

## Introduction to Programming - 2011 Syllabus

### Syllabus

- Introduction (variables, data types, if statement, `stdio.h`, `float.h`, `_MAX/ _MIN` sizes)
- Operators, expressions, if-else condition
- for loop, while loop, do while loop
- 1-d arrays, strings
- 2-d arrays (matrices, array of strings, etc.)
- Functions, header files (`math.h`, `time.h`, custom headers), external functions
- Pointers
- Pointer to pointers, pointer to functions
- Bitwise operators, `struct`, `union`
- File handling, binary files
- Macros, pre-processor directives
- Linked lists

### Books

- **Programming in ANSI C** (Ed 5) by *Balagurusamy*, McGraw-Hill Education
- **C Programming Language** (Ed 2) by *Brian W. Kernighan* and *Dennis M. Ritchie*, Prentice Hall
- **Expert C Programming** by *Peter van der Linden*, Prentice Hall
- **The C Puzzle Book** by *Alan R. Feuer*, Addison-Wesley Professional
- **C Traps and Pitfalls** by *Andrew Koenig*, Addison-Wesley Professional