## 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
- 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.

