



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

Planned Course for Science

Course: Forensic Science

Standards:

This course is aligned to standards within the following categories of the Pennsylvania Academic Standards for Science and Technology and Engineering Education:

- 3.1 Biological Sciences
- 3.2 Physical Sciences: Chemistry and Physics

Course Description:

The K-12 science program within Southern Lehigh School District will foster the development of scientific thinking and logical reasoning. A rigorous curriculum will provide opportunities for students to learn how to ask questions and define problems in order to plan and carry out investigations. Students will be challenged to construct explanations and design solutions through collaborative experiences where they engage in arguments that are based on evidence. Teachers will provide students with hands-on and authentic experiences aligned to a coherent progression of learning.

FORENSIC SCIENCE will provide an introduction to criminalistics and forensics, including topics such as: fingerprints; DNA analysis; fiber and hair analysis; ballistics; document and handwriting analysis; drugs and toxicology; analysis of human (including skeletal) remains; and evidence from blood and other bodily fluids. This course will allow student to apply topics learned in biology and chemistry. It will include case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes.

Prerequisite(s):

- Successful completion of a Biology course; AND
- Successful completion of a Chemistry course

Measurable objectives to be attained by students:

Specific objectives for this course are aligned to the Next Generation Science Standards, the Pennsylvania Academic Standards for Science and Technology and Engineering Education, the Pennsylvania Core Standards for Reading and Writing in Science and the Technical Subjects, and Southern Lehigh School District Learning Targets for Forensic Science as outlined in the Scope and Sequence for Forensic Science.

Instructional Strategies:

A science program demands the use of a variety of instructional strategies to foster scientific thinking. Below is a list of suggested strategies for high-quality instruction:

- Instructional components outlined in the *Framework for Teaching* by Charlotte Danielson
- Hands-on learning
- Posing questions for investigation
- Cooperative learning and collaboration
- Inquiry, engineering, and design

Estimated Instructional Time:

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

Forms of Assessment to Measure Attainment of Course Objectives:

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

Resources:**Student Text Resources:**

Bertino, Anthony J., and Patricia Nolan Bertino. *Forensic Science: Fundamentals & Investigations*. South-Western Cengage Learning, 2016.

- Student Edition Printed Version
- Student Edition Online Version

Teacher Resources:

Bertino, Anthony J., and Patricia Nolan Bertino. *Forensic Science: Fundamentals & Investigations*. South-Western Cengage Learning, 2016.

- Teacher Edition Printed Version with Online Access

Technology:

District approved supplemental technology

Other Resources:

Teacher created resources

District approved supplemental resources and labs