

Tsuyama College		Year	2021	Course Title	Integrated Science and Technology Practice
Course Information					
Course Code	0032		Course Category	Specialized / Compulsory	
Class Format	Seminar		Credits	School Credit: 2	
Department	Department of Integrated Science and Technology Communication and Informations System Program		Student Grade	2nd	
Term	Year-round		Classes per Week	2	
Textbook and/or Teaching Materials	Workbook: マナトレ 英語標準編 (Benesse), drills (Kumon)				
Instructor	KIKUCHI Yosuke, HATA Yoshikazu				
Course Objectives					
Learning purposes: Improve foundational mathematical skills and English grammar and writing.					
Course Objectives: 1. To solve problems with the improvement of essential foundational mathematical skills for a specialized field. 2. To solve problems with the improvement of English grammar and writing.					
Rubric					
	Excellent	Good	Acceptable	Not acceptable	
Achievement 1	The student finishes all mathematical exercises before the deadline and has an excellent exam score.	The student finishes all mathematical exercises before the deadline and has a good exam score.	The student finishes mathematical exercises and has an acceptable exam score.	The student does not finish mathematical exercises and has a unacceptable exam score.	
Achievement 2	The student finishes all English exercises before the deadline and has an excellent exam score.	The student finishes all English exercises before the deadline and has a good exam score.	The student finishes English exercises and has an acceptable exam score.	The student does not finish English exercises and has a unacceptable exam score.	
Assigned Department Objectives					
Teaching Method					
Outline	<p>General or Specialized: Specialized Field of learning: Electric, Electronic, and Control Foundational academic disciplines: Mathematical and Physical sciences / Mathematics / Foundations of mathematics, Humanities/Literature, Linguistics. Relationship with Educational Objectives: This class is equivalent to "(3) acquire deep foundational knowledge of the major subject area." MCC Objectives: Assign to "Communication (1)" and "Logical Thinking (1)" in "VII Generic Skills," and "Proactiveness (1)" in "VIII Attitude and Intentionality (Social Adaptability, Ningen-ryoku)." Relationship with JABEE programs: the main goal of learning/education in this class is "(A)" and also related to "(B)" is involved.</p> <p>Course outline: This class aims to enhance good parts and overcome bad parts of each class field—in one unit, the student deals with the exercises to improve essential fundamental mathematical skills for a specialized field, and English grammar and writing in one unit.</p>				
Style	<p>Course method: This class consists of two parts: the mathematical part and the English part, each for one unit-hour per week. In the mathematical part, first the student confirms his/her own initial understanding of foundational mathematics by taking a test. Second, the student studies different subjects at varying levels depending on his/her ability, according to the result of the test. Finally, comprehension is tested in the mid-term and final exams. In the English part, students work on a workbook by themselves. Each exercise is treated as an assignment.</p> <p>Grade evaluation method: Regular exams (40%) + Mathematical assignments (40%) + English assignments (20%)</p>				
Notice	<p>Precautions on the enrollment: The student must attend this class for promotion. Course advice: This course is a review. The student go through mathematics and English. Foundational subjects: 1st-year Mathematics and English. Japanese Related subjects: All specialized subjects.</p> <p>Attendance advice: The student must completely understand the content of the comprehension test for fundamental mathematics because these skills are essential for learning a specialized field. Therefore, the student should frequently practice on weak mathematical issues. The English grade is evaluated by performance on assignments. Therefore, the student completes assignments and meets the submission deadline. If you miss roll call for half of one period, you are treated as late for the class. If you are more than half a period late, you will be treated as absent.</p>				
Characteristics of Class / Division in Learning					
<input checked="" type="checkbox"/> Active Learning		<input checked="" type="checkbox"/> Aided by ICT		<input type="checkbox"/> Applicable to Remote Class	
<input type="checkbox"/> Instructor Professionally Experienced					
Must complete subjects.					
Course Plan					
			Theme	Goals	
1st Semester	1st Quarter	1st	Guidance, Mathematical comprehension test (1)	Understand the positioning of this course.	

		2nd	Mathematical exercise (1)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		3rd	Mathematical exercise (2)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		4th	Mathematical exercise (3)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		5th	Mathematical exercise (4)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		6th	Mathematical exercise (5)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		7th	Mathematical exercise (6)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		8th	(1st-semester mid-term exam)	Confirm your own knowledge.
	2nd Quarter	9th	Return and commentary of exam answers	Check and improve your own knowledge.

		10th	Mathematical exercise (7)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		11th	Mathematical exercise (8)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		12th	Mathematical exercise (9)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		13th	Mathematical exercise (10)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		14th	Mathematical exercise (11)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		15th	(1st-semester final exam)	Confirm your own knowledge.
2nd Semester	3rd Quarter	16th	Return and commentary of exam answers	Check and improve your own knowledge.
		1st	Mathematical comprehension test (2), English exercise (1)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.

		2nd	Mathematical exercise (12), English exercise (2)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		3rd	Mathematical exercise (13), English exercise (3)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		4th	Mathematical comprehension test (3), English exercise (4)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		5th	Mathematical exercise (14), English exercise (5)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		6th	Mathematical exercise (15), English exercise (6)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		7th	Mathematical exercise (16), English exercise (7)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		8th	(2nd-semester mid-term exam)	Confirm your own knowledge.
	4th Quarter	9th	Return and commentary of exam answers, Mathematical Comprehension test (4), English exercise (8)	Check and improve your own knowledge.

		10th	Mathematical exercise (17), English exercise (9)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		11th	Mathematical exercise (18), English exercise (10)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		12th	Mathematical comprehension test (5), English exercise (11)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		13th	Mathematical exercise (19), English exercise (12)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		14th	Mathematical exercise (20), English exercise (13)	Solve assigned exercise. If you can not solve the exercise yourself, you can communicate with neighbor teachers or students to solve it. The student can read, write, hear, and speak Japanese and other foreign languages. The student has effective explanations and methodologies to convince other people. The student can compose their own remarks and procedures about a problem by the information and knowledge of a specialized field according to multiple perspectives with logical thinking. The student can act with their own advantage by comparison between their own position and circumstances.
		15th	(2nd-semester final exam)	Confirm your own knowledge.
		16th	Return and commentary of exam answers, English test	Check and improve your own knowledge.

#### Evaluation Method and Weight (%)

	Examination	Assignments	Total
Subtotal	60	40	100
Basic Proficiency	60	40	100