Mathematics for Information Technology 1

Basic Course Information

Course Number	02005119	**Subject Category**	Compulsory (C)
Class Format	Lecture	**Credit Type and Number of Credits**	1
Department	Computer	**Student Category**	Year 2
Period of Study	Semester 2	**Classes per Week**	1
Required Materials	Hardware: Laptop and Tablet, Handouts will be distributed		
Instructor	Saung Hnin Pwint Oo	Yuki Yoshikawa	

Course Objective

This course provides students with Mathematics for Information Technology. It covers sets, relations, logic, graphs, and mathematical induction.
You'll acquire knowledge of basis of computer science and engineering. These knowledge is fundamental for computer engineering and cybersecurity.

Evaluation (Rubric)	Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)
Can explain Set and Relation	Can explain Set and Relation appropriately	Can explain Set and Relation	Cannot explain Set and Relation
Can explain Logic	Can explain Logic appropriately	Can explain Logic	Cannot explain Logic
Can explain Graph structure and its representation	Can explain Graph structure and its representation appropriately	Can explain Graph structure and its representation	Cannot explain Graph structure and its representation

Relationship with Learning Outcomes

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

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

Teaching Method

Outline:	Lecture and Drill
Class Format:	Lecture and Homework Assignments
Please Note :	Students are required to ask any questions after sufficient self-learning.

Course Plan

Semester 2	Contents and Method of Course	Goals	Related MOC
1st week	Introduction and Guidance / Sets (Online)	Introduction and Guidance / Understand and use Sets	V-D 7 84 V-D 7 85
2nd week	Sets (Online)	Understand and use sets	V-D 7 84 V-D 7 85
3rd week	Functions	Understand and use functions	V-D 7 84 V-D 7 85
4th week	Functions	Understand and use functions	V-D 7 84 V-D 7 85
5th week	Relations	Understand and use relations	V-D 7 84 V-D 7 85 V-D 7 86
6th week	Relations	Understand and use relations	V-D 7 84 V-D 7 85 V-D 7 86
7th week	Relations/ Preparation for mid-term exam	Understand and use relations and Preparation for mid-term exam	V-D 7 84 V-D 7 85 V-D 7 86
8th week	School Event		
9th week	Mid term exam		
10th week	Propositional Logic	Understand and use Propositional Logic	V-D 7 84 V-D 7 85 V-D 7 86 V-D 7 87
11th week	Propositional Logic	Understand and use Propositional Logic	V-D 7 84 V-D 7 85 V-D 7 86 V-D 7 87
12th week	Predicate Logic	Understand and use Predicate Logic	V-D 7 84 V-D 7 85 V-D 7 86 V-D 7 87
13th week	Predicate Logic	Understand and use Predicate Logic	V-D 7 84 V-D 7 85 V-D 7 86 V-D 7 87
14th week	Graph Structure	Understand and use Graph Structure	V-D 2 24
15th week	Graph Structure	Understand and use Graph Structure	V-D 2 24
16th week	Graph Structure	Understand and use Graph Structure	V-D 2 24
17th week	Preparation Before Final Exam	Preparation Before Final Exam	
18th week	Final Exam		
19th week	Final Exam		
20th week	Return Final Exam	Return Final Exam	

Do not

	Mid Term Examination	Final Examination	Mutual Evaluations between students	Report	Portfolio	Quiz
Basic Ability	35	35		15		15
Technical Ability						

Project