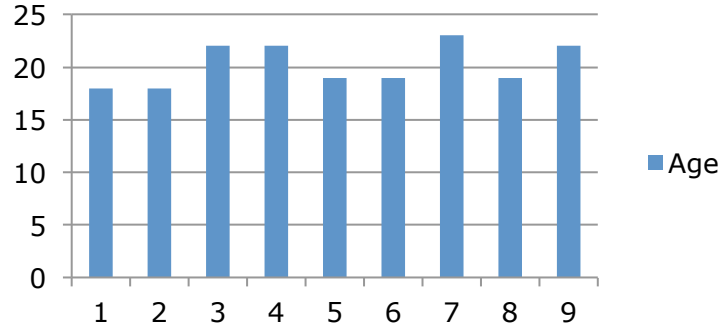# Graphical Display of Statistics

Spring 2015
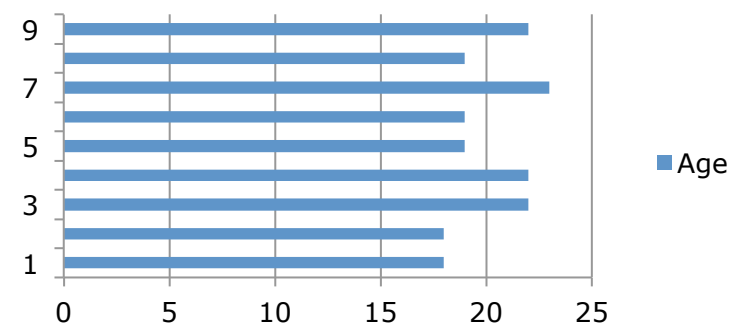
Common Display of Statistical Info

Bar:

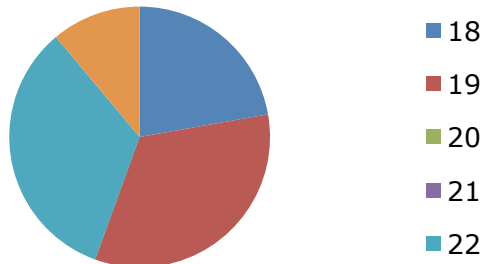**Age of Freshmen**

Age of Freshmen

Pie:

Age of Freshmen

Sample CS120 Dataset

- Consider the following CS120 class information:

ID	Year	Age
0001	FR	18
0002	FR	18
0003	SR	22
0004	JR	22
0005	SO	19
0006	FR	19
0007	SR	23
0008	SO	19
0009	SR	22

If this data was in SPSS, what would be the Type and Measure for each variable?

Exercise
Copy CS120.sav from CS 130 Public to your Desktop.

- Let's discuss the variable definitions and data.

- Create a **Bar Chart** to show how many students in each Year took CS 120.

- Create a **Pie Chart** to show how many students in each Year took CS 120.

- Create a **Bar Chart** to show the **median age** of students in each Year.

- Create a Word document called **graphs.docx** that has all three graphs in the document properly labeled and looking professional. Let me see the results.

- Enter this data into Excel and build the three charts above.

CS130 - SPSS & Graphical Display of Statistics

Bar Chart

We could take the above information and show using a bar chart a graphical representation of the number of students that are FR, SO, JR, and SR.

