Week	Lecture	Date	Topics	Evaluations used	
1	1	24-01-2023	Introduction to the course: course objectives, course policies, grade distribtution; Introduction to Procedural and Object Oriented Paradigms, Structured Programming; Stages in C++ Program Execution; Hello World in C++, Introduction to the concept of namespace; Concept of variables and variable types revisited, Concept of arithmetic and relational operators revisited	Class activity: Program to guess a number	
	2	26-01-2023	Recap of the last lecture, Input/Output in C++ using cin and cout, stream manipulators like setfill(), setw(), left, right, endl, ignore(), peek(), pushback(); Idea of a Class as a type, string as object, difference between a method and a function		
2	3	01-02-2023	Introducing the cocept of a class and an object, the relationship between a class and an object, Using strings in C++: C-style strings string manipulation functions in cstring, Strings as objects of class string, some predefined methods of class string; Introduction to the concepts of function overloading and default parameters; The concepts of pass by value and pass by reference revised, Pass by reference in C++ using pointers and reference variables		
	4	03-02-2023	Introduction to the enumeration type, defining and using enumeration, defining namespaces, using typedef	**Quiz 1**	

3	5	08-02-2023	Introduction to the concept of Structure as a user-defined complex type, the need for using a structure, the syntax for defining a structure, declaring and initializing structure variables, accessing members of structure variables using dot operator, assigment of two structure variables, the restriction on use of relational operators on structure variables, passing structure variables by value to a function, returning a structure variable from a function, having complex types like enumerations and structures within a structure, accessing structure variable within a structure, having array as data member in a structure, declaring an array of structure variables			
	6	10-02-2023	Passing structure variables by reference to a function using reference variables and pointers, using arrow operator wilth a pointer to a structure variable, Practice problems with structures in class, Introduction to the concept of enumeration, defining enumeration, declaring variables of type enumerations, how to use arithmetic operators on enumerations.	**Class Activity: Write** programs on **piece of paper involving** structures		

4	7	15-02-2023	Introduction to the concept of classes, class as a data type containing data members and methods, access modifiers: private and public, why data members are generally private and methods are generally public, accesing public memvers, setters and getters in class definition	**Quiz 2: Structures**	
	8	17-02-2023	Constant Methods, Passing objects by value and by reference, Constant object as a a parameter, Introduction to the concept of constructor, default constructor, parameterized constructor, combining parameterized constructor with default constructor using default parameters, the concept of destructor		
5	9	22-02-2023	Recap of concepts of previous week, Defining arrays of objects, Introduction to the concept of "Separation of Concerns" where the class definition, methods definition and client code are kept in separate files, Introduction to the concept of dynamic memory		
	10	24-02-2023	Dynamic Memory: Using new and delete operators to allocate and deallocate dynamic memory, Concept of memory leak and dangling pointer associated with dynamic memory, How to handle memory leak and dangling pointers; Concepts of destructor and copy constructor revisited for the classes containing pointers as data members	**Quiz 3: Classes and Objects**	

6	11	01-03-2023	Recap of Dynamic memory, destructor and copy constructor concepts, Revision of static local variables, Introduction to the concept of Static data members, static methods, Introduction to the concept of Class Diagrams			
		03-03-2023	Missed due to NUTEC			
7	12	08-03-2023	Recap of concepts of Class Diagram, Static members of the class, Creating objects using new keyword, Accessing object members via arrow operator, The concept of this operator			
	13	10-03-2023				