



**CATHOLIC**  
**VIRTUAL**



2020-2021

## **Course Descriptions**

June 2020

---

## Table of Contents

HIGH SCHOOL ENGLISH.....	1
ADVANCED PLACEMENT® ENGLISH.....	2
HIGH SCHOOL MATH .....	2
ADVANCED PLACEMENT® MATH .....	4
HIGH SCHOOL SCIENCE .....	4
ADVANCED PLACEMENT® SCIENCE.....	5
HIGH SCHOOL SOCIAL STUDIES .....	6
ADVANCED PLACEMENT® SOCIAL STUDIES .....	7
HIGH SCHOOL ELECTIVES.....	8
ADVANCED PLACEMENT® HIGH SCHOOL ELECTIVES.....	27
MIDDLE SCHOOL LANGUAGE ARTS.....	28
MIDDLE SCHOOL MATHEMATICS .....	29
MIDDLE SCHOOL SCIENCE .....	30
MIDDLE SCHOOL SOCIAL STUDIES.....	30
MIDDLE SCHOOL ELECTIVES .....	31
ELEMENTARY SCHOOL COURSES.....	35
ELEMENTARY LANGUAGE ARTS .....	35
ELEMENTARY MATHEMATICS .....	36
ELEMENTARY SCIENCE .....	37
ELEMENTARY SOCIAL STUDIES.....	38
ELEMENTARY ELECTIVES.....	39
ENGLISH AS A SECOND LANGUAGE .....	41
RELIGIOUS COURSE OFFERINGS .....	42



---

\*Course requires the purchase of physical materials.



---

# 2020–2021 Course Descriptions

## HIGH SCHOOL ENGLISH

### **English I (1.0 credit) and Honors English I (1.0 credit): Survey of Literature**

This course has been designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing, and comprehension skills. Students will dissect and analyze the basic elements of plot, setting, mood, character development, narrative devices, theme, and author's perspective in a variety of literary genres. Students will analyze argumentative, explanatory, and functional texts and will synthesize information from different texts. Students will also create monologues, compare film and written versions of text, cite evidence, compare and contrast texts, and interpret graphic aids. Students are challenged to tap into the power of research as they deepen their understanding of a variety of topics. This course examines the process of writing, vocabulary development, and research skills in English, and reinforces students' strengths in the study of other disciplines such as science, math, world languages, and social studies. Students will explore these strengths through interactive and traditional learning exercises, enhancing their study of Language Arts while mastering the technological skills needed in today's academic environment.

### **English II (1.0 credit) and Honors English II (1.0 credit): World Literature**

This course has been designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing, and comprehension skills. Students will dissect the basic elements of plot, setting, mood, character development, narrative devices, theme, and author's purpose. Students will critique arguments and establish patterns of persuasion. They will delve into the language of poetry and experience author's style and voice. They will be exposed to history and culture by way of Greek tragedy and Medieval romance. Students will also experience first-hand the Shakespearean drama by way of the tragedy of Julius Caesar. Students are challenged to tap into the power of research, with units on investigation and the discovery of writing. This course examines the process of writing, vocabulary development, and research skills in English, and reinforces students' strengths in the study of other disciplines such as science, math, world languages, and social studies. Students will explore these strengths through interactive, as well as traditional, learning exercises as they enhance their study of Language Arts and master technological skills necessary in today's academic environment.

**Prerequisite:** English I recommended

### **English III (1.0 credit) and Honors English III (1.0 credit): American Literature**

This course has been designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing, and the comprehension of different text selections from American literature. Students explore passages from the emerging American nation from 1600-1800 with Early American writings and celebrate the Individual from 1800-1855 with the American Romanticism Movement. They explore an age of transition from 1855-1870 with pieces from the Romantic Movement to Realism and capture the American Landscape from 1870-1910 with excerpts from Regionalism and Naturalism. Students are exposed to passages from 1910-1940 encompassing the Harlem Renaissance and Modernism and arouse new perspectives with Contemporary Literature from the 1940s to the present day. Students are challenged to experience the power of research with a variety of projects encouraging investigation and discovery. This course examines the process of writing, vocabulary development, and research skills in English, and reinforces students' strengths in their study of other disciplines such as science, math, world languages, and social studies. Students will explore these strengths through interactive, as well as traditional, learning exercises as they enhance their study of Language Arts and master technological skills necessary in today's academic environment.

