Tsuyama College	Year	2021	Course Title	Physics Practice

Course Information

Course Code	0063	Course Category	Specialized / Compulsory
Class Format	Seminar	Credits	School Credit: 1
Department	Department of Integrated Science and Technology Advanced Science Program	Student Grade	3rd
Term	First Semester	Classes per Week	2
Textbook and/or Teaching Materials	Exercise book : Edited by Fujio Tanaka, Physics excercise book of Kosen (Morikita) Textbook: Ministry of Education, Culture, Sports, Science and Technology official approval textbook "Physics basics", "Physics" (Tokyo Shoseki)		
Instructor	SASAI Yuji		

Course Objectives

Learning purposes :
To ensure knowledge of the dynamics and waves of physics, thermodynamics, waves, and electromagnetism that correspond to high school courses, through exercises.

Course Objective :
1. Understand the contents of mechanics and solve related problems.
2. Understand the contents of waves and solve related problems.

Rubric

	Ideal Level	Standard Level	Unacceptable Level
Achievement 1	For mechanics, student can create answers to most of the problems up to level C dealt with in the exercise.	Can create answers to problems dealt with in exercises regarding mechanics.	Has not reached the left.
Achievement 2	For waves, student can create answers to most of the problems up to level C dealt with in the exercise.	Can create answers to problems dealt with in exercises regarding waves.	Has not reached the left.

Assigned Department Objectives

Teaching Method

Outline	General or Specialized : Specialized Field of learning : Physics Required, Elective, etc. : Required subjects to take Basic disciplines: Mathematical science / physics / general physics Relationship with Educational Objectives : This subject is equivalent to the learning and education goal "(2) Acquisition of solid basic science knowledge". Relationship with JABEE programs : The main goal of learning or education in this subject is "(A) Deepening of basic knowledge about technology, A-1: Acquiring knowledge in a wide range of natural sciences as basic knowledge about engineering, and can be explained. " Class outline : Exercises on mechanics, thermodynamics, wave motion, and electromagnetism to ensure knowledge of physics for high school courses.
Style	Course method: Write on the board before the class starts, as student will be given practice problem in advance. The lesson will be developed accordingly. Deals with the problems of force and motion, temperature and heat, wave and light, and electromagnetic levels B and C. Grade evaluation method: Exams (50%) + Exercises (50%) . Supplementary classes and re-taking exams will be imposed on those with poor grades, and the results of the regular exam will be replaced with a maximum of 60 points.
Notice	Precautions on the enrollment : Students must take this class (the number of absentee hours is less than one-third of the prescribed number of class hours). Course advice : Think carefully about the problem, calculate it well, or research it carefully to create an answer. Also, be sure to submit the assignment report by the deadline. Basic subjects : Physics I (1 year), Physics II (2), Fundamentals of Integreted Science and Technology (1), Electrical and Electronic Circuits (2), Basic Mathematics (1), Differental and Integral I (2) Related subjects : Mechanics I (3rd year), Mechanics (3), Mechanics (3), Introduction to Electricity and Magnetism (3), Introduction to Thermodynamics (3), General Physics (3) Attendance advice : Calculate and understand the mathematical formulas. If students are operating e-mail etc. during class, may be asked to leave the room. If student join the class starts within 25 minutes, it will be lateness, and 3 times lateness will result in 1 absence.

Characteristics of Class / Division in Learning

☐ Active Learning	☐ Aided by ICT	☐ Applicable to Remote Class	☐ Instructor Professionally Experienced

Course Plan				
			Theme	Goals
1st Semester	1st Quarter	1st	Guidance. Instructions of practice problem	Hereafter, the odd numbers problem of levels B and C are dealt with.
		2nd	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		3rd	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		4th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		5th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		6th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		7th	1st term midterm exam (above content)	Requires a score of 60 points or higher.
		8th	Return of answers for the 1st term midterm exam. exam commentary.	Review.
	2nd Quarter	9th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		10th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		11th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		12th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		13th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		14th	Exercises on mechanics, wave and light problems	Understand questions and answers certainly.
		15th	1st term final exam (contents after the first term mid-term exam)	Requires a score of 60 points or higher.
		16th	Return of answers for the 1st term final exam. exam commentary.	Review.

Evaluation Method and Weight (%)

	Examination	Presentation	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	50	0	0	0	50	0	100
Basic Proficiency	30	0	0	0	30	0	60
Specialized Proficiency	20	0	0	0	20	0	40
Cross Area Proficiency	0	0	0	0	0	0	0