



**MODULE HANDBOOK DESCRIPTION**

Module designation	Object Oriented Programming	
Code	FBD3104	
Semester(s) in which the module is taught	5 / third year	
Person responsible for the module	Cipta Ramadhani, S.T., M.Eng	
Language	Indonesian	
Relation to curriculum	Compulsory course for computer system	
Teaching methods	Lecture, small group discussion, case base method.	
Workload (incl. contact hours, self-study hours)	Contact minutes every week, each week of the 16 weeks/semester : <ul style="list-style-type: none"> <li>• Lectures: 2 x 50 minutes</li> <li>• Exercises and Assignments: 2 x 60 minutes</li> <li>• Private study: 2 x 60 minutes.</li> </ul> Total study hours = 5 hours 40 minutes/week	
Credit points	2 (~ 3,2 ECTS)	
Required and recommended prerequisites for joining the module	- Algorithm and programming (ES 1215)	
Module objectives/intended learning outcomes	1. Students are able to explain the fundamental of object oriented programming (OOP). 2. Students have the ability to create class and object using Java Programming. 3. Students are able to understand the concept of function in OOP 4. Students are able to understand the concept of String as a type of class in OOP. 5. Students are able to explain the fundamental of object oriented programming (OOP). 6. Students are able to understand the concept of String of abstract method and class in OOP	PLO3, PLO4

	<p>7. Students have the ability to create class and object using Java Programming.</p> <p>8. Students are able to understand both concept and application of Inheritance in OOP</p> <p>9. Students are able to understand both concept and application of polymorphism in OOP.</p>	PLO3
	<p>10. Students have the ability to create class and object using Java Programming.</p> <p>11. Students are able to understand both concept and application of Inheritance in OOP</p> <p>12. Students are able to understand both concept and application of polymorphism in OOP.</p>	PLO5
Content	Introduction to OOP, Class and object, Method, String, Encapsulation, Inheritance, polymorphism, abstract class.	
Examination forms	Multiple choice examination and Essay, Presentation case study.	
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ul style="list-style-type: none"> <li>a. Exercise Report/ Homework/Portofolio = 15%</li> <li>b. Projects: 55%</li> <li>c. Midterm assessment: 15%</li> <li>d. Final assessment: 15%</li> </ul> <p>Students must have a final grade of 70% or higher to pass</p>	
Reading list	<ul style="list-style-type: none"> <li>1. Head First Java, 2nd edition, 2008, Bert Bates and Kathy Sierra, O'Reilly</li> <li>2. Java™ How to Program, 9th, 2012, Prentice Hall</li> <li>3. Head First Object Oriented Design and Analysis, 1st edition, 2006, Brett D. McLaughlin, Gary Pollice, David West, O'Reilly Media.</li> <li>4. Algoritma, Pemrograman dan Struktur Data dengan Bahasa C++, 2017, Andi Publisher</li> </ul>	