

Lecture #1: Thursday, 10 January 2002
Topics: Course Outline
Lecturer: Leonidas Guibas

Course Outline

January

Tue 8 No Class
Thu 10 Homogeneous Coordinates; The Projective Plane
Tue 15 Affine and Projective Transformations
Homework 1 out
Thu 17 Quaternions
Tue 22 Shape Modeling: Parametric and Implicit
Thu 24 Classification of Parametric Cubics
Tue 29 Polar Forms
Homework 1 due; Homework 2 out
Thu 31 Continuity Constraints; Splines

February

Tue 5 B-Splines
Thu 7 Rational Curves
Tue 12 Tensor-Product and Total-Degree Surfaces I
Homework 2 due; Homework 3 out
Thu 14 Tensor-Product and Total-Degree Surfaces II
Tue 19 Subdivision Surfaces I
Thu 21 Subdivision Surfaces II

Tue 26 Triangle Meshes and Their Representation
Homework 3 due; Project (Homework 4) out

Thu 28 Mesh Simplification

March

Tue 5 Mesh Compression

Thu 7 Scattered Data Interpolation

Tue 12 Solid Models; BSPs and Their Uses

Thu 14 Class Summary

Fri 15 Project due

Mon 18 Final Examination