

# GENESEE CHRISTIAN SCHOOL

## Online Course Catalog

2026



# GCS Online Courses

## AP Courses

World Languages

Art

English/Literature

Career Focused

Health/Physical Education

History/Social Studies

Math

Science

Study Skills/Test Prep/College or Career Readiness

Technology

## AP Courses

### AP Computer Science A and B

*One or two semesters. Prerequisite: Counselor approval*

This course involves developing the skills to write programs or part of programs to correctly solve specific problems. Students will learn design techniques to make programs understandable, adaptable, and reusable.

### AP Macroeconomics A

*One semester; Prerequisite: Counselor approval*

Students will understand the choices they must make as producers, consumers, investors, and taxpayers. This course provides students with the knowledge and decision-making tools necessary for understanding how a society must organize its limited resources to satisfy its unlimited wants.

### AP Microeconomics

*One semester; Prerequisite: Counselor approval*

Students will understand the choices they must make as producers, consumers, investors, and taxpayers. This course provides students with the knowledge and decision-making tools necessary for understanding how a society must organize its limited resources to satisfy its unlimited wants.

### AP U.S. Government and Politics

*One semester; Prerequisite: U.S. History*

Students will research the roles of the media, political parties, interest groups, states, candidates, bureaucracy, and the public in the governmental process. They will experience the production of policy building in the areas of economic/social policy, foreign policy, and public administration.

## World Languages

### ASL - Levels 1 through 5

#### American Sign Language IA and IB

*One or two semesters; Prerequisite: None. May take only 1A*

ASL 1 is an introduction to American Sign Language (ASL). The first semester of this course includes basic grammar, vocabulary, fingerspelling, numbers, and cultural information related to the Deaf Community. The second semester is a continuation of basic study of the language and culture; an opportunity to build receptive and expressive sign vocabulary; use of signing space; further use of non-manual components of

ASL grammar including facial expression and body postures, and introduction to conversational regulators. Discussion of regional and ethnic sign variations, as well as social, political and educational institutions of the Deaf community will be explored. Interaction with members of the Deaf community in both directed and non-directed activities will be featured. Higher levels of the class will expand upon these concepts and skills.

### **American Sign Language IIA and IIB**

*Two semesters. Prerequisite: Successful completion of ASL I*

ASL II is a continuation of the study of ASL. The first semester of this course includes vocabulary, word concepts, multiple meaning signs and an introduction to Interpreting. During the second semester, students will continue building their vocabulary, with a focus on expressive and receptive skills, to help students gain confidence and clarity in communication. Interaction with members of the Deaf community in both directed and non-directed activities will be required.

### **American Sign Language IIIA and IIIB**

*Two semesters. Prerequisite: Successful completion of ASL II*

ASL III is a continuation of the study of ASL.

### **American Sign Language IVA and IVB**

*Two semesters. Prerequisite: Successful completion of ASL III*

ASL IV is a continuation of the study of ASL.

### **American Sign Language VA and VB**

*Two semesters. Prerequisite: Successful completion of ASL IV*

ASL V is a continuation of the study of ASL.

## **French - Levels 1 through 3**

### **French IA and IB**

*One or two semesters. Prerequisite: None*

French courses are grounded in the development and integration of the four key language skills: listening, speaking, reading and writing. Students are introduced to vocabulary themes, grammar concepts, sentence structure and culture through explicit instruction and guided, self-paced learning. Opportunities to apply language in common situations along with interactive exercises reinforce skills in differing contexts.

### **French IIA and IIB**

*Two semesters. Prerequisite: French I*

French II is a continuation of the study of French.

### **French IIIA and IIIB**

*Two semesters. Prerequisite: French II*

French III is a continuation of the study of French.

## **German - Levels 1 and 2**

### **German IA and IB**

*One or two semesters. Prerequisite: None*

German courses are grounded in the development and integration of the four key language skills: listening, speaking, reading and writing. Students are introduced to vocabulary themes, grammar concepts, sentence structure and culture through explicit instruction and guided, self-paced learning. Opportunities to apply language in common situations along with interactive exercises reinforce skills in differing contexts.

### **German IIA and IIB**

*Two semesters. Prerequisite: German I*

In this course, students are introduced to increasingly complex vocabulary and grammar. There is more emphasis on improving spoken communication and listening comprehension.

# Art Courses

## Adobe Illustrator

*One semester. Prerequisites: None*

This course introduces students to the Adobe Illustrator and prepares students to take the ACE Certification Exam on Illustrator. Students will get an insight into what it is like working in the graphic design industry. Students will learn everything from absolute basics like navigating Illustrator to performing complex tasks like managing colors, drawing, creating illustrations, and much more. The course contains guided video tutorials, hands-on projects, and step-by-step resources that help students learn how to work in Illustrator.

## Adobe InDesign

*One semester. Prerequisites: None*

This course introduces students to the world of Adobe InDesign and prepares students to take the ACE Certification Exam on InDesign. Students will get an insight into what it is like working in the print and digital media publishing industry. Over 10 modules, students will learn everything from absolute basics like navigating InDesign to performing complex tasks like creating multi-page documents, applying effects, and even creating original artwork. The course contains guided tutorials, do-it-yourself projects, and great resources that will help students practice and learn how to work in InDesign.

## Digital Photography IA: Introduction

*One semester. Prerequisites: None*

Have you ever wondered how professional photographers manage to take such sensational pictures? How are they able to find just the right way to capture an image or moment in time? Perhaps you've even wondered why your own pictures don't meet that standard. Digital Photography I: Introduction will answer these questions and help you understand more about the basics of photography. Learning about aperture, shutter speed, lighting, and composition is key for any serious photographer and will help you gain the confidence and knowledge you need to become one. You will not only follow photography through its history but also gain a basic understanding of camera functions, techniques and what it takes to shoot quality portraits, close-ups, action shots, and landscapes.

## Digital Photography IB: Creating Images with Impact!

*One semester. Prerequisites: Digital Photography IA: Introduction*

Building on the prior prerequisite course, further develop your photography skills by learning more professional tips, tricks, and techniques to elevate your images. Explore various photographic styles, themes, genres, and artistic approaches. Learn more about photojournalism and how to bring your photos to life. Using this knowledge, build a portfolio of your work to pursue a career in this field!

## Digital Photography II: Discovering Your Creative Potential

*One semester. Prerequisites: Digital Photography IA: Introduction*

In today's world, we are surrounded by images. We are continually seeing photographs as they appear in advertisements, on websites, in magazines, and on billboards; they even adorn our walls at home. While many of these images have been created by professional photographers, it is possible for your photos to take on a more professional look after you discover how to increase your creative potential. In Digital Photography 2: Discovering Your Creative Potential, you will examine various aspects of the field including specialty areas, ethics, and famous photographers throughout history. You will also learn how to effectively critique photographs so you can better understand composition and go on to create more eye-catching photographs on your own.

## Fashion Design

*One semester. Prerequisites: None*

Are you a fashion trend follower? Are you drawn to how designers have pulled together fabrics and colors to create memorable pieces? Do you dream of designing your own line of clothing or accessories? Learn what it takes to get started in the fashion industry, from the careers available to new technology and trends reshaping the industry every day. Start creating!

## Graphic Design

*One semester. Prerequisites: None*

Graphic Design is an introduction to elements of design, spatial relationships, typography and imagery as they apply to practical visual solutions for self-promotion, resumes, logo design, Web design, and sequential systems. In this course, the student explores the basic foundations of design through a series of visual projects that explore the principles and elements of design. Students will work both with analog and digital media as they explore two-dimensional and three-dimensional design along with color theory. This course will help develop and explore a student's ability to communicate visually. In each lesson students acquire new skills, which take some effort. Beyond fundamental skills are various levels of creativity. Each lesson provides room for a student to express the technical skill learned in his or her own creative way.

## Interior Design

*One semester. Prerequisites: None*

Do you have a flair for designing and decorating? If so, then let's learn how to turn your interests and skills into a career. Explore color, texture, trends, and styles over time, how homes are built, and "green" options for homes and businesses. Interior designers do it all—from planning the color scheme to choosing furniture and light fixtures—with the end goal of creating a space where people can live or work comfortably, safely, and happily.

# English/Literature Courses

## Creative Writing - Unleashing Your Imagination

*One semester. Prerequisite: None*

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.

## Journalism IA: Introduction

*One semester. Prerequisite: English 11*

Are you a storyteller at heart? Are you always the first one to know what's going on at school or in your town and excited to share the latest breaking news? If so, you are the kind of person every online, print, and broadcast news outlet is searching, and Journalism I: Introduction is the perfect course for you! Explore the history of journalism and see how social media and the digital world has changed the way news media operates. Learn the basics of press law, as well as the code of ethics journalists should follow. Finally, understand how to make your writing and speaking more powerful, and discover the importance of pictures and images when telling a story.

## Journalism IB: Investigating the Truth

*One semester. Prerequisite: Journalism IA*

If you want to turn your writing, photography, and collaborative skills into an exciting and rewarding career, Journalism I: Investigating the Truth is where to begin. Learn how to write a lead that grabs your readers, discover the roles of sources and how to interview them effectively, and explore the best options for researching your story in a digital world. You will also understand the role editors and producers play in the revision process, learn how to prepare your posts for publication, and how to follow the publication process - from the flow of a work day to the layout of a newspaper or a news broadcast.

