

# Programming Fundamentals

# Outcomes

- Design algorithmic solutions to problems.
- Translate a specified algorithm into correct self-documented C++ code using generally accepted programming style.
- Write C++ programs that use:
  - arrays
  - structures
  - pointers

# Materials

- Slides
- G. J. Bronson, *Program Development and Design Using C++, 3<sup>rd</sup> Edition*, Brooks/Cole Thomson Learning, 2006
- Any other books of C++ programming

# Lectures

- Week 2: Introduction
- Week 3: No class
- Week 4: C++ components
- Week 5,6: Branching
- Week 7,8: Loops
- Week 9,10: Midterm break
- Week 11,12: Function + Pointers
- Week 13,14: Class manipulation
- Week 15: Review

# Tutorials

- Week 5: Tut 1
- Week 7: Tut 2
- Week 11: Tut 3
- Week 13: Tut 4
- Week 15: Tut 5
- Week 17: Tut 6
- All exercises will be uploaded one week before the tutorials. Students must finish the exercises before the tutorials and submit your handwritten solutions in the beginning of the tutorials

# Labs

- Week 6: Lab 1
- Week 8: Lab 2
- Week 12: Lab 3
- Week 14: Lab 4
- All lab materials will be uploaded one week before the labs. Students must finish the requirements before the labs and submit your files (if any) in the beginning of the labs

# Assignments

- Week 7-9: Assignment 1
- Week 11-14: Assignment 2
- Week 15-17: Assignment 3
- All assignments are personal so please no discussion and no plagiarism
- Please protect your solutions because you will get 0 even if someone copies any of them with/without your consent
- Please pay attention to the deadline, because you cannot submit anything after it.

# Assessments

- Midterm exam: 15%
- Tut + Lab + Assignment: 35%
- Final exam: 50%
- If you get 0 for at least 4 tut/lab, you will get 0 for this subject. For example, if you get 0 for 2 tuts and 2 labs, you get 0 for this subject.