

**CS100 General Information**  
Computer Science, Cornell University  
Fall 1998

This missive gives a general description of CS100 and contains reference material that you should refer to throughout the semester. **You are responsible for this information.** Look here first to answer questions about the course.

## 1 Course Description

CS100, a 4-credit course, introduces computer programming and problem-solving concepts using the programming language Java. The course includes a short introduction to Matlab and C. CS100 assumes no prior knowledge of computing and has no prerequisite CS courses. However, in recent years, a majority of the students have had some programming experience prior to taking CS100. The course may be taken for a letter grade or, if your college or program allows it, S/U.

### CS100A vs. CS100B

In the fall semester, there are two versions of CS100: CS100A and CS100B. Both teach the same programming and problem-solving skills, but the skills are applied to different problems.

CS100A assumes only a background in high-school mathematics. CS100B assumes that you have completed one semester of calculus (Math 111, Math 191, or equivalent) or have received advanced placement credit and are eligible to place out of first semester calculus (even if you actually take that course).

Assignments in CS100A emphasize programming and problem-solving skills applied to a broad range of applications. Assignments in CS100B emphasize continuous mathematics and include engineering and scientific problems using trigonometry and some calculus.

Assignments and exams in the two versions of CS100 are different; you can't switch between them in mid-semester. Although you can switch until the end of the add/drop period, you should decide which one you plan to take by the end of the second week of classes if possible.

### Other Courses

Here is a brief description of related courses to help you decide if CS100 is the correct course for you.

**CS99** covers about 1/2 to 2/3 of the material of CS100, but at a slower pace and in less depth, also using Java. It is intended for students who plan to take CS100 but want some computing experience before

enrolling in it. CS99 cannot be taken after CS100. CS99 is offered only in the fall and summer only. S/U.

**CS130** introduces students with little or no computer background to tools and techniques for creating interactive and on-line documents. Topics include HTML authoring, scripting languages, interaction techniques, data mining, and incorporating sound, video, and images in documents.

**CS211/CS212** are the successors of CS100. If you are proficient with the programming concepts and skills taught in CS100, consider taking either CS211 (using Java) or CS212 (using Dylan). Students considering a major in CS usually take CS212. Credit will not be given for both CS211 and CS212.

These courses fulfill the CS100 requirement for Engineering students. If they are used for this purpose, they *cannot* be used toward fulfilling the Engineering Distribution.

## 2 General Information

**CS100A Instructors:** David Gries, Upson 4115A, 255-9207, gries@cs.cornell.edu. Claire Cardie, Upson 4142, 255-9206, cardie@cs.cornell.edu . Office hours to be announced and by appointment.

**CS100B Instructors:** Graeme Bailey, Upson 5156, 255-9210, bailey@cs.cornell.edu . Office hours to be announced and by appointment.

**Teaching Assistants:** To be announced.

**Course Administrator:** Laurie J. Buck, Upson 303, 255-3534, buck@cs.cornell.edu. Office hours: MTR 1:30–4:00 pm; WF 1:30–3:00 pm. See Laurie to take care of administrative problems *not* related to the technical content of the course, including scheduling conflicts for exams and errors in posted grades.

**Undergrad Office:** Upson 303, 255-0982. Open 9:30–4:30 M–F.

**Tutoring:** Call or visit the Undergrad Office to sign up for tutoring appointments if you are having trouble with the course. You must sign up at least 24 hours in advance. If you need to cancel an appointment, you must call the Undergrad Office in advance. If you miss two tutoring appointments without calling to cancel, you will *not* be given further appointments.

**Lectures:** Lectures for CS100A and CS100B meet at the same time. The *first lecture* for *both* CS100A and CS100B will be in Ives 305 at 9:05 and Uris Hall Auditorium at 11:15 on Thursday, 27 August.

Beginning Tuesday, 1 Sept., lectures for CS100A and CS100B will meet *separately*. Lecture section numbers, times, and rooms are as follows.

Lectures			
CS100A	1	TR 9:05	Olin 155
CS100A	2	TR 11:05	Olin 155
CS100B	3	TR 9:05	Kimball B11
CS100B	4	TR 11:05	Upton B17

Sections: Begin Monday, 31 August.  
For CS100A, attend one of the following sections.

CS100A Section			
#	Day	Time	Room
1	Tue.	1:25	Upton 111
2	Tue.	1:25	Phillips 219
3	Tue.	2:30	Phillips 219
4	Tue.	3:35	Phillips 219
5	Tue.	2:30	Upton 111
6	Wed.	1:25	Phillips 203
7	Wed.	2:30	Phillips 203
8	Wed.	3:35	Phillips 203

For CS100B, attend one of the following sections.

CS100A Section			
#	Day	Time	Room
10	Mon.	1:25	Upton 211
11	Mon.	2:30	Upton 211
12	Mon.	3:35	Upton 211
13	Tue.	10:10	Upton 211
14	Tue.	2:30	Upton B17
15	Tue.	3:35	Kimball B11

Sections are required. They are used to clarify topics covered in lecture, discuss assignments, and work additional problems and exercises. Graded assignments and exams are returned in sections, and sample solutions and practice exams are handed out there.

