

CSE 784: Geometric Modeling
Spring 2010
(Tentative Syllabus)

Lectures	Materials
Mar 29	Introduction to curves
Mar 31	Bezier curves I
Apr 01	Bezier curves II
Apr 02	Subdivision curve
Apr 05	B-splines I
Apr 07	B-splines II
Apr 09	Matrix Forms
Apr 12	Matrix based subdivision
Apr 14	More on curve modeling
Apr 16	Basic surface topology
Apr 19	Surface equations and curvatures
Apr 21	Bezier surface I
Apr 23	Bezier surface II
Apr 26	de Casteljau for Bezier surface
Apr 28	B-spline surfaces I
Apr 30	Midterm
May 03	B-spline surfaces II
May 05	Biquadratic B-spline subdivision
May 07	Doo-Sabin subdivisions
May 10	Bicubic B-spline subdivision
May 12	Catmull-Clark subdivision
May 14	B-rep and Boolean Ops.
May 17	CSG representation and Euler Ops.
May 19	Voronoi Diagram and Delaunay Triangulations
May 21	Curve Reconstruction I
May 24	Curve Reconstruction II
May 26	Decimation I
May 28	Multiresolution
June 02	Multiresolution
June 04	Wrap-up

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

Office hours: **MWF 12:30-1:00 pm. or by appointment**

Web-page: <http://www.cse.ohio-state.edu/~tamaldey/course/784/syllabus.html>