

High School Syllabus

Department: Mathematics

Course #: 40461E

Course Title: Probability and Statistics

DESCRIPTION OF COURSE: Students will apply measures of central tendency to experiments, make predictions, determine and justify validity reliability, use sampling techniques to draw inferences about populations, compare odds and probability, construct valid arguments, and use logic truth tables. Students will use various technological aids to enhance student learning. Assessments will include projects, written and oral reports, tests, quizzes, and homework. Students will take the Probability and Statistics final exam at the end of the course.

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ELIGIBLE CONTENT
Introduction to Statistics	8 days	CC.2.4.HS.B.1,4
Descriptive Statistics	12 days	CC.2.4.HS.B.2; CC.2.4.HS.B.1,3,5
Probability	10 days	CC.2.4.HS.B.4,6,7; A1.2.3.3.1
Probability Distributions	12 days	CC.2.4.HS.B.4,5,6,7
Normal Probability Distributions	22 days	CC.2.4.HS.B.4
Confidence Intervals	14 days	CC.2.4.HS.B.1,4,5
Hypothesis Testing w/ One Sample	22 days	CC.2.4.HS.B.1,4,5
Hypothesis Testing w/ Two Samples	15 days	CC.2.4.HS.B.1,4,5
Correlation and Regression	10 days	CC.2.4.HS.B.1,3,4,5

RESOURCES: Elementary Statistics Picturing the World; Fifth Edition
By Ron Larson and Betsy Farber

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