

Programming I - Honors

COP 3014: Spring 2017
Department of Computer Science, Florida State University

January 9, 2017

Class Time and Location

Lecture: Tuesdays, Thursdays, 9:30 AM - 10:45 AM Carothers (MCH) 202.
Recitation: Mondays - 3:30 PM - 4:20 PM. Carothers (MCH) 304.

Instructor Information

- Instructor: Sharanya Jayaraman
- Email: jayarama@cs.fsu.edu
- Office: Office hours for this course will be held at the CS Majors Lab (006 LOV)
- Office hours: Mondays: 1 PM - 3 PM (before class), Tuesdays: 11 AM - 1 PM (after class)

Class Homepage

Course Website: ww2.cs.fsu.edu/~jayarama/cop3014.php

This website contains all information related to this class including lecture slides, assignments, extra material handed out during class and links to some useful resources. The class will also have a Blackboard page which will be used to post grades and for sending out announcements.

Prerequisites

- All students taking COP 3014 are required to have previously taken and passed (with a C- or higher final grade) MAC 1140 or MAC 2311 or MAC 2233.
- If you have not completed this pre-requisite requirement, the CS department will most likely drop you from this course in the first week of classes.
- To be sure that your course schedule is correct, if you do not have the pre-req you should drop yourself from this course and then adjust your class schedule appropriately with the help of your academic advisor.

Course Objectives

This course is intended for majors in computer science or related areas and focuses on the fundamental concepts of computer programming using the C++ language. This course may be used as a programming pre-requisite for COP 3330. Successful completion of this course satisfies the computer competency requirement for the mathematics major. Upon successful completion of the course, the student should be able to:

- Demonstrate a basic understanding of computer concepts, including software and hardware.
- Solve computing problems using a top-down approach in a well-structured design using procedural programming techniques.
- Design, implement, test, and debug a C++ program to solve a given problem.
- Demonstrate knowledge and use of control structures used in procedural programming, including sequence, selection, iteration, and functions.
- Make use of data types and structures in C++ including integer and floating point types, arrays (one-dimensional, two-dimensional, strings) and structs; arrays of structs and structs containing arrays. Have an introductory-level understanding of the C++ class and be able to utilize the standard IO and string classes and their member functions.
- Utilize fundamental algorithms studied to perform common tasks, such as finding the max and min of a data set, counting, summing, tracking a previous value, searching and sorting, reading until EOF, etc.
- Consider, compare, and evaluate code segments or simple algorithms for relative efficiency in a basic fashion.
- Make use of pointers: understanding their relationship with arrays, their use in function parameters and returns, and their importance in dynamic memory allocation.

Textbook

Starting Out with C++: From Control Structures through Objects, 8th ed., Tony Gaddis. This is available at the FSU bookstore, as well as online from multiple retailers. This is the only book you will need for this course. If you have a previous edition, just ensure you're reading the appropriate sections by checking with someone who has the current version (8th edition)

Assignments, Projects and Tests

Assignments will be given periodically through the semester. They will be posted on the course website. You will have a week to 10 days to complete these assignments.

Quizzes will be used to determine class participation and will not be announced beforehand. They will involve a few questions from the day's class material and will be held at the end of class.

There will be three tests over the course of the semester. The dates for the two midterms will be posted later. The final is on the Tuesday of finals week (05/02/2017) at 10:00 AM.

Grading Policy

The final course grade will be computed as follows:

Quizzes and Class Participation	10%
Assignments	45%
Midterm 1	15%
Midterm 2	15%
Final	15%

Requests for regrading should be within a week of grades being posted on Blackboard.

The final grade will be calculated according to your numerical average as shown in the table below. The class will NOT be graded on a curve.

		A	>93	A-	92.99 - 90
B+	89.99 - 87	B	86.99 - 83	B-	82.99 -80
C+	79.99 - 77	C	76.99 - 73	C-	72.99 -70
D+	69.99 - 67	D	66.99 - 63	D-	62.99 -60
F	<60				

Late Assignment Policy

Students are expected to turn their assignments in on or before the due date. Late assignments will suffer a 10 percentage point penalty for the first 24 hour period. For example, an assignment worth 200 points turned in late will receive a 20 point penalty. Assignments turned in more than a day after the due date will receive a grade of '0', but you can still have it graded and receive feedback.

Extra Credit Policy

Extra credit points will be offered on both the midterm and the final. Students might also have the opportunity to earn extra credit points on certain assignments. Also, students will be offered 3 % extra credit on their final grade if they participate in the ACM Spring 2017 programming contest and solve at least one problem.

Academic Honor Code

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://dof.fsu.edu/honorpolicy.htm>)

Assignments/projects/exams are to be done individually, unless specified otherwise. It is a violation of the Academic Honor Code to take credit for the work done by other people. It is also a violation to assist another person in violating the Code (See the FSU Student Handbook for penalties for violations of the Honor Code). The judgment for the violation of the Academic Honor Code will be done by the instructor and a third party member (another faculty member in the Computer Science Department not involved in this course). Once the judgment is made, the case is closed and no arguments from the involved parties will be heard. Examples of cheating behaviors include:

- Discuss the solution for a homework question.
- Copy programs for programming assignments.
- Use and submit existing programs/reports on the world wide web as written assignments.
- Submit programs/reports/assignments done by a third party, including hired and contracted.
- Plagiarize sentences/paragraphs from others without giving the appropriate references.

Penalty for violating the Academic Honor Code: A 0 grade for the particular assignment/quiz/exam and a reduction of one letter grade in the final grade for all parties involved for each occurrence. A report will be sent to the department chair for further administrative actions.

Accommodation for Disabilities

Students with disabilities needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center (SDRC), and 2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done within the first week of class. This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the Assistant Dean of Students:

Student Disability Resource Center
97 Woodward Avenue, South
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdr@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

Syllabus Change Policy

This syllabus is a tentative guide for the course and is subject to change. You'll be informed in class if there's a change in the syllabus.