# GENESEE CHRISTIAN SCHOOL Online Course Catalog



# **GCS Online Courses**

AP Courses
World Languages
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 4

#### 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.

#### French IVA and IVB

Two semesters. Prerequisite: French III

French IV 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.

# **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.

## **Developmental Writing**

One semester. Prerequisite: None.

Students apply the fundamental tools and techniques needed to write clear sentences, effective paragraphs, and well-organized essays for general education courses and employment settings. Using Standard American English, students learn to organize, clarify, and communicate written ideas, as well as how to use correct sentence structure, grammar, and parts of speech in written communication. Students also develop skills in revising and editing to clarify voice, tone, style,

and mode.

#### **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.

# **Career Focused Courses**

## 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.

#### **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.

#### **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 IA.

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.

#### **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.

## **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, closeups, 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.

#### **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!

## **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.

#### **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 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.

#### **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.

#### 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 Business**

One semester. Prerequisites: None.

In this course, the student will explore business in global society, learning terminology, concepts, systems, strategies, and current issues. Topics include the business environment, ethics, entrepreneurship and global business, management, marketing, production, information systems, and financial elements.

#### **Introduction to Communication**

One semester. Prerequisites: None.

The student will examine the communication process, including elements of listening and verbal and nonverbal communication. The course also explores how these communication elements operate between self, individuals, and groups. Communication concepts and skills are explored through a variety of methods and activities.

## **Introduction to Homeland Security**

One semester. Prerequisites: None.

This course provides an overview of the elements involved in the homeland security function, as well as the challenges managers in government and industry can face while maintaining mission operations and staff accountability in the midst of multiple overlapping roles and responsibilities. The key functions of threat prevention, asset protection, crisis response, and operations recovery are addressed from a variety of perspectives.

#### **Introduction to Law**

One semester. Prerequisites: None.

Students receive an overview of substantive and procedural areas of law and legal practice. They explore the legal profession, courts, ethics, sources of law, and alternative dispute resolution systems, and they analyze an application of law to factual circumstances.

## **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.

# **Introduction to the Paralegal Profession**

One semester. Prerequisites: None.

The student will explore the role of paralegals in the legal system, paralegal skills, legal working environments, ethical considerations, and career opportunities. The student is introduced to the sources of law, an overview of courts, and alternative dispute resolution systems.

## 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.

## **Leadership and Supervision in Business**

One semester. Prerequisites: None.

This course examines the roles and responsibilities of supervisors in private, service, and public

organizations. The student will gain an understanding of the expanded scope of supervisory responsibilities for business personnel ranging from first- time, first-line supervisors to top-level executives.

#### **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! If sales management is your goal, you'll learn about management styles, how to find, hire, train, motivate, and compensate your team.

#### **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 introd1u6ced 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!

#### **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 Management**

One semester. Prerequisites: None.

In this introduction to the fast-growing field, students explore topics such as sports marketing, branding, ticket sales, media relations, and ethics. They also learn tips for breaking into the industry. The activities and assignments require students to respond to real-world sports management scenarios.

# **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!

## **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!

# **Health/Physical Education Courses**

#### Health, Safety, and Nutrition

One semester. Prerequisites: None.

Students learn about the physical and psychological needs of children, from birth to age eight, and how to meet these needs in group settings. Topics include wellness of young children, standards, guidelines and national initiatives, children's nutritional needs, safe and healthy environments, emergency response, child abuse and neglect, educational experiences, and partnering with families.

## **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**

#### **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."

# Math

#### **Consumer Math**

Two Semesters Prerequisite: Algebra II

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.

## **Personal and Family Finance**

One semester. Prerequisites: None.

We all know money is important in life. But how important? In fact, the financial decisions you make today may have a lasting effect on your future. Rather than feeling anxious about money, feel empowered by learning how to make smart decisions! Personal and Family Finance will begin the conversation around how to spend and save your money wisely, investing in safe opportunities and the days ahead. Learning key financial concepts around taxes, credit, and money management will provide both understanding and confidence as you begin to navigate your own route to future security. Discover how education, career choices, and financial planning

can lead you in the right direction to making your life simpler, steadier, and more enjoyable.

#### **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.

# **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**

One semester. Prerequisites: None.

Environmental Science offers students the opportunity to understand the concepts fundamental to ecology and measures to prevent damage to the environment. Lessons in the A course review the scientific method, discuss biodiversity, and review earth processes, including the rain and carbon cycles. Students take a detailed look at the various types of pollution and study how to safeguard resources. In the second semester of Environmental Science, students learn about environmental programs and policies, including waste management and conservation. Students study the effect of environmental organizations as well as government agencies charged with

protecting the environment. The final unit examines technology and its impact on the environment; topics include energy production, modern agriculture, and public land management.

#### **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.

#### **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.

#### 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

#### **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.

#### **College Readiness: Preparing for Your Future**

One semester. Prerequisites: None.

Units of student center specifically on college readiness:

#### **College and Career Prep**

One semester. Prerequisites: Counselor Approval.

The first semester of this online course based in Haiku will focus on Soft Skills, those skills that are so often not taught but as learned behaviors they become essential to success in high school, college and the workplace. These Soft Skills include such things as being prepared, being on Time, following through, communication skills, being responsible and study skills. The online course is designed much the same way as online college courses. There will be discussion boards used throughout, much like last semester and a focus on short argumentative essay writing utilizing prompts similar to ones used on the Compass college entrance exam. Students are expected to complete a short essay every other week and schedule individual conferences with the instructor monthly. There will also be four short quizzes during the semester. The last five weeks of the course will focus specifically on college level research writing and how to conduct proper academic research.

## 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.

## 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!

# **Technology**

#### **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.

# **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.

#### **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.

# **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.

# 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.

#### Game Design IIA: Build a World

One semester. Prerequisites: Foundations of Game Design IA and IB.

Are you ready to enter this multi-billion-dollar industry and start applying your technical skills into a compelling package that will catch the eye of an employer? Beginning with conceptualization and the design process, you'll develop your game's story elements, narrative, plot, characters, and assets. Using game design software, you'll bring your game to life by applying lighting, audio, visual effects, player choice options, AI, and consider the type of controls to use for your game. Build a world players can get immersed in.

## Game Design IIB: Launch a Game

One semester. Prerequisites: Foundations of Game Design IA and IB

You've already done the groundwork, and now it's time to level up and launch! In Game Design 2B, you'll take your runner game to new heights and enter the land of fire and ice using the cool tools that Unity has to offer! Get ready to build atmospheric landscapes, mountain runs, stair builds, and implement obstacles to keep your relic safe! Then, your

real-world game begins: test and evaluate your game and prepare for a market launch! All of the moving parts of the game development process come together in this course, so you can unleash your game into the world!

## **Java Programming I**

One semester. Prerequisites: None.

Students explore programming fundamentals, basic problem solving, variables and assignments, math, conditionals, control ow, methods and functional abstraction, objects and data abstraction, inheritance and polymorphism, exception handling, graphical user interfaces, and external libraries. Students use Sun's Java programming language throughout this course.

## **Java Programming II**

One semester. Prerequisites: None.

Students explore programming fundamentals, basic problem solving, variables and assignments, math, conditionals, control ow, methods and functional abstraction, objects and data abstraction, inheritance and polymorphism, exception handling, graphical user interfaces, and external libraries. Students use Sun's Java programming language throughout this course.

# **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!

#### **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!