

CS4104: Data and Algorithm Analysis

Fall 2010

Class: TuTh @ 12:30-1:45, McBryde 307

Instructor: Dr. C.A. Shaffer, Torgersen 2000A, x4354
Office Hours: TuTh 1:45-2:45
E-Mail: shaffer@cs.vt.edu

GTA: Ahsanur Rahman
Office Hours: TBA

Course Prerequisites: CS 3114 and either Math3124 or Math 3134

Honor Code:

The Honor Code (and in particular, the Computer Science Departmental Honor Code) applies to this course and will be strictly enforced.

Assignments and Grading Policy:

The course will be graded on the basis of 1000 total assigned points. There will be two in-class midterms worth 100 points each. Each midterm will take approximately half the class period. The final will be worth 150 points. The remaining 650 points will be based on weekly homework assignments.

Solutions to homework assignments will be submitted via Web-CAT (see the course website for a link to Web-CAT). We will accept homework submissions either in PDF or any format that can be opened with MS Windows. Note that presentation (i.e., readability and clarity) will count in grading, which may influence your choice of document processor. You will need to typeset a lot of mathematical equations. Because of this, I suggest that you do your assignments using \LaTeX . However, you may use any document processor of your choice so long as it produces one of the required output formats. Just remember that if it looks like junk, it will be graded like junk. Due to the need for equations in many answers, plain ASCII text will typically not be satisfactory.

For any homework assignment, two students may turn in the assignment for joint credit. In this case, both students will normally receive the same grade. You are free to work with a partner on some assignments or on no assignments. You are free to use different partners for different assignments. Groups of more than two people working together on an assignment are strictly forbidden and will be treated as an honor code violation. You may not switch partners in the middle of an assignment. In other words, you may not discuss solutions for any one assignment with more than one person in the class.

While students are allowed to work in pairs, it is important that both students involved completely understand the answers that they submit. The instructor reserves the right to require any student to present the answers to their homework assignment verbally to

insure that each student does in fact meet the minimum requirement of understanding the solutions they submitted, and may reduce credit given for the assignment (to both students!) if the verbal answer is not compatible with understanding of the written answer. All joint submissions **MUST** contain a statement that clearly indicates, for **EACH** problem, the contribution of **EACH** student to the problem. Some possible contributions for a problem might include one or more of the following: Cracked the problem, wrote up the solution, found flaws/improved earlier versions of the solution. All homework submissions **MUST** contain the following Pledge Statement:

“I understand the answers that I have submitted. The answers submitted have not been directly copied from another source, but instead are written in my own words.”

Assignments are normally due to Web-CAT at 11:00pm on a given day. Assignments received late will receive an automatic late penalty unless the instructor has given a pre-arranged individual extension.

If any student needs special accommodations because of a disability, please contact the instructor during the first week of class.

Electronic Information:

Information such as copies of the syllabus and assignments, assignment solutions, and class grades, will be made available through the class web site. Notice of homework deadlines, test dates, etc., will be posted at the course website. The course instructor accepts no responsibility or obligation for making such announcements in class. The course website is the official source for all course notifications. The course homepage can be reached from <http://courses.cs.vt.edu/~cs4104>.

Textbook:

The required textbook for this course is *A Practical Introduction to Data Structures and Algorithm Analysis, 3rd Edition* by Clifford A. Shaffer. It is available free, online. A link will be provided at the course website. In addition, course notes (primarily copies of the slides used in class) will be posted at the course website.