

CS5206 (Fall 2009)

Foundations in Algorithms

Course Web: <http://www.comp.nus.edu.sg/~cs5206/2009/>

Tuesday, 6:30 – 8:30pm @COM1-204 (SR2)

Leong Hon Wai, COM1 03-41

Tentative Course Schedule (Rev: 11/11/2009)

Wk	Date	In / Out	Topic
1	11/8	HW1 out	<i>Motivation</i> : Algorithms Technology, Sample Problems, Stable Marriage Problem, Interval Scheduling
2	18/8		<i>Analysis of Algorithms</i> (Master Theorem), Randomized Quicksort (<i>analysis!</i>)
3	25/8	HW1 due	<i>Greedy Algorithms</i> : Interval Scheduling, Shortest Path Algorithms, MST, Heaps
4	01/9	HW2 out	<i>Dynamic Programming Algorithms</i> :
5	08/9		** Lecture cancelled **
6	15/9	HW2 due LEDA out	DS: Data Abstraction, Augmenting Data Structures, LEDA, Binomial Heaps,
B	22/9	LEDA due	DS: Amortized Complexity, F-Heaps
7	29/9	HW3 out	DNSRA Project & Problem Reduction
8	06/10 09/10	Proj-M1 due Proj-M2 due	NP-Completeness & Proving NP-Completeness
9	13/10	HW3 due	<i>Cook's Theorem & Approximation Algorithms</i>
10	20/10		Approximation Algorithms (continued) & <i>Network Flows</i>
11	27/10	HW4 out	Network Flows & <i>Maximum Matching</i>
12	03/11		<i>Graph Partitioning & BAP Case Study</i>
13	10/11 14/11	HW4 due Proj-M3 due	<i>Local Search Algorithms & Course Summary</i>
S	17/11		* STUDY WEEK * STUDY WEEK *
E	30/11		Final Exam (Open Book)