**COURSE PLANE**

**P2 : Introduction to Classes and Objects**

2.1 Defining Classes

2.2 Creating Objects

2.3 Private Members

2.4 Separating Class Specification from Implementation

2.5 Inline Member Functions

**P3 : Constructors and Destructors**

3.1 Constructors

3.2 Passing Arguments to Constructors

3.3 Destructors

3.4 Overloading Constructors

3.5 Copy Constructors

**P4 : Class and Object Manipulations**

4.1 Friend of Classes

4.2 Pointers to Objects

4.3 Arrays of Objects

4.4 Objects and Functions

4.5 Operator Overloading

**P5 : String Manipulations**

5.1 The string Class

5.2 String Comparisons

5.3 String Operators

5.4 String Member Functions

**P6 : Associations, Aggregations and Compositions**

6.1 Introduction to Associations

6.2 Introduction to Aggregations

6.3 Aggregation Implementations

6.4 Introduction to Compositions

6.5 Composition Implementations

**P7 : Inheritance**

7.1 Introduction to Inheritance

7.2 Protected Members and Class Access

7.3 Constructors and Destructors in Base and Derived Classes

7.4 Redefining Base Class Functions

7.5 Class Hierarchies

7.6 Multiple Inheritances

**P8 : Polymorphisms**

8.1 Introduction to Polymorphisms

8.2 Polymorphism and Virtual Member Functions

8.3 Abstract Base Classes and Pure Virtual Functions

**CLASS LECTURE**

**L01 :**

ARRAY  
MULTIDIMENSIONAL ARRAY  
STRING  
FUNCTION  
POINTER   
REFERENCE

**L02 :**

OOP INTRODUCTION

OOP CONSTRUCTOR AND DESTRUCTOR

OOP ACCESS SPECIFIER

**L03 + L04 :**

OOP INHERITANCE PART 01

OOP INHERITANCE PART 02

OOP INLINE FUNCTION

ASSIGNMENT 01

**L05 :**

ASSIGNMENT 02

ASSIGNMENT 03

**L06 :**

OOP THIS POINTER

OOP VIRTUAL INHERITANCE AND FUNCTION

OOP VIRTUAL DESTRUCTOR

**L07 :**

OOP FUNCTORS  
BITWISE OPERATION

**L08 :** POLMORPHISM, EXCEPTION HANDLING

**L09 :** OPERATOR OVERLOADING, FRIEND FUNCTION

**L10 :** ASSOCIATION, COMPOSITION, OBJECT POINTER

**L11 :** FILE

**L12 + L13 :** STL

**L14 + L15 + L16 + L17 :** PROJECT HOTEL MANAGEMENT