## Public Speaking IA: Introduction

*One semester. Prerequisites: None*

Does the thought of speaking in front of people make you break out in hives? Maybe you want tips on how to make that first great impression? In both cases, Public Speaking may be just what you need. In this class you will learn from famous orators, like Aristotle and Cicero, how to communicate effectively, uphold your arguments, and effectively collaborate with others. You'll master the basics of public speaking through practice—such as building a strong argument and analyzing the speeches of others—eventually learning to speak confidently in front of large groups. Grab your notes and get ready to conquer public speaking!

## **Public Speaking IB: Finding Your Voice**

*One semester. Prerequisites: Public Speaking IA: Introduction*

If you've learned the basics and are ready to expand your public speaking skills, Public Speaking IB: Finding Your Voice is for you. In this course, you'll master the fundamentals of public speaking through practice and eventually learn to speak confidently in front of large groups. Explore the use of inductive and deductive reasoning, learn how to prepare a speech outline, and discover how to write your own speech using correct and emotive language. This course will also help you to develop self-efficacy and self-esteem, reduce your fear of public speaking, and teach you how to use body language effectively. You'll also learn how to stand back and critically examine your own work in order to identify areas for improvement.

## **Theater, Cinema, and Film Production IA: Introduction**

*One semester. Prerequisites: None*

Lights! Camera! Action! Theater and cinema are both forms of art that tell a story. Let's explore the enchanting world of live theater and its fascinating relationship to the silver screen. Explore the different genres of both and how to develop the script for stage and film. Then dive into how to bring the script to life with acting and directing. If you have a passion for the art of film and stage, let's bring your creativity to life!

## **Theater, Cinema, and Film Production IB: Lights, Camera, Action!**

*One semester. Prerequisites: None*

Lights, camera, action ... take two! Whether you're a performer, critic, or fan, you'll pull back the curtain to dive deeper into the making of movies and theater performances. Explore multiple facets of the production process from both theater and film. Gain insights from industry leaders along the way and learn to think critically about different aspects to develop your unit-by-unit blog. You'll fully understand how high-quality entertainment and art are crafted for the theater and the silver screen.

## **The Lord of the Rings: An Exploration of the Films and Their Literary Influences**

*One semester. Prerequisites: None*

Hobbits, Orcs, wizards, dashing knights, and powerful elves are all part of the magic created in J.R.R. Tolkien's famously epic tale, The Lord of the Rings. For years, the vivid characters within this beloved story could exist only in the readers' minds until it was adapted into a movie that allowed fans to finally see, through the eyes of Hollywood magic and brilliant technology, the manifestation of these characters onscreen. What does it take to transport these well-known images like Gollum and the Shire from dusty pages to the giant screen? In The Lord of the Rings: An Exploration of the Films & Its Literary Influences, you will see first-hand how classic literature can become modern film and bring the fantasy alive for a whole new generation of believers.

# **Career Focused Courses**

## **Accounting**

*One semester. Prerequisites: None*

In this semester course, students will explore accounting, including investigating accounting careers. They will learn basic accounting skills and procedures both with and without a computer for general journals, general ledgers, cash payments journals, cash receipts journals, sales journals, accounts payable ledgers, and accounts receivable ledgers. Students will also learn how to reconcile a bank statement and to prepare payroll records. This course covers the basic principles of financial accounting for individuals and for companies with attention to both the mathematical formulas and to the ethical side of accounting. Each unit has practical exercises including a project at the end of the unit.

## **Accounting I**

*One semester. Prerequisites: None*

This course provides students with an introduction to accounting concepts and principles, financial statements, internal control design, and accounting for partnerships.

## Accounting II

*One semester. Prerequisites: Accounting I*

Accounting II builds on the foundation acquired in Accounting I, allowing students to extend their skills and knowledge in the subject. The course focuses on various managerial, financial, and operational accounting activities that require the formulation, interpretation, and communication of financial information for use in management decision making.

Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources.

This course allows students to explore careers in accounting while learning financial skills applicable to any professional setting. Students engage in project-based activities such as analyzing financial statements, implementing the accounts payable and accounts receivable process, and determining payroll expenses and taxes. Active learning ensures that students continually focus on the technical and interpersonal skills necessary to prepare them for the workplace. In addition, students evaluate the roles and qualifications required for specific accounting careers, so they can identify opportunities that interest them.

Accounting II is a full-year advanced Career and Technical Education course applicable to programs of study in the Finance or Business Management and Administration career clusters. This course is built to state and national CTE standards. Students who successfully complete the course will be prepared to pursue certifications such as Associate in Regulation and Compliance, Certified Management Accountant, or Certified Quality Auditor.

## Advertising and Sales Promotion

*One semester. Prerequisites: None*

What comes to mind when you think of "marketing"? Perhaps a familiar television jingle plays in your head? Or maybe you think of those irritating sales phone calls? There's no denying the sheer magnitude and power of the marketing industry. Every year companies spend approximately \$200 billion promoting their products and services. That's just in the United States alone! You may be familiar with being on the receiving end of marketing, but what's it like on the other side? In Advertising and Sales Promotions, you'll see how these marketing campaigns, ads, and commercials are brought to life and meet some of the creative folks who produce them. You'll learn about different marketing career opportunities and discover ways to be part of this exciting, fast-paced industry.

## Agrisciences I: Introduction

*One semester. Prerequisites: None*

How can we make our food more nutritious? Can plants really communicate with each other? These are just two of the questions tackled in Agriscience 1: Introduction. From studying the secrets in corn roots to examining how to increase our food supply, this course examines how agri scientists are at the forefront of improving agriculture, food production, and the conservation of natural resources. In Agriscience 1: Introduction, you'll learn about the innovative ways that science and technology are put to beneficial use in the field of agriculture. You'll also learn more about some of the controversies that surround agricultural practices as nations strive to provide their people with a more abundant and healthy food supply.

## Agrisciences II: Sustaining Human Life

*One semester. Prerequisites: Agrisciences I*

Have you ever strolled past a bright green cauliflower at the market and paused to ponder its unusual color? Ever wonder why broccolini is suddenly a thing? Well, if you find yourself curiously questioning these, and other, peculiar vegetables and wondering about the role of agriculture in the modern world, Agriscience II is for you. Learn how science and technology are revolutionizing our food supply and promoting innovative ways to produce healthy plant-based foods, such as developing better hybrids and growing edible plants in challenging places. Food is our most essential resource; see how plant science will change the face of eating in the 21st century and give us the knowledge to continually improve our green thumbs!

## Applied Engineering IA: An Introduction

*One semester. Prerequisites: None*

Discover how technology has changed the world around us by pursuing technological solutions to everyday problems. While using scientific and engineering methods, learn how electricity, electronic systems, magnets, and circuits work. Understand the design process and bring your ideas to life. Explore how engineering advances your ideas and the world!

## **Applied Engineering IB: Solving Problems Together**

*One semester. Prerequisites: Applied Engineering IA*

Do you like to invite solutions to solve problems? Applied engineering has advanced areas such as energy, transportation, health and genetics, alternative energy, food packaging, etc. Explore various inventions and solutions that have solved problems across industries.

Examine how artificial intelligence and technology are making an impact on breakthroughs. Evaluate the range of robotic and STEM-related career options available for you to make a difference in lives with your contributions and innovations.

## **Biotechnician 1A: Introduction**

*One semester. Prerequisites: None*

There are so many mysteries that need unraveling in the world today that can help us grow better crops, cure diseases, combat pollution, solve crimes, and so much more. If you love the idea of solving problems to make the world a better place, a career as a biotechnician may be for you. In this course, you'll learn the basics of lab safety, how to perform tasks crucial to experimentation, biological basics, and about the exciting careers available in the field of biotechnology. Not all heroes wear capes. Some wear lab coats. Grab yours and let's get started!

## **Biotechnician 1B: Advancements in Biotechnology**

*One semester. Prerequisites: None*

You've scratched the genetic surface of a biotechnician's world, but now, we're going to dive deeper into mankind's future. In this course, you'll explore essential topics that structure the reality of biotechnology such as the role genetics and epigenetics play in influencing human traits, the creation and purpose of recombinant DNA, and how the human immune response can be tweaked to fight disease. You'll also explore GMOs and biofuels and how an idea becomes reality in the biotech industry. Let's continue learning about how you can change the world in a role as a biotechnician.

## **Biotechnician 2A: Moving into the Lab**

*One semester. Prerequisites: Biotechnician 1A and 1B*

Are you ready to have an authentic, positive impact on human life? In this course, you will dive even deeper into the role of a biological technician to understand how genetic engineering works. You will explore managing a biotech laboratory, Microscopy and Spectroscopy, mammalian cell culture, what the day-to-day duties of a biotechnician involve, and more. You will also explore experimental design as it relates to genetic engineering to plan your own experiments. Get ready to break down the building blocks of human design!

## **Business Communication 1A: Introduction**

*One semester. Prerequisites: None*

No matter what career you're planning to pursue, excellent professional communication will be key to your success. Upgrade your abilities in speaking, listening, writing, using and reading body language, and communicating in teams and groups. Discover how to plan, create, and deliver business presentations and communicate through graphics. In no time, you'll be communicating with confidence, stand out from your peers, and impress your employer.

## **Business Communication 1B: Listen, Speak, and Write in the Workplace**

*One semester. Prerequisites: Business Communication 1A*

You've learned your audience, found your voice, and can read the body's unspoken words. Now, it's time to limber up those fingers and learn the P's and Q's of communicating in a business setting. In this course, you're going to take the basic writing skills you've developed and revise them so you can take new approaches to planning, building, and distributing documents for a business audience. You'll continue to explore the essentials of writing while drafting new understandings of business documents, and then you'll learn to apply your business communication skills to job applications, interviews, and presentations. No matter your career of choice, learning to effectively communicate will help your professionalism grow leaps and bounds. Let's get writing!

