

Science

Anatomy & Physiology

Prerequisite: Biology 1 and Chemistry 1
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Lancaster

You'll study the human body's structure and its mechanical, physical and biochemical functions.

Anatomy & Physiology Pre AP

Prerequisites: Biology 1 & Chemistry 1 PreAP
Grades: 11-12
Credit: 1 unit
Offered: Buford

You'll study the human body systems along with the body's chemical processes.

You'll develop an understanding of the relationships between structures and functions of the human body as well as how they interact to maintain homeostasis.

You learn through inquiry assignments and lab activities to develop a complete comprehension of the anatomy and physiology of the human body.

Biology AP

Prerequisite: At least a B average in Biology and Chemistry Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Buford, Indian Land, Lancaster

Your studies will emphasize topics covered by the College Board AP Test, which is given in the spring.

The course is for advanced science students with special interests in biology.

You'll need to register for a Pre-Biology AP course.

Biology 1

Prerequisite: None
Grades: 9-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

Your studies will range from the basic cell to advanced organisms and how they work and live together.

You'll get in-depth instruc-

tion on biological principles and terms as you complete laboratory activities.

Biology 1 Pre AP

Prerequisite: None
Grades: 9-10
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll study biochemistry, cell biology, taxonomy, comparative anatomy, human anatomy and physiology and ecological systems.

You'll use concepts you learn for independent investigations in open-ended labs and student-initiated projects.

Biology 2

Prerequisite: Biology 1, Chemistry 1
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

If you're an advanced science student with a special interest in biology, take this course.

You'll do extensive lab work with detailed reports required.

Biology 2 Pre AP

Prerequisite: Biology 1 Pre AP or teacher recommendation
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

If you're interested in taking Biology AP, this is the prerequisite course.

You begin to cover context and do lab experiments related to the thinking required on the Biology AP exam.

Chemistry 1

Prerequisite: Algebra 1, Biology
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster (Grades 11-12)

You'll study inorganic matter, its composition and its changes, with strong emphasis on the mathematical concepts and calculations in Chemistry 1.

You'll also find lab work is an essential part of the course.

Chemistry 1 Pre AP

Prerequisite: Physical Science Pre AP or teacher recommendation
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster (Grades 11-12)

You'll cover traditional Chemistry 1 material in great depth as you use the graphing calculator and CBL to conduct experiments.

Activities will be filled with opportunities to think critically about open-ended questions. You'll also complete at least one research project.

Chemistry 2

Prerequisite: Chemistry 1 or Chemistry 1 Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Indian Land, Lancaster

Chemistry 2 is for you if you are interested in pursuing science as a career.

Your work will emphasize the mathematical approach and will involve a study of nomenclature, molecule structure and types of reactions of organic chemistry.

Emphasis is on lab experiences.

Chemistry 2 Pre AP

Prerequisite: Chemistry 1 or Chemistry 1 Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

Chemistry 2 is for you if you're interested in pursuing science as a career or AP.

Your work emphasizes the mathematical approach and involve studying nomenclature, molecule structure and types of organic chemistry reactions.

Emphasis is on lab experiences related to AP coursework.

Chemistry AP

Prerequisite: Chemistry 2 Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Indian Land, Lancaster

You'll prepare for the AP Chemistry exam in this college-level course. Your exam score may earn you credit at many colleges and universities.

You'll study all aspects of aqueous chemistry and chemical reactions including chemical nomenclature, equilibria, thermodynamics and kinetics.

You'll be required to take a Chemistry 2 Pre AP course.

Earth Science

Prerequisite: None
Grades: 10-12
Credit: 1/2 unit or 1 unit
Offered: Buford

You'll gain a better knowledge of the Earth, its physical makeup and its place in the universe as you study energy in the Earth system, geochemical cycles and the origin and evolution of the universe and Earth system.

You'll take part in rigorous and integrated hands-on lab activities, cooperative learning opportunities and video programs with textbook materials.

Environmental Science

Prerequisite: None
Grades: 10-12
Credit: 1/2 unit or 1 unit
Offered: Andrew Jackson, Indian Land, Lancaster

You'll study ecology, world food supplies, overpopulation, conservation, political and economic concerns, and pollution.

You'll learn how systems interact as you study the impact people have on natural systems.

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Environmental Science AP

Prerequisite: At least a "C" in Biology 1 and Chemistry 1
Grades: 11-12
Credit: 1 unit
Offered: Lancaster

You'll study ecosystems, and the use and protection of our natural resources.

Your world is the classroom as you conduct lab and field experiments related to your studies.

You must be a good critical observer as you plan and conduct experiments. You also must think analytically and apply concepts as you draw conclusions based on your investigations. If you score a 3 or greater on the AP Exam, you may earn college credit.

Physical Science

Prerequisite: None
Grades: 9-12
Credit: 1 unit
Offered: Buford, Indian Land, Lancaster

You'll explore basic chemistry and physics and prepare for future science courses.

You'll study the atom, chemical reactions and the Periodic Table and study machines, energy forms and force.

You'll do lab work in most areas. You'll also review metric measurement and learn problem-solving skills with formulas. A solid background in math is necessary.

Physical Science Pre AP

Prerequisite: Placement in Math Pre AP or teacher recommendation
Grade: 10
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll prepare for Chemistry AP and Physics AP.

You'll study properties of matter, chemical bonding and chemical reactions and the behavior of matter and energy as you build your critical thinking and problem-solving skills through analytical lab work.

Physics

Prerequisite: Chemistry or Algebra 2
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll build an understanding of the physical laws fundamental to sciences.

You'll do lab activities coordinated with course content.

Physics AP

Prerequisite: Pre AP Geometry and Pre AP Physical Science
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson

You'll prepare for the AP Physics Exam in this course.

You'll explore Newtonian mechanics, work, energy, power, mechanical waves and sound and simple circuits during this algebra-based course.

Physics Pre AP

Prerequisite: Chemistry 1 Pre AP and Geometry Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Indian Land

You'll explore Newtonian mechanics, work, energy, power, mechanical waves and sound and simple circuits during this algebra-based course.

You won't receive AP credit for this course.