

CSE 6332: Advanced algorithms
Spring 2019
(Dynamic Schedule)

Lectures	Materials	Comments
Jan 8	Network flow, Ford-Fulkerson algo	
Jan 10	Edmonds-Karp algo, Push-relabel algo	
Jan 15	Push-relabel algo, Bi-partite matching	
Jan 17	Matrix mult and Polynomial operations	Homework 1
Jan 22	DFT-FFT	
Jan 24	Linear programming, Simplex algorithm	
Jan 29	LP Duality	Paper critique choice
Jan 31	Rounding in LP	
Feb 05	RK string algo	
Feb 07	KMP string matching	Homework 1 due
Feb 12	Vertex cover and TSP approx.	TP topic
Feb 14	Set cover	Homework 2
Feb 19	Subset sum	
Feb 21	Randomized Max-3-CNF-SAT	Critique Due
Feb 26	Probabilistic Max-cut II	
Feb 28	Midterm	
Mar 05	No Class	
Mar 07	Randomized linear time MST	Homework 2 due
Mar 19	Convex Hull and closest pair	TP prelim. draft due
Mar 21	Voronoi-Delaunay diagrams I	
Mar 26	Voronoi-Delaunay diagrams II	
Mar 28	TP presentations	
April 02	TP presentations	
April 04	TP presentations	
April 09	TP presentations	
April 11-18	Review	

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

Classes: **TuTh 2:00–3:40 at DL480**

Office hours: **TuTh 4:00-4:30 pm. or by appointment**

Grading Policy: **Homeworks: 15% Critique: 10%, Final: 40% Term paper: 25%, Attendance: 10%**

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

Course web-page

<http://web.cse.ohio-state.edu/~dey.8/course/6332/>