CS100 General Information

Department of Computer Science

Fall 1999

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 fundamental 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 these techniques 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 general 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, exams, and (possibly) the order of topics in the two versions of CS100 are different; you cannot 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 half of the material of CS100, but at a slower pace and in less depth, also using Java. It is intended for those students who plan to take CS100 but want some exposure to computing before enrolling in that course. CS99 cannot be taken after CS100. CS99 is offered only in the fall and summer and is S/U (no letter grade).

CS211 / CS212 are the successors to CS100. If you are proficient with the programming concepts and skills taught in CS100, consider taking either CS211 (using Java) or CS212 (using Scheme). Credit cannot be given for both CS211 and CS212.

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

2 General Information

CS100A Instructors:

Tim Teitelbaum, Upson 4143, 255-7573; Thomas Yan, Upson 322, 255-2352. Office hours to be announced and by appointment.

CS100B Instructor:

David Schwartz, Upson 5137, 255-5395. Office hours to be announced and by appointment.

Teaching Assistants: To be announced.

Course Administrator:

Laurie J. Buck, Upson 303C, 255-3534. Office hours: Mon–Thu 1:30–4:00 p.m. and Fri 1:30–3:00 p.m. 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.

Undergraduate Office: Upson 303, 255-0982, is open 9:30–4:30 Mon–Fri.

Tutoring: Call or visit the Undergraduate 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 Undergraduate Office in advance. If you miss two tutoring appointments without calling to cancel, you will **not** be given further appointments.

Lectures for CS100A and CS100B meet at the same times. The **first lecture** (Aug. 26) for **both** CS100A and CS100B will be in Ives 305 at 9:05 and Statler Auditorium at 11:15.

Beginning Tue., Aug. 31, 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
	2	TR 11:15	Olin 155
CS100B	3	TR 9:05	Kimball B11
	4	TR 11:15	Olin 255

Sections begin the week of Monday, August 31. For CS100A, attend one of the following sections.

CS100A Sections			
#	Day	Time	Room
1	Tue	1:25–2:15	Olin 165
2	Tue	1:25–2:15	Phillips 219
3	Tue	2:30–3:20	Phillips 219
4	Tue	3:35–4:25	Phillips 219
5	Tue	2:30–3:20	Olin 165
6	Wed	1:25–2:15	Upson 111
7	Wed	2:30–3:20	Upson 111
8	Wed	3:35–4:25	Upson 111

For CS100B, attend one of the following sections.

CS100B Sections			
#	Day	Time	Room
10	Mon	01:25-02:15	Hollister 306
11	Mon	02:30-03:20	Phillips 403
12	Mon	03:35-04:25	Phillips 403
13	Tue	10:10-11:00	Upson 205
14	Tue	02:30-03:20	Hollister 110
15	Tue	03:35-04:25	Bard 140

Sections are required; exams are based in part on material covered in section. Sections are used to clarify topics covered in lecture, discuss assignments, and work additional problems and exercises. Graded programs 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 lab in the basement of Carpenter Hall is the primary computing facility 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 24 PCs and 5 Macs (note: it may take a while for software to be made available on the Macs). The Carpenter lab is open when the Engineering library is. Normal hours are: Mon–Thu 8 a.m.–10:50 p.m., Fri 8 a.m.–5:50 p.m., Sat 10 a.m.–5:50 p.m., and Sun noon–10:50 p.m. 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 in Phillips 101 at the following times:

Day	Time
Thu, Aug 26	7-9 p.m.
Fri, Aug 27	7-9 p.m.
Sun, Aug 29	4-6 p.m.
Tue, Aug 31	7-9 p.m.

Consultants: On duty in the Carpenter Hall computer lab daily and most evenings starting

Aug. 26. The exact 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 handed in early.
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

Text: *Java Software Solutions*, by Lewis and Loftus (required).

Getting Started with Matlab 5, by Pratap (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 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 course newsgroups.

Newsgroups for CS100A and CS100B:

`cornell.class.cs100a`

`cornell.class.cs100b`

The newsgroups are an excellent place to ask course-related questions, e.g. questions about lecture material, administrative details, and assignments. It can also be helpful to see what questions and problems other students are having.

Since news articles eventually "expire" (disappear), you should **save** to disk or e-mail to yourself copies of the articles that you might wish to refer to later.

Webpages for CS100A and CS100B are reachable from the CS home page

`http://www.cs.cornell.edu`

and files can also be obtained via ftp in folders `pub/cs100`, `pub/cs100a`, and `pub/cs100b` from

`ftp.cs.cornell.edu`

The newsgroups serve as a rough backup to the web-pages, which sometimes are unavailable or fail to reflect updates.

