Concepts to know Exam 2

This exam covers chapter 2 and chapter 3 $\,$

- Concepts from Chapter 1
 - Probability rules
 - conditional probability
 - independence
 - odds
 - others concepts from ch 1
- Counting
 - Multiplication Principle
 - Combinations
 - Permutations
 - Distinct rearrangements
 - Counting what you want by counting what you don't want
 - problems like those found on the counting handouts.
- Probability using counting techniques
- Random variables
 - Finite Discrete
 - Infinite Discrete
 - Continuous
 - Probability distribution
- Histogram
- Mean, Median, Mode, Variance, Standard Deviation
 - grouped data sets
 - Sample vs. population
- Expected Value
- Fair game
- Bernoulli Trials (Binomial Distribution)
 - mean, standard deviation
 - expected value
 - n, p, q, r
- Chebyshev's inequality

- Normal Distribution
 - The standard normal random variable.
 - * random variable Z
 - * $\mu = 0$ and $\sigma = 1$
- calculator commands
 - binomcdf
 - binompdf
 - 1var stats
 - -1 var stats L_1, L_2
 - normalpdf
 - normalcdf
- Any additional topic discussed in class.