

CCS1302 Problem Solving and Programming

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
CCS1101	1	2	2	2	2	3

COURSE AIM

- Understand different types of problems and problem-solving techniques.
- Understand the problem-solving life cycle.
- Use and understand pseudo-code and flowcharts.
- Understand structured programming, functions, data types, and operators.
- Understand and use different control structures.
- Design and implement different solutions.
- Be able to apply problem analysis and algorithmic thinking.

COURSE WEEKLY CONTENTS

- 1 Problem Solving and Algorithm Design part 1
- 2 Problem Solving and Algorithm Design part 2
- 3 2D Arrays
- 4 Functions (Pass by value)
- 5 Pointers
- 6 Functions (Pass by Reference)
- 7 Functions (Recursion)
- 8 Strings
- 9 Structs
- 10 Searching
- 11 Sorting
- 12 Files part 1
- 13 Files part 2
- 14 Problem Solving Case Studies
- 15 Course Review and Conclusion

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	←		30	MARKS		→	30
8 to 12	←		20	MARKS		→	20
1 to 15	←		10	MARKS		→	10
16 or 17	40	Final					40

REFERENCES

Textbook P. Deitel, H. Deitel, C How to Program, Prentice Hall.