

COMP 1010 – Introductory Computer Science I

Calendar Description: An introduction to computer programming using a procedural high-level language. (Lab required)

Prerequisite: Any Grade 12 or 40S Mathematics or equivalent

This course is a prerequisite for: COMP 1020.

Outline

- 1) Introduction to Computers and Programming (1 week)
History, high vs. low level languages, overview of languages, the compilation process
- 2) Data Types (1 ½ weeks)
Primitive data types, an introduction to using predefined class-based data types
- 3) Control Structures (2 ½ weeks)
Selection and repetition constructs
- 4) Arrays (2 ½ weeks)
Single dimensional arrays, parallel arrays
- 5) Methods (2 ½ weeks)
Functional decomposition of larger problems, argument and parameter mechanisms, return types, scoping
- 6) Algorithms (3 weeks)
Problem solving and case studies using above mentioned material

Text: Tony Gaddis, *Starting out with Java 5: Control Structures to Objects*, Addison-Wesley, 2005