CAS CS101: Introduction to Computers
2015.SPRING.SYLLABUS.1.0

Lecturer
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About the course
In the old days one was literally introduced to computers. I recall being escorted into a large room full of large, noisy equipment with blinking lights and being told, “This is the computer. Don’t touch it.” Singular, of course, since we only had one. We’ve gone from a time when computing was magic and astounding to a time when almost everything that we interact with has embedded computers and we really don’t think about them much. And yet the fundamental machinery, both in the hardware and software sense, hasn’t changed since that earlier time. Sure, computers are smaller and faster and cheaper, but they are still recognizable as descendants of those first machines.

This course is intended to give you a broad look at how computers work from both a hardware and a software perspective. It also provides a survey of what computer science is, and what computer professionals do. The material will be a blend of theory and practical application. After completing CS101 you should have a better understanding of how the devices and services that you use every day work, and how to better use them in your own life.

Text
Our text this semester is Reed's:

A Balanced Introduction to Computer Science, 3rd edition

It's available on Amazon for both purchase and rental in paper, and also is available on CourseSmart in digital form, which is what I use. You might be able to find a used hardcopy, too.

Blackboard
We use Blackboard (http://learn.bu.edu) as a repository for the slide sets for each class, copies of homework assignments, sample code, announcements, and as a class forum. You should be enrolled already, so that when you log on to the site you'll see the course listed. Piazza will be our tool for questions and discussion; a link to it will be on the Blackboard page.

You'll use Blackboard to turn in homework, which for the most part will be in the form of lab exercises.

Homework/Lab Assignments
CS101 is a lecture/lab course, which means that part of your time will be spent in the undergraduate computing lab in EMA 304. Your lab section will meet at a specific time each Wednesday. Our Teaching Assistant, Vinit Nirmal, will conduct lab sections and will be available for tutoring. His hours will be posted on Blackboard.
The computers in the undergraduate lab have a variety of software available for your use. You are welcome to work on homework problems on your own time and computer, but you’ll still need to come to each week’s lab session to turn in your assignment. A good strategy is to start each assignment right away so that you can use lab time to get advice.

Assignments that are turned in after the due date, up to one week, will be docked 25%. For example, if you turn in a perfect assignment but it’s late a few days, you’d receive 75 points instead of 100 points. If it is more than 7 days late, you’ll receive 0 points.

**Grades**
We’ll have both quizzes and a written exams, as well as homework/lab assignments.

The allocation for your final grade looks like this:

- Homework/labs 25%
- Quizzes 20%
- Midterm 25%
- Final exam 30%

Grades are not negotiable, but if you think that a mistake was made in grading, we’ll take a look at it together. When grading, each category is assigned a percentage of the total for that category and multiplied by the weighting for the category. The four categories are then added up to produce your course total. This probably makes more sense with an example!

If, for example, you’d scored 45 correct of the 50 possible quiz questions, you’d get 45/50 or 90% for Quizzes. The 90% is multiplied by .20 (20%) to get 18%, which would be added to your scores for the other three categories to come up with your final course score.

The grading scale is numerical:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-100</td>
<td>A</td>
</tr>
<tr>
<td>90-95</td>
<td>A-</td>
</tr>
<tr>
<td>85-89</td>
<td>B+</td>
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<tr>
<td>80-84</td>
<td>B</td>
</tr>
<tr>
<td>75-79</td>
<td>B-</td>
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<tr>
<td>70-74</td>
<td>C+</td>
</tr>
<tr>
<td>65-69</td>
<td>C</td>
</tr>
<tr>
<td>60-64</td>
<td>C-</td>
</tr>
</tbody>
</table>

If your course grade happens to be close to a boundary, such as an 89.5, I’ll bump you up unless your overall course work for some reason doesn’t justify it.

**Missed quizzes**: We have a lot of quizzes, and it’s likely that you’ll miss a few of them due to obligations, travel, general malaise and so on. At the end of the semester I will replace up to two missed quizzes with the average of your quiz scores. Note that low quiz scores are not replaced, just scores of 0.

**Help With Homework**
We want you to succeed in this class, and if you are stuck on something, email me or your teaching assistant or drop by my or his office hours. You can also post a question on our Piazza forum. There are lots of ways that we can help, but you need to ask. Our teaching assistant will hold tutoring hours during the week, which will be posted on Blackboard, as will be my office hours.
Contacting me and office hours
The best way to contact me is by email at perryd@bu.edu. You may also IM me at perryd@bu.edu (iMessage). My office is in the Psychology building at 64 Cummington Mall, room PSY228A. Office hours are posted on Blackboard. No appointment needed, just drop by if you have a question or want to hang out a bit. If you need to drop something off, my mail slot is in the CS office in MCS138.

Using Encrypted / Signed Email
One of the topics we'll discuss this semester is computer and network security, including encryption. If you'd like to get some practice in using encryption tool, you are invited to send encrypted and/or digitally signed email to me at perryd@bu.edu. On Macs, the GPGSuite at gpgtools.org is a good choice; for Windows users you can try gpg4win.de. My public encryption key is available at https://pgp.mit.edu, and my key fingerprint/ID is C894 B69B 6576 C394 1452 2E9E 7C38 F315 BCC1 ADDF.

Academic Conduct Code
The University the College take cheating very seriously. Cheating and plagiarism will not be tolerated in any course. Cases will be referred to the Dean’s office and may result in loss of credit for an exam or assignment or other disciplinary action.

By nature, programming is a collaborative effort, and I fully expect that you will use resources such as Google, fellow students, and our own discussion forum on Blackboard to learn the material and do your assignments. We’ll discuss code and approaches in class, and I’ll occasionally post sample code on Blackboard that you are welcome to use as a starting point. However, I definitely don’t want you to simply copy entire programs that you find on the web and turn them in as your own work. If you do use more than a line or two of someone else’s code (including mine), just make a note in a comment in your program to point to where you got it.

Dr. Sullivan's guidelines for collaboration are a good explanation of our expectations. You can read them at http://cs-people.bu.edu/dgs/courses/cs111/collaboration.html.

Changelog

CS101 v.2016.SPRING.SYLLABUS.1.0
Initial version, forked from v.2015.FALL.SYLLABUS.1.0