Tsuyama College	Year	2021	Course Title	General Aspects of Integrated Engineering I

Course Information

Course Code	0039	Course Category	General / Elective
Class Format	Lecture	Credits	School Credit: 2
Department	Department of Integrated Science and Technology Communication and Informations System Program	Student Grade	2nd
Term	Intensive	Classes per Week	
Textbook and/or Teaching Materials			
Instructor	CHO Feifei		

Course Objectives

Learning purposes: To acquire knowledge of biology, which is the basis of total rational engineering, and to acquire the basic skills for understanding engineering phenomena and problem solving.

Course Objectives:
1) To understand the commonality and diversity of living things
2) To explain the nature of DNA.
3) To explain the regulatory mechanisms of the body's environment.
4) The understanding of ecosystems on earth.

Rubric

	Excellent	Good	Acceptable	Not acceptable
Achievement 1	Show an understanding of the commonality and diversity of living things very well.	Understand the commonality and diversity of living things	Understand the commonality and diversity of living things not very well	Has not reached the required standards.
Achievement 2	Explain the nature of DNA very well.	Explain the nature of DNA.	Cannot explain the nature of DNA very well.	Has not reached the required standards.
Achievement 3	Explain the regulatory mechanisms of the body's environment very well.	Explain the regulatory mechanisms of the body's environment.	Cannot explain the regulatory mechanisms of the body's environment very well.	Has not reached the required standards.
Achievement 4	Show an understanding of ecosystems on earth very well.	Show an understanding of ecosystems on earth.	Cannot show an understanding of ecosystems on earth very well.	Has not reached the required standards.

Assigned Department Objectives

Teaching Method

Outline	General or specialized: General Field of learning: Common and Basic Natural Sciences Foundational academic disciplines: biology/basic biology Relationship with Educational Objectives :This class is equivalent to "(2) Acquire basic science and technical knowledge". Relationship with JABEE programs : The main goals of learning / education in this class are "(A) , A-1". Course outline: This course is designed for students who transfer from the departments of Mechanical Engineering, Electrical and Electronic Engineering, Electronic Control Engineering, and Computer Science and Engineering to the Department of Integrated Science and Engineering to acquire the academic skills that will not interfere with their studies. Specifically, lectures and exercises are given to first-year students of the Department of Integrated Science and Engineering with an emphasis on biology.
Style	Course method : During long vacations, etc., lectures are given in a concentrated manner. Classes are based on assignment reports and exercises, and lectures are given as needed. Grade evaluation method: Notes (50%) and reports (50%).
Notice	Precautions on the enrollment : Subject to 3rd year transfer students from the departments of Mechanical Engineering, Electrical and Electronic Engineering, Electronic Control Engineering, and Computer Science and Engineering. This course is held in intensive course during the long vacation. Course advice: Biology is a basic subject in the Department of Integrated Science and Engineering, and it is a fundamental subject for students to learn after transferring. It is necessary to understand these subjects in order to transfer to a new department. Preparatory study to be done in advance. Foundational subjects : Related subjects: Chemistry I (2 year), Chemistry II (3rd), Experiments in Science (2nd), General Biology (2nd), Molecular Biology (3rd), Applied Biology (4th), Developmental Biology (4th), Experiments in Biology (4th), Biochemistry (4th), Cell Biology (4th), Bioinformatics (5th)

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	The course will not be offered this year.	
		2nd		
		3rd		
		4th		
		5th		
		6th		
		7th		

		8th		
	2nd Quarter	9th		
		10th		
		11th		
		12th		
		13th		
		14th		
		15th		
		16th		
2nd Semester	3rd Quarter	1st		
		2nd		
		3rd		
		4th		
		5th		
		6th		
		7th		
		8th		
	4th Quarter	9th		
		10th		
		11th		
		12th		
		13th		
		14th		
		15th		
		16th		

Evaluation Method and Weight (%)

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