

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

Planned Course for Science

Course: Zoology

Standards:

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

3.1 Biological Sciences

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.

In ZOOLOGY students explore issues dealing with ecology, evolution, comparative anatomy, and biotechnology. In this course students will apply concepts learned in Biology and it is designed for students who are interested in broadening their knowledge of the biological sciences. Students will have the opportunity to enhance laboratory and research skills through the use of dissections, projects, and presentations in both group or individual explorations.

Prerequisite(s):

Successful completion of a Biology 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, and the Pennsylvania Core Standards for Reading and Writing in Science and the Technical Subjects as outlined in the Scope and Sequence for Zoology.

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
- Cooperative learning and collaboration
- Inquiry, engineering, and design

- Hands-on learning
- Posing questions for investigation

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:

Miller, Stephen A. and Todd A. Tupper. Zoology. McGraw Hill Education, 2019.

- Student Edition Printed Version
- Student Edition Online Version

Teacher Resources:

Miller, Stephen A. and Todd A. Tupper. Zoology. McGraw Hill Education, 2019.

• Teacher Edition Online Access

Technology:

District approved supplemental technology

Other Resources:

Teacher created resources

District approved supplemental resources and labs