CISC 320 Introduction to Algorithms (Spring 2013)

Time and Place

Lectures: Wednesday and Friday 3:35PM- 4:50PM; Ewing 209

Web page: http://www.cis.udel.edu/~lliao/cis320s13

Course Staff and Contact

Staff	Name	Office	Email	Phone	Office Hours
Instructor	Li Liao	Rm 424, Smith Hall	lliao@cis.udel.edu	831-3500	1:30PM - 2:30PM Wednesdays and Fridays, or by appointment
TA	Karankumar Sabhnani	Rm 103, Smith Hall	karans@UDel.Edu		4:00PM – 5:00PM Tuesdays and Thursdays

Course Catalog Description

Design and analysis of algorithms: worst/average case analysis, proofs for correctness and performance of algorithms. Algorithmic strategies (divide and conquer, greedy methods, dynamic programming, etc.). Algorithms for searching, forming and traversal of strings, trees and graphs. Categorization of computational problems: classes P and NP. NP completeness.

Objectives of the course:

1. Working knowledge of important algorithms in several domains.
2. In-depth understanding of algorithms design and analysis.

Prerequisites

MATH210 and a minimum grade of C- in CISC220

Text

Cormen, Leiserson, Rivest, and Stein, *Introduction to Algorithms*, Third Edition, McGraw-Hill & MIT Press, 2009.

Assignments, Exams, and Grading

The course work consists of six homework assignments (7% each), midterm exam (25% each) and final exam (33%).

All assignments will be of the "pencil and paper" variety. The midterm exam is tentatively scheduled for Friday, March 22. Both exams will be closed book and closed notes.

Late assignments

Assignments should be handed in at the beginning of class on the due date. Unexcused late programs will be penalized 10% per class meeting, and will not be accepted more than one week late.

Policies

Exams and homework assignments are intended to measure your individual performance and accomplishments in the course. Thus, the following are considered cheating and will be dealt with accordingly: looking the solution up in any source other than those listed above; looking up the solution by locating a paper in the literature; looking in any way at solutions from other courses at Delaware or elsewhere; posting the problem on the Internet, seeking a solution; getting a solution from (or giving a solution to) another person; etc. You may ask others for clarifications of the problem statement. If in doubt, ask the instructor. Final grades will be formulated by totaling the grades from exams, and homework for each student (weighted as noted above), and then assigning appropriate boundaries between letter grades (including +/-). For those close to the boundaries, class attendance and participation can be a positive (or negative) factor.