

FOR 240 Homework – Assignment 1
Creating Gantt Chart for Project Scheduling
 Introduction to Computing in Natural Resources

Creating a simple Gantt chart isn't difficult when using Excel, but it does require some setup work. **Gantt charts** are used to represent the time required to perform each task in a project. In your homework assignment, you need to use the data showed in Figure 1 to create a Gantt chart for a logger survey project in West Virginia, which is like what is showed in Figure 2.

| | A | B | C | D | E |
|----|------------------------------------------------------|-------------------|-----------------|-----------------|---|
| 1 | Management Plan for Loggers' Survey In West Virginia | | | | |
| 2 | Task | Start Date | Duration | End Date | |
| 3 | Planning Meeting | 1/15/2003 | 1 | 1/15/2003 | |
| 4 | Develop Survey Form | 1/17/2003 | 30 | 2/15/2003 | |
| 5 | Print and Mail Forms | 2/15/2003 | 10 | 2/24/2003 | |
| 6 | Receive Responses | 4/3/2003 | 20 | 4/22/2003 | |
| 7 | Data Entry | 4/20/2003 | 20 | 5/9/2003 | |
| 8 | Data Analysis | 5/10/2003 | 20 | 5/29/2003 | |
| 9 | Write Report | 5/25/2003 | 10 | 6/3/2003 | |
| 10 | Finalize Report | 6/4/2003 | 5 | 6/8/2003 | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |

Figure 1. Data for a Gantt chart.

Here are the steps to create this chart using MS Excel 2003:

- (a) Enter the data as shown in Figure 1. The formula in cell D3, which was copied to the rows below it, is $=B3+C3-1$.
- (b) Use the Chart Wizard to create a stacked bar chart from the range **A3:C10**. Use the second subtype, which is labeled Stacked Bar.
- (c) In Step 2 of the Chart Wizard, select the Column option. Also, notice that Excel incorrectly uses the first two columns as the Category axis labels.
- (d) In Step 2 of the Chart Wizard, click the Series tab and add a new data series. Then, set the chart's series to the following:
 - Series 1: **B3:B10**
 - Series 2: **C3:C10**
 - Category (x) axis labels: **A3:A10**

- (e) In Step 3 of the Chart Wizard, remove the legend and then click Finish to create an embedded chart.
- (f) Adjust the height of the chart so that all the axis labels are visible. You can also accomplish this by using a smaller font size.
- (g) Access the Format Axis dialog box for the horizontal axis. Adjust the horizontal axis Minimum and Maximum scale values to correspond to the earliest and latest dates in the data (note that you can enter a date into the Minimum or Maximum edit box). You might also want to change the date format for the axis labels.
- (h) Access the Format Axis dialog box for the vertical axis. In the Scale tab, select the option labeled Categories in reverse order, and also set the option labeled Value (y) axis crosses at maximum category.
- (i) Select the first data series and access the Format Data Series dialog box. In the Patterns tab, set Border to None and Area to None. This makes the first data series invisible.
- (j) Apply other formatting, as desired.

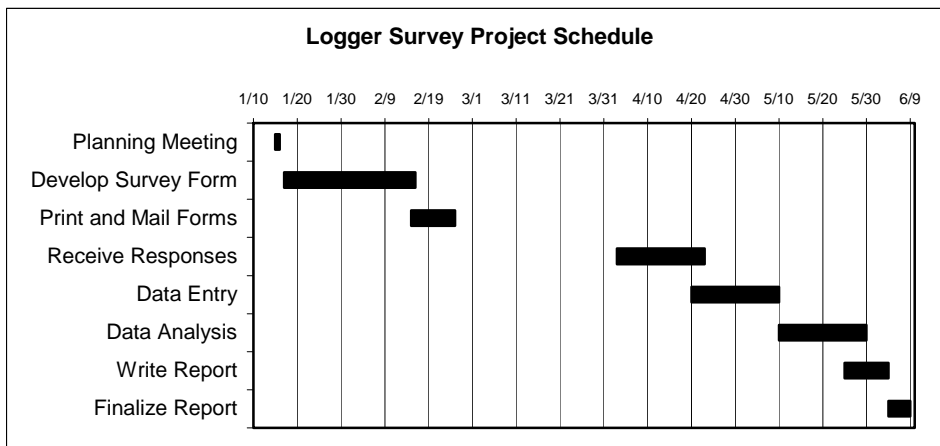


Figure 2. Schedule chart for a loggers' survey project (Excel 2003).