**Prerequisites:** English I & II recommended

---

\*Course requires the purchase of physical materials.



---

## **English IV (1.0 credit) and Honors English IV (1.0 credit): British Literature**

This course has been designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing, and the comprehension of different text selections from British literature. Students explore passages from the Anglo-Saxon and Medieval periods circa 449-1485. They delve into the English Renaissance, circa 1485-1660, and explore the Restoration and the 18th Century from 1660-1798. Students are expected to capture the essence of the flowering of Romanticism, circa 1798-1832 and are exposed to an era of rapid changes in the Victorian Age from 1832-1901. Students are challenged to tap into the power of research with a variety of projects encouraging investigation and discovery. This course examines the process of writing, vocabulary development, and research skills in English, and reinforces students' strengths in the study of other disciplines such as science, math, world languages, and social studies. Students will explore these strengths through interactive, as well as traditional, learning exercises as they enhance their study of Language Arts and master the technological skills necessary in today's academic environment.

**Prerequisites:** English I, II & III recommended

## **ADVANCED PLACEMENT® ENGLISH**

### **AP® English Language and Composition (1.0 credit)**

This course provides high school students with college-level instruction in analyzing and writing various texts. The course covers topics in language and rhetoric as well as expository and persuasive writing. Students become skilled readers of prose written in various periods, disciplines, and rhetorical contexts. The study of texts from both the reader and writer perspectives develops an understanding of the function, effect, and purpose behind the choices writers make, leading students to improve their own composition skills. This course will effectively prepare students for the AP Exam and learning beyond the exam by enabling them to read, analyze, and write about complex texts.

**Prerequisites:** English I & II

### **AP® English Literature and Composition (1.0 credit)**

The AP® English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

**Prerequisites:** English I, II & III recommended

## **HIGH SCHOOL MATH**

### **Algebra I (1.0 credit) and Honors Algebra I (1.0 credit)**

This course is the foundation for high school mathematics. It is the bridge from the concrete to the abstract study of mathematics. The main goal of Algebra is to develop fluency in working with linear equations and provide a formal development of the algebraic skills and concepts necessary for students to succeed in a wide range of advanced math and science courses. Students will extend their experience with tables, graphs, and equations; solve linear equations, inequalities, and systems of linear equations and inequalities; and begin the process of working with polynomials and quadratic relationships. Algebra I students will extend their knowledge of the number system to include irrational numbers, generate equivalent expressions, and use formulas.

**Prerequisite:** Math 8 or Pre-Algebra

---

\*Course requires the purchase of physical materials.



---

## Algebra II (1.0 credit) and Honors Algebra II (1.0 credit)

A primary goal of Algebra II is for students to conceptualize, analyze, and identify relationships among functions. In this course, the basic concepts from Algebra 1 are enriched. Topics include equations and inequalities; linear equations; linear systems and matrices; quadratic functions and factoring; polynomials; rational exponents and radical functions; exponential and logarithmic functions; rational functions; quadratic relations and conic sections; trigonometric ratios and functions; trigonometric graphs, identities, and equations; counting methods and probability; data analysis and statistics; and sequences, series, and limits. This course ties together many of the ideas from arithmetic and geometry.

**Prerequisite:** Algebra I

## Pre-Calculus (1.0 credit)

The Pre-Calculus course is designed to prepare students for topics covered in an elementary Calculus course at the college level. It begins with a comprehensive study of functions and moves into an analysis of rudimentary calculus concepts such as the difference quotient and the notion of “taking a limit.” In addition to introducing students to terminology and concepts essential to the study of Calculus, this course should also help students develop reasoning and analytical skills which may be applied to problems outside the typical realm of mathematics. Facility with these topics is especially important for students intending to study calculus, physics and other sciences, and/or engineering in college.

## Calculus (1.0 credit)

This course is divided into two semesters and is designed to acquaint students with calculus principles such as derivatives, integrals, limits, approximation, and applications and modeling. During this course, students will gain experience in the use of calculus methods and learn how to apply calculus methods practically. Upon completion of this course students will be able to work with functions represented in a variety of ways: graphical, numerical, analytical, or verbal; understand the connections among these; understand the meaning of the derivative in terms of a rate of change and local linear approximation; be able to use derivatives to solve a variety of problems; understand the meaning of the definite integral; be able to use integrals to solve a variety of problems; and understand the relationship between the derivative and the definite integral.

