

STAT 113/213

For a general introduction to the following topics, visit the indicated sites (NOTE: the links branch out into further detailed subtopics and some links merge other topics as well.)

From Khan Academy:

For **Statistics** visit: <http://www.khanacademy.org/math/statistics/#math/statistics>

Available topics on the website above are (among others):

1. Mean, Median and Mode
2. Range and Mid-range
3. Reading Graphs: Bar Graphs, Pictographs, Line Graphs, Pie Graphs, Stem-and-Leaf, Box-and-whisker plots
4. Average
5. Sample vs. Population Mean
6. Variance of Sample and Population
7. Normal Distribution
8. Random Variables
9. Law of Large Numbers
10. Central Limit Theorem
11. Sampling Distribution of the Sample Mean
12. Confidence Interval
13. Bernoulli Distribution
14. Hypothesis Testing and P-values
15. One-Tailed and Two-Tailed Tests
16. Z-statistics vs. T-statistics
17. Variance of Difference of Random Variables
18. Difference of Sample Mean Distribution
19. Comparing Population Proportion
20. Hypothesis Test Comparing Population Proportions
21. R-Squared/Coefficient of Determination
22. Regression Examples
23. Correlation and Causality
24. Covariance
25. Chi-Squared Distribution
26. Contingency Table Chi-Square Test
27. ANOVA

For **Probability**, visit: <http://www.khanacademy.org/math/probability/#math/probability>

Available topics on the website above are (among others):

1. Basic and Simple Probability
2. Venn Diagrams
3. Addition rule
4. Compound Probability
5. Independent Events
6. Probability
7. Events and Outcomes
8. Dependent Probability
9. Conditional Probability
10. Permutation
11. Combination
12. Generalizing with Binomial Coefficients
13. Binomial Distribution
14. Expected Values
15. Poisson Process