



## LET AMBITION LEAD THE WAY.

Find Your Drive lets you to take the wheel as you plan your future. Discover in-demand occupations and emerging industries, what colleges offer leading programs of study, and how Laurel Springs School's industry-focused curriculum pathways enhance the academic experience as you make progress toward your ultimate professional destination.





Behavioral Science involves the careful analysis of human behavior and includes a number of diverse disciplines, including anthropology, psychology, and sociology. Those who wish to pursue a career in the behavioral sciences have the opportunity to work in fields like education, law enforcement, business, and more.



## Career Pathway: Psychologist



Psychologists study cognitive, emotional, and social processes and behavior by observing, interpreting, and recording how individuals relate to one another and to their environments. They use their findings to help improve mental processes and behaviors.



#### **Top Universities**

Stanford University | University of California at Berkeley | Harvard University University of California at Los Angeles | University of Michigan\*

**\$77,030**MEDIAN ANNUAL SALARY

**\$141,890**SALARY IN LOS ANGELES, CA

**+14%**GROWTH BY 2026





## Career Pathway: Sociologist



#### **Job Summary**

Sociologists study society and social behavior by examining the groups, cultures, organizations, social institutions, and processes that develop when people interact and work together. Sociologists study how these dynamics influence people and individual attitudes.



#### **Top Universities**

Harvard University | Princeton, University | University of California at Berkeley University of Michigan | Stanford University\*

\$79,650
MEDIAN ANNUAL SALARY

**\$147,590**SALARY IN SAN FRANCISCO, CA

**+1%**GROWTH BY 2026





## Career Pathway: Political Scientist



Political scientists study the origin, development, and operation of political systems. They research political ideas and analyze governments, policies, political trends, and related issues.



#### **Top Universities**

Harvard University | Stanford University | Princeton University University of California at Berkeley | University of Michigan\*

\$115,110 MEDIAN ANNUAL SALARY \$122,100 SALARY IN NEW YORK CITY, NY **+3%**GROWTH BY 2026





## **Laurel Springs Core Course Offerings**

#### **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.

#### **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.

#### **AP U.S. Government & Politics**

"Lights, Camera, Action" ...Prepare to study the intricacies of the American Political Culture. The script is written and the actors participate daily in the drama of American politics. You will be "on location" to delve into primary source documents. You will go behind the scenes with stars such as the President, Congress people, and Supreme Court Justices. You will research the roles of the media, political parties, interest groups, states, candidates, bureaucracy, and the public in the governmental process. Finally, you will witness the large- scale production of policy building in the areas of economic/social policy, foreign policy and public administration.

#### Sociology

The Sociology course takes a fresh and accessible theoretical approach appropriate to our contemporary world. While the course emphasizes the interactionist perspective, students learn a range of theoretical thought, including postmodernism. Students will put into practice what they are learning through innovative methodological exercises in each chapter. Material is presented that is familiar and relevant to the students in a way that allows them to make profound analytic connections between their individual lives and the structure of their society.

#### **AP Statistics**

AP Statistics provides students with hands-on experience collecting, analyzing, graphing, and interpreting data. This course draws connections between all aspects of the statistical process including design, analysis, and drawing conclusions. Students will use the vocabulary of statistics to communicate statistical methods, results and interpretations. They will also use graphing calculators and read computer output to further the development of their statistical skills. Students will learn to effectively design and analyze research studies by reviewing and evaluating real-world examples taken from an array of professional disciplines including meteorology, medicine, politics, and athletics.

#### **AP Human Geography**

The AP Human Geography course is designed to provide college level instruction on the patterns and processes that impact the way humans understand, use, and change Earth's surface. Students use geographic models, methods, and tools to examine human social organization and its effect on the world in which we live. Students are challenged to use maps and geographical data to examine spatial patterns and analyze the changing interconnections among people and places.

#### **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.



## **Laurel Springs Elective Course Offerings**

#### **Anthropology I**

The aim of anthropology is to use a broad approach to gain an understanding of our past, present, and future, and in addition address the problems humans face in biological, social and cultural life. Explore the similarity and diversity of humankind through time as you examine how we have evolved from a biologically and culturally weak species to one that has the ability to cause catastrophic change.

