Queens College, CUNY, Department of Computer Science INTRODUCTION TO ALGORITHMIC PROBLEM SOLVING CSCI 111 Spring 2018 Instructor: Krishna Mahavadi

Course Description. Introduction to the principles and practice of programming. Topics include primitive data types; concepts of object, class, and method; control structures; arrays; procedures and functions; parameter passing; scope and lifetime of variables; input and output; documentation. 2 lec., 2 lab. hr.; 3 cr.

Prerequisites and/or corequisites MATH 120 or 151 or equivalent.

Required Text:

Brian Overland: C++ Without Fear, 3rd Edition Pearson, 2016 ISBN 978-0-13-431430-3.

Course Topics:

Week 1: Introduction to C++ Week 1: Input and output Week 2: Data types and variables Week 3: Decisions: *if* and *while* Weeks 4, 5: Loops: *for* and *while* Weeks 6, 7, 8: Functions Weeks 9, 10, 11: Arrays Week 12: Strings Week 13: Files Week 14: Review

Learning Goals. A solid understanding of the fundamental concepts of programming in C++. Successful students will be able to write correct and complete C++ implementations of projects assigned in lab sessions. Successful students will also complete exam questions that require the writing, reading and analysis of C++ programs and pieces of C++ programs.

Instructor:

Krishna Mahavadi kmahavadi@qc.cuny.edu office: SB A201 office hours: Monday 12:00pm - 1:00pm Tuesday 6:00pm - 7:00pm or by appointment.

Course Website:

http://venus.cs.qc.edu/~krishna/cs111/

Classes: Tuesday and Thursday, 05.00pm - 05.50pm, Room: SB C205

Reminder:

The class will not meet on:

Tuesday, February 20 (Monday schedule)

There are also required lab sections for this course.

Departmental tutors are available in SB A135-G to help students from this course. For information about tutors ask in the department office, SB A202.

Requirements:

Two in-class midterm exams and the final exam. Weekly quizzes (in lab), homework assignments (in lab). The final counts for 40% of the course grade. Each midterm counts for 20% of the grade. Lab attendance, quizzes and homeworks count for a total of 20% of the course grade.

Exam Dates:

The first midterm will be in class on Thursday March 15th, 2018 The second midterm will be in class on Thursday May 3rd, 2018. The final exam (scheduled by the college) will be on Thursday, May 24th, 2018 from 4:00 - 6:00 pm. This date and time might be changed by the college during the semester.

Policy: Academic dishonesty such as plagiarism or cheating will be dealt with seriously in accord with the University's policy on academic integrity.