

## **STAT 110 – Chapter 13 Definitions – Part I**

Strategy for Exploring Data:

1. Always plot your data: make a graph, usually a histogram or stemplot.
2. Look for the overall pattern (shape, center, spread) and for striking deviations such as outliers.
3. Choose either the five-number summary or the mean and standard deviation to briefly describe center and spread in numbers.

An additional step:

4. Sometimes the overall pattern of a large number of observations is so regular that we can describe it by a smooth curve.

density curve – a curve that has no negative values where the area under the curve is exactly one

normal curves – symmetric, bell-shaped curves with these properties:

1. It's completely described by giving the mean and standard deviation.
2. The mean determines the center of the distribution.
3. The standard deviation determines the location of the “inflection points”