# Research Statistics

**Pima Medical Institute Online Education**

**MTH310 Course Map**

## Speaking of Statistics

### What to Read
- **Topic: Statistics: What’s the Use?**
  - Read Chapter 1
- **Topic: Data Sampling**
  - Read Chapter 1 (Sociology)
- **Topic: Should You Believe Statistics?**
  - Read Chapter 1 (Public Health)

### What to Do
- **Activity: Basic Statistics Terminology**
- **Assignment: Studying Studies (Due _________)**
- **Discussion: Nurses’ Health Study (Due _________)**

## Measuring the Data

### What to Read
- **Topic: Data Types and Levels of Measurement**
  - Read Chapter 2
- **Topic: Measurement Errors**
  - Read Chapter 2 (Politics: Who Benefits from a Tax Cut?)
- **Topic: Percentages and Indexes**
  - No assigned reading

### What to Do
- **Discussion: Two Sides (Due _________)**
- **Assignment: Data Types (Due _________)**

## Visual Representations of Data

### What to Read
- **Topic: Frequency Tables**
  - Read Chapter 3
- **Topic: Graphical Presentation of Data**
  - Read Chapter 3
- **Topic: What’s Wrong with This Picture?**
  - Read Chapter 3

### What to Do
- **Discussion: Interpreting Graphs (Due _________)**
- **Assignment: Descriptive Analysis (Due _________)**
# Describing Data

**What to Read**
- Topic: What’s Average?
  - Read Chapter 4
- Topic: Measures of Variation
  - Read Chapter 4
- Topic: Statistical Paradoxes
  - Read Chapter 4

**What to Do**
- Assignment: Histograms (Due _________)
- Discussion: Descriptive Statistics (Due _________)

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# Probability in Statistics

**What to Read**
- Topic: Probability Basics
  - Read Chapter 6
- Topic: Probabilities with Large Numbers
  - Read Chapter 6
- Topic: Correlation versus Causation
  - Read Chapter 7

**What to Do**
- Assignment: Probability (Due _________)

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# Inferential Statistics

**What to Read**
- Topic: Sample Statistics and Confidence Intervals
  - Read Chapter 8
- Topic: Hypothesis Testing
  - Read Chapter 9

**What to Do**
- Final Assessment: Evaluating a Statistical Study