Syllabus of 1st Semester, 2023

Course Title	INTRODUCTION TO COMPUTERS AND PROGRAM	Course Code	CB1501007	Section	003
Department	Computer Engineering Major	Level	1st year	Credit-Theory - Practice	4.0 - 4.0 - 0.0
Class Hours & Classroom	Tue 10:30(100) 201-6408, Thu 10:30(100) 201-6408				
Lecturer	Woo, Gyun	Office (Counsel room)		Counsel Hours	
		Telephone	3518	E-mail	woogyun@pusan.ac.kr
Lesson Style	· 대면 · Teacher-centered learning, Experiment				
Evaluation Method	* Students with disabilities can request an extension of the exam hour, and they can take exams by getting writing assistance or by using a computer.				
Competitors and Knowledge					
Objective	1. Obtaining the basic concepts of the computer system (the computer architecture and the machine cycle). 2. Understanding the concepts of data type, the data representation methods, and the operations of the data. 3. Learning the basic programming concepts and exercising programming using Python.				
Lecture Overview	This course introduces the fundamentals of computer systems from both the hardware and the software aspects. Also, the hardware architecture and how the software is in operation using machine cycles are also introduced. This course also provides problem-solving methods, i.e. how to program, using Python. * Students with disabilities can negotiate with the Disabled Student's Academic Support Center regarding course materials and assignments.				

Course and Core competencies

BNU 8Point Core Competency	Global Culture	Communication	Convergence	Application	Service	Personality	Basic Knowledge	Higher thinking
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Core competencies according to subject matter

Department Core Competencies		Training Method
01	Ability for applying information and technology in mathematics, basic science, and engineering	Lecture and Assignments
02	Ability for understanding and analyzing data, and planning and performing experiments	Lecture, Laboratory, and Assignments
04	Ability for formulating engineering problems, understanding requirements, and modeling the problems	Lecture and Assignments

Textbooks and References

Required Textbooks	
References	

Week Lecture Plan		
Week	Lesson and Lab Contents	Challenges and Other Notes
1 Week	[Orientation and Education on Academic Misbehavior(e.g. Cheating, Plagiarism) and Safety Education on Experiment and Practice] [Orientation and Education on Academic Misbehavior(e.g. Cheating, Plagiarism) and Safety Education on Experiment and Practice] Introduction to Computer	
2 Week	Introduction to Software and Programming [Open Shource] programming using IDLE	programming assignment 1
3 Week	Using Functions [Open Shource] programming using IDLE	programming assignment 2
4 Week	Sequential Data Structure [Open Shource] programming using IDLE	programming assignment 3
5 Week	Control Structures [Open Shource] programming using IDLE	programming assignment 4
6 Week	Representing Algorithms [Open Shource] programming using IDLE	programming assignment 5
7 Week	Recursion [Open Shource] programming using IDLE	
8 Week	Midterm Exam	
9 Week	Dictionary and Sets [Open Shource] debugging using pdb	programming assignment 6
10 Week	Comprehension [Open Shource] debugging using pdb	programming assignment 7
11 Week	Functional Programming [Open Source] debugging using pdb	programming assignment 8
12 Week	Using Classes [Open Source] programming using IDLE	programming assignment 9
13 Week	GUI [Open Source] using TkInter	programming assignment 10
14 Week	Subclasses [Open Source] programming using IDLE	case study
15 Week (Appointed	Summary and where to go	
16 Week	Final Exam	