Lecture #1: Tuesday, 26 September 2006
Topics: Course Outline
Lecturer: Leonidas Guibas

Course Outline

September

Tue	26	Homogeneous Coordinates; The Projective Plane; Oriented Projective Geometry
Thu	28	Affine/Projective Transformations and their Matrix Representations

October

Tue	3	Quaternions
Thu	5	Shape Modeling: Parametric and Implicit Homework 1 out
Tue	10	Classification of Parametric Cubics
Thu	12	Polar Forms
Tue	17	Continuity Constraints; Splines
Thu	19	B-splines Homework 1 due; Homework 2 out
Tue	24	Rational Curves
Thu	26	Tensor-Product and Total-Degree Surfaces I
Tue	31	Tensor-Product and Total-Degree Surfaces II Homework 2 due; Homework 3 out

November

Thu	2	Subdivision Curves and Surfaces I

Tue	7	Subdivision Curves and Surfaces II
Thu	9	Triangle Meshes and their Representation; the Quad-Edge Data Structure Homework 3 due; Project (Homework 4) out
Tue	14	Solid Models; BSPs and their Uses
Thu	16	In class midterm
Tue	21	Thanksgiving Recess
Thu	23	Thanksgiving Recess
Tue	28	Mesh Simplification
Thu	30	Scattered Data Interpolation I

December

Tue	5	Scattered Data Interpolation II Project due
Thu	7	Class Summary and Course Evaluation