## **Business Information Management 1A: Introduction**

*One semester. Prerequisites: None*

Students will build their career skills and strengthen their knowledge of business information management by exploring types of businesses and the elements of business planning. Learning about the

initial requirements to start a business, students will then examine business finances, marketing, sales, and the importance of customer service.

Computer hardware, networks, and the internet are discussed as well as the basics of web design. Lastly students will explore ethics and business law, giving each learner an opportunity to discover their passion for business.

### **Business Information Management IB: Data Essentials**

*One semester. Prerequisites: Business Management IA*

Students will build their career skills and strengthen their knowledge of business information management by exploring types of businesses and the elements of business planning. Learning about the initial requirements to start a business, students will then examine business finances, marketing, sales, and the importance of customer service. Computer hardware, networks, and the internet are discussed as well as the basics of web design. Lastly students will explore ethics and business law, giving each learner an opportunity to discover their passion for business.

### **Business Law IA: Introduction**

*One semester. Prerequisites: None*

Whether you plan on starting your own business or being in charge of one, it is crucial you understand how to keep the company compliant. Explore what it means to run an ethical business, how to keep intellectual property, technology, and e-commerce safe and protected, understand insurance and taxes, and how to have a healthy workplace environment. Keep the business safe and growing by following the law.

### **Business Law IB: Legal Aspects of Business**

*One semester. Prerequisites: Business Law IA*

Whether you plan to start your own business, work for an organization, or go into law, it's essential to understand more complex legal requirements that impact business operations and decisions. This is especially true as companies grow and expand domestically and internationally. Explore the differences between criminal and civil law. Examine how state and federal regulations work to protect consumer and employees' rights, protect society and the environment, and understand how business contracts can work to protect everyone.

### **Business Management**

*One semester. Prerequisites: None*

Business Management guides students through examples of their roles as wage earners, consumers, and citizens as they explore the wide, exciting world of business. Course topics range from the extensive use of credit to the role of government in the U.S. economy.

### **Career Exploration in Finance**

*One semester. Prerequisites: None*

This course introduces students to the challenging and lucrative world of finance. While "Wall Street" may still get a bad rap after the 2008 financial crisis, finance careers still remain highly sought after and can be highly rewarding. The course reviews key financial terms and examines various groups, positions, and roles within financial institutions. Students will learn about resumes, interviews, and networking. Students will also discuss ethics on Wall Street and the role of finance within society.

### **Career Planning**

*One semester. Prerequisites: None*

The Career Planning course guides students through the essential elements of the career planning process and the development of a defined career plan. Students will consider the many factors that impact career success and satisfaction. Using a process of investigation, research, and self-discovery, students will acquire the understandings critical to the career planning process. Upon completion of the course, students will have created a practical and comprehensive college or career transition portfolio that reflects their skills and abilities, as well as their interests, values, and goals.

### **Careers in Criminal Justice IA: Introduction**

*One semester. Prerequisites: None*

Have you ever wondered what steps take place as people as they move through the court system? The criminal justice system is a very complex field that requires dedicated people willing to pursue equal justice for all. Explore different career choices and how the juvenile justice system, the correctional system, and the trial process all work together to maintain social order.

## **Careers in Criminal Justice IB: Finding Your Specialty**

*One semester. Prerequisites: None*

Have you ever thought about a career as a police officer, an FBI or DEA agent, or any occupation that seeks to pursue justice for all? Careers in criminal justice can be found at local, county, state, and federal levels, and even in the private sector. Explore some of the various occupations in this field, while simultaneously learning how they interact with each other and other first responders. Discover various interviewing techniques to uncover the truth. Understand the importance of making ethical decisions, and how you need to keep your sense of right and wrong in check to be successful in this field.

## **Concepts of Engineering and Technology**

*One semester. Prerequisites: None*

What if you could do the impossible? Engineers understand a lot of things, but the word impossible definitely isn't one of them. Through Concepts of Engineering and Technology, you'll learn how the momentum of science is continually propelling engineers in new directions towards a future full of insight and opportunity. This course explores the different branches of engineering and how problem-solving, sketching, collaboration, and experimentation can change the very fiber of our human lives. This ever-increasing knowledge can also lead to serious ethical dilemmas and the need to discuss where the boundaries of science lie (or even if there should be boundaries). By examining astounding engineering feats and complex ongoing issues, you, too, will begin to question whether the word impossible exists.

## **Cosmetology I: Cutting Edge Styles**

*One semester. Prerequisites: None*

We all want to look our best, but did you know there is actually a science behind cutting your hair and painting your nails? In Cosmetology: Cutting-Edge Styles, you will learn all about this entertaining field and how specialized equipment and technology are propelling our grooming into the next century. Just like all careers, cosmetology requires certain skills and characteristics, which are thoroughly explored in this course. Learn about beauty regimes related to hair, nails, skin, and spa treatments, and discover how to create your own business model quickly and efficiently while looking fabulous!

## **Cosmetology II: The Business of Skin and Nail Care**

*One semester. Prerequisites: Cosmetology I*

Helping people put their best face forward is a growing, vibrant industry which needs skilled and personable professionals well-versed in the latest trends and technological advances. In Cosmetology 2: The Business of Skin and Nails, experience what the day-to-day life of a cosmetologist is like. You will discover that cosmetology is much more than knowing and applying techniques. Additionally, you will explore skin care and facials, learn how to give manicures and pedicures and how to apply artificial nails, and gain an understanding of different hair removal techniques. Discover the next steps towards launching a rewarding and creative career in cosmetology.

## **Cosmetology IIIA: Introduction to Hair Skills**

*One semester. Prerequisites: Cosmetology I and II*

Cosmetology is a specialized field with a high skill set. Examine the complexities of cosmetology by learning to perform a hair, scalp, and skin analysis. You'll learn about hair types, face shapes, and color theory. And, to effectively prepare you for a career in cosmetology, color techniques with an emphasis on salon and chemical safety is examined.

## **Cosmetology IIIB: Waving, Coloring, and Advancing Hair Skills**

*One semester. Prerequisites: Cosmetology I, II, and 3A*

Let's delve into the realm of hairstyling and cutting techniques! Explore a variety of wigs, extensions, and hairpieces, while also developing knowledge about shampooing and conditioning. Discover manual curling and the use of chemicals to curl and straighten hair, as well as safety when working with chemicals. Expect to be well versed with a plethora of hair skills upon completion.

## **Culinary Arts IA: Introduction**

*One semester. Prerequisites: None*

Food, glorious food! It both nourishes and satisfies us, and it brings people together through preparation, enjoyment, and celebration. If you've ever wanted to learn more about cuisine and how your creativity and appreciation can be expressed by preparing food, Introduction to Culinary Arts is perfect for you. Learn the fundamentals of a working kitchen, and explore what it takes to develop real talent as a chef. Enhance your knowledge of the endless varieties of food, and discover the possibilities that the many spices can bring. Learning more about food preparation will certainly make everything you prepare taste better while giving you the ability to bring people together through the joy of eating.

## **Culinary Arts IB: Finding your Palate**

*One semester. Prerequisites: None*

Did you know that baking is considered a science? Building on the prior prerequisite course, discover how to elevate your culinary skills through the creation of stocks, soups, sauces, and learn baking techniques. Examine sustainable food practices and the benefits of nutrition while maintaining taste, plating, and presentation to truly wow your guests. The last unit in this course explores careers in the culinary arts for ways to channel your newfound passion!

## **Culinary Arts II: Baking, Pastry, and More!**

*One semester. Prerequisites: Culinary Arts IA: Introduction*

Whether you aspire to be a world-class chef or just want to learn the skills needed to create your own dishes, Culinary Arts 2: Baking, Pastry, and More! will help you build a strong foundation and grow your knowledge of this exciting industry. In this course, you will explore baking and desserts, learn how to prepare proteins, and study nutrition and safety in the kitchen. You will also enhance your understanding of sustainability in the food industry, learn to prepare meals from a global perspective, and dissect the business of cooking, from managing a kitchen to successfully running a catering company. Discover the delights that await you on this delicious culinary adventure!

## **Early Childhood Education IA: Introduction**

*One semester. Prerequisites: None*

As children, we see the world differently than we do as teenagers and adults. It is a world full of magical creatures and strange, exciting things. But what makes childhood such a wondrous time of learning and exploration? What can caregivers do to encourage this? In Early Childhood Education, you will learn more about understanding the childhood experience. Learn how to create interesting lessons and stimulating learning environments that provide a safe and encouraging experience for children. Discover how to get children excited about learning and, just as importantly, to feel confident about their abilities. Early childhood teachers have the unique opportunity to help build a strong base for their young students' life-long education.

## **Early Childhood Education IB: Developing Early Learners**

*One semester. Prerequisites: Early Childhood Education IA*

What makes childhood such a wondrous time of learning and exploration? What can caregivers do to encourage this? In Early Childhood Education I: Developing Early Learners, you will learn more about the childhood experience and how to create fun, stimulating, and educational environments for children. Discover how to get children excited about learning and, just as importantly, to feel confident about their abilities. Learn to effectively communicate with children, how to create good behavior, and how to discipline youth of different ages. You will also learn how to encourage language development in young children and how to create a literacy-rich environment. Finally, build an educational plan that will help you meet your career goals and explore professional development opportunities that will assist you on your path.

