CS1372/CS4803 PDE
Program Design for Engineers
Spring 2013 Class Syllabus

Course Content

Concepts

This course is designed to teach you C. There is absolutely no substitute in this endeavor for coding. Code every day. You cannot learn C at the last minute. Attend lecture and recitation, read the book and try the things you see and hear. Your objective should be to learn C not worry about a grade.

General Principles:

- abstraction
- hardware concepts
- testing
- debugging
- problem solving

Concepts evaluated by coding:

- data types
- the use of variables for storing data
- basic mathematical and logical expressions
- arrays
- operations on arrays
- strings and character arrays
- structures
- file input and output
- conditional statements
- selection
- repetition
- functions and procedures
- variable scope
- elementary graphics
- recursion
- dynamic data structures

Languages

We will be focused on ANSI standard C code, using **a no-cost commercial cross-platform** development environment.

Open Door Policy

Your instructor maintains an open door policy. You are free to visit him during the posted office hours or, if you prefer a different time, arrange an appointment. It is very important to contact him as soon as you feel that you might need to. Problems, unlike fine wines, don't improve with age.

Grading Policies

Grades will be curved. The curve cannot be defined ahead of time but it will compensate for the imperfection of the evaluation process.

The grading breakdown is as follows:

Homework	40%
Quizzes	30%
Final	30%

You have the right to question your grade on any assignment; but you must initiate discussion about the grade in the following ways:

- **Homework grades may be appealed within two weeks of receiving the grade.**
- **Regrades for quizzes must be requested before you leave the meeting when the quiz is returned. Do not write on the quiz itself. Write the reason for the regrade request on a separate sheet, attach that sheet to the quiz and return both to your TA.** Should you find yourself having an issue with a grade, contact your TA. If the issue remains, contact **your head TA then** your instructor. It is your responsibility to ensure that the grade posted in the course management software is correct. Discuss any discrepancy with your TAs or your instructor before the beginning of Finals week.
- **Some if not all assignments may be graded via demo. If you miss a scheduled demo you will receive a zero on the assignment. Missing the demo is equivalent to not turning in the assignment.**

Notice about Homework

This class is about programming. Homework must be submitted to the Course Management System (currently, T-Square) as individual files (Note compressed in any way…i.e. no zip, rar, gzip) containing all the source files required to run your code. Submissions that cause errors when they compile or run will receive and automatic zero for the assignment. ***No exceptions.***

Homework assignments will be graded by demo. This means that you will sit down with a TA who will look at your code and evaluate your submission. You will be expected to understand how the code was designed and constructed and how you would, for example, modify it to accomplish additional tasks.

Collaboration Policy

Homework assignments are designed to be learning experiences; they are graded only to encourage students to complete the assignments correctly. Collaboration is permitted and encouraged when working on your homework. However, the material you turn in ***must be your own work***. Submitting material written by others is not permitted on this course, or anywhere else at Georgia Tech.

Obvious duplicate assignments will receive a zero and may be submitted to the Office of Academic Integrity

The quizzes and the final are our primary means of assessing your understanding of course material. They will be taken in a supervised environment during lecture periods.

Email Policy for this Course

You are encouraged to conduct all official email correspondence for this course **using your official GT email account**; that is, your prism-based email. This is to protect your privacy. Email from outside sources such as hotmail, yahoo, and other personal accounts should also be avoided - many Spam killers automatically reject mail from these accounts. For a quickest response, put [CS1372] in the subject of your e-mail. Most of the people involved with the class filter their mail in some way, and having CS1372 in the subject will help them see your e-mail sooner.

Lectures

There are three hours of lecture each week intended to cover the core material for the course. You are expected to attend.

Recitation

- Recitation will be Thursdays with TA's.
- You must bring your laptop to recitation
- ALL QUIZZES WILL BE TAKEN IN RECITATION

TA Access

TA Office hours will be announced. This time is used to return graded work and address any questions.

Due Dates/Times

Assignments are due electronically as indicated on the assignments. Typically this is midnight (11:55pm) on the date the assignment states it is due (and this is also indicated on the course calendar.) There is a grace period (usually, 6 hours) that begins at the due time. You are free to turn things in early before the due date, but once the grace period after the due date/time is over, no more submissions are possible. Multiple submissions are accomplished in the course management software, and this is a good way to preserve partial solutions.