**Prerequisite:** Pre-Calculus

**Required Materials:** graphing calculator (TI83 or above)

## Geometry (1.0 credit) and Honors Geometry (1.0 credit)

Geometry introduces the study of points, segments, triangles, polygons, circles, solid figures, and their associated relationships as a mathematical system. Students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusions follow logically from their hypotheses. Geometry is meant to employ an integrated approach to the study of geometric relationships. Integrating synthetic, transformational, and coordinate approaches to geometry, students will justify geometric relationships and properties of geometric figures. Students will extend their pre-existing experiences with algebra and geometry to trigonometry, coordinate geometry, and probability. The main goal of Geometry is for students to develop a Euclidean geometric structure and apply the resulting theorems and formulas to address meaningful problems.

**Prerequisites:** Algebra I or its equivalent

## Statistics (1.0 credit) and Honors Statistics (1.0 credit)

This course is a practical hands-on approach to the study of statistics and probability. Topics include the use of graphs such as histograms, stem plots, time plots, and scatter plots to display data; using numbers such as median, mean, and standard deviation to describe data; and evaluating data distribution. Students examine relationships using correlations and least square regressions. They calculate the probability of simple and compound events. They learn to estimate with confidence, explore tests of significance, and evaluate the validity of statistics contained within published reports.

**Required Materials:** graphing calculator (TI83 or above)

---

\*Course requires the purchase of physical materials.





---

## ADVANCED PLACEMENT® MATH

### **AP® Calculus AB (1.0 credit)\***

AP® Calculus AB is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. Daily preparation is required for success. This course fulfills the requirements for the Advanced Placement Calculus AB exam.

**Prerequisites:** Algebra I, Geometry, Algebra II, and Pre-Calculus or Trigonometry/ Analytical Geometry

**Required Materials:** calculator approved for use on the AP exam

### **AP® Calculus BC (1.0 credit)\***

AP® Calculus BC is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. Daily preparation is required for success. This course fulfills the requirements for the Advanced Placement Calculus BC exam.

**Prerequisites:** Algebra I, Geometry, Algebra II, and Pre-Calculus or Trigonometry/Analytical Geometry

**Required Materials:** calculator approved for use on the AP exam

### **AP® Statistics (1.0 credit)\***

AP® Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

**Prerequisite:** Algebra II

**Required Materials:** calculator approved for use on the AP exam

## HIGH SCHOOL SCIENCE

### **Biology (1.0 credit) and Honors Biology (1.0 credit)**

This course investigates the relationship between structure and function from molecules to organisms and systems the interdependence and interactions of biotic and abiotic components of the environment, and mechanisms that maintain continuity and lead to changes in populations over time. Students will explore biological concepts through an inquiry approach. Embedded standards for inquiry, technology and engineering, and mathematics are taught in the context of the content standards for cells, interdependence, flow of matter and energy, heredity, and biodiversity and change.

### **Chemistry (1.0 credit) and Honors Chemistry (1.0 credit)**

Chemistry is the investigation of atomic and molecular-level properties and interactions. The course begins with properties of matter, atomic structure, and basic atomic bonding. It then lays a mathematical and conceptual groundwork by which more complex molecular interactions can be understood. Chemistry allows students an opportunity to explore substances, their properties, and how the interactions of these substances can generate a different set of properties. This course will provide students with several analytical tools needed for scientific investigation and thought. Chemistry is a necessary component of the student's understanding of physical processes in the world around them.

---

\*Course requires the purchase of physical materials.



---

## Environmental Science (1.0 credit)

Environmental Science is a year-long course designed to show thematic connections between a variety of science disciplines including biology, chemistry, and physics. It gives students a coherent and realistic picture of the applications of a variety of scientific concepts as they manifest in our environment. The aim of this course is to increase students' knowledge of environmental challenges of today, while continuing to cultivate scientific critical thinking skills.

