## Wednesday 1 October - Class Session 11

## Homework:
      Read  Budny:  Sec 4.13, 4.14
      Programming Assignment 5: Due Wednesday 8 October  (Counts as 2 assignments)

## Class Activities:

1.    Create separate functions for plotting polynomial and spline fits to data.  Each function has
    the following requirements
          needs:      xdata, ydata, symbol, linetype
          results:    coeff (polynomial coefficient vector if polynomial fit)
                     splinecoef (spline coefficient matrix if spline fit)

    Each function is to do the following:
        delete unplottable data (if necessary)
        if polynomial fit
            ask user for degree of polynomial (must be <= length(xdata))
        determine appropriate fit to data
        create (xfit,yfit) set for line display
        display data points on graph as distinct data points
        display fit on graph

2.    Modify your script from Class Activity 10 - 4 to:
        add polynomial and spline fits to possible fits

**Group assignment:**
    **Turn in a printed copy of your script from activity 2 and the polynomial fit function
from activity 1.  Test your script by plotting the data contained in ca09dat.dat (available in
the get12 directory).  Print and turn in the polynomial fit plot that looks like it best fits the
data.**