#### **Anthropology 2**

Continue the study of global cultures and the ways that humans have made sense of their world. Examine the ways cultures have understood and gave meaning to different stages of life and death, the creation of art within cultures, and how cultures evolve and change over time. Apply the concepts and insights learned from the study of anthropology to several cultures found in the world today.

#### Criminology

Why do some individuals commit crimes while others do not? What aspects of our culture and society promote crime and deviance? Look at possible explanations for crime from the standpoint of psychological, biological and sociological perspectives, explore the categories and social consequences of crime, and investigate how the criminal justice system handles not only criminals but also their misdeeds.

#### **Health Careers**

In Health Careers 1, students explore a variety of career options related to the health care field, including medicine, nursing, physical therapy, pharmacy, dental careers, sports medicine, personal training, social work, psychology, and more. Students will learn about various options within each field, what each of these jobs entails, and the education and knowledge required to be successful. In addition, they will focus on basic job skills and information that would aid them in health care and other career paths.

#### **Human Geography**

How do language, religion, and landscape affect the physical environment? How do geography, weather, and location affect customs and lifestyle? Explore the diverse ways in which people affect the world around them and how they are affected by their surroundings. Discover how ideas spread and cultures form, and learn how beliefs and architecture are part of a larger culture complex.

#### **Peer Counseling**

Explore the role of a peer counselor, learning the observation, listening, and emphatic communication skills counselors require, and receive basic training in conflict resolution and group leadership. These valuable skills will enhance your ability to communicate effectively in your personal and work relationships.

#### Personal Psychology I

Self-knowledge is the key to self-improvement! Sample topics include the study of infancy, childhood, adolescence, perception, and states of consciousness. Amazing online psychology experiments dealing with our own personal behavior are featured in this course.

#### Personal Psychology II

Personal Psychology II continues the study of self-improvement initiated in Personal Psychology I. Topics include memory, intelligence, emotion, health, stress, and personality. This course features virtual psychology experiments that give students insight into human behavior.

## Philosophy: The Big Picture

Read about a man who hung out on street corners, pestering everyone he met with questions. Learn about an eccentric who climbed inside a stove to think about whether he existed. These and other philosophers of the Western world are among the most brilliant and influential thinkers of all time and will inform you of the fundamental ideas of Western Civilization. By the time you've "closed the book" on this course, you will better understand yourself and the world around you - from atoms to outer space - and everything in between

#### **Real World Parenting**

Learn what to prepare for, what to expect, and what vital steps parents can take to create the best environment for their children. Parenting roles and responsibilities, nurturing and protective environments for children, positive parenting strategies, and effective communication in parent/child relationships are some of the topics covered in this course.

#### Social Problems I

Explore the challenges faced by social groups, as well as the complex relationships that exist among societies, governments, and the individual. Each unit focuses on a particular area of concern, often within a global context, and explores possible solutions at the structural level as well as that of the individual. You will develop the skills necessary to help make a difference in your own life, in your community, and globally.

#### Social Problems II

Learn about the overall structure of the social problem and how it impacts their lives. Each unit focuses on social problems like racial discrimination, drug abuse, the loss of community, and urban sprawl, then discusses possible solutions at individual and structural levels. For each issue, students examine the connections in the global arena involving societies, governments, and the individual.



## **Laurel Springs Elective Course Offerings**

#### Sociology I

Students will examine social problems in our increasingly connected world and learn how human relationships can strongly influence and impact their lives. Exciting online video journeys to an array of areas in the sociological world are an important component of this relevant and engaging course.

#### Sociology II

Develop your "sociological imagination" and examine how society shapes human action and beliefs, and how in turn these factors re-shape society! Fascinating online videos journeys not inform students, but motivate them to still seek more knowledge on their own.

## Women's Studies: A Personal Journey Through Film

Maybe you grew up watching movies with female characters like Cinderella, Belle, Snow White, or Ariel. Maybe you've wondered why there are stereotypes about women being bad drivers or ignorant about sports. Maybe you want to know about feminism and the women's movement. The Introduction to Women's Studies: A Personal Journey Through Film can help you answer these questions. Though it focuses on the experience of women, it's appropriate for anyone who wants to learn to critically examine films while learning about the history of the women's movement and how gender, race, and social class influence us. Women have earned their right to stand up and be recognized as equal partners and reap the benefits of their hard work. As the anonymous quote goes, "History is Herstory too.."

