

Queens College, CUNY, Department of Computer Science
INTRODUCTION TO ALGORITHMIC PROBLEM SOLVING
CSCI 111
Spring 2018
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.

Optional texts. Easy reading: Brian Overland, *C++ without fear*
Harder, but more complete: Walter Savitch, *Problem Solving with C++*

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:

Alex Ryba
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718-997-3488
office: SB A116
office hours: Wednesday 10am – 10.30am
Wednesday 3.45pm – 4.15pm
or by appointment.

Course Website:

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

Classes: Monday and Wednesday, 09.00am – 09.50am or 2.45pm – 3.35pm, SB C205

Reminder:

The class will meet on:
Tuesday, February 20 (Monday schedule)
The class will not meet on:
Monday, February 12
Monday, February 19
Monday, April 2
Wednesday, April 4
Wednesday, April 11

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 Wednesday March 14th, 2018

The second midterm will be in class on Monday May 7th, 2018.

At present the college has scheduled the final exam for: Monday, May 21st

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.