There are no redos allowed on any assignment!

Textbooks

Required: The C Programming Language (2nd ed.). by Brian Kernighan and Dennis Ritchie

Publisher: Prentice Hall, Englewood Cliffs, NJ

ISBN#: 0-13-110362-8

RECOMMENDED: Problem Solving and Program Design in C by Jeri R. Hanley and Elliot B. Koffman

Publisher: Addison Wesley

ISBN#: 0-321-40991-4

Late Work Policy

No late homework, quizzes or exams are accepted in this class. Any request for exceptions to this policy due to incapacitating illness, death in the family, or something similarly serious must be accompanied by supporting documentation. If you miss your quiz/exam period without prior approval or a valid excuse, you will receive a zero for the quiz/exam

CAUTION: the preprinted note from the infirmary stating that you visited the infirmary is not sufficient documentation.

Please contact the Dean of Students with your excuse and they can provide you with the proper documentation. http://www.deanofstudents.gatech.edu/contact.html

Final Times and Places

1. It is your responsibility to show up for the final. If you arrive more than 15 minutes late you may be denied entrance. This is Georgia Tech policy as stated in the official catalog.

2. If you miss the final other than for reasons outside your control you will receive a zero. This typically means you will fail the class.
3. If you have a conflict with your final exam times either with three exams in one day when CS1372 is the middle exam, or a direct time conflict with another class, you may negotiate with your instructor to take your final exam at another time, including the published conflict time.

Course Expectations

1. Attend lecture on a regular basis and keep up with the reading. These are the ONLY sources of new material to be learned.
2. Participate in all discussions and ask questions about the material. This is your best opportunity to review the material and see examples to solidify your understanding.
3. Visit your TA's and / or your Instructor's office hours with questions about grades and the course materials. This is your chance to have one-on-one contact to take care of individual questions and issues.
4. Refer to the course newsgroups to have discussions about course material with your classmates and the TAs. This is where you can have general-interest questions answered outside lecture and office hours. You are also expected to follow good newsgroup etiquette.
5. Complete every homework assignment and use it as a learning opportunity; use collaboration in order to gain a better understanding, not to get the work done faster. This is your chance to learn the material in preparation for the quiz; not having a solid understanding of the homework *will* lead to poor performance later (i.e. quizzes, other homework and the final exam).
6. Take responsibility for your coursework submissions; it is your job to make sure that you successfully turned in what you meant to turn in and verify your submission by retrieving and checking your files. This is how you make sure that you get credit for the work you do.
7. Be prepared when you go to get help from a TA or your instructor with specific questions. Bring your work (on computer media) and any other relevant materials to the meeting.
8. Take initiative. You will only get out of this class what you put into it. 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.

Course Components

1. Lectures - Attend, listen and learn. This is usually where we will introduce new material.
2. Recitation periods - Example questions with discussion. Questions about the homework and interactive solutions, taking advantage of the small group setting.
3. TA Office Hours - Individual questions about grades and homework. The primary focus for individual office hours: the students in this TA's section. All other students are second priority.

4. Homework - learn ins and outs of the topics. Apply the material covered in lecture to programming problems. Collaboration encouraged here especially.
5. Quizzes - should demonstrate your *understanding* of the course material. Focus on applying concepts and skills learned in hw to novel problems.
6. Final Exam - cumulative assessment of everything in the course.

What to do in case of problems

- If you need help, contact your TA first. If he cannot resolve the problem to your satisfaction contact your instructor. Note: You always have the right to see your instructor

Miscellaneous Reminders

1. You are responsible for turning in assignments on time. This includes allowing for unforeseen circumstances.
2. You are also responsible for insuring that what you turned in is what you meant to turn in for each assignment.
3. Finals and quizzes must be taken at the scheduled date and time. Any change to your quiz or Final time must be approved in writing by your instructor. If you have any personal issues (family/illness/etc.) please go to the Dean of Student's office located in the Student Services Building (Flag Building) next to the Student Center. They are equipped and authorized to verify the problems and will issue a note to your instructors making them aware of the problem and requesting whatever consideration is necessary.
4. The announcements should be read every day. Official announcements about course matters will be posted there. The general course discussion group is for posting technical questions about assignments, quizzes etc. Complaints, questions about your personal problems, etc. should be discussed with your instructor in person or via email.

Last Modified January 4, 2013 by Bill Leahy