

Course Calendar for 6.838: Geometric Computing Fall 2003

1	Thu, Sept 4	Introduction. Convex hulls in 2D	
2	Tue, Sept 9	Segment intersection	
3	Thu, Sept 11	LP in low dimensions	Assignment I out. Covers L1-L4.
4	Tue, Sept 16	Polygon triangulation	
5	Thu, Sept 18	Range searching	
6	Tue, Sept 23	Point location	
7	Thu, Sept 25	Arrangements and duality	Assignment I due.
8	Tue, Sept 30	Voronoi diagrams	
9	Thu, Oct 2	Delaunay triangulations	Assignment II out. Covers L5-L10.
10	Tue, Oct 7	Convex hulls in 3D	
11	Thu, Oct 9	Binary space partitions	
12	Tue, Oct 14	Motion planning	
13	Thu, Oct 16	Folding	Assignment II due. Assignment III out. Covers L11-L15.
14	Tue, Oct 21	Quad-trees	
15	Thu, Oct 23	Kinetic algorithms	
16	Tue, Oct 28	LP in higher dimensions	
17	Thu, Oct 30	Closest pair	Assignment III due. Assignment IV out. Covers L16-L21.
18	Tue, Nov 4	Approximate near neighbor in high dimensions (LSH)	
19	Thu, Nov 6	Low-distortion embeddings	
X	Tue, Nov 11		
20	Thu, Nov 13	Low-distortion embeddings II (includes approximate near neighbor in higher and high dimensions)	
21	Tue, Nov 18	Geometric algorithms for streaming data (a.k.a. low-distortion embeddings III)	
22	Thu, Nov 20	Geometric algorithms in external memory	
23	Tue, Nov 25	Exciting topic I	
X	Thu, Nov 27		
24	Tue, Dec 2	Combinatorial geometry	Assignment IV due.
25	Thu, Dec 4	Exciting topic II	
26	Tue, Dec 9	Conclusions	