

Queens College, CUNY, Department of Computer Science
INTRODUCTION TO ALGORITHMIC PROBLEM SOLVING
CSCI 111
Spring 2016
Instructor: Alex Ryba

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*

Course Topics:

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

Alex Ryba
alexander.ryba@qc.cuny.edu
718-997-3488
office: SB A116
office hours: Monday 10.00am – 11.00am
Wednesday 3.45pm – 4.45pm
or by appointment.

Course Website:

<http://venus.cs.qc.edu/~ryba/cs111/>

Classes: Monday and Wednesday, 09.00am – 09.50am or 2.45pm – 3.45pm, SB C205

There are also required lab sections for this course.

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

Reminder:

The class will not meet on:

Monday, February 15
Wednesday, March 23
Monday, April 25
Wednesday, April 27

Requirements:

Two in-class midterm exams and the final exam.

Weekly quizzes (in lab), homework assignments (in lab).

The final and better midterm each count for 30% of the course grade.

The worse midterm counts for 10% of the grade.

Lab attendance, quizzes and homeworks count for a total of 30% of the course grade.

Exam Dates:

The first midterm will be in class on Monday March 21st, 2016.

The second midterm will be in class on Wednesday May 4th, 2016.

At present the college has scheduled the final exam for: Monday, May 23

either: from 08.30am to 10.30am (for the 9am class)

or: 1.45pm to 3.45pm (for the 2.45pm class).

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.