

CSE 788.Y14: Sample Based Shape Modeling in Graphics and Visualization
Autumn 2005
(Tentative Syllabus)

Lectures	Materials
	Preliminaries
Sep 22,27	Shapes and Sampling
Sep 27,29	Voronoi / Delaunay Geometry
	Curve Reconstruction
Oct 04	Algorithm
Oct 06	Correctness
	Surface Samples
Oct 11	Geometry
Oct 13	Topology
	Surface Reconstruction
Oct 20	Cocone Algorithm
Oct 25	Correctness
	Noise
Oct 27	Noisy Samples
Nov 03	Algorithm
	Smoothing
Nov 15	MLS techniques
Nov 17	Adaptive MLS
	Medial Axis
Nov 22	Approximation
Nov 29	Convergence
	Shape Segmentation
Dec 01	Segmentation

Instructor: **Tamal K. Dey**, Room: **483 DL, 292-3563**.
Office hours: **TR 1:00-2:00 pm. or by appointment**

- Grading:** Grading will be based on three things.
- A. Your experiments with the software (provided) with some data from your area of applications. Search Internet to obtain interesting data and find out application of these software systems.
 - B. A short term paper on a related topic of your choice.
 - C. Your class participation. Actually if you point out non-trivial errors in the notes, presentations, you get credit.