Math 142 Course Map

Course sequence using OpenStax Statistics Text:

Week1: 1.1, 1.2 : Terms, Data classification, sampling method, Summarize categorical data.

Week 2: 1.3, 1.4 : Frequency distribution, Experiment design.

Week 3: 2.1 to 2.4: Graphical summary of quantitative data, histogram, stemplot, dotplot, boxplot.

Week 4: 2.5 to 2.7: Numerical summary of quantiative data, mean, median, standard deviation.

Week 5: Review

Week 6: 3.1 to 3.4: Probability, "OR", "And", "conditional probability", contingency table, addition and multiplication rule, sampling and independence events.

Week 7: 4.1 to 4.3: Discrete random variable, probability distribution, binomial distribution.

Week 8: 5.1 to 6.2: Density curve, standard normal distribution, application of normal distribution.

Week 9: 7.1 to 7.2: Central limit Theorem

Week 10: 8.1 to 8.3: Confidence Interval for Mean and proportion. t-distribution

Week 11: 9.1, 9.3 and 9.4: Hypothesis basic.

Week 12: 9.5 and 9.2: Hypothesis test for proportion and mean.

Week 13: 10.3: Hypothesis test for two proportions.

Week 14: 10.1 and 10.2: Hypothesis test for two means.

Week 15: 12.1 to 12.4: scatter plot, correlation and prediction.

Week 16: 11.1 and 11.3: Chi-square distribution, test of independence.