

**Statistics 1:
Introduction to
Probability and Statistics**

Section 3-4

**Exploratory Data
Analysis**

- **First stage in analysis**
- **Summaries that help us see**
 - **Outliers**
 - **Shape**
 - **Comparisons**

**Exploratory Data
Analysis**

- **Outliers**
 - **Observations that are not consistent with the rest of the data**
 - **Many ways to identify outliers**
 - **Some used in exploratory steps**

Exploratory Data Analysis

- **Shape**
 - Box (and whisker) Plots
 - Simple distribution pictures
 - Often used for initial steps to explore data sets

Exploratory Data Analysis

- **Box Plot**
 - 5 number summary
 - Min
 - P_{25} (Q_1)
 - P_{50} (Median or Q_2)
 - P_{75} (Q_3)
 - Max

Exploratory Data Analysis

- **Box Plot**
 - Graph of the 5 number summary
