

Toyama College		Year	2022		Course Title	Programming Ⅲ
Course Information						
Course Code	0064		Course Category	Specialized / Elective		
Class Format	Lecture		Credits	School Credit: 1		
Department	Department of Electronics and Computer Engineering		Student Grade	3rd		
Term	Second Semester		Classes per Week	2		
Textbook and/or Teaching Materials						
Instructor	Aso Tsukasa					
Course Objectives						
At the completion of this course, student will be able to: 1) Understand the basic syntax of JAVA language 2) Create the basic JAVA programs 3) Understand the concept of object oriented technology						
Rubric						
		Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)		
Evaluation 1		Can understand the basic syntax of JAVA language almost perfectly.	Can understand the basic syntax of JAVA language correctly.	Can't understand the basic syntax of JAVA language correctly.		
Evaluation 2		Can create the basic JAVA programs almost perfectly.	Can create the basic JAVA programs almost correctly.	Can't create the basic JAVA programs correctly.		
Evaluation 3		Can understand the concept of object oriented technology almost perfectly.	Can understand the concept of object oriented technology correctly.	Can't Understand the concept of object oriented technology correctly.		
Assigned Department Objectives						
ディプロマポリシー 1						
Teaching Method						
Outline	C programing is based on a procedural language, while C++ and JAVA programing are based on the object oriented language. This lecture introduces the programing method in Object-oriented technology using JAVA language. The lecture consists from 1) learning about the basic syntax of JAVA language, 2) understanding about the difference between C language and JAVA language, and 3) creating basic JAVA programs with object-oriented technology.					
Style	The lecture includes exercises and practice of programing, in order to check the students' understandings.					
Notice	The recognition of credit requires 60 points or more rating. A person who has a rating of less than 60 points may be subjected to an approval test by request. As the result of the approval test, the evaluation is made to be 60 points in the person who the mastery of the unit is recognized.					
Characteristics of Class / Division in Learning						
<input type="checkbox"/> Active Learning		<input type="checkbox"/> Aided by ICT		<input checked="" type="checkbox"/> Applicable to Remote Class		<input type="checkbox"/> Instructor Professionally Experienced
Course Plan						
			Theme	Goals		
2nd Semester	3rd Quarter	1st	Guidance Installation of JAVA SDK	Can understand the lecture structure and the goals.		
		2nd	Basic structure of JAVA program	Can understand the procudure about source code description, compiling and running program.		
		3rd	Types, expression and cast	Can understand the syntax of types, expression and cast for developing a basic program.		
		4th	Branches and loops	Can understand the syntax of branches and loops for developing a basic program.		
		5th	Array	Can understand the syntax of array for developing a basic program.		
		6th	Method	Can understand the syntax of static method for developing a basic program.		
		7th	Exercise and practice	Can understand how to develop practical programing with the knowleges.		
		8th	Midterm exam	Can create basic JAVA programs as well as explain the results of given programs.		
	4th Quarter	9th	Comments to the intermediate test	Can understand and recover the weak points of study.		
		10th	Program with multiple classes	Can understand how to develop a program with multiple classes.		
		11th	Object-oriented technology	Can understand the advanteges of object-oriented technology.		
		12th	Instances and classes	Can understand the class definition and its structure with the difference between instance and class.		
		13th	Encapsulation	Can understand the visibility of field variables, constructs and methods.		
		14th	Exercise and practice	Can understand how to develop practical programing with the classes.		

		15th	Final exam	Can create basic JAVA programs with object-oriented technology.			
		16th	Comments to the final exam, class questionnaire etc.	Can understand and recover the weak points of study.			
Evaluation Method and Weight (%)							
	Examination	Report	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	70	30	0	0	0	0	100
Basic Ability	40	20	0	0	0	0	60
Technical Ability	30	10	0	0	0	0	40
Interdisciplinary Ability	0	0	0	0	0	0	0