WORCESTER POLYTECHNIC INSTITUTE
ES 1310 – Introduction to Computer Aided Design. Term B'99
Final project. *Final Report.*
Due: December 17, 1999.

http://me.wpi.edu/~ES1310/

Instructor: Cosme Furlong, TA: Greg Rixon

Project objective: to generate detail CAD drawings of all the specified components of an engineering assembly (some design/research is required). In addition, to generate an isometric, and exploded views (both with ballooning) of the assembly, and a parts/materials list as part of the exploded view. All drawings are to be presented on a professional format following engineering standards and regulations.

The final report shall contain, in the order listed, the following information:

1. *Cover page* (see attached sheet)
2. *Table of contents*
3. *Design description*: a short description of the device and its function, materials used, and manufacturing methods
4. *Methodology*: a short description of the methods that were utilized for generation of the CAD components and assemblies
5. *An exploded isometric view showing how the components fit together*. List of materials with corresponding ballooning is required
6. *An assembly drawing showing the components assembled together*. This drawing should also show a list of materials with corresponding ballooning
7. *Multiview detail drawings of each component*, properly dimensioned and toleranced, including auxiliary and/or section views if appropriate
8. *Conclusions and recommendations*
9. *List of references*

Observations:

The multiview drawings of each component may be produced on either A or C size paper. The assemblies should be produced on C size paper and Z-folded to fit into the report binder.

All drawings are to be CAD generated with proper borders, titles, scales, name (drawn by), date, etc.

All detail drawings should be fully dimensioned and toleranced (or have a general tolerance note). Dimensions **must** be at least 1/8" high when printed out.

Line weight for visible lines should be 3, and 1 for dimensions, centerlines, hatching, etc.

Title block should have a *descriptive* name for the part (not "part1", part "2").

Color printouts are recommended, but please *do not* use yellow. Use landscape orientations for all your printouts.

REPORT

as a partial requirement
for
the course on

<COURSE NAME>
<COURSE NUMBER, TERM>

FINAL PROJECT:
<**TITLE**, boldface and capitalized>

Submitted by:

<Sign your name. First partner >
_____

<Type your name. First partner – use alphabetical order . E-mail>

<Sign your name. Second partner >
_____

<Type your name. Second partner . E-mail>

Submitted to:

Dr. Cosme Furlong

DEPARTMENT OF MECHANICAL ENGINEERING
WORCESTER POLYTECHNIC INSTITUTE
WORCESTER, MA 01609-2280

<Date of submission>

Project score:

ORGANIZATION AND PRESENTATION:	_____	out of 15 %
DESIGN DESCRIPTION AND METHODOLOGY:	_____	out of 10 %
DETAIL DRAWINGS ACCURACY:	_____	out of 35 %
EXPLODED VIEW ASSEMBLY:	_____	out of 20 %
ASSEMBLY:	_____	out of 20 %
Total:	_____	out of 100 %