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

Skills in Biology Mathayom 5

Course Outline & Objectives

Strand 1: Biological Science [Indicators Standard 1.1 -1.3]

UNIT 1: Biology Laboratory [Indicators Standard 1.1]

Lesson 1.1: Biology Laboratory Equipment and Procedures

- Understand the light microscope and its components.
- Knowledge on experimentation and observation of prepared slides
- Understand and create slide preparation for the observation of cell division
- Explain observation results of plant cell division

Lesson 1.2: Photosynthesis and Transpiration



- Design and conduct an experiment to study the rate of photosynthesis and transpiration
- Explain experimental results of plant photosynthesis and transpiration
- Knowledge of basic techniques in data analysis from experimentation
- Visual Summary - Movement of water and minerals from photosynthesis and transpiration

Lesson 1.3: Nutrient effects on yeast cellular respiration reaction

- Understand through experimentation the types of nutrients that affect cellular respiration in yeast.
- Explain experimental results of various nutrients that affect cellular respiration in yeast.
- Knowledge of basic techniques in data analysis from experimentation

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

Lesson 1.4: Microbiology

- Gain basic techniques in microbiology including basic preparation of culture media, simple streak, and gram staining.
- Apply knowledge and laboratory skills in fundamental biology and microbiology through science project development
- Visual Summary - Microbiological growth experiment

Lesson 1.5: Insect Behavior Comparison in the Laboratory

- Gain basic techniques in insect behavior comparison in the laboratory
- Knowledge and laboratory skills associated with insect behavior comparison in the laboratory
- Visual Summary - Insect behavior comparison in the laboratory

Lesson 1.6: Cell membrane transport and active transport

- Gain basic techniques in active transport and movement of substances through cell membrane
- Knowledge and laboratory skills associated with active transport and movement of substances through cell membrane
- Visual Summary - Cell membrane transport and active transport

Lesson 1.7: Vapor pressure and latent heat of vaporization.

- Gain basic techniques in experimentation to find vapor pressure and latent heat of vaporization.
- Knowledge and laboratory skills in vapor pressure and latent heat of vaporization.
- Visual Summary - vapor pressure and latent heat of vaporization

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

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 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:

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

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.