(possibly incomplete list of)

Topics Covered from Chapter 1 to Section 3.1

Chapter One: Probability

Statistical Model
Sample Space
Sample Point
Event
Probability Function

The three probability rules:

$P(A \cup B) = P(A) + P(B)$ if A and B are disjoint
$P(A \cap B) = P(A)\,P(B)$ if A and B are independent
$P(A \mid B) = P(A \cap B) / P(B)$

The three counting rules:

n! = # ways of arranging n different things in a row
the multinomial coefficient
the binomial coefficient

Random Variable
Probability Density Function
Cumulative Distribution Function
Expected Value of a Discrete Random Variable
Variance of a Discrete Random Variable
Quantiles

The Binomial Distribution, the Hypergeometric Distribution, and the Sum of n out of 1...N :

when each is used
know what the parameters are
know how to use the formulas for the pdf, expectation, and variance
you will need to know the formula for the mean and variance of the binomial
you will be given the other formulas, but you will have to know which distribution they go with and how to use them

Central Limit Theorem

NOT: Chi-squared Distribution, F Distribution, or Correlation Coefficient

Chapter Two: Statistical Inference

Population
Sample
Random Sample
Order Statistic

Empirical Distribution Function - how to make one, how to read it, how to find quantiles from it

Type I error
Type II error
α-level
Level of Significance
Null Hypothesis
Alternate Hypothesis
Null Distribution
Power
p-value

The confidence interval and hypothesis test for the mean (using the central limit theorem)

Unbiased test and estimator
Consistent test and estimator

Relative Efficiency of tests
Conservative test
Robust test

NOT: Measurement scales, Bootstrap, Survival Function, Kaplan-Meier Estimator, ARE

Section 3.1: The Binomial Test

The exact test and confidence intervals using the binomial distribution including using tables 3 & 4
The problem with finding the two sided test p-value
The approximate test and confidence intervals using the central limit theorem
The correction for continuity