Deliverable 1: Preliminary design concepts and Management Plan

- **Due: 6A**
- **Team Memo**
  - Begin with executive statement which tells why the memo was written
  - Briefly discuss your team’s management plan. Include your management plan in body of memo (this should be a table and must have a title above it that says *Table 1: An appropriate title*)
  - Summarize (and refer to) your Gantt chart
  - Discuss Spring Analysis and Refer to Spreadsheet.
    - What was the purpose of the experiment?
    - What was the spring analysis test procedure?
    - What were the results (including the linear regression)?
    - Include your figure in the body of memo (this is a figure and must have a title below the figure that says *Figure 1: An appropriate title*)
    - How does this test pertain to your design project?
- **Enclosures**
  - Gantt chart
  - Spring Analysis Spreadsheet (details next time)
Spring Analysis Spreadsheet

- Enter data in a spreadsheet. Label columns with description of data and units used.
- Compute the average force at each angle measured.
- Create one graph:
  - Graph the average spring force vs. arm angle and the spring force vs. arm angle for each mousetrap tested.
  - Add a linear regression line to the average spring force data.
  - Compute m and b (using internal spreadsheet functions) for the linear regression and list the units associated with m and b.
Project Management

- **Management Plan:**
  - Equitable division of specific tasks between team members
  - List of tasks should:
    - Be well defined
    - Have specific person assigned to it

- **Timeline/Gantt Chart:**
  - Lists all start / finish dates for each task
  - Helps determine progress towards completion of project
  - Provides graphical representation of project complexity
Management Plan

Table 2: Team 11 Eng1101 Design Project Management Plan

<table>
<thead>
<tr>
<th>Task</th>
<th>Person</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gantt chart and management plan</td>
<td>John Smith</td>
<td>Prepare final version of Gantt chart and table for management plan</td>
</tr>
<tr>
<td>Del #1 Memo</td>
<td>Jane Jones</td>
<td>Prepare final version of memo</td>
</tr>
</tbody>
</table>

- Should include same tasks as your timeline
- Shows who is in charge of what tasks
- Needs a title
Gantt Chart

- Microsoft Visio
  - Used in the Chem. Eng. and EE departments and many senior design classes
  - **Start → All Programs → MSVisio 2003**

- Microsoft Excel
  - Create your own on a spreadsheet

- **Must have a title!!!!!!**
Timeline (Gantt Chart)

Table 3: Gantt Chart for Team 11’s Eng1101 Design Project

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May</td>
</tr>
<tr>
<td>2</td>
<td>Interviews of previous ENG1101 students, VisioTech sketches of design concepts, and vehicle selection matrix memo</td>
<td>3/17/2003</td>
<td>3/28/2003</td>
<td>12d</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Design project test clay</td>
<td>4/18/2003</td>
<td>4/19/2003</td>
<td>1d</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Final design report</td>
<td>4/17/2003</td>
<td>4/21/2003</td>
<td>15d</td>
<td></td>
</tr>
</tbody>
</table>

- Must include a minimum of 8 tasks
- Example of timeline in Beer, pg. 37
- Which tasks will you include?
Visio Hints

- Click on the "Project Schedule" folder
  - Double click on the Gantt Chart (US units) icon
  - A window will pop up allowing you to define some chart options such as major and minor time units, start and end dates, number of tasks

- Once Gantt chart template appears – go to Gantt Chart – configure working time if you want to include Saturday and Sunday as work days

- Do not link tasks

- Go to Page Setup to print chart on one page (print in landscape mode)