Adama Science and Technology University

School of Electrical Engineering and Computing

Computer Science and Engineering Program

Course Syllabus

Course Title	**Object oriented programming (OOP)**			
Operation Period			**Course Credits**	3
Class Schedule			**Code**	CSE 2202
	Target Students' Major	-	**Target Grade**	2nd Year
	Prerequisite(s) for enrollment	CSE 1102	**Capacity** (Maximum Number)	50
	Instructor Information			**Office Hour**
				E-Mail
	TA	**Name**		**E-Mail**
	Course Team or SIG			**Contact person**
				Weekly programs
	Learning outcome	Upon completion of this course, students will have the ability to: • Learn core Java features such as class and objects, Inheritance, polymorphism, Encapsulation • Learn about Object oriented programming • Gain an in-depth understanding of Java Programming • Able to solve real time problem using Java • Learn how to develop Java Programs using Java development		

		tools like Edit Plus and Eclipse
	Course Description	This intensive hands-on course explores Core Java programming language features. Students will be able to take the content learned and immediately apply it to the problems encountered on the job. The course emphasis on Introduction to Java, Class and Object, Inheritance, Package and Interfaces, Exception Handling, File and I/O, GUI and Multi-threading.

	Assessment	**Parameter**	**Weight**	**Remark**
		Attendance		Course instructors may change the weight and assessment types
		Quiz	10%	
		Project / Presentation	15%	
		Lab Exam	15%	
		Mid exam	25%	
		Final exam	35%	
		Total	100 %	

Weekly Lecture Schedule

Major Topics	**Chapter 1**	**Introduction**: Programming Paradigms, History of Java, Features of Java, C++ vs Java, Java Environment setup, JDK, JRC, JVM
	Chapter 2	**Object and Class:** Class, Object, Datatypes, Variables, Operators, Java Program Structure, SOP Statement, Control Statements, Constructors, Wrapper Class, Naming Convention, Array in java
	Chapter 3	**Inheritance: Aggregation, Overloading and Overriding Methods, In boxing and Out boxing Supper and Final Keyword, Polymorphism, Abstract Class**
	Chapter 4	**Package and Interface :** Interface, Package, Access modifiers, Encapsulation
	Chapter 5	**Exception Handling :** Types of Exception, Hierarchy of Exception Handling, Try-Catch-Final Blocks, User Defined Exceptions
	Chapter 6	**File and I/O :** Streams, Hierarchy Chart for byte Streams, File I/O Stream, Date I/O Stream, String Handling and Tokenization

	Chapter 7	**GUI :** Java Swing, Window Component, Event Delegation Model, Event Driven programming and Event Handling
	Chapter 8	**Multithreading:** Thread, State of a Thread, Thread API, Synchronization, Inter Thread Communication

Course Text Books	1. 1. “Java: How to Program”, P.J. Deitel & H.M Deitel, 9th Edition Pearson Education, 2011. 2. “Java 2: The Complete Reference”, Herbert Schildt, 8 th Edition, Tata McGraw Hill, 2011.
References in MOOC	www.coursera.org,
Related References	www.coursera.org https://www.udacity.com http://www.javatpoint.com/java-tutorial https://www.edx.org https://www.tutorialspoint.com/java_technology_tutorials.htm