

[OL] = Ott & Longnecker *Statistical Methods and Data Analysis*, 5<sup>th</sup> edition.

Ch 20	Communicating and documenting results of analyses
2.5	Data Management issues
<b>Describing data</b>	
3.3	Graphical methods – histograms, stemplots
3.4	Central tendency – mode, median, mean
3.5	Variability – range, percentiles, IQR, var, SD, CV
3.6	Distributions – boxplots
3.7	More than one variable
<b>Representing Experimental Results</b>	
4.1	Probability – definition (details 4.2-4.5)
4.6	Random variables
4.7	Probability Distributions – discrete RVs
4.8	Binomial
4.9	Probability Distributions – continuous RVs
4.10	Normal
<b>Describing Populations based on Data</b>	
4.11	Random Sample
4.12	Sampling Distribution – SE, CLT
5.2	Estimating population mean $\mu$ (sample size 5.3)
5.4	Tests involving $\mu$ ( $H_a$ , $H_0$ , TS, RR), Type I/II errors
5.5	Sample size
5.6	P-value
5.7	Inference for $\mu$ with $\sigma$ unknown ***
5.8	Inference for median
<b>Comparing 2 population central values</b>	
6.1, 6.2	$\mu_1 - \mu_2$ independent samples (6.3 nonparametric alternative)
6.4	$\mu_1 - \mu_2$ Paired samples (6.5 nonparametric alternative)
6.6	Sample size planning
<b>Categorical data</b>	
10	Proportions, independence/homogeneity, Odds Ratios
<b>This Semester</b>	
11, 12, 13	Regression
8, 9, 14, 15, (16), 17, 18, 19	Experimental Designs