CS100J Fall 2007 David Gries, Prof of CS and Assoc. Dean of Engineering

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CS100J, CS100M, and CS100R introduce computing concepts, using JAVA and MATLAB. The courses emphasize techniques of problem analysis and the development of algorithms and programs.

CS100J (Gries): Computing using Java

CS100M (Fan): Computing using Matlab

CS100R (Zabih): Honors course using Matlab

CS100J and CS100M do not require previous programming experience. CS100M requires a firm background in math and at least one semester of calculus. See www.cs.cornell.edu/degreeprogs/ugrad/CSMajor/CoursesandResearch/FirstCSCourse/index.htm#CS100 for more information.

CS100R is a fast-moving, small class (about 25 students) that uses Matlab to control robots. You must have previous experience programming.

Course webpage:

www.cs.cornell.edu/courses/cs100j/2007fa/. Look at it several times a week. It is a major communication medium for the course. If you miss a handout, download it from the website. Also, participate in the newsgroup for the course —find about it by clicking on the link "Newsgroup" near the bottom of the lefthand column of the course webpage.

Course material (see course web page for more info)

- (1) Multimedia Introduction to Programming Using Java and its accompanying livetext ProgramLive, by Gries and Gries. Available in Cornell bookstore.
- (2) DrJava, a free Java programming environment,
- (3) an Iclicker, (buy in the Cornell Bookstore). We will use this for interactive discussions and quizzes.
- (4) a USB storage key on which to keep your Java programs when you want to use CIT-lab computers, and

Homework will consist of 6-8 computer projects, which you can do with one partner, and some written assignments. Each lab will require you to show your completed lab assignment. Computer projects will be submitted electronically using CMS, the Computer Science Course Management System.

Tests: Three prelims and a final. To find out when they are, bring up the course home page and scroll down to the bottom of the page. You are expected to be at these

three prelims; we don't give a makeup unless a real serious problem arises.

Quizzes: There will be quizzes during the lecture from time to time. The purpose of a quiz is to let you know what material we think is important at a particular time and to force you to learn it. You will know exactly what the quiz will cover, and we expect everyone to get 100 on each quiz.

Recitations-Sections-labs: ALL SECTIONS ARE IN THE ACCEL LABORATORY IN CARPENTER. Attendance will be taken. Miss three of them without valid excuses (given to us ahead of time) and your letter grade *may* decrease (e.g. B to B-).

Syllabus: The syllabus is on the course website.

Academic integrity. This course is not a case of student against faculty. It is not about grades. It is about all of us working together to teach you as much about programming as possible in as efficient a manner as possible. We (instructor, TAs, consultants) know that you have other courses, and we will strive to make your workload in this course reasonable. We are ready to help you in any way we can. On your side, we expect you to be honest —read the academic integrity statement that appears on the course web site— and we expect you to come to us early if problems arise, so that we can solve them together. If you have a problem, talk to us immediately about it; don't wait four-five weeks, because then you may be too far behind.

Practise, practise, practise. Learning programming is different from learning many other topics, in that you are learning a skill that should allow you to program any problem. It's not just a matter of learning a way to solve one particular kind of problem; after this course, instructors in other courses may expect you to program anything with ease. Learning to program well takes practise. The more time you spend on the computer, trying things out, getting acquainted with programming features and techniques, the better you will do in this course and later. Therefore, practise, practise, practise.

Fix your PCs. To reduce chances of errors later, fix your PCs so that extensions (e.g. .java and .doc) always appear. To do this: Open an explorer window. Click menu item *Tools / Folder Options*. Click the view tab. Uncheck the box "Hide extensions for known file types".