

A304/A504

Introduction to Programming in C++

Instructor:

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Office Hours:

Time: Tuesday 10:00 until Noon
Friday 11:00 to 13:00
Location: LH 415
Appointments are also encouraged, and should be made via email.

Schedule:

Lecture: Tuesday, 8:00 - 8:50
Lab: Friday, 13:30 - 14:45

Texts:

Savitch, *Problem Solving with C++*, 6/ed, Addison-Wesley, 2006.

Course Objectives:

This course is designed to cover an introduction to C++, including the non-object oriented aspects of the language. The first part of the course will cover UNIX/GNU utilities which will be used for the rest of the course, including, but not limited to make, emacs, subversion, and g++.

We will attempt to cover chapters 1-8 in the text book. Not all sections will be covered, but students will be responsible for all material in sections which are covered. If time permits, chapter 9 will be introduced.

While you are welcome to program in whatever environment you wish, labs and grading will assume a UNIX like environment (either GNU/Linux or Mac OS X), and all submissions will be compiled with g++. Please note that a number of compiler differences exist, and so please make sure all labs compile with g++.

Grading:

Your grade will be a simple weighted average consisting of the following parts:

- Homework: 20%
- Labs: 40%
- Midterm: 10%
- Final: 15%
- Participation: 15%

Attendance is mandatory, and a viable excuse will be needed for each absence after the first. We only meet once a week, so please do try to make it.

Please note there is a final exam. It will consist of two parts: one written, one practical. In order to pass this class, both must be passed. Both portions will be given during the last week of classes.

Labs:

All documentation for the labs will be posted at the latest by Thursday night prior to lab by 11:59:59 PM. Lab time will be used to work on the coding, and might be used to cover a specific topic in more detail. Questions are encouraged, and while I will never just hand you the solution, I am always willing to point you in the right direction. Questions can be asked in class, sent via email, discussed during office hours, etc. Labs will be due the following Thursday, 11:59:59 PM.

Grading will be based on correctness, clarity, documentation (quality and quantity), and style; presentation counts. You can have the most efficient and elegant solution to a given problem, but if I can't read the code, that doesn't count for much. Code should be commented, and should be written in a readable style.

No credit will be given for code which does not compile. Please ensure that your code will compile on the burrow machines prior to submitting it. The exception to this rule is that if a README file is included, which explains the *reasons* the code does not compile. I understand that, sometimes, errors can be very difficult to eliminate.

Midterm:

The midterm will be an in class exam. It will consist of (at minimum) a set of short answer questions, as well as a couple code like exercises (find the error, etc.). It will be a general concept exam, rather than a coding exercise, as it is a written exam in class.

Participation:

As you can see, participation is worth as much as the final exam. Please participate in class, so that you can earn these points. Participation can take the form of asking questions, answering questions, coming to office hours, asking questions via email, etc. So long as it is clear that you are actively engaged with the class, you will get participation points.

Exceptions to the Rules:

Almost all rules are designed to be broken under the correct set of extraordinary circumstances. I strongly recommend your communicating to the instructor at the earliest possible time any circumstances you feel warrant an exception (e.g. illness, religious holiday, personal and/or family crisis, etc.). Remember that going into hiding is probably the worst strategy you can adopt! There is a direct relationship between the amount of sympathy you can anticipate from an instructor and the amount of time remaining until a given assignment's due-date. Finally, remember that if you are uncomfortable discussing something directly with me (e.g. personal problems) you can always contact someone in the Dean of Students Office and have that individual contact me.

Please note, all policies within the Computer Science Department Statement on Academic Integrity will be enforced. Please read it if you have not already done so.