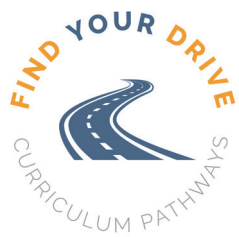




HEALTH SCIENCES

The healthcare industry is projected to grow by 18% during the next decade due to the vast number of specializations and occupations. Pursuing a course of study in the Health Sciences can lead to extremely rewarding health-related professions in medicine, technology, management, and more.



HEALTH SCIENCES

Career Pathway: Physician



Job Summary

Physicians and surgeons diagnose and treat injuries or illnesses. Physicians examine patients; take medical histories; prescribe medications; and order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare. Surgeons operate on patients to treat injuries, such as broken bones, diseases, such as cancerous tumors, and deformities, such as cleft palates.



Colleges & Universities to Consider

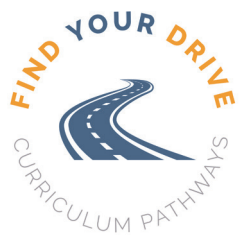
Boston University | Harvard University | Indiana University | Johns Hopkins University
Kings College London | Stanford University | University of California - San Francisco
University of North Carolina - Chapel Hill | University of Rochester | Washington University in St. Louis

\$208,000
MEDIAN ANNUAL SALARY

\$175,000
AVERAGE STARTING SALARY
FOR FAMILY PRACTICE DOCTOR

+13%
GROWTH BY 2026

Salary & Industry Growth Sources: U.S. Bureau of Labor Statistics 2018 | Payscale.com
College & University Sources: U.S. News & World Report | CNBC.com | BestValuesSchools.com



HEALTH SCIENCES

Career Pathway: Physician Assistant



Job Summary

Physician assistants, also known as PAs, practice medicine as a part of teams with physicians, surgeons, and other healthcare workers. They examine, diagnose, and treat patients, under the supervision of a physician, and in some cases prescribe medication. A 2015 American Academy of Physicians Assistants study found that more than 96 percent would recommend their physician assistant career to others.



Colleges & Universities to Consider

Baylor College of Medicine | Butler University | Drexel University | Emory University | Hofstra University
James Madison University | Northwestern University | Nova Southeastern University
University of California - Davis | University of Iowa

\$104,860

MEDIAN ANNUAL SALARY

\$95,000

AVERAGE STARTING SALARY

+37%

GROWTH BY 2026

Salary & Industry Growth Sources: U.S. Bureau of Labor Statistics 2018 | Payscale.com
College & University Sources: U.S. News & World Report | PhysicianAssistantEdu.org



HEALTH SCIENCES

Career Pathway: Veterinarian



Job Summary

Veterinarians care for the health of animals and work to improve public health. They diagnose, treat, and research medical conditions and diseases of pets, livestock, and other animals.



Colleges & Universities to Consider

Auburn University | Colorado State University | Cornell University | Oregon State University
Purdue University | Texas A&M University | University of Glasgow | University of Sydney
University of Tennessee | Virginia Polytechnic and State University

\$90,420

MEDIAN ANNUAL SALARY

\$79,000

AVERAGE STARTING SALARY

+19%

GROWTH BY 2026



Salary & Industry Growth Sources: U.S. Bureau of Labor Statistics 2018 | Payscale.com
College & University Sources: U.S. News & World Report | AVMA.org



HEALTH SCIENCES

Laurel Springs Core Course Offerings

AP Biology

During this course, students are engaged in a wide variety of activities with substantial emphasis on interpreting and collecting data in virtual labs, writing analytical essays, and mastering Biology concepts and connections. The key themes of the AP Biology course are: the scientific processes, the effects of science on technology and society, the chemistry and make up of living organisms, genetics, diversity, and evolution. Throughout this course, students will be expected to answer questions, reflect on issues, and complete lab activities. The primary emphasis is to develop an understanding of concepts rather than memorizing terms and technical details.

AP Chemistry

In this course students will build their understanding of the nature and reactivity of matter. After studying chemical reactions and electrochemistry, students move on to understand how the chemical and physical properties of materials can be explained by the structure and arrangements of the molecules, as well as the forces between those molecules. Students will examine the laws of thermodynamics, molecular collisions, and the reorganization of matter in order to understand how changes in matter take place. Finally, students will explore chemical equilibria including acid-base equilibria. This course prepares students for further study in science, the health sciences, or engineering.

AP Psychology

Advanced Placement Psychology is a college level course providing students with an overview of the development of human behaviors and thoughts. Along with preparation for the AP Psychology exam, the goals of this course are to immerse students in modern psychological investigation techniques, to accentuate the ethics and morality of human and animal research, and to emphasize scientific critical thinking skills in application to the social sciences. This college level course will expand your knowledge, challenge your mind and, at times, actually be entertaining! It will help you to better understand yourself and those around you.

Biology

Biology introduces the fundamental concepts including the nature of life, basic chemistry, animal structure and function, plant structure and function, reproduction and development, genetics, evolution, diversity of living things, and ecology. Through inquiry-based investigations, independent experiments, and activities, students gain firsthand experience with observing, classifying, identifying, measuring, inferring, hypothesizing, interpreting, and predicting. Students conduct kitchen-based laboratory experiments to apply scientific concepts in a practical setting.

