

Course Title and Code	IT 214 Object Oriented Programming I
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I. Course Identification and General Information:

Course Title	Object Oriented Programming I	Course Code	IT 214	Pre-requisite	CS 182
Department	Information Technology	Course Level	5	Credit Hours	3(2+1)

II. Course Description/Topics: The following course topics will be covered.

An introduction intermediate and advanced features of the Java programming language. Students will learn about object-oriented programming concepts such as inheritance, interfaces, abstract classes, abstract methods, and polymorphism; will learn how to write and read Java primitive types to and from files; how to serialize objects, and how to implement graphical user interfaces using Java's FX components. Typical assignments, exercises, and projects include using built-in and programmer-defined classes, implementing inheritance and runtime polymorphism, and implementing graphical user interfaces with components like buttons, check boxes, scroll bars, and lists. At the end of the course, students submit a comprehensive final examination.

III. Course Outcomes: Summary of the main learning outcomes for students enrolled in the course.

1. When asked, in writing, students will be able to identify the principles of Object-Oriented Programming.
2. When asked, in writing, students will be able to understand the benefits of well- structured program.
3. When asked, in writing, students will be able to communicate and work with a team to learn how to use advanced tools through OOP
4. When asked, in writing, students will be able to learn the skill on how to use the advanced OOP tools; such as inheritance, Polymorphism, Abstraction Class, Interface Class.
5. When asked, in writing, students will be able to develop problem-solving and programming skills using OOP concept.

IV. Required Text:

- Thomas Wu, Thomas Wu, An Introduction to Object-Oriented Programming with Java, 6th Edition, McGraw-Hill, 2010, ISBN: 978-0-07352-330-9

V. References:

- Mark Lasso. Java Programming for Beginners: Learn the Fundamentals of Programming with Java , 2017 , ISBN: 9781788296298 - 9781788299046