

Week	Topic	CLO	Lab Topic	Assessment	
1	Introduction to OO paradigm	1	Introduction to IDE, skeleton of JAVA program, array, basic I/O in JAVA	Assignment 1 Quiz 1	
	Comparison from sequential & procedural paradigms	1			
	Data Abstraction	1			
2	Encapsulation	1,2	Java data types, functions,		
	Introduction to Objects in real world	1,2			
3	Introduction to classes and objects	1,2,3	Classes & Objects		
	Access Control	1,2,3			
	Constructors & its types	1,3,4			
4	Final keyword	1,3,4	Working with classes and constructors		
	Static data and member functions,	1,3			
	Composition	1,3			
5	Aggregation	1,3	Working with access modifiers, static and final keywords, some examples to revise concepts of classes and objects, constructors & destructors		
	Inheritance concept and syntax	1,3			
6	Mid I Exam				
7	Types of inheritance	1,2,3,4	Working with Static functions, final keywordf	Assignment 2 Quiz 2	
	Data and code hiding	1,2,3,4			
	Polymorphism in OOP	1,2,3,4			
8	Function overloading	1,2,3,4	Inheritance		
	Function overriding	1,2,3,4			
		1,2,3,4			
9	Nested Classes	1,2,3,4	Polymorphism, Function overloading and overriding		
		1,2,3,4			
10	Multiple inheritance & its issues (Diamond Problem)	1,2,3,4	Nested Classes		
		1,2,3,4			
		1,2,3,4			
11	Abstract classes & Interfaces	1,2,3,4	Abstract Classes and virtual functions		
12	Mid II Exam				
13	Introduction to filing, File modes, Writing objects to the files	1,2,3,4	Multiple inheritance, abstract class	Quiz 3/4	
14	Generics, Generics Functions	5	Project Submission & Project demo		
	Generics Classes, Exception Handling	5			
15	User defined exceptions	1,2	Filing and I/O stream Working with Generic functions and Generic classes		
	Revision	1,2			
16	GUI	1,2,4	Final lab exam		
	Final Exam				