Math 220 topic coverage

Week 1:   Chapter 1 (1.1, 1.2, 1.3, 1.4)

      Population, sample sampling methods. Types of data: numerical and categorical. Experiments and observational studies; Biases in studies.

Week 2:   Chapter 2 (2.1, 2.2, 2.3, 2.4)

      Descriptive statistics: Tables and graphs; Categorical data: bar graph, comparative bar graph, & pie chart. Numerical data: histogram, distribution and distribution shape. Stem & leaf plot, time series plot. Distribution shapes. Interpretation of graphs.

***** Must have a calculator with statistics function, & bring it to every class *****

Week 3:   Chapter 3 (3.1, 3.2, 3.3)

      Measures of center of data (mean, median, mode)
      Measures of spread of data (range, variance, standard deviation, Empirical Rule)

Week 4:   Measures of positions (Z score, quartiles, inter quartile range, box plot, outliers)
      Coefficient of variation
      Exclude: Chebyshev's Inequality

Week 4 – 5: Chapter 4 (4.1, 4.2, 4.3)

      Formal definition of probability and properties
      Venn diagrams, Addition Rules, Rule of complements
      Conditional probability, Multiplication Rule, Tree diagrams

Week 6:   Chapter 5 (only 5.1)

      Random variables, discrete probability distribution
      Distribution mean, variance, & standard deviation

Week 7   Chapter 6 (6.1, 6.2, 6.3)

      Continuous probability distribution: Normal distribution
      Applications of normal distributions

Week 8 – 9   Sampling distribution for sample mean
      Sampling distribution for sample proportion

Week 9 – 10: Chapter 7 (7.1, 7.3, 7.2, 7.4*)
          *Read on your own.

Week 11:   Chapter 8 (8.1, 8.3, 8.4)

Week 12:   Chapter 9 (9.1, 9.3)

Week 13:   Thanksgiving Break

Week 14:   Chapter 11 (11.1, 11.2, 11.3)

Week 15:   Chapter 10 (only 10.2) and Review