#### **World Religions**

Throughout the ages, religions from around the world have shaped the political, social, and cultural aspects of societies. Explore major religions that have played a role in human history, including Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Shintoism, and Taoism. Trace major developments in these religions and explore their relationships with social institutions and culture. Discover the similarities and differences among the major religions and examine the connections and influences they have.

#### **Model United Nations**

**CLUB |** Imagine preparing for the global experience as a member of the United Nations who strives for peace and balance among cultures around the world. This club engages in an authentic simulation of the United Nations (UN) by learning about the UN system, skills of debate, compromise, conflict resolution, and negotiation. Model UN team members meet twice a month to explore and reveal the workings of world diplomacy through the lens of current events.





A myriad of opportunities become available to those who want to pursue careers as an Accountant, Financial Analyst, or one of the many other business-related professions. Education and training vary across the many disciplines, but 21st-century skills like communication, leadership, and critical thinking are extremely beneficial.

## **Career Pathway: Accountant**



Accountants and auditors prepare and examine financial records. They ensure that financial records are accurate and that taxes are paid properly and on time. Accountants and auditors assess financial operations and work to help ensure that organizations run efficiently.



### **Top Universities**

University of Texas - Austin | Brigham Young University | University of Illinois - Urbana-Champaign | University of Michigan | University of Pennsylvania\*

**\$70,500**MEDIAN ANNUAL SALARY

**\$99,900**SALARY IN NEW YORK

**+10%**GROWTH BY 2026



## Career Pathway: Financial Analyst



#### **Job Summary**

Financial analysts provide investment advice for individuals and businesses. They work in banks, pension funds, hedge funds, mutual funds, securities firms, insurance companies, and other businesses. They measure the performance of stocks, bonds, and other kinds of investments in order to stay current about economic trends and guide clients about when to buy and sell investments. Many are certified financial analysts.



#### **Top Universities**

University of Pennsylvania | New York University | Massachusetts Institute of Technology | University of Michigan - Ann Arbor | University of Texas - Austin\*

\$84,300 MEDIAN ANNUAL SALARY **\$154,980**SALARY IN MISSOULA, MT

**+11%**GROWTH BY 2026



## **Career Pathway: Sales Manager**



#### **Job Summary**

Sales managers direct organizations' sales teams in order to drive revenue for their company. They develop plans to acquire new customers, create plans to meet sales goals, analyze statistical sales data, set sales quotas, and build training programs for their sales team.



#### **Top Universities**

University of Michigan - Ann Arbor | University of Pennsylvania | New York University University of Texas - Austin | University of North Carolina - Chapel Hill\*

\$121,060
MEDIAN ANNUAL SALARY

\$200,320 SALARY IN NEW YORK CITY, NY **+7%**GROWTH BY 2026





## **Laurel Springs Core Course Offerings**

#### **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.

#### **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.

#### Sociology

The Sociology course takes a fresh and accessible theoretical approach appropriate to our contemporary world. While the course emphasizes the interactionist perspective, students learn a range of theoretical thought, including postmodernism. Students will put into practice what they are learning through innovative methodological exercises in each chapter. Material is presented that is familiar and relevant to the students in a way that allows them to make profound analytic connections between their individual lives and the structure of their society.

#### **AP Statistics**

AP Statistics provides students with hands-on experience collecting, analyzing, graphing, and interpreting data. This course draws connections between all aspects of the statistical process

including design, analysis, and drawing conclusions. Students will use the vocabulary of statistics to communicate statistical methods, results and interpretations. They will also use graphing calculators and read computer output to further the development of their statistical skills. Students will learn to effectively design and analyze research studies by reviewing and evaluating real-world examples taken from an array of professional disciplines including meteorology, medicine, politics, and athletics.

