**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.

**WEDNESDAY, 1.8.25**

**Objective:** Know the basic concepts and terminology of sampling.

**Class Work/Homework:**

* Read and take notes on pages 232 – 238.
* On a separate sheet of paper, define the following vocabulary:

population, sample, sample survey, bias, randomization, sample size, census, population parameter, statistic (sample statistic), representative sample, SRS (simple random sample), sampling frame.

* Next, write the symbols for the following: mean (statistic), mean (parameter), standard deviation (statistic), standard deviation (parameter), proportion (statistic), proportion (parameter).
* Page 252 (#6 – 11).
* Explain how you can get a SRS of the students at GTCHS.

**FRIDAY, 1.10.25**

**Class Work/Homework:**

* Review the vocabulary and symbols of pages 232 – 238.
* Read and take notes on pages 238 – 250.
* Define and give examples of the following vocabulary on a separate sheet of paper: sampling variability, stratified random sample, cluster sample, multistage sample, systematic sample, pilot, voluntary response bias, convenience sample, undercoverage, nonresponse bias, and response bias.
* Pages 251 – 253 (#1 – 5, 12 – 16).