

Math 114 Elementary Statistics & Probability

Text: *Introduction to Statistics and Data Analysis* by Peck, 6th edition.

SECTION	TOPICS
1.3	Statistics and the Data Analysis Process
1.4	Types of Data and Some Simple Graphical Displays
2.1	Statistical Studies: Observation and Experimentation
2.2	Sampling
2.3	Simple Comparative Experiments
2.4	More on Experimental Design
3.1	Displaying Catagorical Data: Comparative Bar Charts and Pie Charts
3.2	Displaying Numerical Data: Stem-and-Leaf Displays
3.3	Displaying Numerical Data: Frequency Distributions and Histograms
3.4	Displaying Bivariate Numerical Data
4.1	Describing the Center of a Data Set
4.2	Describing Variability in a Data Set
4.3	Summarizing a Data Set: Boxplots
4.4	Interpreting Center and Variability: the Emperical Rule
5.1	Correlation
5.2	Linear Regression: Fitting a Line to Bivariate Data
6.1	Chance Experiments and Events
6.2	Definition of Probalibility
6.3	Basic Properties of Probability
7.1	Random Variables
7.2	Probability Distributions for Discrete Random Variables
7.3	Probability Distributions for Continuous Random Variables
7.5	Binomial and Geometric Distributions
7.6	Normal Distributions
8.1	Statistics and Sampling Variability
8.2	The Sampling Distribution of a Sample Mean
8.3	The Sampling Distribution of a Sample Mean
9.1	Point Estimation
9.2	Large-Sample Confidence Interval for a Population Proportion
9.3	Confidence Interval for a Population Mean
10.1	Hypotheses and Test Procedures
10.2	Errors in Hypothesis Testing
10.3	Large-Sample Hypothesis Tests for a Population Proportion
10.4	Hypothesis Tests for a Polulation Mean
FINAL EXAM	