CS5114: Theory of Algorithms
Spring, 2014

Class:	TuTh @ 2:00–3:15, McBryde 307 (CRN 12261)
Instructor:	Dr. C.A. Shaffer, Torgersen 2000A, x4354
	Office Hours: Tu 3:15–4:15, Th 11-12
	E-Mail: `shaffer@cs.vt.edu`
GTA:	TBA
Course Prerequisites:	CS3114 or equivalent.
Class Homepage:	`http://courses.cs.vt.edu/cs5114/spring2014`
Class Forum:	`https://piazza.com/vt/spring2014/cs5114/home`

Honor Code:

The Honor Code (and in particular, the Computer Science Departmental Honor Code and the Graduate 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 an in-class midterm worth 100 points, and a final worth 200 points. The remaining 700 points will be based on weekly homework assignments. There will be 14 homework assignments, each worth 50 points, and each due by 11pm on Thursday submitted to Web-CAT.

Solutions to homework assignments will be submitted via Web-CAT. (see the course website for a link to Web-CAT). We accept homework submissions PDF or in 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.

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.

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 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, carefully verified that the answer is correct. 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 at 11:00pm on a given day (normally Thursday). 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. There is a class Piazza forum for announcements and discussion, whose link is posted at the class website. This forum will be the source for all official announcements related to changes to, and interpretation of, homework questions and similar course management issues. You should make sure that you have your Piazza account set to forward postings to your email so that you won't miss anything. Notice of homework deadlines, test dates, etc., will be posted at either the course website or at the Piazza forum. The course instructor accepts no responsibility or obligation for making such announcements in class. The course website and Piazza forum are the official source for all course notifications.

Textbook:

The required textbook for this course is *Introduction to Algorithms: A Creative Approach* by Udi Manber.

Course notes (primarily copies of the slides used in class) will be posted at the course website.