Here are the steps to create this chart using MS Excel 2007:

(a) Enter the data as shown in Figure 1. The formula in cell D3 is: $=B3+C3-1$. To copy the formula for cell D4 to cell D10, clicking cell D3 and putting the mouse cursor at the lower right corner of the cell. When it becomes a solid cross, drag the cursor down to D10.

(b) Select the data range A3:C10, then click "insert" in the menu, a bunch of options are shown. Choose the bar option, then 2-D stacked bar. Notice that you will get a chart with incorrect category axis labels.

(c) Now we will further modify this chart. Right click the void area of the chart and choose "Select data" from the dropdown menu. The window "Select data source" will be popped up. We can change the category axis label by clicking the "Edit" button in the right frame box. In the input box, change the axis label range to A3:A10, and click "OK".

(d) Continue step (c). To edit the data source of "start date" and "duration", click "series 1" in the left frame box and click "Edit", you can define the series name as "Start Date" and

series value as B3:B10. Now, add a new data series as “Duration” with series value C3:C10, and then click “OK”.

(e) To remove the legend in the chart, right click the icon of legend and choose “Delete”.

(f) Adjust the height of the chart so that all the axis labels are visible. You can also accomplish this by using a smaller font size.

(g) Right click the horizontal axis to access the Format Axis dialog box. Adjust the horizontal axis minimum and maximum scale values to correspond to the earliest and latest dates in the data (note that you can enter a date into the minimum and maximum edit box. For example, enter 37631 in the minimum edit box. You can also change the date space shown in the chart by changing the major unit from default value 50 to 30 or other values you want). You may also want to change the date format for the axis labels from mm/dd/yyyy to mm/dd.

(h) Access the Format Axis dialog box for the vertical axis. In the Axis options tab, check the “categories in reverse order” and set the option for “Horizontal axis crosses” to “At category number: 1” or use automatic option.

(i) The last thing to do is to make the first data series invisible. In the embedded chart, right click the bar corresponding to the first data series, and choose “Format data series” from the dropdown menu. In the “Fill” and “Border color” options, set “No fill” and “No line”. Now, you get it.

(j) Apply other formatting as desired.

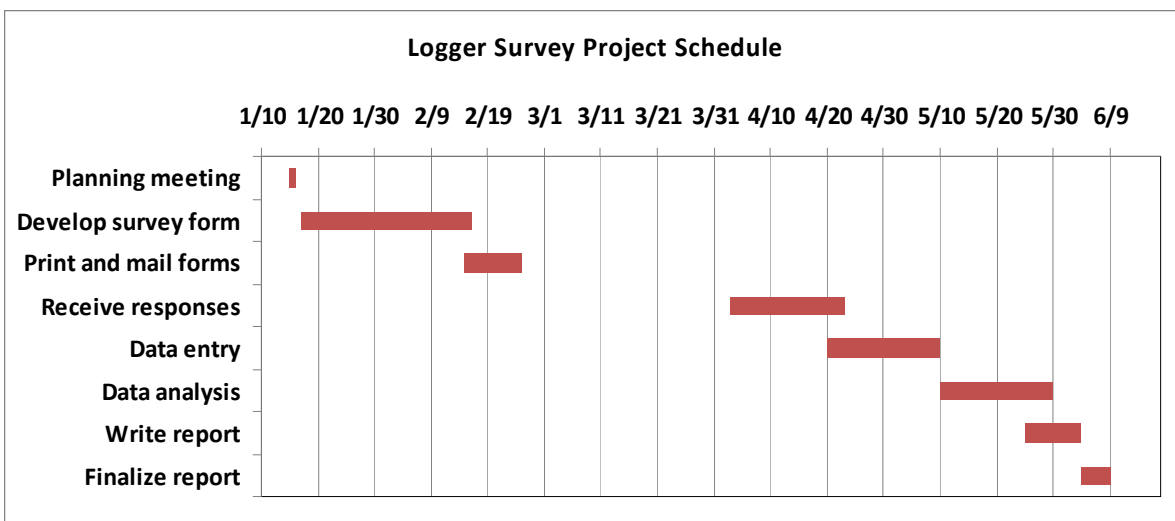


Figure 3. Schedule chart for a loggers’ survey project (Excel 2007).

Please provide me a typed summary report together with your final chart by the beginning of the class next week.