

Course Outline for Physics 1 (SCI 31201)

1^{st} Semester, Academic Year 2023

For Grade 10, Demonstration School of Suan Sunandha Rajabhat University

Credit1.5Total class hours60 hours (20 weeks)ClassroomMathayom 4/1TeacherAriyaphol JiwalakContactTel: 089-7525223E-mail: ariyaphol.ji@ssru.ac.thWebsite:http://elsd.ssru.ac.th/ariyaphol_ji

Teaching Schedule

Week	Topics		Time (hours)
1	CHAPTER 1: Introduction to Physics	Course Introduction,	12
		Mathematical method for physics	
2		Quantities and Units	
3		Significant figures	
4		Error	
5	CHAPTER 2: Linear Motion	Position, Displacement, Distance,	15
		Velocity, Speed, and Acceleration	
6		Graphs of linear motion	
7		Kinematic equations for linear motion	
1		with constant acceleration	
8		Free fall	
9		Relative motion	
10	Midterm Exam		3
11	CHAPTER 3: Force and Law of Motion	Force and Mass	15
12 13		Newton's laws of motion	
14		Frictional force	
15		Gravitational force	
1.6	CHAPTER 4: Mechanical Equilibrium	Mechanical equilibrium,	12
16		Center of mass and Center of gravity	
17		Translation equilibrium and	
18		Rotational equilibrium	
19		Stability	
20	Final	Exam	3
	Total		60

Evaluation criteria	Homework	50%
	Quiz	10%
	Midterm exam	20%
	Final exam	20%