Course Name	Elective-2 (Java Programming)		Course Code	COMP 471	
Credit Hour	3	Contact Hours	Lecture	Laboratory	Total
			2	2	4

Track	☐University Requirement ☐College Requirement ☒Program Requirement ☐Core ☒Elective
	☒ COMP ☐ INFS ☐ CNET

Level	9	Prerequisites	COMP-213

Course Description:

This course aims to introduce the development of stand-alone and dynamic web applications with respect to solve real world problems using one to many tier architectures. In order to construct the stand alone and web applications, it mainly focuses on techniques to design and implement front-end, back-end and business logics using various java-based technologies.

Course Objectives:
   At the end of this course, students are able to:

1. Describe the foundation of good programming skills for designing of object oriented based software.
2. Explain how java library helps to construct GUI, event handling, database access for developing a stand-alone system.
3. Define the concepts of client and server side programming scripts as well as the role of web server and application servers.
4. Show the layer approaches to develop dynamic web applications.

Grading	☒**Assignment(s)**	**10 %**	☒ **Exam-1**	**10%**	☐**Exam-2**	**-**
	☒**Mini Project**	**20 %**	☒ **Lab Exam**	**20%**	☒**Final Exam**	**40%**

Textbook:
1. Paul Deitel and Harvey Deitel, "Java How to program", Tenth Edition, Pearson Publications,2015, ISBN-13 9780133807806
2. Marty Hall and Larry Brown, "Core Servlets and Java Server Pages Vol 1: Core Technologies", Pearson Publications, Second Edition, 2004.
3. Joel Murach and Andrea Steelman, "Java Servlets and JSP", 2nd edition, Mike Murach & Associates

Reference Books:
1. Bryan Basham, Kathy Sierra & Bert Bates, "Head First Servlets & JSP", Second Edition, 2008 ISBN 1-800-889-8969 / 707-827-7019
2. James M Slake, "Programming and Problem Solving with java", Thomson leaning 2000 , The McGraw- Hills,ISBN : 0-534-37486-7
3. C Thomas Wu, "An introduction to object oriented programming with java" Tata McGraw Hills, 2005, ISBN: 0070611033