Lecture #1:   Tuesday, 4 January 2005
Topics: Course Outline
Lecturer: Leonidas Guibas

Course Outline

January

Tue	4	Homogeneous Coordinates; The Projective Plane; Oriented Projective Geometry
Thu	6	Affine/Projective Transformations and their Matrix Representations
Tue	11	Shape Modeling: Parametric and Implicit Homework 1 out
Thu	13	Classification of Parametric Cubics
Tue	18	Polar Forms
Thu	20	Continuity Constraints; Splines
Tue	25	B-splines Homework 1 due; Homework 2 out
Thu	27	Rational Curves

February

Tue	1	Quaternions
Thu	3	Tensor-Product and Total-Degree Surfaces I
Tue	8	Tensor-Product and Total-Degree Surfaces II Homework 2 due; Homework 3 out
Thu	10	Subdivision Surfaces I
Tue	15	Subdivision Surfaces II Homework 3 due; Project (Homework 4) out

Thu   17   In class midterm

Tue   22   Triangle Meshes and their Representation; the Quad-Edge Data Structure

Thu   24   Solid Models; BSPs and their Uses

March

Tue   1   Mesh Simplification

Thu   3   Scattered Data Interpolation I

Tue   8   Scattered Data Interpolation II
              Project due

Thu   10   Class Summary and Evaluation