

CSE 6331: Design and analysis of algorithms
Autumn 2012
(Tentative Syllabus)

Lectures	Materials	Assignments
Aug 23	Big-O and Big- Ω	
Aug 28	Heap sort	Hw1
Aug 30	Quick sort	
Sep 04	Selection	Hw2
Sep 06	Search Trees	
Sep 11	Red-Black Trees	Hw3
Sep 13	Dynamic prog. I	
Sep 18	Dynamic prog. II	Hw4
Sep 20	Greedy algorithms	
Sep 25	Fibonacci heap I	
Sep 27	Fibonacci heap II	Hw5
Oct 02	Union-find	
Oct 04	Graphs, DFS	Hw6
Oct 09	Topo sort, BFS	
Oct 11	Midterm	
Oct 16	Min. spanning tree	
Oct 18	Single source shortest path	
Oct 23	All pairs shortest paths	Hw7
Oct 25	Flow networks	
Oct 30	Maxflow-Mincut	Hw8
Nov 01	Linear programming	
Nov 06	Simplex algorithm	Project due
Nov 08	LP Duality	
Nov 13	Randomized algorithms	
Nov 15	Planar graphs	
Nov 20	Convex hulls	Hw09
Nov 27	Plane sweep	
Nov 29	Triangulations	
Dec 4	Reviews	

Instructor: **Tamal K. Dey**, Room: **483 DL, 292-3563**.

Classes: **TR 11:10–12:30 at DL 480**

Office hours: **TR 12:30-1:00 pm., F 2:00-2:30 pm. or by appointment**

Grading Policy: **Assignments: 30% Midterm: 30% Final: 40%**

Required Text: **Introduction to Algorithms, T. Cormen, C. Leiserson and R. Rivest, MIT press, McGraw-Hill Book Company**

No late assignment is permitted.

All homeworks will be posted on

<http://www.cse.ohio-state.edu/~tamaldey/course/6331>