**OBJECTIVES: CHAPTER 9, *Samples (*Pages 232 – 256)**

* Understand the importance of a representative sample.
* Know the basic concepts and terminology of sampling.
* Realize that it is the size of the sample not its fraction of the larger population that determines the accuracy of the inferred statistics about the population.
* Understand the power of randomness when choosing a sample.
* Define SRS, simple random sampling.
* Be able to identify various sampling techniques: SRS, stratified samples, cluster samples, systematic samples, and multistage samples.
* Avoid sampling bias that can invalidate any conclusions that we may draw about the original population.
* Avoid nonresponse bias and response bias.
* Avoid poor sampling methods: voluntary response, convenience sampling, and nonrepresentative sampling frames that result in undercoverage.
* Look for biases in any survey others have done to determine the validity of their conclusions.
* Report on our sampling methods so that others can evaluate our conclusions and give us feedback.
* **Vocabulary:** population, sample, sample survey, bias, randomization, sample size, census, population parameter, statistic (sample statistic), representative sample, SRS (simple random sample), sampling frame, sampling variability, stratified random sample, cluster sample, multistage sample, systematic sample, pilot, voluntary response bias, convenience sample, undercoverage, nonresponse bias, and response bias.
* **Symbols:** mean (statistic), mean (parameter), standard deviation (statistic), standard deviation (parameter), proportion (statistic), proportion (parameter).

**WEDNESDAY, 1.22.25**

**Class Work: Discuss the previously assigned homework on** pages 253 – 255 (#25 – 33, 39).

**Homework: Study for your Chapter 9 Test to be taken on Monday, 1.27.25.** You may refer to your notes when you take this test. The ***Reading Guide (Vocabulary)*** that you received in class may be helpful.

**FRIDAY, 1.24.25 SERVE DAY**

**MONDAY, 1.27.25**

**Chapter 9 Test.** You may refer to your notes when you take this test.

**Class Work/Homework:** Read and take notes on pages 257 – 260 from Chapter 10: *Observational Studies and Experiments*.