

Math 240 Course Outline

TEXT: TRIOLA, Elementary Statistics, Addison-Wesley, Fifth edition

<u>CHAPTER</u>	<u>APPROXIMATE WEEKS</u>
1. <u>Introduction</u> "First Day Examples" (attached) can be used to set the stage. Differentiate between population/parameter and sample/statistics. Cover levels of measure in Section 3.	1/3
2. <u>Descriptive Statistics</u> Ogives may be omitted. A glaring omission in Triola is that he does not cover percentiles or medians for grouped data. Supplement this from other sources.	2
3. <u>Probability</u> Light on this chapter. It's easy to get bogged down. Cover Sections 2-4 plus complements from Section 5. Omit the rest.	2/3
4. <u>Probability Distributions</u> Cover Sections 2-4 lightly. Do binomial experiments in Section 4, but save time by using Table A-1 rather than the Binomial Probability Formula.	1
5. <u>Normal Probability Distributions</u> Cover Sections 1-4. Omit Section 5...the normal approximation to the binomial. Do Central Limit Theorem in Section 6.	1
6. <u>Estimates and Sample Sizes</u> Triola does confidence intervals before hypothesis tests. Light on variances and on computation of sample sizes. Warn students that σ is usually replaced by s .	1
7. <u>Testing hypotheses</u> This chapter parallels the development of confidence intervals in Chapter 6 in that it does means, proportions, and variances in that order. Light on variances. Cover Type I error, but not calculation of Type II. Chapters 7, 8 comprise the heart of the course.	2 1/3
8. <u>Inferences from Two Samples</u> Triola does both hypothesis testing and confidence intervals in this chapter. Flow charts and the Summary of Formulas (p. 443) are critical here.	2
9. <u>Correlation and Regression</u> Cover Sections 1-3.	2/3
10. <u>Multinomial Experiments and Contingency Tables</u>	1
II. <u>Analysis of Variance</u> OPTIONAL. Save time for it earlier, especially in Chapters 3, 4, 5 and 7-8.	0

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CHAPTER

APPROXIMATE WEEKS

12. Nonparametric Statistics

2

Do a few. The best ones are, perhaps, Rank Correlations in Section 6, Sign Test in Section 2, and the Rank-Sum Test for Independent Samples (equivalent to the Mann-Whitney Test) in Section 4.

TOTAL

14 weeks

(This assumes that tests are given during the lab period.)