

Course Calendar for 6.838: Geometric Computing Spring 2005

1	Tue, Feb 1	Introduction. Convex hulls in 2D	
2	Thu, Feb 3	Segment intersection	
3	Tue, Feb 8	LP in low dimensions	Assignment I out. Covers L1-L4.
4	Thu, Feb 10	Polygon triangulation	
5	Tue, Feb 15	Range searching	
6	Thu, Feb 17	Point location	
X	Tue, Feb 22	VIRTUAL MONDAY	
7	Thu, Feb 24	Arrangements and duality	Assignment I due
8	Tue, Mar 1	Voronoi diagrams	Assignment II out. Covers L5-L9.
9	Thu, Mar 3	Delaunay triangulations	
10	Tue, Mar 8	Binary space partitions	
11	Thu, Mar 10	Motion planning	Assignment II due.
X	Tue, Mar 15	PIOTR AWAY AT CG WORKSHOP	
X	Thu, Mar 17	PIOTR AWAY AT CG WORKSHOP	
X	Tue, Mar 22	SPRING BREAK	
X	Thu, Mar 24	SPRING BREAK	
12	Tue, Mar 29	Closest pair in higher dimensions	
13	Thu, Mar 31	Approximate near neighbor in high dimensions (LSH)	
14	Tue, Apr 5	Low-distortion embeddings	Assignment III out. Covers L12-L16.
15	Thu, Apr 7	Low-distortion embeddings II (includes approximate near neighbor in higher and high dimensions)	
16	Tue, Apr 12	Geometric algorithms for streaming data	
17	Thu, Apr 14	Geometric algorithms in external memory	
X	Tue, Apr 19	PATRIOTS DAY	
18	Thu, Apr 21	Kinetic algorithms	Assignment III due.
19	Tue, Apr 26	Geometric approximation algorithms	Assignment IV out. Covers L17-L21.
20	Thu, Apr 28	Geometric pattern matching	
21	Tue, May 3	Combinatorial geometry	
22	Thu, May 5	Topic I	
23	Tue, May 10	Folding – invited lecture by Erik Demaine	Assignment IV due.
24	Thu, May 12	Conclusions	