#### **Economics**

The Economics course begins with a survey of the basic principles concerning production, consumption, and distribution of goods and services within the free enterprise system. Students will examine the rights and responsibilities of consumers and businesses, analyze the interaction of supply, demand, and price, and study the role of financial institutions. Types of business ownership, market structures, and basic concepts of consumer economics will be surveyed. The impact of a variety of factors including geography, government intervention, economic philosophies, historic documents, societal values, scientific discoveries and technological innovations on the national economy, and economic policy will be an integral part of the course. Students will apply criticalthinking skills to create economic models and to evaluate economic activity patterns. Students will also examine the knowledge and skills necessary as self-supporting adults to make critical decisions relating to personal financial matters such as seeking college financial aid, using credit wisely, and balancing financial accounts. Students will complete a research project as part of their

#### **AP Macroeconomics**

In AP Macroeconomics, students study the principles of economics that apply to an economic system as a whole. Through learning activities including quizzes, discussions, and document-based questions, students study national income and price-level determination, economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

#### AP Microeconomics

In AP Microeconomics, students study the principles of economics that apply to the functions of individual decision-makers in the economic system. Through learning activities including quizzes, discussions, and document-based questions, students study the nature and functions of product markets and factor markets and of the role of government in promoting greater efficiency and equity in the economy.

#### Calculus

Calculus introduces students to universal concepts in the graphing of functions and optimizations. Students build foundational calculus knowledge by analyzing graphs and calculating limits of functions, determining rates of change, and finding derivatives using the sum rule, product rule, quotient rule, chain rule, and implicit differentiation. Students are introduced to the derivatives of all functions including power functions, exponential functions, logarithmic functions, trigonometric functions, and inverse trigonometric functions. Students then apply derivatives to solve real-world problems. The course continues with techniques of integration, indefinite integrals, definite integrals, the fundamental theorem of calculus, and various applications of integration.

#### AP Calculus AB

AP Calculus AB is a comprehensive introduction to calculus that is comparable to one semester of college-level, introductory calculus. The material is challenging and helps students understand the concepts of calculus and applications to the study of science, business, and engineering. The course emphasizes problems that are expressed graphically, numerically, and algebraically. Students build foundational calculus knowledge by analyzing graphs and calculating limits of functions, determining rates of change, and finding derivatives using the sum rule, product rule, quotient rule, chain rule, and implicit differentiation. Students are introduced to the derivatives of all functions including power functions, exponential functions, logarithmic functions, trigonometric functions, and inverse trigonometric functions. Students then apply derivatives to solve real-world problems. The course continues with techniques of integration, indefinite integrals, definite integrals, the fundamental theorem of calculus, and various applications of integration.

#### AP Calculus BC

AP Calculus BC is a comprehensive introduction to calculus that is comparable to two semesters of college-level, introductory calculus. The material is challenging and the course moves at a faster pace as compared to AP Calculus AB. This course helps students understand the concepts of calculus and applications to the study of science, engineering, and advanced mathematics. Through the study of functions, limits, derivatives, integrals, and infinite series, students learn to evaluate the soundness of proposed solutions, apply mathematical reasoning to real-world models, and understand change geometrically, visually, analytically, numerically, and verbally.



### **Laurel Springs Elective Course Offerings**

## Advertising & Sales Promotion

In the United States, companies spend approximately \$200 billion a year promoting their products and services. Discover how marketing campaigns, ads, and commercials are conceived and brought to life, and even meet some of the creative folks who produce that memorable media. Learn about different career opportunities in the field and how you can be part of this exciting, fast-paced industry.

#### **Creative Writing**

For many hundreds of years, literature has been one of the most important human art forms. It allows us to give voice to our emotions, create imaginary worlds, express ideas, and escape the confines of material reality. Through creative writing, we can come to understand ourselves and our world a little bit better. This course provides students with a solid grounding in the writing process, from finding inspiration to building a basic story to using complicated literary techniques and creating strange hybrid forms of poetic prose and prose poetry. By the end of this course, students will learn how to discover their creative thoughts and turn those ideas into fully realized pieces of creative writing.

## **Entrepreneurship: Starting Your Business**

Do you dream of owning your own business? Get a head start in learning about what you'll need to own and operate a successful business. Learn how to create a business plan, finance a business, and price products and services.