## **Entrepreneurship IA: Introduction**

*One semester. Prerequisites: None*

Starting a business is more than just having a good idea. Successful entrepreneurs know how to use and apply fundamental business concepts to turn their ideas into thriving businesses. Explore topics such as identifying the best business structure, business functions and operations, finance, business laws, regulations, and more! If you have ever dreamed of making a business idea a reality, take the time to establish a solid foundation of business skills to make your business dreams come true!

## **Entrepreneurship IB: Make Your Idea a Reality**

*One semester. Prerequisites: None*

You have the business idea; now it's time to go from dream to reality. Throughout this course, you'll explore different topics representing the major parts of a business plan, such as risk, hiring, pricing, marketing, and more. By completing activities, you'll create a viable document you can use to help you start your business by the end of the course. Let's bring your dream to life!

## **Health Careers**

*One semester. Prerequisites: None*

In this course students explore a variety of career options related to the health care field, including medicine, nursing, physical therapy, pharmacy, dental careers, child care, 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.

### **Health Science Foundations IA: Introduction**

*One semester. Prerequisites: None*

Introduce your students to the rewarding field of health science! Learners will acquire foundational knowledge required to pursue a career, such as the roles in the health care industry and the education, training, and credentials needed to attain them. Basic medical terminology, principles of anatomy and physiology, and legal and ethical responsibilities are also discussed. In addition, students will explore communication, teamwork and leadership techniques- providing a solid basis for those wanting to advance through the health sciences.

### **Health Science Foundations IB: Professional Responsibilities**

*One semester. Prerequisites: Health Science Foundations IA*

Building on the prior prerequisite course, you will further develop your understanding of health science. Starting with safety, you will analyze your responsibilities for ensuring patient and personal safety with special attention paid to emergency procedures. Infection control, first-aid, CPR, and measuring vitals are discussed in detail. You will also learn about numerical data, such as systems of measurement, medical math, and reading and interpreting charts. Finally, examine effective team work and leadership characteristics while building your employment skills.

### **Health Science: The Whole Individual**

*One semester. Prerequisites: None*

We know the world is filled with different health problems and finding effective solutions is one of our greatest challenges. How close are we to finding a cure for cancer? What's the best way to treat diabetes and asthma? How are such illnesses as meningitis and tuberculosis identified and diagnosed? Health Sciences I: The Whole Individual provides the answers to these questions and more as it introduces you to such health science disciplines as toxicology, clinical medicine, and biotechnology. Understanding the value of diagnostics and research can lead to better identification and treatment of many diseases, and by learning all the pertinent information and terminology you can discover how this amazing field will contribute to the betterment of human life in our future.

### **Health Science II: Patient Care and Medical Services**

*One semester. Prerequisites: Health Science I: The Whole Individual*

Are you looking for a job that's challenging, interesting, and rewarding? These three words describe many of the different careers in health care, and Health Sciences II: Patient Care and Medical Services will show you how to become part of this meaningful vocation. Promoting wellness, communicating with patients, and understanding safety in the workplace are just a few of the essential skills you will learn, all the while becoming familiar with some of the more prominent areas in the field, such as emergency care, nursing, infection control, and pediatrics. You'll learn about some of the inherent challenges faced by this age-old profession and how you can become a significant part of the solution.

### **Health Science: Nursing**

*One semester. Prerequisites: None*

Nursing is an in-demand career, perfect for someone looking for a rewarding and challenging vocation in the healthcare sector. With a strong focus on patient care, a nurse must be skilled in communication, promoting wellness, and understanding safety in the workplace. In Health Science: Nursing, you will explore communication and ethics, anatomy and physiology, and the practice of nursing. Learn how to build relationships with individuals, families, and communities and how to develop wellness strategies for your patients. From emergency to rehabilitative care to advances and challenges in the healthcare industry, discover how you can launch a fulfilling career providing care to others.

### **Health Science: Public Health**

*One semester. Prerequisites: None*

What is public health? Who is in control of our health systems and who decides which diseases get funding and which do not? What are the human and environmental reasons for health inequality? Health Science:

Public Health answers all of these questions and more. You will study both infectious and non-communicable diseases as well as learn how we conquer these on a community and global level through various methods, including proper hygiene, sanitation, and nutrition. Explore the role of current and future technologies worldwide as well as consider the ethics and governance of health on a global scale. Discover unique career opportunities and fascinating real-life situations.

### **Hospitality and Tourism: Traveling the Globe**

*One semester. Prerequisites: None*

Think about the best travel location you've ever heard about. Now imagine working there. In the 21st century, travel is more exciting than ever, with people traversing the globe in growing numbers. Hospitality and Tourism: Traveling the Globe will introduce you to a thriving industry that caters to the needs of travelers through managing hotels, restaurants, cruise ships, resorts, theme parks, and any other kind of hospitality you can imagine. Operating busy tourist locations, creating marketing around the world of leisure and travel, spotting trends, and planning tasteful events are just a few of the key aspects you will explore in this course as you locate your own career niche in this exciting field.

### **Hospitality and Tourism IIA: Hotel and Restaurant Management**

*One semester. Prerequisites: Hospitality and Tourism: Traveling the Globe*

If you love working with people, a future in hospitality may be for you. In Part 1 of Hospitality and Tourism 2: Hotel and Restaurant Management, you will learn about what makes the hotel and restaurant industries unique. Learn about large and small restaurants, boutique and resort hotels, and their day-to-day operations. Evaluate the environment for these businesses by examining their customers and their competition. As well, you will discover trends and technological advances that make each industry exciting and innovative. In Part 1, you can explore a variety of interesting job options from Front Desk and Concierge services to Maître d and food service.

### **Hospitality and Tourism IIB: Hotel and Restaurant Management**

*One semester. Prerequisites: Hospitality and Tourism IIA*

Building upon the prior prerequisite course, students will embark on their journey to becoming managers in the hotel and restaurant industry by gaining knowledge and developing a variety of skills. Students will learn of different management styles, laws, and regulations that govern hotels and restaurants as well as how to develop job descriptions and business plans. In addition, students will learn how to create menus, advertise vacancies, perform interviews, and understand the financials of a hotel or restaurant.

### **Human and Social Services**

*One semester. Prerequisites: None*

Those working in the field of social services are dedicated to strengthening the economic and social well-being of others and helping them lead safe and independent lives. In Human and Social Services 1, you will explore the process of helping, body, mind, and family wellness, and how you can become a caring social service professional. If you are interested in an emotionally fulfilling and rewarding career and making a difference in the lives of others, social and human services may be the right field for you.

### **Human Resource Management IA: Introduction**

*One semester. Prerequisites: None*

Are you ready to step into a critical leadership role that oversees the development of every successful business' most valuable resource? In this course, you will wear the shoes of a Human Resource Management (HRM) professional and will learn how to build and manage a team to help a company reach its goals. You will also explore and perform some of the key responsibilities of a HRM professional: research, interviewing, reporting, recruiting, hiring, assessing employees, and more! Are you ready to help develop invaluable human resources that are the heart of a company and help your company thrive? Learn how to create a winning culture through human resources!

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

*One semester. Prerequisites: None*

Imagine meeting with suppliers at an office in Europe while calling your salesroom that's back in Asia. Imagine investing in foreign markets and visiting partners in exotic locales. With the evolution of current technology, our world is more connected than ever before, and the business community today is larger than ever. International Business: Global Commerce in the 21st Century will demonstrate just how you can gain the knowledge, skills, and appreciation to live and work in the global marketplace. You will begin to understand how both domestic and international businesses are affected by economic, social, cultural,

political, and legal factors and what it takes to become a true manager of a global business in the 21st century.

### **Introduction to Education and Teaching**

*One semester. Prerequisites: None*

This course is designed to prepare future educators for the classroom they will inherit! It starts with a history of education and how blended, adaptive, and personalized learning are coming to the forefront in learning. It then explores new and emerging technologies, along with their current and future impact on education. Throughout the course, students will explore a wide range of career possibilities in the education field and evaluate both the promises and pitfalls of technology in education.

### **Introduction to Manufacturing: Product Design and Innovation**

*One semester. Prerequisites: None*

Think about the last time you visited your favorite store. Now picture the infinite number of products you saw. Have you ever wondered how those things made it to the shelves?

Whether it's video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In Introduction to Manufacturing: Product Design and Innovation, you will learn about different types of manufacturing systems as well as career opportunities, including engineers, technicians, and supervisors. As a culminating project, you will plan your own manufacturing process and create an entirely original product! If you thought manufacturing meant mundane assembly lines, this course will show you how exciting, creative, and practical this industry can be.

### **Introduction to Military Careers**

*One semester. Prerequisites: None*

Most of us have seen a war movie; maybe it had a hotshot aviator or a renegade private or a daring Special Forces operative. But outside of these sensationalized portrayals, do you really understand how the military works or what it can do for you? The military offers far more career diversity than most people imagine, and Introduction to Military Careers will provide the information you need to gain a broader understanding of how to find the right fit. You will learn about the five military branches' Force, Army, Coast Guard, Marines Corps, and Navy' examine which jobs you might like to pursue. From aviation, to medicine, to law enforcement, the military can be an outstanding place to achieve your dreams in a supportive and well-structured environment.

### **Law and Order: Introduction to Legal Studies**

*One semester. Prerequisites: None*

Imagine if there were no laws and people could do anything they wanted. It's safe to say the world would be a pretty chaotic place! Every society needs some form of regulation to ensure peace in our daily lives and in the broader areas of business, family disputes, traffic violations, and the protection of children. Laws are essential to preserving our way of life and must be established and upheld in everyone's best interest. In Law and Order: Introduction to Legal Studies, you'll delve deeper into the importance of laws and consider how their application affects us as individuals and communities. Through understanding the court system and how laws are actually enacted, you will learn to appreciate the larger legal process and how it safeguards us all.

