CS4104: Data and Algorithm Analysis
Spring 2007

Class:	MW @ 4:00-5:15, Norris 207
Instructor:	Dr. C.A. Shaffer, Torgersen 2000A, x4354 Office Hours: MW 11:00-12:00 E-Mail: `shaffer@cs.vt.edu`
GTA:	Liguang Xie, `windgoon@vt.edu`, McBryde 133 Office Hours: MF 1:30-3:30; Tu 1:30-3:30 and 5:00-7:00
Course Prerequisites:	CS2606 (or CS2604) 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. 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.

When students 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 (normally Tuesday). Assignments received late will receive an automatic penalty of 1 point/minute 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.

Attendance Policy:

Educational studies consistently show a strong correlation between class attendance and class grade. Attendance to every class is mandatory, and will be monitored at every class meeting. Students will lose 10 points for every class missed. There are no excused absences for any reason. However, any student who needs to miss a class for a legitimate reason can recover those points by scheduling a meeting with me (normally this must be done before the next class) at which the student presents to me the gist of the material covered during the missed class. Notes about the lecture topics will always be available from the course website.

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 URL is `http://courses.cs.vt.edu/~cs4104`.

Textbook:

There is no required textbook for this course. Course notes (primarily copies of the transparencies used in class) will be posted at the course website. Relevant sections of the forthcoming third edition of the book *A Practical Introduction to Data Structures and Algorithm Analysis* by Clifford A. Shaffer will be posted to the website.