CS1110, Fall 2010 David Gries and Lillian Lee, Professors of CS

See the course web page, www.cs.cornell.edu/courses/cs1110/2010fa/, for contact information

Comparison of CS1110 and CS1112 Both introduce computing concepts. The courses emphasize techniques of problem analysis and the development of algorithms and programs.

CS1110 (Gries, Lee): Computing using Java

CS1112 (Fan): Computing using Matlab

CS1110 & 1112 do not require previous programming experience. CS1112 requires 1 semester of calculus. For more information, see

www.cs.cornell.edu/ugrad/FirstCSCourse/index.htm.

Course webpage (see top of page) 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.

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 at the Cornell bookstore. If your book does not have a CD in the back, check an announcement on the course home page.
- (2) DrJava, a free Java programming environment.
- (3) iclicker. We will be using iclickers, and every student is expected to bring their iclicker to every class. Buy them at the bookstore. Your iclickers may be used in many classes during your stay at Cornell.

Homework will consist of 6-7 computer projects, which you can do with one partner, and some written assignments. Computer projects will be submitted electronically using CMS, the Computer Science Course Management System, cms.csuglab.cornell.edu.

We do our best to make the programming assignments interesting! Music, graphics, manipulating jpg files, games, string manipulation —we will show you what you can do with Java.

Tests: Two prelims and a final. To find out when they are, visit the course home page, scroll to the bottom of the page, and click the link. Please be at the exams; we give make-ups only in special circumstances.

Quizzes: There will be quizzes during 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: Sections/labs are in the ACCEL laboratory in Carpenter library. Each lab will ask you to do something on the computer, either to reinforce what is being taught in lecture or to introduce new topics to you. At the end, show what you did to the lab instructor to get credit (if you can't finish in time, show it to the instructor the next week).

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: A lecture-by-lecture topic list is on the course website. see "Lecture summaries".

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 (instructors, 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 a solution to 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, 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". You may have to do something different depending on what Windows OS you use.