Course	**Course Name**	**: Object Oriented Programming**
	Course Code	**: KM184303**
	Credit	**: 3**
	Semester	**: 3**

Description of Course

Object-oriented programming is a course that discusses the basic concepts of object-oriented programming using JAVA programming language. The course include: object-oriented programming concepts, UML diagrams, encapsulation, inheritance, polymorphism, comparable, exception handling, and data structures

Learning Outcome

| PLO 1 | [C2] Students are able to identify and explain foundations of mathematics that include pure, applied, and the basic of computing |
| PLO 2 | [C3] Students are able to solve simple and practical problems by applying basic mathematical statements, methods and computations |

Course Learning Outcome

1. Be able to understand the basic concepts of object-oriented programming
2. Be able to understand and design class diagrams with Unified Modeling Language (UML)
3. Be able to apply object oriented programming to design and develope a program to solve a problem using JAVA programming language, individually or togetherly

Main Subject

1. OOP: Object-oriented programming paradigm, UML diagram

2. OOP Concepts: encapsulation, inheritance, polymorphism
3. OOP SUPPORTING UTILITIES: comparable and exception handling
4. Data structure: list, stack and queue

Prerequisites

Algorithms And Programming

Reference

1. Y. Daniel Liang, "Java Programming Comprehensive", 10th edition, Pearson Education, Inc., publishing as Prentice Hall, 2013
2. Paul Deitel, Harvey Deitel, "Java: How to Program", 9th edition, Prentice Hall, 2012

Supporting Reference

1. Abdul Kadir, "Algoritma & Pemrograman Menggunakan Java", Andi Offset, 2012
2. C. Thomas Wu, An Introduction to Object-Oriented Programming with Java, 4thEdition, Mc Graw Hill, 2006.