Anan College	Year	2024	Course Title	ProgrammingLanguage

Course Information

Course Code	1314A02	Course Category	Specialized / Compulsory
Class Format	Lecture	Credits	Academic Credit: 2
Department	Course of Electrical Engineering	Student Grade	4th
Term	First Semester	Classes per Week	前期:2
Textbook and/or Teaching Materials	Easy to learn C language introduction [2nd edition] (Science) / Self-study C (Shoeisha), Programming language C (Kyoritsu Shuppan)		
Instructor	Komatsu Minoru		

Course Objectives

1. Able to explain the concepts of variables and data types.
2. Able to understand the concepts of assignments and operators and be able to write expressions.
3. Able to understand the concept of control structure and be able to describe conditional branching and iterative processing.
4. Able to understand the concept of functions and write programs using functions.
5. Able to understand programs written in C language and perform basic programming.

Rubric

	Ideal achievement level	Standard achievement level	Minimum achievement level (possible)
Achievement Goal 1	Able to explain and describe all the concepts of variables and data types.	Able to explain the concepts of variables and data types and describe them.	Able to explain some of the concepts of variables and data types, and some of them.
Achievement Goal 2	Able to understand all the concepts of assignments and operators and be able to write expressions.	Able to understand the basic concept of assignments and operators, and can write expressions.	Able to understand some of the concepts of assignments and operators, and can write some expressions.
Achievement Goal 3	Able to understand all the concepts of control structures and describe them using multiple conditional branches and iterations.	Able to understand the basic concept of control structure and describe conditional branching and iterative processing.	Able to understand a part of the concept of control structure, and can describe a part of conditional branching and iterative processing.
Achievement Goal 4	Able to understand all the concepts of functions and write programs using multiple functions.	Able to understand the basic concept of functions and can write programs using functions.	Able to understand a part of the concept of a function and write a part of a program.
Achievement Goal 5	Able to understand and program all programs written in C language.	Able to understand programs written in C language and can perform basic programming.	Able to understand a part of the program written in C language and can do some basic programming.

Assigned Department Objectives

学習・教育到達度目標 B-4 学習・教育到達度目標 D-1

Teaching Method

Outline	The goal is to understand programming in C language and to acquire the actual software creation technology. Classes leverage actual practice in the practice room along with lectures.
Style	After the explanation, the lesson will be programmed by each person and the contents will be confirmed. If you have time, take the initiative in doing the exercises. You may also take quizzes during class hours. Since this subject is a study unit, reports and online tests will be conducted as pre- and post-study. [Class time 31 hours + self-study time 15 hours]
Notice	Exercises will be imposed, so if you cannot do it during class time, use the time after school to complete the program.

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	Basics of C	Able to explain the components of C programs, program creation and compilation.
		2nd	Data type / variable / expression	Able to explain the concept of variables and data types.
		3rd	Condition judgment processing	Able to understand the concept of control structure and describe conditional branching and iterative processing.
		4th	Iterative processing	Able to understand the concept of control structure and describe conditional branching and iterative processing.
		5th	Arrangement	Able to understand the concept of arrays and write programs using arrays.
		6th	Arrays and strings	Able to understand the concept of arrays and write programs using arrays.
		7th	Programming	Able to understand the written program and do basic programming.
		8th	Review up to this point (may be the first half of the exam)	Your comprehension is checked by past exam questions

	2nd Quarter	9th	Function	Able to understand the concept of functions and write programs using functions.
		10th	Function	Able to understand the concept of functions and write programs using functions.
		11th	Pointer	Able to understand the concept of pointers and write programs using pointers.
		12th	Pointer	Able to understand the concept of pointers and write programs using pointers.
		13th	Numerical calculation programming	Able to program typical algorithms for numerical calculations.
		14th	Other programming languages (such as Python)	Check the description method for programming languages other than C language.
		15th	Other programming languages (such as Python)	Able to describe programming languages other than C language.
		16th	Final exam for the previous term	

Evaluation Method and Weight (%)

	Routine Exam	Little Test	Portfolio	Announcement / approach attitude	Others		Total
Subtotal	70	10	20	0	0	0	100
Basic Proficiency	10	0	0	0	0	0	10
Specialized Proficiency	50	10	10	0	0	0	70
Cross Area Proficiency	10	0	10	0	0	0	20