## Foundations in Personal Finance

Personal finance refers to the financial decisions an individual or family makes in order to earn, budget, save, and spend money over time. These decisions are generally based on a variety of financial risks and planning for the future. This course will change your financial future and set you on a path to win with money, allowing you to change the way you look at money forever.

#### **Hospitality & Tourism**

Gain an introduction to this rapidly growing industry, including hotel and restaurant management, cruise ships, spas, resorts,

theme parks, and more. Learn key hospitality issues, the development and management of tourist locations, event planning, marketing, and environmental issues related to leisure and travel.

#### International Business: Global Commerce in the 21st Century

Designed to help students develop appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace, this course provides a conceptual tool by which to understand how economic, social, cultural, political and legal factors influence domestic and cross-border business. You'll cultivate a mindfulness of how history, geography, language, cultural studies, research skills, and continuing education are important to business activities and the 21st century.

## Introduction to Manufacturing

Learn about the types of manufacturing systems and processes used to create the products we buy every day, and discover various career opportunities in the manufacturing industry. As a culminating project, you'll plan your own manufacturing process for a new product or invention.

#### Leadership Skills Development

Leadership Skills Development takes students on a leadership journey, where they explore their own story and goals, and learn how to achieve things they never thought possible. The course concludes with students researching, planning, and participating in a service project that will benefit their school and/or community.

#### **Public Speaking**

Examine the foundations of public speaking through Aristotle and Cicero's views of rhetoric, then trace those foundations into the modern world. Learn theory as well as the practice of effective public speaking, including how to analyze the speeches of others, build a strong argument, and speak with confidence and flair.

#### **Restaurant Management**

Discover what's needed to run a successful restaurant, including ordering supplies, hiring quality workers, maintaining inventory, and

managing a large staff. Understanding such concepts as food safety, hygiene, customer relations, marketing, and using a point-of-sale system is crucial to being an effective restaurateur.

## Social Media: Our Connected World

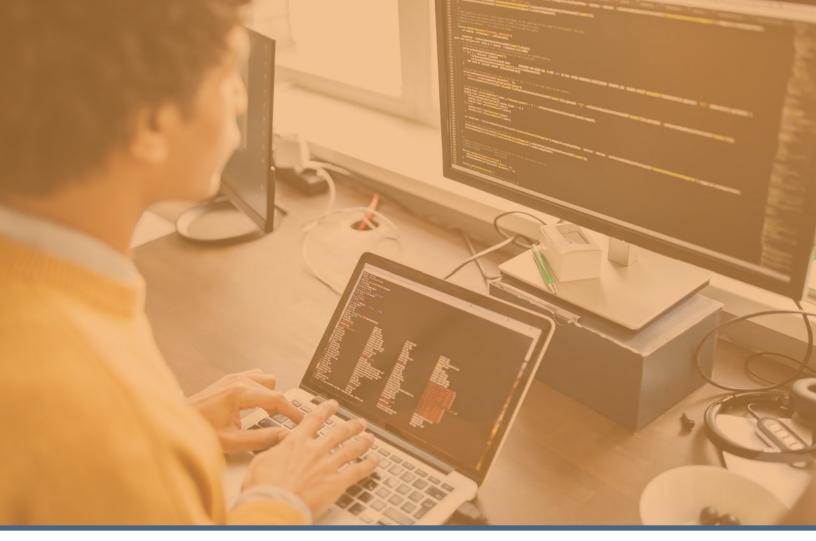
Have a Facebook account? What about Twitter? Whether you've already dipped your toes in the waters of social media or are still standing on the shore wondering what to make of it all, learning how to interact on social media platforms is crucial to surviving and thriving in this age of digital communication. In Introduction to Social Media, you'll learn the ins and outs of such social media platforms as Facebook, Twitter, Pinterest, Google+, and more and how to use them for your benefit—personally, academically, and, eventually, professionally. If you thought social media platforms were just a place to keep track of friends and share personal photos, this course will show you how to use these resources in much more powerful ways.

