Samriddhi College

Lokanthali-1, Bhaktapur

Level: Bachelor of Science in Computer Science and Information Technology

Faculty: Science and Technology

Year/Semester: First Year/Second Semester

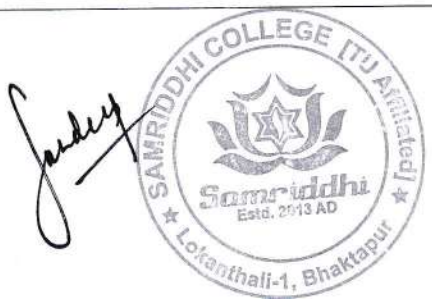
Subject: Object Oriented Programming

Teacher's Name: - Mr. Mohan Bhandari

Unit/Chapter	Lesson Title
Unit I	Introduction to Object Oriented Programming
Unit II	Basics of C++ programming
Unit III	Classes and Objects
Unit IV	Operator Overloading
Unit V	Inheritance
Unit VI	Virtual Function, Polymorphism, and Miscellaneous C++ Features
Unit VII	Function Templates and Exception Handling
Unit VIII	File Handling

Specific Objective: *At the end of this lesson, the students will be enabled to*

- Understand the object oriented programming and advanced C++ concepts such as composition of objects, operator overloads, inheritance and polymorphism. File I/O , exception handling and templates



Teaching Learning Activities:

- ***Warm Up**: Introducing the topic to be discussed*
- ***Task/Action**: Discussion about the topics*
- ***Follow up:** Summarize*

Pedagogical Approach:

- Class lectures
- Group works
- Case Studies
- Guest Lectures
- Research work
- Project work
- Assignment (Theoretical and practical)
- Tutorials and examination(Written and verbal)

Teaching Materials/Equipment:

- *Course Book*
- *Laptop*
- *Projector*
- *Reference Book*
- *Microprocessor Kit*

Assignment (CW/HW):

HW:

- *Lab Assignment*
- *Preparation & Presentation of Laboratory works*
- *Report Writing*

Remarks:

More Practical, Two way Interaction, Active Participation

SAMRIDDHI COLLEGE [TU Affiliated] Samriddhi Estd. 2013 AD Lokanthali-1, Bhaktapur

Samriddhi College

Lokanthali-1, Bhaktapur

Level: Bachelor of Science in Computer Science and Information Technology

Faculty: Science and Technology

Year/Semester: Third year/Fifth Semester

Subject: Design and Analysis of Algorithms

Teacher's Name: - Mr. Bikal Adhikari

Unit/Chapter	Lesson Title
Unit I	Foundation of Algorithm Analysis
Unit II	Iterative Algorithms
Unit III	Divide and Conquer Algorithms
Unit IV	Greedy Algorithms
Unit V	Dynamic Programming
Unit VI	Backtracking
Unit VII	Number Theoretic Algorithms
Unit VIII	NP Completeness

Specific Objective: *At the end of this lesson, the students will be enabled to*

- *Analyze the asymptotic performance of algorithms*
- *Demonstrate a familiarity with major algorithm design techniques*
- *Apply important algorithmic design paradigms and methods of analysis*
- *Solve simple to moderately difficult algorithmic problems arising in applications*
- *Able to demonstrate the hardness of simple NP-complete problems*

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Teaching Learning Activities:

- ***Warm Up**: Revision of Previous Class, introducing the main topics*
- ***Task/Action**: Discuss the topics*
- ***Follow up:** Summarize*

Pedagogical Approach:

- Class lectures
- Group works
- Case Studies
- Guest Lectures
- Research work
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