### **Legal Admin Specialist IA: Intro**

*One semester. Prerequisites: None*

Do you picture yourself working in a law office or maybe even in a courtroom someday? A rewarding career as a legal administrator means you are responsible for the day-to-day operations in a law firm, and therefore, need to learn the fundamentals of law. You'll need to understand the specifics of researching, creating, processing, filing legal documents, and more. Jumpstart your career in law by learning what it takes to be a legal admin.

### **Legal Admin Specialist IB: Taking Care of a Legal Office**

*One semester. Prerequisites: None*

Wherever your legal admin career takes you, understanding the responsibilities of a law office requires strict attention to detail, communication skills, office competence, and legal savvy. What does a legal admin need to know and what duties do they perform? How do confidentiality, cybersecurity, and client relations look different in a legal office? Learn the answers to these questions and so much more for this exciting career with endless opportunities to prove your value, learn, and grow.

## **Marketing IA: Introduction**

*One semester. Prerequisites: None*

Introduce your students to the fast-paced and exciting world of marketing! Students will learn about the role of marketing in business in addition to the basics of business management, customer service, and economics. Furthermore, students will examine how to identify target markets, perform market research, and develop successful marketing strategies. Finally, the legal and ethical considerations of business and marketing are discussed along with the impact of government on business.

## **Marketing IB: Building Your Base**

*One semester. Prerequisites: Marketing IA: Introduction*

Building on the prior, prerequisite course, you will dive deeper into the marketing world with real world applications and practices. Engage with the marketing mix by studying understanding branding, advertising, promotion strategies, and more. Learn about effective sales techniques and discover employment opportunities to pursue a career in this exciting field!

## **Marketing IIA: Global Business and Trade**

*One semester. Prerequisites: Marketing IA: Introduction*

Can you think of a brand that first launched in the U.S. and then became popular in other countries? Facebook™ did this very thing! Without a solid understanding of business and international marketing strategy, it becomes nearly impossible to be successful and stand out from the crowd. In this course, you'll find out how business and marketing works around the world! You'll learn about topics such as regulations, market research, marketing plans, global trends, buying and selling internationally, and more!

## **Marketing IIB: Developing a Sales Team**

*One semester. Prerequisites: Marketing IA: Introduction*

How does a business make money? If you said sales, then you're right! This course explores the secrets to sales. You'll learn expectations, best practices, sales planning, building a clientele that becomes long-term buyers, and how to stay motivated to sell, sell, sell! If sales management is your goal, you'll learn about management styles, how to find, hire, train, motivate, and compensate your team.

## **Medical Assistant IA: Introduction**

*One semester. Prerequisites: None*

It takes a strong team to offer top-notch patient care, and each team member plays an integral role. Are you a team player interested in coordinating patient care? Then a career as a medical assistant may be right for you! In this course, you will acquire medical terminology, investigate anatomy and physiology, learn keys to professionalism in an office setting, and explore office roles while building a professional portfolio. Let's learn what it takes to fill the important shoes of a medical assistant today!

## **Medical Office Administration IA: Introduction**

*One semester. Prerequisites: None*

Caring for a patient takes more than a medical degree: it takes a team! In this course, you will build your knowledge of medical terminology, medical office processes, the technology that keeps an office humming, and the laws that keep it operating ethically. You'll also explore different office roles all while building the beginnings of a portfolio. Let's march through the waiting room and throw open the doors to a career as a Medical Office Admin today!

## **Medical Terminology IA: Introduction**

*One semester. Prerequisites: None*

Learning the language is essential for careers in health science. Join word parts to form medical terms, associations within body systems, and better communicate with colleagues and patients. Build your proficiency and confidence with this course and prepare yourself for a career in health sciences.

## **Medical Terminology IB: Discovering Word Foundations**

*One semester. Prerequisites: None*

Adding on the prior prerequisite course, discover the medical terminology associated with even more body systems to increase your ability to master prefixes, suffixes, and roots. Connect this language to real world patients and clinical settings through practical applications and specific scenarios. Launch your health knowledge with detailed medical terms!

## **National Security**

*One semester. Prerequisites: None*

Do you know what it takes to keep an entire nation safe? It not only requires knowledge of how to handle disasters, but it also demands a cool head and tremendous leadership abilities. In National Security, you will have the opportunity to learn about the critical elements of the job, such as evaluating satellite information, analyzing training procedures, assessing military engagement, preparing intelligence reports, coordinating information with other security agencies, and applying appropriate actions to various threats. Put yourself in the position of the country's decisive leaders and develop your own knowledge base and skill set necessary to meet the requirements of our nation's most demanding career.

## **Principles of Agriculture, Food, and Natural Resources**

*One semester. Prerequisites: None*

Did you know that the world's population could be as high as 11 billion people by the year 2050? And certainly, as our population is growing, so too are our food needs. Even today, millions of people around the world experience hunger. How can we balance growing populations and keeping everyone fed? This is where the importance of agriculture, food, and natural resources comes in! Through the study of Principles of Agriculture: Food and Natural Resources, you will gain a stronger sense of how food ends up on the plate and how we can maximize the foods and natural resources the earth provides. You'll learn more about agriculture's history, animal husbandry, plant science, and natural resources, and you'll be better prepared for your part in sustaining the world.

## **Principles of Business, Marketing, and Finance IA: Introduction**

*One semester. Prerequisites: None*

Discover the fundamental knowledge that will help you pursue a career in business, as well as always generating interest and buzz around the products and services offered. Explore different types of businesses and ownership forms, the impact of governments on business, and the marketing of goods and services. Learn about globalization, free trade, and various economic systems, as well as the impact of technology on business, business ethics, and social responsibility.

## **Principles of Business, Marketing, and Finance IB: Targeting Your Business Insight**

*One semester. Prerequisites: Principles of Business, Marketing, and Finance IA*

Take your knowledge of business basics, finance, and marketing to the next level. Learn how to create a marketing strategy that promotes and attracts customers in order to sell a product or service. Explore important basics of business finance, including accounting, budgeting, and investing. And learn what careers are available in business and the important employability skills you'll need to ace the interview and land the job!

## **Principles of Public Service: To Serve and Protect**

*One semester. Prerequisites: None*

Ambulances scream along, heading toward those in need. But who makes sure someone is there to answer the 9-1-1 call? When you take a pill, who has determined that drug is safe for the public? All of these duties are imperative to our comfort and success as a society. Public service is a field that focuses on building a safe and healthy world, and in Principles of Public Service: To Serve and Protect you will be introduced to its many different career choices. The protection of society is not only one of our greatest challenges, it also provides ways for people to work together to ensure safety and provide indispensable services. If you've ever contemplated being one of these real-life heroes, now is the time to learn more!

## **Professional Sales and Promotion IA: Introduction**

*One semester. Prerequisites: None*

"Sell me this pen." It seems like an easy request, but the art of selling takes nuance, expertise, and an ability to navigate the complexities of client needs. In this course, you'll learn about the bigger picture of the sales cycle. You'll examine the role of today's sales professional along with the skills and qualities needed for success, and you'll learn the ins and outs of the sales process and how it is driven by recognizing and responding to customer needs. Before long, you'll be a part of the well-oiled engine that drives the entire commercial economy. But first, can you sell me this pen?

## **Professional Sales and Promotion IB: Secrets of Sales Success**

*One semester. Prerequisites: None*

They say money makes the world go round, but sales is what keeps the world spinning. In this course, you'll explore the power of promotion and how to rise to the ranks of an elite sales and promotions rep. You'll dive into what it takes to be a stellar seller, how salespeople work together in teams to meet goals, and how the savviest sales managers employ proven sales methods mixed with technology, tools, and psychological insights to build and operate an efficient sales team. Are you ready to keep the world in motion? Let's uncover the secrets of sales success.

## **Restaurant Management**

*One semester. Prerequisites: None*

Have you ever dreamed of running your own eatery? Maybe you've thought of collaborating with a famous chef to create an unforgettable dining experience? What goes on behind the restaurant dining room is a very different world than what goes on out front and really determines the success or failure of an establishment. Restaurant Management will show you exactly 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 are crucial to being an effective restaurateur. Whether you are hoping to operate a casual sit-down eatery, oversee a fine dining establishment, or buy a food franchise, this course is the perfect first step.

## **Sports and Entertainment Marketing IA: Intro**

*One semester. Prerequisites: None*

Whether you are watching a famous athlete make an unbelievable play or witnessing a sensational singing performance, the world of sports and entertainment is never boring. Although it may seem impossible for you to be a part of this glittery world, it's not! The Sports and Entertainment Marketing field offers careers that combine entertainment with traditional marketing, but with a whole lot more glamour. Explore basic marketing principles while delving deeper into the multibillion dollar sports and entertainment industry. Learn how professional athletes, sports teams, and famous entertainers are marketed as commodities and how the savvy people who handle these deals can become very successful. This course will show you exactly how things work behind the scenes of a major entertainment event and how you can be part of the act.

## **Sports and Entertainment Marketing IB: Promoting the Main Event**

*One semester. Prerequisites: None*

Get ready to drop your spectator status for an all-access pass to enter the exciting world of sports and entertainment marketing! In this course, you'll secure a solid foundation of effective marketing by studying the different roles and levels and how they relate to one another. Then, you'll explore the modern marketing methods professionals use to take an event concept and make it successful. Finally, you'll get up to speed on industry terminology and touchpoints with the help of HR. Get ready to flash that pass and gain all-star access to the stage and arena!

