

# Stat 305 Section 7 - Quiz 1 Topic Outline

1. Introductory concepts (Ch. 1-2)
  - a) Population and samples
  - b) Validity, accuracy, and precision of measurement
  - c) kinds of data: categorical, numeric (quantitative), discrete, continuous, univariate, multivariate, paired
  - d) Variables: treatment, blocking variables, concomitant variables, factor, response, predictor
  - e) observational vs. experimental studies
2. Study design (Ch. 1-2)
  - a) Designs: completely randomized design, factorial design, block design
  - b) Simple random sampling and randomization
3. Descriptive statistics (Ch. 3)
  - a) graphical and tabular displays: dot diagrams, stem and leaf plots, frequency tables, histograms, bar plts, boxplots, scatterplots, quantile-quantile plots, theoretical QQ plots (especially normal plots)
  - b) quantiles
  - c) numerical summaries: mean, median, mode, variance, standard deviation, range, IQR
  - d) statistics vs. parameters