Chemistry

This introductory chemistry course is designed for students pursuing a technical career or admission to college. Topics of study include phases of matter, atomic and molecular models, polarity, solutions, ionic bonding, stoichiometry, acids and bases, Le Chatelier's Principle, the mole, nuclear reactions, the periodic table, isomers, molecular orbitals, chemical reactions, energy and change, osmosis, entropy, reaction rates, and more. This course enhances inquiry-based learning activities and instruction emphasizes the mathematical, theoretical, and experimental basis of modern chemistry. Throughout this course, students actively engage in exploration and analysis that will improve their ability to explain and predict phenomena using scientific skills.

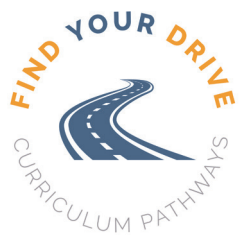
Pre-Calculus

Pre-Calculus teaches students the concepts and skills necessary to succeed in college-level mathematics courses and in mathematics-based disciplines such as chemistry and physics. The course contains in-depth coverage of trigonometry, logarithms, analytical geometry, and upper-level algebraic concepts. There is also emphasis on multiphase calculations, translations and applied mathematics, problem solving, and the development of productive thought patterns. Topics include linear, quadratic, exponential, logarithmic, radical, polynomial, and rational functions; systems of equations; trigonometric ratios and functions; inverse trigonometric functions; vectors; laws of cosine and sine; polar functions; and notation and arithmetic of complex numbers.

Psychology

Psychology is everywhere, affecting every second of life. Learning about psychology can positively affect life in three main ways. First, while studying psychology, the course will provide a solid foundation for success in later psychology courses. Second, this course can influence your personal life. The concepts discussed here will help you know yourself better; understand your family members, friends, and people you encounter; and improve your relationships. Third, taking this course will help you develop academic skills. Many topics in psychology directly translate into skills that you can use to improve your studying. Students will learn how psychologists develop and validate theories and will examine how hereditary, social, and cultural factors help form an individual's behavior and attitudes. Students will also evaluate the effectiveness of different types of psychological counseling and therapy. Highly interactive content includes online discussions that help develop critical thinking skills.

Contact Your College Counselor to Learn More



HEALTH SCIENCES

Laurel Springs Elective Course Offerings

Anatomy & Physiology

Explore the organization of the human body and how it works. Acquire the knowledge necessary to understand what the body is doing and how you can help the body cope with many different situations. Body systems will be studied in order to understand how their structure, location, and function allow for interaction with other parts of the body.

Exercise Science

This course takes an in-depth examination of the effects of exercise on the body. Through this course, students will learn basic anatomy, biomechanics, and physiology, as well as proper principles and techniques to designing an effective exercise program. The study of nutrition and human behavior will also be integrated into the course to enhance the students' comprehension of this multifaceted subject.

First Aid & Safety

Learn and practice first aid procedures for a variety of common conditions, including muscular, skeletal, and soft tissue injuries, as well as how to appropriately respond to a variety of emergency situations, such as procedures for choking and CPR for infants, children, and adults. You will also explore personal, household, and outdoor safety, and disaster preparedness.

Health Careers

Explore a variety of career options related to the healthcare field, including medicine, nursing, physical therapy, pharmacy, dental careers, sports medicine, personal training, social work, psychology, and more. You will gain insights into basic job skills and information that can aid you in healthcare and other career paths.

Health Sciences

Will we ever find a cure for cancer? What treatments are best for conditions like diabetes and asthma? Learn the answers to questions such as these. In addition, you'll explore various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.

Introduction to Nursing I

Learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. You will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention.

Introduction to Nursing II

Examine various nursing theories, as well as focus on the nursing process, including assessment, diagnosis, and treatment options. You will also learn about professional and legal standards and ethics, as well as skills of communication, teaching, time and stress management, patient safety, and crisis management.

Medical Terminology

Receive an introduction to basic medical language and terminology required within the healthcare field. Emphasis is placed on definitions, proper usage, spelling, and pronunciation, and you will study word structure and parts, including roots, prefixes, and suffixes, as well as symbols and abbreviations. In addition, students will learn proper terminology of the body's main systems, common tests, procedures, pharmacology, disease, and conditions.

Nutrition

A comprehensive study of nutritional principles and guidelines, students learn about worldwide views of nutrition, nutrient requirements, physiological processes, food labeling, healthy weight management, diet-related diseases, food handling, nutrition for different populations, and more.

Scrubs Club

CLUB | Scrubs Club members research, explore and discuss the health industry; health professions; diseases; healing and all topics related to medical professions at home and around the world. Open ended opportunities and conversations allow members to discover all things curative—especially that which members are interested in discovering. The club begins each year with introductions, including medical profession intentions and culminates in a Health Fair open to all LSS students.

Contact Your College Counselor to Learn More