## **Sports Medicine IA: Introduction**

*One semester. Prerequisites: None*

What do you think of when you hear the phrase "sports medicine professional"? Believe it or not, the term encompasses a much larger range of career options than jobs typically associated with this field. Explore some of the most popular career pathways, day-to-day responsibilities, emergency care for athletes, and legal obligations. Discover what nutrition, healthy lifestyle, and fitness truly mean, and dive into anatomy, human biomechanics, and exercise modalities. Learn how to get started in this exciting field.

## **Sports Medicine IB: Injury Prevention**

*One semester. Prerequisites: Sports Medicine IA: Introduction*

You've warmed up those muscles and stretched your understanding of basic human biomechanics, but now it's time to power forward your learning even further! In Sports Medicine IB: Injury Prevention, you'll expand your understanding of the human body to provide a greater context for injury in a variety of scenarios. You'll learn how to evaluate an injury, onsite tests to perform, and when to refer a patient to a medical professional. You'll also explore the anatomy of specific body areas to better understand injuries that may occur as well as ways to prevent injury. Are you ready to keep athletes functioning at peak levels? Grab your sports tape and let's hit the field of sports medicine!

### **Sports Medicine IIA: Working with Clients**

*One semester. Prerequisites: Sports Medicine IA and IB*

You've learned the basics about how the body works and how to attend to athletes' injuries, but now, it's time to get personal! Time to personalize and plan for clients, that is! In this course, you will learn to develop dietary and exercise regimes for clients based on their needs and goals. You'll even have an opportunity to turn plans into action by designing workouts for your own example gym. Let's hit the ground running and continue building towards a career as a trainer!

### **Sports Medicine IIB: Personalizing Your Practice**

*One semester. Prerequisites: Sports Medicine IA and IB*

"Five, four, three, two, one—rest." You've learned what it looks like to work one-on-one with clients as a sports medicine professional, and now it's time to focus on the group. In this course, you will be introduced to teaching group exercise classes and providing rehabilitation services to clients facing injury and disease. You will also learn about laws that govern the work of sports medicine professionals, business concerns like insurance and staffing, and what you need to consider if you start your own fitness facility. It looks like it's time for the next set! Let's get started!

### **Veterinary Science: The Care of Animals**

*One semester. Prerequisites: None*

Lions and tigers and bears (oh my!) Whether you want to step into the wild side of veterinary medicine or just take care of the furry dogs and cats down your street, Veterinary Science: The Care of Animals will show you how to care for domestic, farm, and wild animals and diagnose their common diseases and ailments. Learn how different veterinary treatments are used and developed to improve the lives of animals and, as a result, the lives of those people who treasure them. If you have always been drawn to the world of our furry, scaly, and feathered friends, this may be just the course for you!

### **Workplace and Internship Readiness: Preparing for Work and Life**

*One semester. Prerequisites: None*

Starting your first "real" job can be intimidating. But when you know what to expect and learn how to be successful, you'll feel confident about the hiring process and prepared to put yourself out there! Discover how to build a well-rounded set of employability and personal leadership skills that allow you to guide your own career. Learn how to communicate with others, take initiative, set goals, problem-solve, research different career options, and envision your own personal career path. Get ready to create a powerful launching pad that will help you blast off into a great first job experience!

## **Health/Physical Education Courses**

### **First Aid & Safety**

*One semester. Prerequisites: None*

In this course, students learn and practice first aid procedures for a variety of common conditions, including muscular, skeletal, and soft tissue injuries. In addition, students learn how to appropriately respond to a variety of emergency situations. They also learn the procedures for choking and CPR for infants, children, and adults. In addition to emergency response, students will explore personal, household, and outdoor safety, and disaster preparedness.

### **Life Skills: Navigating Adulthood**

*One semester. Prerequisites: None*

What do you want out of life? How do you achieve your dreams for the future? These can be difficult questions to answer, but with the right tools, they don't have to be. This course will encourage you to learn more about yourself and help you to prepare for the future. You will explore goal setting, decision making, and surviving college and career. You will also discover how to become a valuable contributing member of society. Now is the time to take action. It's your life, make it count!

### **Nutrition and Personal Fitness**

*One semester. Prerequisites: None*

Nutrition and Personal Fitness encompasses a variety of topics with a focus on nutrition, dietary needs, and physical fitness. Students develop a foundation within the basics of nutrition principles and practices,

learning to read food labels and understand food safety concerns. In regards to physical fitness, students are exposed to exercise guidelines that promote healthy lifestyles.

### **Nutrition and Wellness**

*One semester. Prerequisites: None.*

Have you ever heard the phrase "Your body is your temple" and wondered what it means? Keeping our physical body healthy and happy is just one of the many challenges we face, and yet, many of us don't know how to best achieve it. Positive decisions around diet and food preparation are key to this process, and you will find the essential skills needed to pursue a healthy, informed lifestyle in Nutrition and Wellness. Making sure you know how to locate, buy, and prepare fresh delicious food will make you, and your body, feel amazing. Impressing your friends and family as you nourish them with your knowledge? That feels even better!

## **History/Social Studies**

### **Archaeology: Detectives of the Past**

*One semester. Prerequisites: None*

The famous Spanish philosopher and writer George Santayana once said, 'se who cannot remember the past are condemned to repeat it.' know from studying history how true this statement is, and the age-old field of archaeology helps us to better understand, through discovery and analysis, how ancient civilizations have shaped the modern world. This fascinating course, Archaeology: Detectives of the Past, explores the various techniques, methods, and theories of this field and illustrates how archaeologists conduct their studies. What is it like to uncover precious artifacts? How are they located and preserved? Find the answer to these questions and more as you learn how ancient discoveries can unlock the secrets of a long and colorful past.

### **Forensic Science I**

*One semester. Prerequisites: Biology*

Fingerprints. Blood spatter. DNA analysis. The world of law enforcement is increasingly making use of the techniques and knowledge from the sciences to better understand the crimes that are committed and to catch those individuals responsible for the crimes. Forensic science applies scientific knowledge to the criminal justice system. This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

### **Forensic Science II: More Secrets of the Dead**

*One semester. Prerequisites: Forensic Science I: Secrets of the Dead*

Every time a crime is committed, a virtual trail of incriminating evidence is left behind just waiting to be found and analyzed. In Forensic Science 2: More Secrets of the Dead, you'll learn even more about the powerful science of forensics and how it has changed the face of crime and justice in our world. You will learn some basic scientific principles used in the lab, such as toxicology, material analysis, microscopy, and forensic anthropology and find out how scientists use everything from insects to bones to help them solve crimes. Discover how advanced techniques and methodical processes can lead to catching even the craftiest criminal. The best way to battle crime these days is not with a weapon, but with science.

### **History of the Holocaust**

*One semester. Prerequisites: None*

"Never shall I forget that night, the first night in camp, which has turned my life into one long night, seven times cursed and seven times sealed." Elie Wiesel, a Holocaust survivor, wrote these words about his experiences in a Nazi concentration camp. History of the Holocaust will take you through the harrowing details of anti-Semitism, the power of the Nazi party, the persecution of European Jews and other groups, and the tremendous aftermath for everyone involved in World War II. You'll explore the causes of the Holocaust, the experiences of Jews and other individuals during this time, and what has been done to combat genocide since WWII. "For the dead and the living, we must bear witness."

### **Political Science**

*One semester. Prerequisites: None*

Political Science provides students with the foundation for the origin, creation, and function of different political systems within the United States and across the globe. Political Science looks into the separation of powers, defining democracy and other types of government-led strategies such as dictatorship, totalitarianism, authoritarianism, and communism. The course delves into economic concepts, such as the regulation of trade and employment.

## Math

### Consumer Math

*Two Semesters Prerequisite: Pre-Algebra*

In this course, the student will learn that money is lost or gained depending upon the information a consumer has to help him make informed decisions. Retailers, banks, and credit card companies may not provide consumers with all the information they need to make good decisions. By the end of this course, the student will understand the history of money, define fixed costs and discretionary spending, understand the importance of savings, and recognize the dangers of debt. This course will ask the student to look hard at his financial choices including spending patterns, purchasing motivations, and how to make some difficult decisions. In the second semester, students will continue to learn how to make good financial decisions. Retailers, banks, and credit card companies may not provide consumers with all the information they need to make good decisions. By the end of this course, the student will differentiate between secured and unsecured debt, learn how to create a budget, examine a credit report, and discover the best way to increase income and decrease expenses. This course will provide the student with the skills to make good financial decisions.

### Financial Literacy

*One semester. Prerequisites: None*

Financial Literacy helps students recognize and develop vital skills that connect life and career goals with personalized strategies and milestone-based action plans. Students explore concepts and work toward a mastery of personal finance skills, deepening their understanding of key ideas and extending their knowledge through a variety of problem-solving applications.

Course topics include career planning; income, taxation, and budgeting; savings accounts, checking accounts, and electronic banking; interest, investments, and stocks; cash, debit, credit, and credit scores; insurance; and consumer advice on how to buy, rent, or lease a car or house.

These topics are solidly supported by writing and discussion activities. Journal activities provide opportunities for students to both apply concepts on a personal scale and analyze scenarios from a third-party perspective. Discussions help students network with one another by sharing personal strategies and goals and recognizing the diversity of life and career plans within a group.