Software: Programming assignments are designed to be done using MetroWerks CodeWarrior Pro 5 and Matlab 5, on a PC or a Mac, and we will do our best to help you with any problems you encounter with those programs. You may try to use some other version of Java and/or Matlab, but then you are on your own, so start assignments early enough to discover and cope with any resulting installation or compability problems.

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 5 for personal machines are available at an educational discount from the Campus Store, Metrowerks, and other software outlets. Additional information about CodeWarrior, including bug fixes and other updates, can be found on the Metrowerks web site `http://www.metrowerks.com`.

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

If you want a personal copy of Matlab 5 you can purchase a copy of the *Student Edition* of Matlab at the Campus Store. 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 student files may be left on CIT's public machines — they are cleaned out frequently. You must store your files on your own disks. **You also should keep back-up copies of all your work on** *separate* **disks.**

4 Requirements and Grading

Programs: There will be six programming assignments. Each program will be given two grades — one for correctness and one for program organization and style. The grade for each part will be 0, 1, or 2. All programs are weighted equally. **No Late Assignments Will Be Accepted.**

Except for the first assignment, CS100A assignments are due on Thursdays in class.

CS100A Program	Due at the End of Lecture on ...
1	Tue, Sep 7*
2	Thu, Sep 16*
3	Thu, Oct 7
4	Thu, Oct 28
5	Thu, Nov 11
6	Thu, Dec 2

CS100B assignments are due on Tuesdays in class.

CS100B Program	Due at the End of Lecture on ...
1	Tue, Sep 7*
2	Tue, Sep 21*
3	Tue, Oct 5
4	Tue, Oct 26
5	Tue, Nov 9
6	Tue, Nov 30

(*) Except for the first two assignments, CS100B assignments are due two days *before* CS100A assignments to alleviate the load on labs.

Programs are due at the end of lecture on the day assigned. **No Late Assignments Will Be Accepted.** You may also hand in your program to a consultant in Carpenter until the close of business the day *before* the program is due. (Programs will **not** be accepted in Carpenter on the day they are due.) You **must** give the program to a consultant personally. **Do not** just leave it on a desk or table.

Program listings should be printed, separated into pages with the perforated edges removed, and stapled together with the requested output. The first comment in each program **must** contain your name and Cornell ID#, the day and time you attend section, and your section instructor's name. These cannot be written in by hand. You must sign the first page of the program.

Working with Partners: You may work with **one** other student—we encourage you to do this. If you work with a partner, you should submit only **one** programming assignment between the two of you. The program must contain both of your names and ID#s and information about when you attend section in the first comment at the beginning of the program. The program 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. Both of you must sign your names on the first page of the program.

Working with a partner can be very helpful both in getting the assignments to work and in clarifying your understanding of the course material. But be sure that both 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 in CS100 are not based on the reading list; they are based on material covered in the lectures, sections, and assignments. There will be three 1 1/2 hour preliminary examinations and a 2 1/2 hour final.

Exam	Date	Time
Prelim 1	Mon, Sep 27	7:30 p.m.
Prelim 2	Tue, Oct 19	7:30 p.m.
Prelim 3	Tue, Nov 16	7:30 p.m.
Final	Mon, Dec 13	3:00 p.m.

Exams for CS100A and CS100B cover different material and will be held in different rooms, locations to be announced.

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: Sep 26, Oct 17, Nov 14. They will be held in the following rooms:

Review Sessions		
CS100A	Olin 155	3-5 p.m.
CS100B	Olin 155	7-9 p.m.

There will also be a review session for the final, to be scheduled.

Graded Assignments & 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 feel an exam or program has been incorrectly graded, fill out a regrade request giving your reasons in writing, attach the exam or program 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: In both CS100A and CS100B, total scores will be computed as follows:

CS100A Grades	
Programs	20%
Prelim 1	10%
Prelim 2	20%
Prelim 3	20%
Final	30%

Your letter grade will be based on your total score. The actual cutoffs (chosen independently for CS100A and CS100B) 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.

WARNING: Since programs "count" for a relatively small percentage of the total score, some students are tempted to skip them (or let their partners do most of the work) and plan to learn the material by reading the sample solutions. This does not work for most people. This material is learned by actively doing the programs, not by passively watching a partner or reading the sample solutions. Thus, **failure to actively do the assignments is likely to hurt your grade.**

5 Academic Integrity

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

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 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 can include *failure* in CS100, University disciplinary action, and a permanent mark on your transcript.

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

6 Sources of Help

Besides the resources we provide—

- Instructor office hours.
- TA office hours.
- TA tutoring by appointment.
- The consultants.
- The course newsgroup.
- The course webpage.

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

- Learning Skills Center (420 CCC, Computing and Communications Center) 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).