CIS 780: Analysis of Algorithms
Autumn 2004
MWF 9:30-10:18, DL305

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Course Summary: Algorithm design paradigms; mathematical analysis of algorithms; design and analysis of graph algorithms.

Objectives: Students will:

1. Augment their “tool box” of algorithm design techniques.
2. Learn how to analyze the efficiency of algorithms.
3. Learn how to design and analyze graph algorithms.


Prerequisites: CIS 680 or equivalent.

Sequence of Topics:
1.5 weeks  Mathematical foundations
2.0 weeks  Divide-and-conquer
3.0 weeks  Dynamic programming
1.5 weeks  Greedy algorithms
2.0 weeks  Graph algorithms

Grading: Homework 20%, Midterm Exams 40%, Final Exam 40%

General Policy:

1. Late homework will not be accepted.