

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