

Name of the Faculty: Ms. Neha
Discipline: Computer Science & Engineering
Semester: 3rd Sem
Subject: Programming Languages(CSE - 209N)
Work Load (Lecture/Practical) per week (in hours): Lectures- 3

Week	Theory	
	Lecture day	Topic (including assignment/test)
1 st	1 st	A brief history, Characteristics of a good programming language
	2 nd	Programming language translators compiler & interpreters
	3 rd	Elementary data types – data objects
2 nd	4 th	variable & constants, data types
	5 th	Specification & implementation of elementary data types, Declarations
	6 th	type checking & type conversions
3 rd	7 th	Assignment & initialization, Numeric data types
	8 th	enumerations, Booleans & characters
	9 th	Introduction, general problem of describing syntax
4 th	10 th	formal method of describing syntax, attribute grammar dynamic semantic
	11 th	Revision
	12 th	Class Test
5 th	13 th	Structured data objects & data types
	14 th	specification & implementation of structured data types
	15 th	Declaration & type checking of data structure, vector & arrays
6 th	16 th	records Character strings, variable size data structures
	17 th	Union, pointer & programmer defined data objects
	18 th	sets, files.
7 th	19 th	Evolution of data type concept abstraction, encapsulation & information hiding
	20 th	Subprograms, type definitions, abstract data types
	21 st	over loaded subprograms, generic subprograms
8 th	22 nd	Revision
	23 rd	Class Test
	24 th	Implicit & explicit sequence control
9 th	25 th	sequence control within expressions
	26 th	sequence control within statement, Subprogram sequence control
	27 th	simple call return, recursive subprograms
	28 th	Exception & exception handlers, co routines

10 th	29 th	sequence control. Concurrency – subprogram level concurrency
	30 th	synchronization through semaphores
11 th	31 st	monitors & message passing
	32 nd	Names & referencing environment, static & dynamic scope
	33 rd	block structure, Local data & local referencing environment
12 th	34 th	Shared data: dynamic & static scope
	35 th	Parameter & parameter transmission schemes
	36 th	Revision
13 th	37 th	Class Test
	38 th	Major run time elements requiring storage, programmer and system controlled storage management & phases
	39 th	Static storage management, Stack based storage management
14 th	40 th	Heap storage management, variable & fixed size elements
	41 st	Introduction to procedural, non-procedural
	42 nd	structured, logical, functional and object oriented programming language
15 th	43 rd	Comparison of C & C++ programming languages
	44 th	Revision
	45 th	Class Test