

**CSE 780: Design and analysis of algorithms**  
**Winter 2011**  
**(Tentative Syllabus)**

Lectures	Materials	Chapter	Assignments
Jan 03	Big-O and Big- $\Omega$	2,3,4	
Jan 05	Sort (Heap)	6	Hw1
Jan 07	Sort (Heap, Quick)	7	
Jan 10	Sort (Quick)	7	
Jan 12	Selection	9	Hw2
Jan 14	Selection		
Jan 19	Search Trees	12	
Jan 21	Dynamic prog. I	15	Hw3
Jan 24	Dynamic prog. II		
Jan 26	Dynamic prog. III		
Jan 28	Greedy algorithms	16	Hw4
Jan 31	Fibonacci heap I	20	
Feb 02	Fibonacci heap II		
Feb 04	Review		
Feb 07	Midterm		
Feb 09	Union-Find algorithms I	21	
Feb 11	Union-Find algorithms II		
Feb 14	Graphs, DFS	22	Hw5
Feb 16	Topo sort		
Feb 18	BFS		
Feb 21	No Class		
Feb 23	Min. spanning tree	23	Hw6
Feb 25	Min. spanning tree		
Feb 28	Single source shortest path	24	
Mar 02	Single-All pairs shortest paths	25	Hw7
Mar 04	All pairs shortest paths		
Mar 07	Flow networks	26	
Mar 09	Flow networks		
Mar 11	Review		

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

Classes: **MWF 10:30 at DL BO0314**

Office hours: **MWF 11:30-12:00 am. 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 (2nd or 3rd edition)**

No late assignment is permitted. All homeworks will be posted on

<http://www.cse.ohio-state.edu/~tamaldey/course/780>