Programing 1

Basic Course Information

Course Number	03005080	Subject Category	Compulsory (E)
Class Format	Lecture	Credit Type and Number of Credits	0.5
Department	Electrical and Electronics	Student Category	Year 1
Period of Study	Semester 1	Classes per Week	1
Required Materials	Laptop, Coding program (PyCharm, VScode), Google Colab (Optional), Materials will be uploaded in Google Classroom.		
Instructor	Tanapon Keatsamarn	Teerapong Orachon	

Course Objective

Students can understand and explain introduction to computer programing by using Python language. Students can understand and explain the basic computer programming of python language such as, "Variables, expressions and statements", "Conditional execution", "Iteration", "Strings", "Lists", "Tuples", "Set", "Dictionaries", "Files", and "Functions" including its applications.

Evaluation(Rubric)	Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)
Can explain how to write basic programs by using Python.	Can explain how to write basic programs by using Python detailedly and precisely.	Can explain how to write basic programs by using Python.	Can't explain how to write basic programs by using Python.
Can implement basic programs by using Python.	Can implement basic programs by using Python detailedly and precisely.	Can implement basic programs by using Python.	Can't implement basic programs by using Python.
Can solve problems by using computer programs of Python.	Can solve problems by using computer programs of Python detailedly and precisely.	Can solve problems by using computer programs of Python.	Can't solve problems by using computer programs of Python.

Relationship with Learning Outcomes

CI(1) Ability to operate and administer the computer software and hardware

CI(2) Ability to understand the operating system and to develop software to solve specific problems.

Please change

Teaching Method

Outline:	Lecture and practice the basic computer programming such as, "Variables, expressions and statements" , "Conditional execution", Iteration", Strings", Lists", Tuples", Set", Dictionaries", Files", and "Functions"
Class Format:	Lecture, Practice and Homework Assignments
Please Note :	The Midterm report (Quiz score) and Final examination will provided.

Course Plan

Semester 1	Contents and Method of Course	Goals	Related MCC
1st week	Guidance: Basic statements of Python	Guidance: Basic statements of Python	
	05/07/2023		
2nd week	Variables, expressions, operations and statements	Understanding Variables, expressions, operations and statements	
3rd week	Variables, expressions, operations and statements	Understanding Variables, expressions, operations and statements	
4th week	Conditional Execution and Flowchart	Understanding Conditional Execution and Flowchart	
5th week	Conditional Execution and Flowchart / loop with while and for	Understanding Conditional Execution and Flowchart / loop with while and for	
6th week	loop with while and for	Understanding loop with while and for	
7th week	Review week 1st-6th class and assign Midterm report	Review week 1st-6th and assign Midterm report	
	Midterm Examination	No exam	
8h week	Midterm report feedback	Understanding mid-term report	
9th week	Text Strings	Understanding Text Strings	
10th week	List and Tuples	Understanding List and Tuples	
	Holiday 08/02/2023		
11th week	Dictionary	Understanding Dictionary	
12th week	Functions	Understanding Functions	
	S.E. 7 08/27/2023		
13th week	Functions	Understanding Functions	
14th week	Functions	Understanding Functions	
15th week	Preparing for final Examination	Preparing for final Examination	
	Final Examination	Final Examination	
16th week	Review and feedback final exam	Review and feedback final exam	

Do not

	Examination	Quiz	Mutual Evaluations between students	Report	Portfolio	Other
Basic Ability	0	0		40		
Technical Ability	30	30		0		
Interdisciplinary Ability	0	0		0		