



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

Planned Course for Science

Course: Honors Anatomy and Physiology

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

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.

HONORS ANATOMY & PHYSIOLOGY is designed for students who have earned high levels of achievement in science and mathematics. Students interested in understanding human body systems in preparation for careers in health fields would benefit from this course. It will emphasize, in detail, metabolism, histology, support, movement, communication, control, and integration. In this course students will experience lecture and discussion, report writing, computer-aided instruction, handling human skeletons, and a variety of dissections, which may include various sheep organs, the earthworm, and a detailed dissection of the cat.

Prerequisite(s):

- Earn a minimum grade of a C in Applied Biology, a B in Biology, or successful completion of Honors Biology; AND
Earn a minimum grade of a C in Applied Chemistry, a B in Chemistry, or successful completion of Honors Chemistry

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 Honors Anatomy and Physiology

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:**

Marieb, Elaine N. and Katja Hoehn. *Human Anatomy & Physiology*, 11th Edition. Pearson, 2019.

- Student Edition Printed Version
- Student Edition Online Version

Teacher Resources:

Marieb, Elaine N. and Katja Hoehn. *Human Anatomy & Physiology*, 11th Edition. Pearson, 2019.

- Instructor Resource Manual Online
- Anatomy and Physiology Coloring Workbook: A Complete Study Guide
- Essentials of Human Anatomy & Physiology Laboratory Manual
- Human Anatomy & Physiology Atlas
- Study Guide for Anatomy & Physiology
- Printed Test Bank for Human Anatomy & Physiology

Technology:

District approved supplemental technology

Other Resources:

Teacher created resources

District approved supplemental resources and labs