

CS116 - Intro to Programming, C++

Summer 1998

Introduction

Welcome to CS-116, the second course in the series on introduction to programming. In this class you will develop the skills needed to build and maintain moderately large programs. To that end, we will talk about a particular programming paradigm known as *Object-Oriented Programming*. Although in this class our primary concern will be the correctness of programs, we will also be somewhat concerned with a program's efficient use of time and memory resources.

Instructor: Behfar Bastani, Ryerson 163, 702-6238, behfar@cs.uchicago.edu. My office hours are the hour following lecture in my office, and also by appointment.

Texts: The two texts for this class are

- *On To C++*, by Patrick H. Winston, and
- *The C++ Programming Language*, by Bjarne Stroustrup.

The first book is a very readable tutorial. The second book is the C++ bible, and will be used as reference. Both books are available at the University of Chicago bookstore.

Online resources

The course home page provides up to date course information. All the handouts, homeworks, projects, etc. will be posted there. The home page is at

<http://www.cs.uchicago.edu/~behfar/summer98/cs116>

If you are logging in over a terminal that can't run Netscape, you can still access the page text-only by using lynx. Type `lynx` followed by the URL above.

There will also be an email list set up for our class. More on this later this week.

Quizzes, Homework, Projects

- **Quizzes.** Since this is a five week fast paced class, we want to make sure that you will not fall behind. So every Friday, there will be a short quiz that will cover some of the highlights of that week. I will mention what sort of problems will be on the quiz during the Monday and Wednesday lectures, so there will be no surprises. The quizzes will not count for much of your grade, but they will help you keep on top of the material.
- **Homework & Projects.** There will be written homework assignments handed out regularly in class. However, soon most of your time will be spent on projects, which are large & fun programs and applications! More on projects soon..
- **Policy for late assignments.** No late homework or project will be accepted, unless you have a valid reason *and* talk to me about it beforehand.

Exams

There will be a midterm and a final. Dates and times will be discussed in class. There will be no make-up exams. Missed exams will be excused only in cases of serious illness or trouble.

Grading Policy

Your final grade will be based on to the following weights:

Projects	50%
Homework	10%
Final	20%
Midterm	15%
Quizzes	5%

Policy on Collaboration and Cheating

You are strongly encouraged to collaborate on assignments by discussing the work *before* you do it. But you should complete and write up each assignment by yourself.

Copying and presenting another person's work under any circumstances constitutes cheating, and will result in zero points for the assignment. Your best strategy for this class is to stay ahead of deadlines, and seek advice from me if you feel yourself getting behind in something. If you have a problem, we can work it out - just come and ask for help.

To get started on the computer

- Make sure an account is set up for you on `classes.cs.uchicago.edu`
- Log onto `classes.cs.uchicago.edu` (if you are not familiar with the basics of UNIX, come and talk to me).
- Once you have logged in, run the Emacs editor by typing `emacs`. Start up the tutorial by typing `C-h t` (`C-h` means Control-h). Go through the tutorial and get familiar with the basics. An Emacs reference card is provided for you for convenience. Emacs is a bit strange at first, but you will get used to it, and soon you will find out how convenient an editor it is for the editing and debugging purposes of this course.
- After getting comfortable with Emacs, type out one of the simple programs from the lecture, save it as `main.cc`, compile it via `g++ main.cc -o main` which creates the executable `main`, and finally run it by typing `main`.
- If you want, you can print your files on the MacLab laser printers. For example, to print the file `main.cc` on the MacLab printer A, type `enscript -2r -PMacLabA myfile.cc`
- In UNIX, you can get help and documentation on any command via the online *manual pages*. For example, to get documentation on the g++ compiler, type `man g++`.