

SYLLABUS FOR K300: Statistical Techniques for Health Professions REVISED FALL 2009

Book: Elementary Statistics by Triola, 11th Edition, Addison-Wesley

Rationale: Most of the students in K300 are social science or nursing majors. This course introduces them to some theory and a lot of application of simple statistical ideas, formulas, etc. The material is more flexible than some other courses since it is a “stand alone” course. Material listed as required should be covered carefully; material noted as recommended should be covered if possible; and material noted as optional is nice but not necessary. Remind the students that M117 is the recommended prerequisite.

Tenth Edition Content Changes: New sections 1-2 and 2-5

Technology: Students are required to use the TI-83 or 84 calculator in this class. The text allows for earlier introduction of linear regression in 10.1 – 10.3. There is also an option to reduce the amount of probability in Chapter 4. MyStatLab online homework and assessment system is available.

Grading: Grading is left up to the discretion of the instructor. Some instructors require students to complete a project or projects, which is a nice way of getting students to do some statistical analysis on a small scale.

Syllabus:

<u>Chapter</u>	<u>Sections</u>	<u>Comments</u>
1	1-5	Introduction to Statistics; types of data, critical thinking and design of experiments. In addition, students should practice evaluating expressions on the calculator.
2	1-5	Organization of data; frequency distributions; histograms; other statistical Graphs
3	1-4	Measures of central tendency, dispersion and relative standing; EDA
4	1-3	Probability; Sections 4-7 are optional
5	1-4	Distributions; binomial distributions; Section 5 is optional
6	1-5	Normal distributions; central limit theorem; Sections 6 & 7 are optional
7	1-4	Estimates and sample sizes; Section 5 is optional
8	1-5	Hypothesis testing; t-tests; section 6 is optional
10	1-3	Use capabilities of calculator to analyze paired data; correlation; regression; Some instructors cover chapter 10 between chapters 3 and 4.