

Lecture plan for c++

Class 1

- ✓ Principle of object oriented programming
- ✓ Object
- ✓ Classes
- ✓ Data abstraction
- ✓ Encapsulation
- ✓ Inheritance
- ✓ Polymorphism
- ✓ Dynamic biding
- ✓ Message parsing
- ✓ Object based languages

Class 2 (classes and objects)

- ✓ Creating a class
- ✓ Defining member function (inside the class/ outside the class)
- ✓ Creating object
- ✓ Using objects

CLASS 3

- ✓ Inline member function
- ✓ Nested member function
- ✓ Private member function
- ✓ Array as class member

CLASS 4

- ✓ Static data member
- ✓ Static member function
- ✓ Using array of objects
- ✓ Passing object as parameters

CLASS 5

- ✓ Making function friendly to class
- ✓ Function returning objects
- ✓ Const member function

CLASS 6

- ✓ Exercise lab

Class 7 (constructors and destructors)

- ✓ Constructing objects
- ✓ Default constructors
- ✓ Parameterized constructors
- ✓ Constructors overloading

CLASS 8

- ✓ Copy constructors
- ✓ Dynamic constructors
- ✓ Destructors

CLASS 9

- ✓ Exercise lab

Class 10(inheritance)

- ✓ Single inheritance
- ✓ Multi level inheritance
- ✓ Multiple inheritances

CLASS 11

- ✓ Hybrid inheritance
- ✓ Hierarchical inheritance
- ✓ Inheriting private members
- ✓ Virtual base class

CLASS 12

- ✓ Direct base class
- ✓ Indirect base class
- ✓ Defining derived class constructor
- ✓ Abstract class

CLASS 13

- Exercise lab

- ✓ Operator function
- ✓ Overloading unary operator

Class 14(Working with files)

- ✓ Input stream
- ✓ Output stream
- ✓ File stream classes

CLASS 15

- ✓ Opening a file with constructors
- ✓ Opening a file with open()

CLASS 16

- ✓ End of file detection
- ✓ File modes
- ✓ File pointers

CLASS 17

- ✓ Sequential file organization
- ✓ Error handling

CLASS 18

- ✓ Exercise lab

Class 19(Operator overloading)

- ✓ Overloading

CLASS 20

Exercise lab

Class 21 (Templates)

- ✓ Templates function
- ✓ Class templates
- ✓ Overloading template function

CLASS 22

- ✓ Exercise lab

Class 23(Exception Handling)

- ✓ Error and exception
- ✓ Throwing mechanism
- ✓ Multiple catching
- ✓ Catching all exception

CLASS 24

- ✓ Exercise lab

CLASS 25

- ✓ All back up classes