

BOROUGH OF MANHATTAN COMMUNITY COLLEGE

City University of New York

Department of Computer Information Systems
Office S150/Phone: 212-220-1476

Title of Course

**Computer Programming I
Spring 2013**

CSC 110

Lect hrs/Wk: 3

Lab hrs: 2

Credits: 4

Course Description

Course is an introduction to the fundamental concepts and terms of computer science, including algorithms, problem solving techniques and data types. Student will use a high-level computer programming language to solve a variety of problems.

Prerequisites

Basic skills- ENG 088; ESL 062; ACR 094; MAT 012/ 051

Learning Outcome and Assessment

After completing this course, students will be able to:

- **Outcome:** Explain what an algorithm is and design algorithms to solve problems.
Assessment: Homework and programming projects.
- **Outcome:** Choose an appropriate problem solving technique for developing an algorithmic solution to a problem.
Assessment: Exam questions and programming projects.
- **Outcome:** Apply concepts of Object Oriented Programming (OOP).
Assessment: Programming projects, lab exercises and exam questions.
- **Outcome:** Trace the execution of a computer program.
Assessment: Exam questions and homework.
- **Outcome:** Test and debug a computer program.
Assessment: Programming projects and lab exercises.

General Education Outcomes and Assessment

- **Quantitative Skills** – Students will use quantitative skills and concepts and methods of mathematics to solve problems
Assessment: Use formulas and concepts of mathematics to solve problems in programming assignments
- **Information and Technology Literacy** – Students will collect, evaluate and interpret information and effectively use information technologies
Assessment: Use a high-level computer programming language to create application software

Required Text & Readings

Textbook: **Starting Out With Java: From Control Structures through Objects 5th edition**
Author: **Tony Gaddis**
Pub: **Addison Wesley**
ISBN: **978-0-13-285583-9**

Other Resources

Flash drives are recommended.

Evaluation & Requirements of Students

Exam 1/Quiz	25%
Exam 2/Quiz	25 %
Final	30%
Homework/Project	10%
Instructor Evaluation	<u>10%</u>
	100%

College Attendance Policy

At BMCC, the maximum number of absences is limited to one more hour than the number of hours a class meets in one week. For example, you may be enrolled in a three-hour class. In that class, you would be allowed 4 hours of absence (not 4 days). In the case of excessive absences, the instructor has the option to lower the grade or assign an F or WU grade.

Academic Adjustments for Students with Disabilities

Students with disabilities who require reasonable accommodations or academic adjustments for this course must contact the Office of Services for Students with Disabilities. BMCC is committed to providing equal access to all programs and curricula to all students.

BMCC Policy on Plagiarism and Academic Integrity Statement

Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's web site, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).

Outline of Topics

Students should read the text section of the following chapters as well as the exercises. Reading these sections will help you prepare for your homework and examinations. Your instructor will be assigning specific exercises and programming problems from each chapter as homework.

Ch 1: Introduction to Computers and Java

Ch 2: Java Fundamentals

Ch 3: Decision Structures

Ch 4: Loops and Files

Ch 5: Methods

Ch 6: A First Look at Classes