Course Objectives. The students will learn to a) design algorithms, 2) analyze them for correctness and complexity, and 3) implement them using a high level programming language.

Course Contents. Problems and functions; Unsolvable, Intractable, and Tractable problems; Complexity measures and asymptotic notations; Search, Sort and Selection Algorithms; Graph algorithms; Greedy Algorithms; Dynamic Programming Algorithms; Pattern Matching Algorithms; NP-Complete and NP-Hard problems.

Textbook:
T. H. Cormen, C. E. Leiserson, R. L. Rivest, and C. Stein

References

Grading and Evaluation.
Lab 20%
Semester Exam I 20% 7-9 September, 2009
Semester Exam II 20% 13-15 October, 2009
End Semester Exam 40% 23-27 November, 2009

No Classes. 2009: August-5(wed), 14(fri); Oct-2(fri);