



**SAMSEN WITTAYALAI SCHOOL
ENGLISH PROGRAM**

COURSE OUTLINE

Subject: Physics (SC30101)	Course Classification: Foundation
Learning Period: 1 Period/Week	Credit Unit: 1.0
Grade Level: Mattayomsuksa 4 (Grade 10)	Semester 1, Academic Year 2022
Learning Area: Science	Samsenwittayalai School: English Program
Teacher: Apichart Siriwitpreecha	

I. COURSE DESCRIPTION

Studying one-dimension motion, two-dimension motion, angular distance, angular velocity, frequency, period, and the concept of Projectile motion and Circular motion are all covered. The important distinction between one-dimension motion and two-dimension motion is made. The application of Projectile motion and circular motion are presented. Methods of solving problems using two-dimension motion are demonstrated; these methods often lead to easier solutions than methods involving two-dimension motion equations.

By using the scientific processes, seeking knowledge, searching data, investigating, analyzing, comparing, explaining, discussing and conclude.

For improving the scientific knowledge and understanding so that the students can make use of the knowledge to make decision, develop scientific skill including the 21st century skills in information technology, critical thinking and problem– solving and communicating. They can also communicate the knowledge and can use the knowledge in every day’s life, leading to scientific mind, ethics, virtues and appropriate attitudes.

II. INDICATORS / LEARNING OUTCOMES

1. Learners’ reading, analytical thinking and writing skills meet the criteria prescribed by the respective educational institutions.
2. Learners’ desirable characteristics meet the criteria prescribed by the respective educational institutions.
3. Learners are able to describe the concept of the motion.
4. Learners are able to describe the kinematics of one-dimension motion.
5. Learners are able to describe the projectile motion and its application.
6. Learners are able to describe the concept of angular quantities for two-dimension motion.
7. Learners are able to describe the circular motion and its application.

III. TENTATIVE COURSE OUTLINE

Week	Topics / Contents	Indicators	Period(s)
1.	Introduction to concept of motion	3	1
2.	Kinematics of one-dimension motion	4	1
3.	One-dimension in horizontal axis	4	1
4.	One-dimension in vertical axis	4	1
5.	Projectile motion 1/5	5	1
6.	Projectile motion 2/5	5	1
7.	Projectile motion 3/5	5	1
8.	Projectile motion 4/5	5	1
9.	Projectile motion 5/5	5	1
10.	Midterm Examination		
11.	Introduction to angular quantities of two-dimension motion	6	1
12.	The distinction and relation between linear quantities and angular quantities	6	1
13.	Circular motion 1/7	7	1
14.	Circular motion 2/7	7	1
15.	Circular motion 3/7	7	1
16.	Circular motion 4/7	7	1
17.	Circular motion 5/7	7	1
18.	Circular motion 6/7	7	1
19.	Circular motion 7/7	7	1
20.	Final Examination		

IV. Teaching Methods and Management

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|---|--|--|
| <input checked="" type="checkbox"/> Experiment | <input checked="" type="checkbox"/> Lecture/Discussion | <input checked="" type="checkbox"/> Group work |
| <input checked="" type="checkbox"/> Individual work | <input type="checkbox"/> Game | <input type="checkbox"/> Song |
| <input checked="" type="checkbox"/> Self-learning | <input type="checkbox"/> Demonstration | <input type="checkbox"/> Role play |
| <input type="checkbox"/> Project | <input type="checkbox"/> Experience | <input type="checkbox"/> ICT |
| <input type="checkbox"/> Local Wisdom based | <input type="checkbox"/> Others | |

V. Teaching Materials/Supplements

- Handouts Worksheets Teacher's textbook
 Graphs/ Diagrams Maps Pictures
 Samples/ Models Exercise s

VI. Assessment and Evaluation

Indicator/ Learning Outcome Score from SGS	Formative I				Midterm	Formative II						Final
	1	2	3	4		10	11	12	13	14	15	
Total score	5	5	5	5	20	10	10	5	5	5	5	20
1						10						
2							10					
3	5											
4		5										
5			5	5								
6								5				
7									5	5	5	

VII. Assignment

SGS No.	Score (points)	Assignment	Deadline	Type	Remark
1	10	Homework	June	Individual	
2	10	Worksheet	July	Individual	
3	5	Quiz 1	June	Individual	
4	5	Quiz 2	July	Individual	
5	10	Homework	August	Individual	
6	5	Worksheet	September	Individual	
7	15	Quiz 3	September	Individual	