



Department of Computer Science
CMPT 102 Computer Science II
Course Syllabus Spring 2014

Instructor

Dr. Ankur Agrawal

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Office Hours: MWR 3:00pm – 4:00pm or by appointment in RLC 203C

Class Hours: MWR 4:30pm – 5:20pm (Section 01), 5:30pm – 6:20pm (Section 02) in RLC 107

Overview

Fundamentals of computer programming is introduced, with emphasis on programming methodology, object oriented principles and problem solving. Topics include basic constructs and syntax of C++ language as well as advance topics such as classes and inheritance, and pointers. The object oriented programming language C++ is fully discussed and serves as the vehicle to illustrate many of the concepts.

Learning Goals/ Outcomes

- Understand the form and structure of C++ programming language
- Analyze a problem and construct a C++ program to solve it
- Able to read from and write to a file
- Able to understand the use of pointers
- Develop a working knowledge of the concepts of object oriented programming
- Able to implement object oriented principles such as classes, inheritance and polymorphism using C++

Prerequisites

CMPT 101 or ENGS 116 with a grade of C or better

Textbook

Starting Out with C++: From Control Structures through Objects 7/E, Tony Gaddis, ISBN-10: 0132576252, ISBN-13: 9780132576253, 2012 Addison-Wesley

Tentative List of Topics

- Introduction to C++
- Control Structures and Loops
- Arrays
- Files
- Pointers
- Introduction to Classes



- Inheritance, Polymorphism and Virtual Functions
- Exceptions and Templates
- Additional topics at the instructor's discretion and time-permitting

Grades (Method of Evaluation)

- There will be two midterm examinations (tentatively, Feb 27 and Apr 3) worth 30% of the course grade.
- There will be a final examination (tentatively, May 1st/2nd week) worth 30% of the course grade.
- Assignments, projects, attendance and class performance will be worth 40% of the course grade.

Success in Class

- Read the assigned pages in the book as per the class discussion.
- Do as many exercises as possible even if they are not assigned.
- Ask questions about parts of reading or lecture which you do not understand.
- Get help before you are completely lost. I am available to help you via e-mail, in the classroom, or in my office.

Center for Academic Success

Tutoring and support to students is offered in the Learning Center (DLS 206), Leo Learning Center (Leo 117) and the Writing Center (Mig 203).

Attendance Policy

Attendance in every lecture is mandatory. Being in class on time is equally important. Any absence for valid reason will be required to be supported with proper documentation.

Cheating Policy

Cheating on a programming assignment will result in zero credit for all students involved. Programming assignments may not be solved in collaboration, unless specifically stated in the assignment. Cheating on an exam will result in an "F" in the course. You may discuss problems with each other. Where does discussion end and cheating start? You may not copy lines of code from anybody or anywhere. You may not use code in your assignments that you did not write. As a general rule, if you don't understand the code and can't explain the code, you can't use the code.

Policy on Students with Disabilities

Students with Disabilities should contact the Specialized Resource Center with their appropriate documentation, to obtain an "Academic Adjustment/Auxiliary Aid" form. When the student presents this completed form to the professor, the professor will then confer with the student on the fulfillment of the adjustments/aids listed on the form.

Academic Integrity Expectation

In accordance with the Manhattan College policy on Academic Integrity, students are expected to do their own work. If they use somebody else's work, then that fact should be documented. Individual



work is to be done individually and not copied from others and it is expected that you will perform all exams without consulting others and do your own work on any assignments. Consulting with others on general approaches to take in an assignment is considered acceptable, but copying assignments from others or working the majority of the assignment together is not acceptable. Of course group work is done in a group. See <http://manhattan.edu/community-standards-and-student-code-conduct> for more information on Manhattan College policy on Academic Integrity.