1 Major Topics

1.1 Computer Graphics Programming Environment (4 Lectures)

1.1.1 Graphics Primitives and Directives
1.1.2 Demonstration with Mathematica Graphics
1.1.3 Two- and three-dimensional plots:
   (student selects a programming environment)
   functions and data
1.1.4 Test-1: (from classwork and homework problems) February 16, 2006

1.2 Classical Graphics (3 Lectures)

1.2.1 Descriptive Geometry
1.2.2 Principal views
1.2.3 Auxiliary views
1.2.4 Test-2: (from classwork and homework problems:
   sketching different views) March 23, 2006

1.3 Mathematical elements of Computer Graphics (4 Lectures)

1.3.1 2-D Transformations
1.3.2 Computer Implementation:
   Matrix operation and perspective views
1.3.3 Hand Calculations and sketches

1.4 Interpolations and splines

1.5 3-D Graphics, Surface, Color

1.6 Individual Projects:
   Report: Calculations and Graphics

Students can use any Graphics system of their choice.
A structured programming language will be preferred.
May 11, 2006 — Final Examination