

# TABLE OF CONTENTS

Licensing

Student Usage of the Book

## 1: Introduction to Statistics

- 1.1: What is Statistics?
- 1.2: Importance of Statistics
- 1.3: Two Realms of Statistics- Descriptive and Inferential
- 1.4: Sampling Methods
- 1.5: Variables
- 1.6: Levels of Measurement

## 2: Descriptive Statistics

- 2.1: Descriptive Statistics and Distributions
- 2.2: Using and Understanding Graphs
- 2.3: Histograms
- 2.4: Box Plots, Quartiles, and Percentiles
- 2.5: Measures of Central Tendency
- 2.6: Measures of Dispersion
- 2.7: Distributions- Using Centrality and Variability Together
- 2.8: Measures of Median and Mean on Grouped Data
  - 2.8.1: Measures of Median and Mean - Grouped Data Loss of Information - Optional Material
- 2.9: Measures of Variance and Standard Deviation on Grouped Data
  - 2.9.1: Measures of Variance and Standard Deviation - Loss of Information - Optional Material

## 3: Probability

- 3.1: Introduction to Probability
- 3.2: Counting Strategies
  - 3.2.1: Counting with Indistinguishable Objects - Optional Material
- 3.3: Counting and Compound Events
- 3.4: Probability and Compound Events

## 4: Probability Distributions

- 4.1: Random Variables
- 4.2: Analyzing Discrete Random Variables
- 4.3: Binomial Distributions
  - 4.3.1: Multinomial Distributions - Optional Material
- 4.4: Continuous Probability Distributions
- 4.5: Common Continuous Probability Distributions
- 4.6: Accumulation Functions And Area Measures in Normal Distributions

## 5: Sampling Distributions

- 5.1: Introduction to Sampling Distributions
- 5.2: Sampling Distribution of Sample Means

- [5.3: Sampling Distribution of Sample Proportions](#)
- [5.4: Sampling Distribution of Sample Variances - Optional Material](#)

## 6: Confidence Intervals

- [6.1: Introduction to Confidence Intervals](#)
- [6.2: Confidence Intervals for Proportions](#)
- [6.3: Confidence Intervals for Means \(Sigma Known\)](#)
- [6.4: Confidence Interval for Means \(Sigma Unknown\)](#)
- [6.5: Confidence Intervals for Variances - Optional Material](#)

## 7: Hypothesis Testing

- [7.1: Introduction to Hypothesis Testing](#)
- [7.2: Claims on Population Means](#)
- [7.3: Claims on Dependent Paired Variables](#)
- [7.4: Claims on Population Proportions](#)
- [7.5: Claims on Population Variances - Optional Material](#)

## 8: Linear Correlation and Regression

- [8.1: Introduction to Bivariate Quantitative Data](#)
- [8.2: Linear Correlation](#)
- [8.3: Introduction to Simple Linear Regression](#)

[Index](#)

[Detailed Licensing](#)

[Glossary](#)

[Detailed Licensing](#)