Instructor:  Don Friesen (friesen@cse.tamu.edu)  
Office:  H. R. Bright Building, room 304A (845-5401)  
Office hours:  MWF 11:15-12:15 am or by appointment  
Textbook:  Introduction to Algorithms, 3rd Edition,  
by Cormen, Leiserson, Rivest and Stein  
McGraw-Hill, 2009  

**GRADING POLICY:**  

Homework – 30%  
In class midterm exam – 30%  
In class comprehensive final exam – 40%  

Homework is an essential part of the course. Discussing the homework problems with other students is acceptable, but to make sure that you understand the solutions you need to write them up in your own words. Copying someone else's homework is not acceptable. If you use another source, (web, books other than the text, etc.) you must cite the source. Homework assignments are to be turned in during class on the due date. Assignments may be turned in late for a 10% penalty if they are turned in by the beginning of the next class. Late homework is not accepted after that without a university accepted excuse.  

By Friday, review the material in chapters 1-12 of the textbook. This, together with the material on elementary graph algorithms (introductory parts of chapters 22-25), is approximately the expected background material from the prerequisite course. If this material is unfamiliar to you, you might be well advised to take the undergraduate course before this class. Although some of this material will be reviewed during the semester, I will assume that you are familiar with most of it already.  

**SCHOLASTIC DISHONESTY:** Scholastic dishonesty will not be tolerated. Working together on homework assignments is encouraged, but the final product submitted for grade must be the individual work of the person turning it in. In other words, it is all right to discuss and to assist each other concerning problem solving strategy or technique, but the solutions turned in should be in the words of the student turning the work in. It will not help you to copy someone else’s assignment. For additional information on this topic see the Aggie Honor Code (http://www.tamu.edu/aggiehonor/).  

Plagiarism is the presentation of the work of someone else without giving him or her due credit. You can copy the words of others as long as you clearly identify them as such (i.e. in quotes). Examinations are meant to measure the knowledge or skill of each individual, so giving or receiving unauthorized assistance during tests is cheating. Any identified instances of scholastic dishonesty will be dealt with in accordance with the procedures outlined in the Aggie Honor Code.
STUDENTS WITH DISABILITIES: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in room 126 Koldus Building, or call 845-1637.

EXCUSED ABSENCES: According to rule 7.6.1.2, if you are absent for a period of less than 3 days, confirmation of your illness may be satisfied by completion of Explanatory Statement for Absence form at http://attendance.tamu.edu.

TEXTBOOK COVERAGE: We will begin by reviewing the material in the sections on sorting and data structures for about 2 classes. The main part of the course from Cormen, Leiserson, Rivest, and Stein comes from chapters 13-26. This includes material on advanced data structures (Augmented data structures, Fibonacci heaps, union-find structures) advanced design and analysis techniques (dynamic programming, greedy algorithms, and amortized analysis), and improvements to graph algorithms for MST, shortest path, and network flow. We will end the course with material on NP-completeness which is covered in the text in chapters 34-35.

ASSIGNMENT 1

Due: Monday, June 6 in class.

Review chapters 1-12. Turn in written solutions to the following problems:

1. Problem 3-2 p. 61
2. Problem 6-3, pp. 167-168
3. Exercise 8.3-4, p. 200
4. Exercise 9.3-7, p. 223