

a-g Probability and Statistics

Course Description:

This is an introductory course to the study of probability, the collection and interpretation of data, and fundamental statistical problem solving.

Prerequisite(s): Algebra 1

Length of Course: One-half year required for graduation

Year in School Taken: 10, 11, or 12

Course Objectives/Details:

Coursework will include a thorough understanding and application of the following topics:

- Independent events

- Conditional Probability

- Discrete random variables

- Standard distributions:

 - Normal, binomial, and exponential

 - Mean and standard deviation of a normally distributed random variable

 - Mean, median, and mode

 - Variance and standard deviation

- Organization of data:

 - Frequency tables, histograms, and standard line and bar graphs

 - Stem-and-leaf displays, scatterplots, and box-and-whisker plots

Methods for Evaluating Student Performance:

Evaluation of student performance is based on individual abilities, interests, and talents. Methods by which student progress is assessed will be through a variety and/or combination of methods. The methods available include but are not limited to the following:

- Monthly review of work by education specialist (credentialed teacher),

- Portfolios

- Parent facilitator and education specialist observation

- Student demonstrations,

- Student grades,

- Student work samples

- Written Examinations

- Projects

Texts:

Elementary Statistics: A Step by Step Approach, 3rd edition, by Bluman
Glencoe McGraw-Hill, 1998
ISBN: 0256234302

