

Exam I — Tuesday, September 24th covering Chapters 1-3...

Chapter 1: basic recognition of terminology

qualitative v. quantitative, population v. sample, descriptive v. inferential, census, confounding, observational study v. experiment, double-blind, placebo; sampling methods: random ~ use of **Table 1** (p.A9) v. systematic, cluster v. stratified

Chapter 2: GRAPHS

bar, histogram, cluster, Pareto, pie/circle graph, time-series (time placed on horizontal axis); frequency (distribution, including relative & cumulative), symmetric (mound-shaped), left v. right skew; raw v. grouped data, class width/limits, midpoints, stem-and-leaf

Chapter 3: preponderance of emphasis on exam!

- 3.1 find the **mode, median (MD), mean (\bar{x} or μ)**, and 5% trimmed mean; weighted average
- 3.2 find the **standard deviation** (s or σ) for either raw data or grouped data (see p.117); find the coefficient of variation (CV); use Chebyshev's Theorem (formula for "k" to be provided)
- 3.3 determine the **five-number summary** values; box-and-whisker plots not covered

9-12 problems, closed-book, use of a straight-edge, **calculator** (no smart phones or tablets are allowed); silence cell phones before entering classroom; entire class period to take the exam; scratch paper allowed, adequate space provided to do any work needed...