## **Sports & Entertainment Marketing**

Explore basic marketing principles and delve deeper into the multi-billion dollar sports and entertainment marketing industry. Learn how professional athletes, sports teams, and well-known entertainers are marketed as commodities and how some of them become billionaires as a result.

#### **TedED Speech Club**

**CLUB** | Using the TED Talk style of presenting big ideas in a short form, LSS students will get a chance to explore what it means to offer quality expressions via speech. Members will identify their passions, interests and talents and the means to share with others in an authentic, clear and expansive manner. Additionally, students will identify and outline their own, unique big idea. Students will have an opportunity to "talk" and benefit from authentic feedback from peers equally excited about this common interest, speaking. Finally, members will be chosen to share their big idea talk school wide, as LSS students, staff and faculty will be invited to hear them speak via web cam.





The digital age is well underway and the demand for skilled computing professionals is high; the industry expects to grow 13% by 2026. Students interested in a career in computer science and technology can choose from a variety of areas of study, including robotics engineering, game development, software programming, and more.

## **Career Pathway: Information Security Analyst**



#### **Job Summary**

Information security analysts plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyber attacks increases. The U.S. government, health care organizations, financial systems and other companies are increasingly dependent on the skills of information security analysts to protect their computer networks and software against hackers and cyber attacks.



#### **Top Universities**

Georgia Institute of Technology | Purdue University | University of Maryland at College Park | University of Illinois at Urbana-Champaign | Rochester Institute of Technology\*

\$95,510
MEDIAN ANNUAL SALARY

\$130,360 SALARY IN NEW YORK CITY, NY

**+28%**GROWTH BY 2026



## **Career Pathway: Robotics Engineer**



#### **Job Summary**

Robotics engineers design robots, maintain them, develop new applications for them, and do research to expand the potential of robotics. These engineers design and test how robots move, use sensors, and store data in order to carry out tasks. Robotics engineers work in a wide range of industries, including manufacturing, medicine, military, agriculture, aerospace, and energy.



#### **Top Universities**

University of Pennsylvania | Worcester Polytechnic Institute of Massachusetts | Carnegie Mellon University | University of Georgia | University of Southern California\*

\$93,254
MEDIAN ANNUAL SALARY

\$94,348
SALARY IN NEW YORK CITY, NY

**+9%**GROWTH BY 2026



## Career Pathway: Software Developer



Software developers are the creative minds behind computer programs. Some software developers create the applications that allow people to do specific tasks on a computer, smartphone, tablet, or another digital device. Other software developers build the underlying systems that run digital devices or control computer networks. Developers are often natural problem solvers who possess strong analytical skills and the ability to think outside the box.



#### **Top Universities**

Massachusetts Institute of Technology | University of California at Berkeley University of Illinois at Urbana-Champaign | Carnegie Mellon University\*

\$101,790 MEDIAN ANNUAL SALARY

\$147,590 SALARY IN SAN FRANCISCO, CA **+24%**GROWTH BY 2026





## **Laurel Springs Course Offerings**

#### 3D Modeling

Gain a deeper understanding of graphic design and illustration as you use 3D animation software to create virtual three-dimensional design projects. Hone drawing, photography, and 3D construction skills while developing the abilities needed to navigate a 3D digital modeling workspace. This course is an excellent introduction to careers in virtual reality, video game design, television and motion pictures, and more!

#### **AP Calculus AB\***

AP Calculus AB is a comprehensive introduction to calculus that is comparable to one semester of college-level, introductory calculus. The material is challenging and helps students understand the concepts of calculus and applications to the study of science, business, and engineering. The course emphasizes problems that are expressed graphically, numerically, and algebraically. Students build foundational calculus knowledge by analyzing graphs and calculating limits of functions, determining rates of change, and finding derivatives using the sum rule, product rule, quotient rule, chain rule, and implicit differentiation. Students are introduced to the derivatives of all functions including power functions, exponential functions, logarithmic functions, trigonometric functions, and inverse trigonometric functions. Students then apply derivatives to solve real-world problems. The course continues with techniques of integration, indefinite integrals, definite integrals, the fundamental theorem of calculus, and various applications of integration.

