

ME 407 Computer Aided Design and Manufacture Part 1

Cole/Bethune

Bethune, x3414, Room 303 at 110 Cummington ST., Bethune@bu.edu
Tuesday/Thursday at 4:00, Room: PHO 203

TEXT: Class handouts (Optional reference-Engineering Drawing and Design-Bethune)

GRADES: 70% Lab Homework, 30% Quiz

The Part 1 grade will be averaged with Part 2's grade to determine your final grade.

LATE POLICY: All assignments are due as assigned
No credit will be given for late work.

Copied assignments will receive no credit and 5 points will be subtracted from your final grade for each assignment. If you let someone copy your work, you will be fined equally with the copier.

LAB ASSIGNMENTS: Hand in copies of your assignments in the CAD lab.
Room 302 at 110 Cummington Street. A box labeled ME407 is available
In the TA area. **IMPORTANT:** Sign each assignment in ink.

LECTURE TOPICS

- 9/7 Introduction, 2D Construction; Sketching – Isometric, Dimetric, Trimetric
EX2-10 (2D shape only), EX2-18 – Thickness = 10mm,
EX2-27 – Thickness = 5mm **Due 9/14**
- 9/9 3D Construction; Sketching – Perspective, 2 Point, 1 Point
EX3-12 (2d shape only), EX3-42-Thickness = 10mm,
EX3-43 (2D shape only), EX3-53 **Due 9/16**
- 9/14 Orthographic views; Sketching, Orthographic to Isometric
EX5-10-F, T & RS views, EX5-56-F, T,& RS views,
EX5-121-F, T, RS, and Isometric views,
EX6-23- F, T, and Section view **Due 9/21**
- 9/16 Assembly Drawings; Sketching, Exploded drawings
EX12-16 A & B, EX12-18 A&B-animate the assembly
A TA must sign off on the animation **Due 9/23**

- 9/21 Threads/Fasteners; Sketching, Design concepts
EX11-22, EX12-21 **Due 9/30**
- 9/23 Dimensions; Sketching, Dimensions (Practice quiz)
EX8-13-Inches, EX8-32-mm, EX8-43-mm **Due 10/5**
- 9/30 Dimensions; Sketching, Dimensions
EX8-53(inches), EX6-32 F,T, Section A-A,B-B views.
Hint: No double dimensions, that is, dimension a distance only once.
Due 10/7
- 10/5 Tolerances; Sketching, Tolerances
EX9-1-Thickness = 5mm, only on view,
EX9-22, EX9-31 – Linear tolerances only
EX10-28, Ex10-41 – Geometric positional tolerances
Due 10/14
- 10/7 Gears/Bearings/Tolerances/Fits
Class handouts – done in class
Drawing project: Team project-2 students per team.
Due 10/21
- 10/12 Monday's classes
- 10/14 No lecture – work on drawing project
- 10/19 No lecture – work on drawing project
- 10/21 QUIZ – Open notes, closed books