### Probability and Statistics

*One semester. Prerequisites: None*

This course is designed for students in grades 11 and 12 who may not have attained a deep and integrated understanding of the topics in earlier grades. Students acquire a comprehensive understanding of how to represent and interpret data; how to relate data sets; independent and conditional probability; applying probability; making relevant inferences and conclusions; and how to use probability to make decisions.

## Science

### Anatomy and Physiology IA: Introduction

*One semester. Prerequisites: Biology*

Increase your students' understanding about the form and function of the human body! Starting with the relationship between anatomy and physiology, students will then learn about cell structure and their processes. Learners will also discover the functions and purposes of the skeletal, muscular, nervous, and

cardiovascular systems, as well as diseases that affect those systems. Focusing on terminology, this course is essential to students pursuing the health sciences or wanting to gain a greater sense of how the human body works.

### **Anatomy and Physiology IB: Discovering Form and Function**

*One semester. Prerequisites: Anatomy and Physiology I*

Building on the prior prerequisite course, students will examine the form and function of even more body systems. Students will learn about the structure, function, and interrelation between the lymphatic, immune, respiratory, digestive, urinary, and the endocrine systems. The reproductive system is also discussed along with hereditary traits and genetics. Finally, students will explore the importance of accurate patient documentation as well as technology used in the industry.

### **Environmental Science A**

*One semester. Prerequisites: None*

This course presents relationships between organisms and how these relationships relate to the functioning of ecosystems. Students learn the key concepts and processes of nutrient cycling, biomes, pollution, energy resources, and habitat destruction. The course also covers ways to promote biodiversity and create a sustainable future.

### **Forestry and Natural Resources**

*One semester. Prerequisites: None*

Whether you are a tree-hugger or not, everyone loves the beauty and serenity of a healthy forest. Our precious woodland species not only supply us with aesthetic beauty but also play a valuable role in nature. Trees uphold a great deal of our wildlife's ecosystem while providing us humans with needed lumber, paper products, and even food. But these forests cannot protect themselves and depend greatly on humans for conservation. In Introduction to Forestry and Natural Resources, you will learn more about this meaningful relationship and how environmental policy, land use, water resources, and wildlife management all factor into current forestry issues. After better understanding these variables and how they affect the majesty of our forests, you may just be hugging these gentle giants after all.

### **Great Minds in Science: Ideas for a New Generation**

*One semester. Prerequisites: None*

Sometimes there are simply more questions than answers. Does life exist on other planets? How extreme is the human ability to survive? Will the issue of global warming ever be solved? Today, scientists, explorers, and writers are working to answer such questions by using extensive inquiry to find innovative solutions. Similar to such famous minds from history as Edison, Einstein, Curie, and Newton, the scientists of today are finding ways to revolutionize our lives and the world. Great Minds in Science: Ideas for a New Generation takes an in-depth look at the extraordinary work of these individuals and demonstrates how their ideas may very well shape the world of tomorrow.

### **Marine Science: Secrets of the Blue**

*One semester. Prerequisites: None*

Have you ever wondered about the secrets of the deep and the creatures below the ocean's surface? It is truly a new frontier of discovery. Begin to better understand the aquatic cycles, structures, and processes that generate and sustain life in the sea. You'll use scientific inquiry, research, and problem-solving to conduct various scientific procedures and become a more capable marine scientist.

## **Study Skills/Test Prep/Career Planning**

### **College and Career Prep**

*One semester. Prerequisites: Counselor Approval*

The College and Career Prep courses equip students with the essential skills for a seamless transition from high school to college and the workforce. Students will explore the college application process, financial aid options, and career readiness by analyzing career clusters and linking their interests to future careers. The courses emphasize the importance of preparation and skill development, offering opportunities for job shadowing and internships. Through interactive critical thinking and analysis activities, students will sharpen their time management, organization, and learning skills, ultimately gaining a deeper understanding of how to achieve their college and career goals.

## Learning in a Digital World: Strategies for Success

*One semester. Prerequisites: None*

The digital world seems to change every day, and touch more of our lives. We use technology to communicate with friends and family, find never-ending entertainment options, follow our favorite sports teams and fashion trends, and do our school work. In Learning in a Digital World, you will get the tools to navigate this exciting and always changing world. Learn about real-world issues and how to solve real-world problems through interactive and hands-on assignments. Discover what it means to be a responsible digital citizen, expand your digital literacy, and become a successful online student. Consider the best ways to find, create, and share information, learn to maximize information and communication technologies, and explore digital content creation, from emails and blogs to social media, videos, and podcasts.

## Study Skills and Strategies

*One semester. Prerequisites: None*

The Study Skills and Strategies course equips students with skills and understandings critical to effective learning. Using a unique approach to the traditional topic of study skills, this course weaves understanding regarding the role of the brain in learning into the instruction of discrete learning skills and strategies. Moving beyond a list of good tips and ideas, the Study Skills and Strategies course will challenge students to develop intentional approaches to learning. They will be required to make connections between the strategies and skills they learn in this course and the implementation of those strategies and skills in their other coursework. Upon completion of the course, students will have learned a variety of specific learning skills and strategies, gained greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans for any academic course or other learning needs.

## SAT Prep

*One semester or full year; Prerequisites: None*

SAT Prep Course assists students with test preparation and teaches content that the student may be tested on during the actual exams. These courses ensure that students focus on the areas where extra assistance is needed. SAT Practice Tests include rigorous test items and are timed to help students learn to budget time in preparation for taking the actual SAT assessments. This is a pass/fail course. Students may take this as a one-semester class or as a full-year class.

# Technology

## Adobe Photoshop

*One semester. Prerequisites: None*

This course prepares students to demonstrate expertise in Adobe Photoshop software and take the ACE Certification Exam on Photoshop. Students will learn through engaging and interactive content, projects and practice exam items aligned to the learning objectives outlined by Adobe exam specifications. Students will leave this course with career-ready, real-life skills in one of the most popular software programs in the world!

## Basic Web Design

*One semester. Prerequisites: None*

In this course, students will learn how to design a beautiful and functional website. Students will learn how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programming languages. HTML5 and CSS3 will be the standard versions used in the class. Students will understand design components of websites, including the use of color, layout and when to use different techniques, typography rules, and the importance of imagery. At the conclusion of the course, students will present a website to the class. Upon completion of this course, each student will have hands-on experience creating a fully functioning website. Students do not need to have a previous technical background with HTML or CSS prior to taking this course.

## Biotechnology IA: Introduction

*One semester. Prerequisites: None*

How is technology changing the way we live? Is it possible nature can provide all the answers to some of science's most pressing concerns? In Biotechnology IA: Introduction, you'll learn the basics of biotechnology and evolutionary theory, explore the various ways we store and preserve food, and

discover the process of fermentation and microbiology. This course will also cover the importance of breeding plants and hybridization and how early breeding programs led to the study of genetics and an understanding of the function of genes. Finally, you'll delve into early industrial discoveries and explore the developments in biotechnology during the industrial revolution.

## **Biotechnology IB: Unlocking Nature's Secrets**

*One semester. Prerequisites: Biotechnology IA*

The fusion of biology and technology creates an amazing process and offers humanity a chance to significantly improve our existence, while simultaneously creating new challenges. In Biotechnology IB: Unlocking Nature's Secrets, you'll build on your knowledge from Biotechnology I and learn how his field seeks to cure such deadly diseases as cancer and malaria, develop innovative medicine, and effectively feed the world through improved agricultural systems. Learn about some of the challenges biotechnology faces today, such as the growth of antibiotic-resistant bacteria and questions about the safety of commercially produced genetically modified organisms (GMOs). You'll research new biotechnologies and learn how they are changing the world we live in, including the environmental benefits of industrial biotechnology.

## **Business Applications**

*One semester. Prerequisites: None*

In Business Applications, students focus on business software and the corresponding skills required in the business world. The course begins with an overview of computers, including hardware, software, and operating systems. Students explore spreadsheet, word processing, presentation, and database software and discover how to fulfill a customer request using these skills. They also study web-based applications and additional software packages and learn about Internet technology. Students investigate common security concerns and discover how to prevent security issues. Finally, students experience the software development cycle where they will learn how various professionals utilize business applications. They will also discover the importance of moral and ethical responsibility in an online community. Students must possess basic spreadsheet, word processing, and presentation software skills before entering this course. Additionally, students must be independent learners, comfortable learning new technology and researching software features and functions.

## **Coding IA: Introduction to Programming**

*One semester. Prerequisites: None*

Have you ever wanted to create your own web page or wondered how your favorite websites were built? Maybe you want to know more about how computers and technology are affecting the world around us. In Coding 1a: Introduction to Programming, you will explore the role technology plays in our lives as well as 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 using HTML and CSS and learn basic and complex commands and sequences as you become familiar with programming languages like JavaScript and Python Programming. This course also covers data collection methods, access rights, protocols, and security.

## **Coding IB: Programming**

*One semester. Prerequisites: None*

Are you passionate about technology? Do you love learning how things work and are excited about the idea of further exploring the world of computer science? If you thrived in Coding I, now is your chance to build on that knowledge with Coding II. In this course, you will continue to cultivate an understanding of programming languages and expand on website development. You will learn the difference between web development and web application development as well as further explore Advanced Python, HTML, and JavaScript. You will also examine software engineering concepts, learn more about security, privacy, and ethics in technology, and explore the wide variety of careers in computing.

## **Computer Basics**

*One semester. Prerequisites: None*

In this course you will learn how to use productivity and collaboration tools, such as G Suite by Google Cloud to create word processing documents, spreadsheets, surveys and forms such as personal budgets and invitations.

