

COURSE CODE	COURSE TITLE	L	T	P	C
1151CS302	JAVA PROGRAMMING LAB	0	0	2	1

Course Category: Program Core

A. Preamble:

Most of the software need to develop runs in cross platform. Java is the one of the pioneer software development tools developed used for cross platform development software. From the system towards the handheld devices all place Java become one of the most dominant software. This course provides a basic concept about Object Oriented Programming, Database connectivity, Networking and finally provides programming skills in java. After successful completion of this course learners can able to develop software modules for real world problem.

B. Pre-requisites:

Sl. No	Course Code	Course Name
1	1150CS201	Problem Solving using C

C. Related Courses:

Sl. No	Course Code	Course Name
1	1156CS601	Minor Project
2	1156CS701	Major Project

D. Course Outcomes:

Students undergoing this course are able to

CO Nos.	Course Outcomes	Knowledge Level (Based on revised Bloom's Taxonomy)
1	Write a java program using classes, methods, Objects and control structures.	S3
2	Implement inheritance, interfaces and packages in various applications.	S3
3	Develop simple applications for handling pre-defined and user defined exceptions.	S3
4	Develop simple applications using GUIs and event driven programming.	S3
5	Construct an application using JDBC.	S3

E. Correlation with Programme Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	L		M		L			H	L		M		L	L	L
CO2	L		M		L			H	L		M		L	M	L
CO3	L		M		L			H	L		M		L	M	L
CO4	L	H	M		H			H	M	M	M		L	M	L
CO5	L	H	H	M	H	L	L	H	M	M	H	M	L	H	L

F. Course Content

-LIST OF EXPERIMENTS:

1. Simple Java applications
 - for understanding reference to an instance of a class (object), methods
 - Handling Strings in Java
2. Constructors
 - Implement constructor overloading.
3. Inheritance
 - To Implement Method Overloading and Method Overriding.
4. Package creation.
 - Developing user defined packages in Java
5. Interfaces
 - Developing user-defined interfaces and implementation
 - Use of predefined interfaces
6. Threading
 - Creation of thread in Java applications
 - Multithreading
7. Exception Handling Mechanism in Java
 - Handling pre-defined exceptions
 - Handling user-defined exceptions
8. AWT-To Create Different Layout Managers.
9. JDBC-To connect Oracle/MS Access for Table creation and Data Manipulation.

LIST OF EQUIPMENT FOR A BATCH OF 30 STUDENTS:

Standalone desktops with JDK 30 Nos.

G. Learning Resources

i. Text Books

- 1.E. Balaguruswamy, Programming in java, Fourth Edition, TMH,2010.
2. Patri Naughton, Herbert Schildt, The Complete Reference “Java 2 “, Ninth edition
Tata McGraw Hills ,2014.

ii. Reference Books

1. H.M. Deitel and P.J. Deitel– “**Java How to Program**” Pearson Prentice Hall 6th Edition, 2011.
2. Sachi Malhotra,” Programming in JAVA”, Oxford University Press, 2011.
3. Maydene Fisher, Jonathan Ellis, Jonathan Bruce,” *JDBC Database access with java*” Addison-Wesley, Third Edition 2003
4. Bruce Eckel – “**Thinking in Java**” Pearson Prentice Hall Third Edition-2006

iii. Online Resources

1. docs.oracle.com/javase/6/tutorial/doc/girgm.html
2. www.webreference.com/programming/java.html
3. www.apl.jhu.edu/~hall/java/Documentation.html