CS 1301 SYLLABUS
Spring 2017
Introduction to Computer Science

Instructor
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Where to Find your TA:
Help Desk or TA Office Hours will be held in the College of Computing – CCB 107A.
Schedule of Help Desk hours will be posted on T-Square. You may see any CS1301 TA for help.

Course Objectives:

- ✓ To understand the basic concepts of computer programming in a high-level language.
- ✓ To be able to use and combine control flow constructs to form useful programs.
- ✓ To understand and become familiar with a number of simple data structures.
- ✓ To understand the process and skills necessary to effectively deal with problem solving in relation to writing programs.
- ✓ To be able to test and debug programs.
- ✓ To understand and employ functions and modularity.
- ✓ Through labs become comfortable with common software packages in use today.

Programming Language and IDE

The language used in this class is Python. The software is free and can be downloaded from https://www.python.org/downloads/. Python has an interactive development environment (IDE), IDLE, that is pure Python and comes as part of the download. Python is a high-level programming language that supports multiple programming paradigms: object oriented, imperative, procedural, and functional programming styles. Your TAs will guide you in installing the software when you meet with them at the first week's recitation.

Online Free Textbook:

How To Think Like a Computer Scientist: Learning with Python 3 by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers. http://openbookproject.net/thinkcs/python/english3e/

T-Square

All course information and resources can be found in T-square https://t-square.gatech.edu/portal to include: Syllabus, Assignments, Submissions, Announcements, Grades & Feedback, Resources, etc.

The code from each lecture will be posted on T-square under the Resources tab by the end of the following day.

T-Square is NOT forgiving about due dates and times.

Course Components

1. Lectures - Attend, listen and learn. This is usually where we will introduce new material. Bring your laptop to program for a portion of the class. Bring paper and pencil for taking notes. Attendance is required; occasional short quizzes will be given.

2. Recitation - Occurs weekly, is strongly encouraged, begins the first week. Here you will be able to ask questions about the homework and labs, taking advantage of the small group setting. TAs will also review and supplement lecture material.

3. Help Desk - group-oriented help for specific homework and lab questions, and more general help on other topics. Help Desk hours will be announced on the course T-Square site.

4. Homework – Helps students learn the topics in depth. Apply the material covered in lecture to programming problems. Assignments are posted on T-Square, the Georgia Tech course management system, and must be submitted on T-Square. Homework sent by email is never graded.

5. Labs – additional assignments that cover concepts on which you will not be tested. These labs are to give you exposure to a broad range of computer science topics.

6. Exams (3) - will demonstrate your understanding of the course material. Focus on applying concepts you have learned in lecture and recitation to solving new problems. Do not assume that doing the homework will be enough to prepare you for the tests however. Tests will also cover material learned from lecture, recitation and textbook material. All exams are given on paper.

7. Final Exam - cumulative assessment of everything in the course given during the official institute allocated exam period.

Grading Policies

Grades are calculated using the following percentages:

Participation	5%
Homework/Labs	25%
Exams (3)	45%
Final Exam	25%

There is no curve in this course. Scores do not round up. You must have 90.0 or better to get an A, 80.0 or better to get a B etc.

Test/Exam Policies:

Tests are our primary means of assessing your understanding of course material. They focus on applying concepts and skills learned in homework to new problems. There are no makeups for missed exams and missed in-class assignments. Any request for exceptions to this policy must be made in advance when at all possible. If you miss a test/exam without a valid excuse, then you receive a 0. Any request for relief from the consequences of this policy must follow the Excused Absence Policy.

Excused Absence Policy:

Documented incapacitating illness, death in the family, judicial procedures, military service, or official school functions. Please contact the Dean of Students with your excuse and they can provide you with the proper documentation. Documentation must be provided on letterhead with the signature of a physician, supervisor, or other appropriate official. Please do not send this documentation through me. Fill out the form you will find at http://www.studentlife.gatech.edu/content/class-attendance .