#### AP Calculus BC\*

AP Calculus BC is a comprehensive introduction to calculus that is comparable to two semesters of college-level, introductory calculus. The material is challenging and the course moves at a faster pace as compared to AP Calculus AB. This course helps students understand the concepts of calculus and applications to the study of science, engineering, and advanced mathematics. Through the study of functions, limits, derivatives, integrals, and infinite series, students learn to evaluate the soundness of proposed solutions, apply mathematical reasoning to real-world models, and understand change geometrically, visually, analytically, numerically, and verbally.

#### **AP Computer Science**

The equivalent to the first semester of a college-level introductory computer science course, develop the ability to write programs to correctly solve specific problems. The course also emphasizes design issues that make programs understandable, adaptable, and reusable.

#### **AP Computer Science Principles**

Discover the foundational concepts of computer science and explore the impact computing and technology has on society. With a unique focus on creative problem solving and real-world applications, you'll explore important topics of computing using your own ideas and creativity, use the power of computing to create artifacts of personal value, and develop an interest in computer science that will foster further endeavors in the field.

#### Coding 1A & 1B

Want to create your own webpage or simply curious how your favorite sites were built? Explore the role technology plays in our lives, study the fundamentals of computer science, review hardware and software, and learn how the internet functions. You will also discover how to create and build your own website, and learn basic and complex commands and sequences as you become familiar with programming languages.

#### **Cybersecurity 1A & 1B**

Can anything be kept "secret" online? Learn the tools, technologies, and methods needed to protect online information, and how these issues are impacting safety and rights on a global and personal level. Learn what exciting career possibilities await you in the new and high-demand field of cybersecurity.

#### Game Design 1A & 1B

Tap into your creative and technical skills as you explore the many aspects involved with designing video games. Learn about software and hardware, various gaming platforms, necessary technical skills, troubleshooting and internet safety techniques, and history of gaming. You'll even have the opportunity to create your very own plan for a 2D video game! The second part of this course allows you to conceptualize, design, and fully create your own game.

#### **Renewable Technologies**

Learn about the cutting-edge field of renewable energy and the exciting technologies that make it possible. Explore new ways of generating energy and storing that energy, from biofuels to high-capacity batteries and smart electrical grids. Discover the environmental and social effects of renewable technologies and examine how people's energy decisions impact policies.

#### Social Media: Our Connected World

Learning how to interact on social media platforms is crucial to thriving in this age of digital communication. Explore the ins and outs of social media platforms like Facebook, Twitter, and Pinterest, as well as how to use them to benefit personally, academically, and, professionally. This course will show you how to use these resources in powerful ways.

#### **Creative Computing**

**CLUB |** Robotics engineers design robots, maintain them, develop new applications for them, and do research to expand the potential of robotics. These engineers design and test how robots move, use sensors, and store data in order to carry out tasks. Robotics engineers work in a wide range of industries, including manufacturing, medicine, military, agriculture, aerospace, and energy.

\*Laurel Springs School Core Course





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.



### **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.



#### **Top Universities**

Cornell University | Creighton University | Boston University | Dartmouth College East Tennessee State University\*

\$208,000
MEDIAN ANNUAL SALARY

**\$285,420**SALARY IN TULSA, OK

**+13%**GROWTH BY 2026





## Career Pathway: Physician Assistant



Physician assistants, also known as PAs, practice medicine on 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 AAPA (American Academy of Physician Assistants) study found that more than 96 percent would recommend their physician assistant career to others.



#### **Top Universities**

Duke University | University of Iowa | Emory University George Washington University | Oregon Health and Sciences University\*

\$104,860
MEDIAN ANNUAL SALARY

\$146,870 SALARY IN CEDAR RAPIDS IA

+37% GROWTH BY 2026





## **Career Pathway: Veterinarian**



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.



#### **Top Universities**

Pennsylvania State University | University of Illinois at Urbana-Champaign University of Delaware | Clemson University | University of Findlay\*

\$90,420
MEDIAN ANNUAL SALARY

**\$216,240**SALARY IN HONOLULU, HI

**+19%**GROWTH BY 2026





## **Laurel Springs Core Course Offerings**

#### **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.

#### **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.

#### 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.

#### **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.

#### **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.

#### **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.

#### **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.



### **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.