

SMMUSD COURSE DESCRIPTION

STATISTICS

Students extend their work in statistics and probability by applying statistics ideas to real-world situations. They link classroom mathematics and statistics to everyday life, work, and decision-making, by applying these standards in modeling situations. They choose and use appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions.

Students in Statistics and Probability take their understanding of probability further by studying expected values, interpreting them as long-term relative means of a random variable. They use this understanding to make decisions about both probability games and real-life examples using empirical probabilities.

With depth over breadth in mind, the course offers the opportunity to delve deeper into those repeated Statistics and Probability standards while addressing new ones.

Students will develop a strong grasp of the Mathematical Practices:

1. Make Sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the high school years.

This course uses the text by Pearson, Elementary Statistics