

TECHNICAL DRAFTING A

COURSE PACING GUIDE

1ST TRIMESTER

2007-08

TOPICS COVERED: Fundamentals of Parametric Modeling, Template Construction, 3D Modeling, 3D Assemblies, 3D Part Animation.

TOPIC	TIME FRAME
HISTORY and INTRO TO CAD INVENTOR SOFTWARE	1 WEEK
3D MODELING Problems: Creating a "B" size template; 5.4-9; 5.10-14; 5.15-23; 5.41-46. Test: Parametric 3D Modeling. Extra credit: 5.34-40.	2 WEEKS
3D MODELING W/CIRCLES and DIMENSIONING Problems: Creating an "A" size template; 5.54; 5.47-49; 5.53-58. Test: Circles and Dimensioning. Extra credit: 5.60-62.	2 WEEKS
3D MODELING ISOMETRIC Problems: 14.60-61; 5.89-90. Test: Isometric Models Extra Credit: Various problems...see instructor.	1 WEEK
ASSEMBLY CREATION Problems: 7-5-B (caster); Shaft Support Assembly. Test: Students are evaluated on computer screen. Extra credit: On an individual basis as needed.	3 WEEKS
ANIMATION Problems: Animate assembly 7-5-B, and the Shaft Support Assembly. Test: Students are evaluated on computer screen. Extra credit: Available upon request.	2 WEEKS
SEMESTER WRAP UP EXAM REVIEW ADMINISTER FINAL EXAM	1 WEEK

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COURSE PERFORMANCE OBJECTIVES
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The students will learn how to operate the CAD Inventor Software.

The students will learn the history of CAD.

The students will learn how to create “A”, and “B” size templates for their drawings.

The students will learn how to create 3D models.

Students will learn how to change visibility lines in models.

The students will learn how to create 3D models with circles.

The students will learn how to put center lines on circles.

The students will learn how to create 3D models with dimensions.

The students will learn how to create assemblies.

The students will learn how to animate assemblies.

In addition, the students will learn multiple editing, copying, rendering, and general cleanup tricks designed to enhance the quality of their work/drawings.