

NATIONAL INSTITUTE OF TECHNOLOGY, KARNATAKA, SURATHKAL

COURSE PLAN AND EVALUATION PLAN

- | | |
|-------------------------|---------------------------------|
| 1. Course Code: | MA601 |
| 2. Course Title: | Problem Solving and Programming |
| 3. L-T-P: | (3-0-0) |
| 4. Credits: | 3 |
| 5. Prerequisite: | Basics of C |
| 6. Course Instructor: | Ms. Tejashwini A G |
| 7. Teaching Department: | MACS |

8. Objective of the course:

The student should be made to learn about algorithms, flow chart, programming languages to solve different application problems using programming approach.

9. Course Coverage:

Introduction to Algorithms, Flow charts, Procedure oriented Programming concepts, Data types, Operators and Expression, I/O functions, composite Data types (Arrays, Structs, Union) Queues (FIFO), Stacks (LIFO), Pointers, Dynamic Memory Allocation, Linked lists: - Single and doubly linked list, Introduction to Object oriented Paradigms:- Encapsulation, Data hiding, Polymorphism (Operator and Function overloading), Inheritance, Data abstraction, Introduction to Object Oriented Design.

Reference books:

1. *B. Kernighan and D. Ritchie, The C Programming Language, Prentice Hall, 1990*
2. *E. Balagurusamy, Programming in ANSI C, Tata Mc.Graw Hill 2004*
3. *Hilbert Schilds, C++ complete Reference 1999.*

10. Evaluation Plan:

Test/Assignment/Quiz	Evaluation Plan	Weightage
Mid Semester Examination	Portion will be limited to what has been covered till the last date of Exam. Emphasis will be on complete understanding of the subject.	25%
End Semester Examination	The entire syllabus will be included for the exam. Emphasis will be similar to Mid semester examination	50%
Quizzes/Assignments/Seminar	Quizzes may be conducted without prior announcement. Quizzes will be of short duration ranging from 15mins to 1hour.	25%

Prepared by

Ms. Tejashwini A G

Course Instructor

HOD MACS