Homework Submission & Responsibility:

Turning in homework properly on T-Square is solely your responsibility. T-Square will send you a confirmation email. Do not delete that email. If you do not get the email, then trust that we did not get your HW submission. You should get the email almost immediately. After submitting your file(s) for a HW, reload T-Square going to the Assignments link within the CS1301 tab. Look at the assignment in question. You should now see that it says it has been submitted and when. Download a fresh copy of the file that T-Square has, saving it to a new folder, and reload and run that file. This is genuinely the only way to know for sure that what you think you uploaded to T-Square 1) is indeed your intended code, 2) is successfully uploaded to T-Square, and 3) is functioning code. Failure to upload the proper file(s) for a homework assignment will result in a zero for the assignment. Files that do not load or run also receive no credit.

Grade Disputes:

All grading disputes must be initiated within one week of the grade being made available. Present grading disputes to the Head TA rather than your individual grading TA as this helps fairness and oversight. Follow the chain of command: if the Head TA does not resolve the matter, see your Instructor.

All regrade requests must go through the Head TA. This applies to all graded material ~~ Homework, Labs, Quizzes, Tests and Final Exam.

Should you find yourself having an issue with a grade, contact the Head TA. Regrade forms will be made available.

Recitation: Workshop sessions consist of smaller groups (max 25) and are led by two TAs. The weekly workshops are designed for hands on help, and easier interaction with the material. Workshops begin at the start of the semester. Laptops are required. Lecture and Workshop Attendance is required, and it is assumed you are attending.

Email Policy

Use your official GT email account when corresponding with the instructor or TAs to protect your privacy. Include [CS1301] in the subject line of the email, followed by a brief description. For example, "[CS1301] lost homework 3". Be professional in the email. Sign your name in the email.

Academic Honor Code

Every Student is expected to read, understand and abide by the Georgia Tech Academic Honor Code. http://www.honor.gatech.edu/ Collaboration Policy Academic misconduct is taken very seriously in this class. Homework assignments are collaborative. Your homework assignments may be evaluated via demo or code review. During this evaluation, you will be expected to be able to explain every aspect of your submission. Missing a demo without a valid excuse will result in a zero for all assignments scheduled to be demoed. You are expressly forbidden to supply a copy of your homework via electronic means. If you supply an electronic copy of your homework to another student and they are charged with copying, you will also be charged. Collaboration with other students currently in this CS 1301 class is an important learning method. The following explanation will help you understand collaboration. o Students may only collaborate with fellow students currently taking CS 1301, the TA's and the instructor. Collaboration means talking through problems, assisting with debugging, explaining a concept, etc. You should not exchange code or write code for others. **Each individual programming assignment must be coded by you**. You may work with others, but each student must turn in their own version of the assignment. Each student must turn in a unique program. Your submission must not be substantially similar to another student's submission. Collaboration at a reasonable level will not result in substantially similar code. Submissions that are basically identical will receive a zero and will be sent to the Dean of Students Office of Academic Integrity.

Course Expectations

Readings should be completed before class on the date indicated on the Calendar.

Take notes on paper during the note-taking portion of the class, then program along with the instructor during the programming portion of the class. Use Piazza to have discussions about course material with your classmates and the TAs. Never post code on Piazza however! Do your homework and go to recitation every week. Do not skip lecture. Occasionally short quizzes may be given in lecture or recitation. These short quizzes (called Reality Checks) will make sure you are keeping up.

How to succeed in this course

Learning to program is like learning a sport. It takes actual practice to become comfortable and proficient at coding. The assignments that are given are opportunities to learn the material that you will be responsible for on tests and the final exam. Use collaboration wisely to help you learn. Take responsibility for your course work submissions; it is your job to make sure that you successfully turned in what you meant to turn in. Be sure to verify your submission. This is how you make sure that you get credit for the work you do.

Be prepared when you go to get help from a TA or your instructor. Bring your work with you. Take initiative. Begin your assignments early and if you think you need help, come prepared. Use the resources that are provided for you, and be determined to succeed from the start.

Remember that just doing the homework is not enough. You also are expected to read the book and any additional materials provided, attend recitation, attend lecture and review the material often.