Lecture #1: Wednesday, 9 January 2008
Topics: Course Outline
Lecturer: Leonidas Guibas

Course Outline

January

Mon	7	No Class
Wed	9	Homogeneous Coordinates; The Projective Plane; Oriented Projective Geometry
Mon	14	Affine/Projective Transformations and their Matrix Representations Homework 1 out
Wed	16	Quaternions
Mon	21	MLK Day Holiday
Wed	23	Shape Modeling: Parametric and Implicit; Classification of Parametric Cubics
Mon	28	Polar Forms Homework 1 due; Homework 2 out
Wed	30	Continuity Constraints; Splines

February

Mon	4	B-splines
Wed	6	Rational Curves
Mon	11	Tensor-Product and Total-Degree Surfaces Homework 2 due; Homework 3 out

Wed	13	Subdivision Curves and Surfaces
Mon	18	President's Day Holiday
Wed	20	Triangle Meshes and their Representation; the Quad-Edge Data Structure Homework 3 due; Project (Homework 4) out
Mon	25	Solid Models; BSPs and their Uses
Wed	27	In class midterm

March

Mon	3	Intro to Geometry Processing; Surface Reconstruction
Wed	5	Mesh Smoothing
Mon	10	Mesh Simplification
Wed	12	Mesh Parametrization Project due