Each week, all sections for CS100A will cover the same topics, similarly all CS100B sections will cover the same topics. However, there will be some variations in problems and exercises depending on the instructor and the interests of the students in each section.

**Registration:** You should be registered for the lecture and section you plan to attend regularly. If you are currently registered for a different lecture (A or B) or section than the one you attend, you *must* complete an add/drop form to change your registration.

**Computing Facilities:** The computer room in the basement of Carpenter Hall is the primary lab for

CS100. CS100 students have priority in this lab, and this is where you will find CS100 consultants, extra copies of handouts, unclaimed work, and posted announcements and grades. This lab has about 35 Power Macintosh computers. The Carpenter lab is open when the Engineering library is. Normal hours are: Mon–Thu, 8:00am–10:50pm, Fri 8:00am–5:50pm, Sat 10:00am–5:50pm, and Sun noon–10:50pm. Hours are restricted during vacations and university holidays.

The software used in CS100 is available on all CIT lab machines that have sufficient capacity to support it. During peak periods you may want to use a machine at another location to avoid long lines in Carpenter.

No food or drink is allowed in the computer labs. Please keep the area clean and recycle.

**Demonstrations:** You should attend a demonstration if you have not used the Metrowerks' CodeWarrior programming environment. Demos are given at the following times.

Day	Time	Room
Thu., 27 Aug.	7:00 pm	Phillips 101
Fri., 28 Aug.	4:00 pm	Olin 155
Sun., 30 Aug.	4:00 pm	Phillips 101
Tue., 1 Sept.	7:00 pm	Phillips 101

**Consultants:** On duty in the Carpenter Hall basement daily and most evenings starting 27 August. The schedule will be announced in class and posted in Carpenter. Consultants will:

1. Help you find program errors. Consultants will **not** fix your programs for you; they will suggest how *you* can find errors and fix them yourself.
2. Receive assignments.
3. Return prelims and graded assignments that were not picked up in sections. (Bring your ID card with you when you pick up an exam).
4. Receive regrade requests.
5. Provide tutoring during slack periods.

### 3 Texts and Other Materials

**Texts:** *Programming in Java*, by Holmes (required). *Getting Started with Matlab*, by Pratap, or *Mastering Matlab*, by Hanselman and Littlefield (optional).

Readings in the texts are suggested to help you follow the lecture and section material. Exams in

CS100 are not based on the reading list; they are based on material covered in the lectures, sections, and assignments. You are not “responsible” for material in the textbooks that is not covered in class. Some copies of the texts are placed on reserve in Carpenter Library.

**Handouts:** Distributed in class. A limited number of extra copies will be available in Carpenter.

**Announcements:** Posted on the bulletin board to your right as you enter the Carpenter lab and to the newsgroups

`cornell.class.cs100a` and  
`cornell.class.cs100b`.

**Web pages for CS100A and CS100B:** These can be reached from the CS home page

<http://www.cs.cornell.edu>.

Files can also be obtained via ftp from

<ftp.cs.cornell.edu>

in the folders `pub/cs100a` and `pub/cs100b`.

**Software:** Programming assignments are done using CodeWarrior Pro 3 and Matlab, on a PC or a Mac. Cornell Information Technologies (CIT) provides this software in its public labs. Anyone may use CodeWarrior. To access Matlab, you will be given a user name and password (all students in CS100 use the same user name and password). Do not give this password to others. Do not forget the password. The course staff has been instructed not to give the password to anyone. If you forget it, you will have to see your instructor.

Copies of CodeWarrior Pro 3 for personal machines are available at an educational discount from the Campus Store, Metrowerks, and other software outlets. More information about CodeWarrior, including bug fixes and other updates, can be found on Metrowerks web site <http://www.metrowerks.com>.

We have heard that CodeWarrior Pro 4, the next version, may be ready some time this fall. We will not use it in this course.

The standard CodeWarrior package does not include some additional Java files that are installed on the CIT machines. Instructions for obtaining these files and installing them can be found at the CS100A and CS100B web sites.

If you want a personal copy of Matlab you can purchase a copy of the *Student Edition of matlab* at the Campus Store or other bookstores. Be sure to get the correct version (Mac or PC) for your machine.

**Disks:** You will need a few 3.5 inch floppy disks for your programming assignments. No personal files may be left on CIT’s machines—they are cleaned out frequently. Keep back-up copies of all your work on separate disks.

## 4 CS100A Assignments

Weekly assignments are always due on Tuesday *at the beginning of lecture*. Many, but not all of them, will require the use of a computer. Assignments may be handed in before they are due by giving them to a consultant in the Carpenter Lab. **No Late Assignments Will Be Accepted.**

Programming assignments are given two grades: one for correctness and one for program organization and style. The grade for each part will be in the range 0..5. Each written assignment will indicate how it will be graded.

## 5 CS100B Assignments

**Programs:** There will be six programming assignments. Each will be due on a Thursday at 4:00pm. Programs may be handed in at the end of lecture on the assigned day or given to a consultant in the Carpenter Lab. **No Late Assignments Will Be Accepted.**

Each program will be given a score in the range 0..20, some for correctness, program organization, and style.

