CSE 5311(001 & 003): DESIGN AND ANALYSIS ALGORITHMS  
Fall 2006

Section 001: Tu/Th 11:00AM – 12:20PM (NH 108 )  
Section 003: Tu/Th 2:00PM - 3:20PM (NH 229)

Course Syllabus:

- Review of Asymptotic Analysis and Growth of Functions; and Trees and Heaps
- Recurrences and Sorting Algorithms
- Graph Algorithms and Maximum Flow Networks
- Greedy Algorithms and Dynamic Programming, and Amortized Analysis
- Algorithms for String Matching and Computational Geometry
- Matrix Operations and Linear Programming
- NP Completeness and Approximation Algorithms
- (Time Permitting) Special Topics: Applications of Algorithms in
  - Databases
  - Information Retrieval and Web Searching
  - Data Mining and High-Dimensional Computational Geometry