CS100 Students By Class

CS130 - SPSS & Graphical Display of Statistics
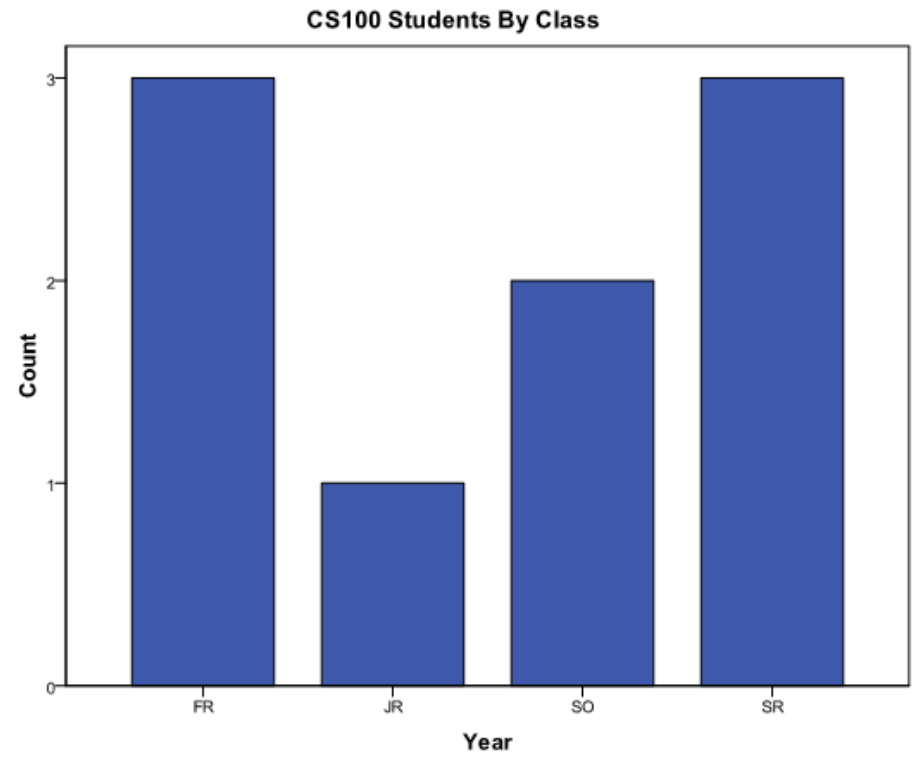
Pie Chart

- Notice with a pie chart we get a better visualization of the frequency of occurrence as a percent. The amount of arc in the above example is proportional to the represented quantity.

CS100 Students By Class

Year
FR
SO
JR
SR

CS130 - SPSS & Graphical Display of Statistics
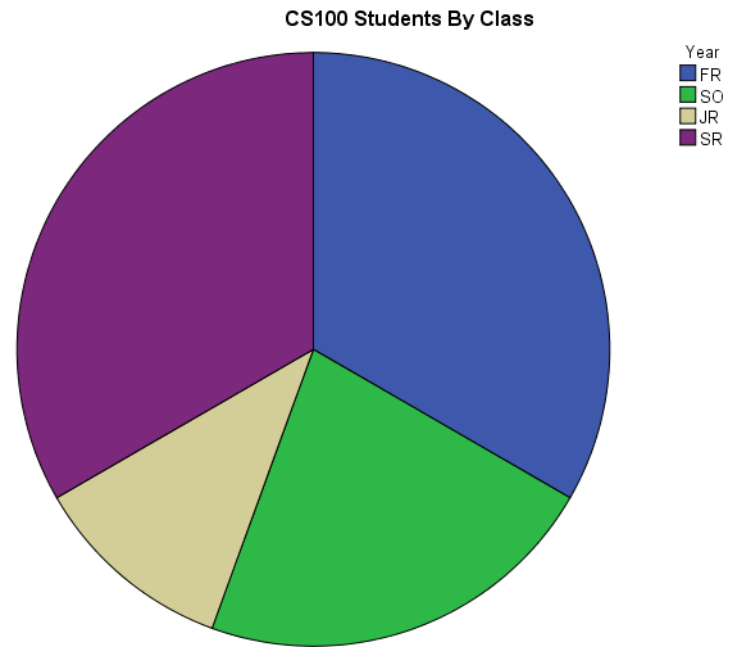
More SPSS practice

- Compare the mean, standard deviation, and median for age by year
Analyze | Compare Means | Means

- Add the Report to the Word document from earlier

Make sure the Year is in the correct order!

Report

Age Year	Mean	N	Std. Deviation	Median
FR	18.33	3	.577	18.00
SO	19.00	2	.000	19.00
JR	22.00	1	.	22.00
SR	22.33	3	.577	22.00
Total	20.22	9	1.986	19.00