CE 550 - Fall 2006

TOPICS
Introduction, Overview of computer-aided engineering
Geometric Modeling: Curve representation
Geometric Modeling in engineering Design I
Surface representation, Data exchange formats
Geometric Modeling in engineering Design II
Modeling methods - paper. STEP, IGES, Translators
Topology Concepts
Parasolid modeling concepts
Meshing Methods for Design Models
   Iso mesh, Paving methods -- I
Meshing Methods for Design Models
   Iso mesh, Paving methods -- II
Visualization in Design Applications:
   Graphical visualization
Visualization in Design Applications I
Delaunay Triangulation
Results Visualization
Product Data Management
Optimization Methods in Design/Analysis Applications

LAB TOPICS
Ideas Tutorials
Design: Part Modeling---Fundamental Skills
TUTORIALS  1, 2

Design: Part Modeling---Fundamental Skills
TUTORIALS  3, 4, 5

Design: Part Modeling---Fundamental Skills
TUTORIALS  6, 7, 8

Design: Part Modeling---Fundamental Skills
TUTORIALS  9, 10, 11

Design: Part Modeling---Fundamental Skills
TUTORIALS 12, 13, 14

Design: Part Modeling---Fundamental Skills
TUTORIALS 15, 16, 17

Design: Surfacing-->Fundamental Skills
TUTORIALS 14, 15, 17

Design: Assemblies-->Fundamental Skills
TUTORIALS 8, 9
Design: Assemblies-->Fundamental Skills
TUTORIALS 10, 11

Simulation--> Simulation Projects
TUTORIALS 1, 2, 3

Simulation--> Simulation Projects
TUTORIALS 4, 5, 6

Simulation--> Simulation Projects
TUTORIALS 7, 8, 9

Simulation--> Simulation Projects
TUTORIALS 10, 11, 12