## **Cybersecurity IA: Foundations**

*One semester. Prerequisites: None*

Ever wonder what it's like to be a hacker? Or think about who is trying to steal your passwords while you're shopping online using the free Wi-Fi at your local coffee shop? Can someone be watching your personal, private information? Can anything be kept "secret" online? We depend more and more on the technologies we interact with every day. This creates the need for increased system and network security measures. And, it means we all need to know more about how to protect valuable and vulnerable information. This course introduces you to the tools, technologies, and methods needed to protect online information and addresses 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.

## **Cybersecurity IB: Defense Against Threats**

*One semester. Prerequisites: Cybersecurity I: Foundations*

Unmask the cybersecurity threats around you by understanding hackers and identifying weaknesses in your online behavior. Learn to avoid the various types of cyber attacks, including those to your social media accounts, and to predict the potential legal consequences of sharing or accessing information that you do not have rights to. Dig into these crimes in depth by taking a look at cyber forensics and other cybersecurity careers. In a world where such threats have no boundaries, cybersecurity will undoubtedly play an increasingly larger role in our personal and professional lives in the years to come.

## **Excel: Office Fundamentals A**

*One semester. Prerequisites: None*

Discover the real world uses of Microsoft Excel and its impact upon business, academic, and personal applications. Move from inserting and manipulating data, to working with tables, charts, graphs, and calculations. Content of this course will also be applicable to the Microsoft Office Suite certification exam.

## **Foundations of Game Design IA**

*One semester. Prerequisites: None*

Does your love of video games motivate you to pursue a career in this field? Pursue your passion by learning about the principles of game design through the stages of development, iterative process, critiques, and game development tools. Put these new skills to work by designing your own game!

## **Foundations of Game Design IB: Storytelling, Mechanics, and Production**

*One semester. Prerequisites: None*

Now that you have the basics of game design down, let's use your creativity to develop a game from start to finish! Develop your game creation skills and practice with the tools professionals use to launch your career options in the field of game design. The content of this course also applies to certification exams.

## **Foundations of Programming**

*One semester. Prerequisites: None*

Learn the skills required to be competitive in today's high tech workforce. This course covers the fundamentals of programming using the computer language Python. It provides you with the concepts, techniques, and processes associated with computer programming and software development. You'll also explore the vast programming career opportunities available in this high-demand field. This course is part of a program of study that provides coherent and rigorous content needed for progression in the Information Technology career cluster.

## **History of Gaming and E-Sports**

*One semester. Prerequisites: None*

In this course, students will learn about the technologies and design principles that have been the foundation of the development of video game technology over the last 50 years. Students will examine and discuss the impact of video games on culture and the economy. Students will learn about the current gaming and e-sports landscape, including strategies and techniques of top teams and individuals. This course will also discuss the risks and dangers of video games and understand how to set appropriate time and content parameters. Finally, the course will identify career paths and opportunities for those who are passionate about gaming.

## **Intro to Java Programming**

*One semester. Prerequisites: None*

Java is one of the most widely used computer languages in the world. This course will teach students Java by having them complete multiple projects, both in the console and user interface, including: mad libs, player vs computer games, battleship, tic tac toe, picture shuffler and many more. This course is meant to give students lots of experience in Java by creating multiple stand alone programs. This course assumes no coding experience with Java programming and includes self graded quizzes and tests.

## **Introduction to Artificial Intelligence**

*One semester. Prerequisites: None*

This course teaches what every student should know about Artificial Intelligence. AI is a fast-moving technology with impacts and implications for both our individual lives and society as a whole. In this course, students will get a basic introduction to the building blocks and components of artificial intelligence, learning about concepts like algorithms, machine learning, and neural networks. Students will also explore how AI is already being used, and evaluate problem areas of AI, such as bias. The course also contains a balanced look at AI's impact on existing jobs, as well as its potential to create new and exciting career fields in the future. Students will leave the course with a solid understanding of what AI is, how it works, areas of caution, and what they can do with the technology.

## **Introduction to Business and Technology**

*One semester. Prerequisites: None*

Introduction to Business and Technology provides the foundational knowledge and skills students need for careers in business and technology. Throughout the course, students gain a knowledge of business principles and communication skills, an understanding of the impact of financial and marketing decisions, and proficiency in the technologies required by business. Students will also learn the essentials of working in a business environment, managing a business, and owning a business.

This course allows students to explore careers in business and information technology while learning skills applicable to any professional setting. Through a variety of hands-on activities, students will engage with word processing, presentation, and spreadsheet software and explore operating systems, networking, and the Internet. Regular engagement in active learning ensures students can continually refine the skills necessary to prepare them for work. In addition, students will evaluate the qualifications required for specific careers so they can identify opportunities of interest to them.

Introduction to Business and Technology is a full-year introductory Career and Technical Education course applicable to programs of study in the Business, Management and Administration and Information Technology career clusters, as well as other career clusters. This course is built to state and national standards. Students who successfully complete the course will be prepared to pursue certifications such as Microsoft® Office Specialist certifications in Microsoft Word, Microsoft Excel and Microsoft Access, as well as IC3 certification.

## **Principles of Information Technology IA: Introduction**

*One semester. Prerequisites: None*

Develop your students' understanding and proficiency of computers! Students will learn about computer hardware, Von Neumann architecture, peripherals, and maintenance as well as data management and storage options. Learners will trace the history of operating systems and application software while also exploring network systems, administration, and troubleshooting. Finally, students will dive into word processing, spreadsheets, and databases to cement their knowledge of information technology!

## **Principles of Information Technology IB: Working with Computers**

*One semester. Prerequisites: Principles of Information Technology IA*

Take the IT knowledge you have to a more advanced level. Starting with an overview of programming, algorithms, and compilers, you'll then learn the basics of web page design and creating graphics. Explore security and cybercrime, emerging technologies, presentation software, and intellectual property laws. Finally, you will prepare for the future by discovering various careers in this field and planning your education!

## **Python Multiplayer Adventure**

*One semester. Prerequisites: None*

Python is a powerful language designed to do just about anything! This course allows students to learn Python by first completing a text based console game and then turning it into a multiplayer adventure! Students will not only learn Python from going through the individual lessons and video reviews but also understand a client server relationship. They will get to code in their own python web server that allows connections through a browser. Students will gain experience using variables, classes, functions, lists, dictionaries, generators and proper Python formatting. This is a great course for anyone interested in preparing themselves for future coding classes. This course assumes no coding experience and includes self graded quizzes and tests.

### **Robotics IA: Introduction**

*One semester. Prerequisites: None*

Are you fascinated with how machines work? Robots are machines, and they are all around us, from helping doctors in surgeries to helping to keep our homes clean. Explore the physics, mechanics, motion, and the engineering design and construction aspects used to develop robots. Learn how models are created through both sketches and software. Discover STEM careers and the education needed to enter this high-demand field.

### **Robotics IB: Intelligent Robots**

*One semester. Prerequisites: None*

The robots have invaded... and they're here to make our lives easier. You've learned about the basics of robotics and STEM careers, but now we're going to learn about manipulating the physical world to create desired effects. In this course, you'll learn to manipulate electrical signals to create logic and memory, how to quantify the physical world through variables, and how to have an impact through tools. You'll discover how to choose the best tools and materials, how to create AI, and how to take an idea from initial planning to a completed project. Let's continue the pursuit of a career in robotics so the friendly invasion can thrive!

### **Robotics IIA: Design a Robot**

*One semester. Prerequisites: Robotics IA & IB*

From outer space to the oceans and everywhere in between, robots are doing everything from solving complex problems to simply making daily life easier. But, there has to be a beautiful mind behind the machine, and this is where you come in! In this course, you will identify a problem and using the skills you've learned, you will apply the principles of engineering and robotics to design an innovative robot to solve the problem. Robotics engineers are problem solvers– are you ready to step up?

### **Robotics IIB: Build Your Robot**

*One semester. Prerequisites: Robotics IA & IB*

You have learned how to think like a robotics engineer, and now, it's time to design and build like one to breathe life into your machine. In this course, you'll explore how to add more complexity to your creations to make them more efficient, capable, and better able to handle advanced tasks. You will also learn how models and simulations can enhance robotic development and construction. After a real-world safety review, a deeper dive into advanced applications and systems, and improving your prototype, you'll finalize and launch your robot. Are you ready to continue improving the world with your machine? Let's automate!

### **Robotics: Applications and Careers**

*One semester. Prerequisites: None*

It seems like many elementary to high school robotics courses are focused on coding a simple robot to move its mechanical arm up and down. This course, in contrast, teaches students what a robot is and how it relates to other key technologies such as artificial intelligence and machine learning. Then the course examines 10 applications of robots and how they will change and impact various aspects of our lives and the economy. Will robots simply steal our jobs, or will they be a tool that will create new opportunities and even free humans to use our creativity and curiosity to their full potential? Students will grapple with this and many other questions as they explore this vital, future-focused subject.

### **Web Development IA: Introduction**

*One semester. Prerequisites: None*

How many times per day do you access the internet, including social media? The web is an important part of our daily lives, so it's no surprise that web development is one of the hottest careers. In this course,

you'll start to get a real picture of professional web development, including how to create content for the web. You'll learn about topics such as servers, file organization, HTML, CSS, Javascript, and the development stack that will let you build any website you can dream up!

## **Web Development IB: Planning and Designing**

*One semester. Prerequisites: None*

Building on the prior prerequisite course, polish your digital media skills and learn all about web design. Incorporate your ideas into websites and dabble in the basics of marketing to understand how your work is used. Finally, explore the world of podcasts and audio editing to construct a solid foundation from which you can pursue a career!