



SOUTHERN LEHIGH SCHOOL DISTRICT
5775 Main Street
Center Valley, PA 18034

Planned Course for Mathematics

Course: Survey of Statistics

Standards:

This course is aligned to standards within the following Domains of the PA Core Standards:
HS.B Statistics and Probability

Course Description:

The K-12 mathematics program within Southern Lehigh School District will provide opportunities for all students to develop the ability to independently apply mathematical knowledge and skills to real-world situations. A robust and coherent curriculum will prepare students to think and reason mathematically while requiring them to demonstrate a deep understanding of mathematics. Students will develop critical thinking, problem solving, innovation, collaboration, and communication skills. A focus will be placed on using mathematics as a key to understanding the world, in order to meet the challenges of a dynamic society.

SURVEY OF STATISTICS introduces students to data collection and interpretation. Students will explore study design, sampling techniques, data analysis, and inference. The course presents statistics in an investigative approach helping students gain an appreciation for the diverse applications of statistics and its relevance to their lives and future fields of study.

Prerequisite(s):

- Successful completion of a Geometry course

Measurable objectives to be attained by students:

Specific objectives for this course are aligned to the Pennsylvania Core Standards for Mathematics and the Common Core State Standards for Mathematics as outlined in the Scope and Sequence for Survey of Statistics.

Instructional Strategies:

Below is a list of suggested strategies for high-quality instruction in mathematics:

- Instructional components outlined in the *Framework for Teaching* by Charlotte Danielson
- Use Concrete Representational Abstract (CRA) representations
- Promote productive struggle
- Promote mathematical discourse
- Use precise mathematical language

Estimated Instructional Time:

77 minutes per day on an alternating A/B block schedule for one semester

Forms of Assessment to Measure Attainment of Course Objectives:

- Curriculum-based measures
- Benchmark Assessments
- Formative Assessments
- Summative Assessments

Resources:**Student Text Resources:**

Brase, Charles Henry, and Corrinne Pellillo Brase. Understanding Basic Statistics. Cengage, 2019.

- Student Text Printed Version
- Student Text Online Version
- Solutions Manual

Teacher Resources:

Brase, Charles Henry, and Corrinne Pellillo Brase. Understanding Basic Statistics. Cengage, 2019.

- Teacher's Guide Printed Version with Online Access

Technology:

Graphing calculator

District approved supplemental technology

Other Resources:

Manipulatives

Teacher created resources

District approved supplemental resources