## 6 Common Requirements

**Mechanics:** Program listings and output should be printed and separated into pages with the perforated edges removed. Assignments should be stapled together. Every assignment *must* contain your name and Cornell ID#, the day and time you attend section, and your section instructor’s name. For programs run on the computer, this information must be included in a comment at the beginning of the program and cannot be written by hand.

If you hand in your assignment by giving it to a consultant in Carpenter, you *must* give the assignment to a consultant personally. *Don’t* just leave it on a desk or table.

**Working with Partners:** For CS100A, each assignment will indicate to what extent you may work with others. For CS100B, for programming assignments *only*, you may work with **one** other student.

If you work with a partner, you and your partner together should submit *one* assignment. The assignment must contain both of your names and ID#'s and information about when you attend sections. For programming assignments, this information must be included in the first comment at the beginning of the program. The assignment will be returned in section to the first person named in the comment; the other person will receive for their records a cover sheet showing the assigned grade.

For assignments where working with a partner is allowed, we encourage you to do so. Working with a partner can be helpful in getting the assignments to work and in clarifying your understanding of the course material. But be sure that you and your partner share in the work equally and that both of you understand it. You cannot take the exams with a partner.

**Exams:** There will be three 1 1/2 hour preliminary examinations and a 2 1/2 hour final.

Exam	Date	Time
Prelim 1	Mon., 28 Sept.	7:30pm
Prelim 2	Tue., 20 Oct.	7:30pm
Prelim 3	Tue., 17 Nov.	7:30pm
Final	Tue., 15 Dec.	9:00am

Exams for CS100A and CS100B cover different material and will be held in different rooms.

*Do not plan to leave for the winter break before the final exam.* You are expected to be present.

**Note:** Cornell reserves the right to change the final exam time or date. Although this rarely happens, we advise you not to make final travel plans until after the full final exam schedule is published in the middle of the semester.

**Review Sessions** are on the Sunday before each prelim and the final: 27 Sept., 18 Oct., 15 Nov., and 13 Dec. Review sessions are at 3:00-5:00pm. CS100A meets in Olin 155; CS100B in Upson B17.

**Graded Assignments and Exams will be returned in your section.** Unclaimed work may be obtained from the consultants in the Carpenter lab. Bring your Cornell ID to pick up an exam.

**Regrades:** If you think that an exam or assignment has been incorrectly graded, fill out a regrade request giving your reasons in writing, attach the exam or assignment to it, and give it to a consultant in the Carpenter lab. A regrade request can cause your grade to go up or down —the paper will be regraded from scratch.

A regrade request must be submitted within one week after the graded work is first returned.

**Posted Grades:** Grades will be posted outside the Carpenter lab by either student ID# or a four-digit code that you give us. It is your responsibility to verify that our records are correct. If you find an error, please contact the course administrator, Laurie Buck, during her office hours.

**Course Grades:** Grades for CS100A will be computed as follows.

CS100A Final Grades	
Assignments	30%
Prelim 1	10%
Prelim 2	15%
Prelim 3	20%
Final	25%

CS100A assignments may be weighted differently to account for the relative difficulty of some assignments. Generally, however, weekly problem sets will be weighted the same.

Grades for CS100B will be computed as follows:

CS100B Final Grades	
Assignments	60%
Prelim 1	10%
Prelim 2	10%
Prelim 3	10%
Final	10%

This distribution emphasizes assignments. However, exams can have a negative as well as a positive credit. In particular, surprisingly poor performance on exams yet strong scores on homeworks will *reduce* your assignment score by up to 50%.

In both CS100A and CS100B, your letter grade will be based on your total score. The actual cut-offs between letter grades won't be decided until the end of the course. Further, we reserve the right to make adjustments both up and down based on our knowledge of each student and their situation.

## 7 Academic Integrity

As already stated, you may work with one other person on some assignments. Below, a *group* refers to either an individual or a pair of students working together on an assignment.

The work you submit in CS100 must be the result of your group's effort only. The use of a computer in no way modifies the standards of academic integrity

expected under the Cornell University code of conduct. You may discuss work with students not in your group (e.g. you may discuss general strategies). However, *cooperation should NEVER involve one student having possession of a copy of all OR part of a program or assignment written by someone not in that student's group*, regardless of whether that copy is on paper or on a disk. In addition, *any output submitted with your program must have been produced by your program by running it as described in the assignment.*

The penalty for violating the Code of Academic Integrity can include *failure* in CS100, University disciplinary action, and a permanent mark on your transcript.

**ASK FIRST** if you have questions about whether a particular behavior violates our integrity expectations or the University Code.

## 8 Other Sources of Help

The College of Engineering has a number of additional programs and groups that offer tutoring, advice, counseling, you-name-it.

- The Learning Skills Center (420 Computing and Communications Center (CCC)) provides help with study skills, time management, and test taking. Tutoring is available.
- Engineering Advising (167 Olin Hall).
- Minority Programs (170 Olin Hall).
- Women's Programs (167 Olin Hall).
- Society of Women Engineers (167 Olin Hall).