## Physics (1.0 credit) and Honors Physics (1.0 credit)

This course examines the relationship between matter and energy and how the two interact. This course has a strong emphasis on the mathematics of physics. Students explore physics concepts through an inquiry-based approach. Embedded standards for inquiry, technology and engineering, and mathematics are taught in the context of the content standards for mechanics, thermodynamics, waves and sound, light and optics, electricity and magnetism, and atomic and nuclear science.

## ADVANCED PLACEMENT® SCIENCE

### AP® Biology (1.0 credit)\*

AP® Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations. The course focuses on topics encompassing evolution; cellular processes and homeostasis; genetics and information transfer; and ecology and biological interactions. The course also emphasizes inquiry-based learning and the development of science practices and skills.

**Prerequisites:** Biology, Chemistry and Algebra I recommended

**Required Materials:** household items for lab experiments

### AP® Chemistry (1.0 credit)\*

The AP® Chemistry course is designed to be the equivalent of an introductory college chemistry course. Students will attain an in-depth understanding of fundamentals and competence in dealing with chemical problems. The course helps students develop abilities to think clearly and express their ideas orally and in writing, with clarity and logic. This course will reinforce the chemical principles learned in college-prep chemistry such as the periodic table, chemical formulas and equations, stoichiometry, and chemical bonding. This course also includes new topics such as the hybrid theory, the molecular orbital theory, organic chemistry, chemical kinetics, chemical equilibrium, and thermo-chemistry.

**Prerequisites:** Chemistry, Algebra I, and Algebra II

**Required Materials:**

- *AP Chemistry Chang* – Raymond Chang, Kenneth Goldsby – 12th Edition, 2016; ISBN-13: 978-0076727704; ISBN-10: 007672770X
- *Cracking the AP Chemistry Exam*, 2020 Edition; ISBN-13: 978-0525568186; ISBN-10: 0525568182
- [Advanced Microchem Kit](https://www.qualitysciencelabs.com/advanced-chemistry/advanced-microchem-kit/) (<https://www.qualitysciencelabs.com/advanced-chemistry/advanced-microchem-kit/>)

### AP® Environmental Science (1.0 credit)\*

AP® Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students identify and analyze environmental problems that are natural and human-made. They evaluate the relative risks associated with these problems and examine alternative solutions for resolving or preventing problems. Laboratories support student content mastery in both hands-on and virtual experiences.

**Prerequisites:** Algebra I and two years of high school science, with labs

**Required Materials:** household items for lab experiments

---

\*Course requires the purchase of physical materials.



---

### **AP® Physics 1 (1.0 credit)\***

AP® Physics is a college level course designed to give students an understanding of physical theory and principles. The subject matter includes the interaction of matter and energy, fluid mechanics, thermal physics, electricity, magnetism, and nuclear and atomic physics. The course is designed for students with strong mathematics, problem-solving, and expository writing skills. It is designed as a senior year course for students who are independent learners and who intend to select careers in science, medicine, engineering, or the applied sciences.

#### **Required Materials:**

- graphing calculator
- *Cracking the AP Physics 1 Exam*, 2020 Edition; ISBN-13: 978-0525568308; ISBN-10: 0525568301
- [Lab Materials](#)

## **HIGH SCHOOL SOCIAL STUDIES**

### **Economics (0.5 credit) and Honors Economics (0.5 credit)**

Economics is the study of how humans make decisions in the face of scarcity. This course introduces the principles and the applications of economics in everyday life. Students develop an understanding of limited resources and compare it with unlimited wants and needs. Students learn how individual and national economic decisions are made to allocate goods and services among competing users. Students will think and problem solve as they focus on understanding economic problems, laws of demand and supply, market organization, labor and financial markets, competition, monopolies, and poverty and economic inequality. A goal of the course is for students to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting focused on developing their own views on current economic and monetary issues.

### **U.S. Government (0.5 credit) and Honors U.S. Government (0.5)**

U.S. Government will introduce to students the main concepts that have become inherent within our modern government. Students will learn the function of political systems, the purpose of a party system, how policy is decided, elections, voting, and the basic ideas that are associated with being a participant within a political system. Students will look at the development of our government from its inception to the modern incarnation that it has become. A primary goal of this course will be to teach students the concepts associated with the idea of civil efficacy.

### **U.S. History (1.0 credit) and Honors U.S. History (1.0 credit)**

American History is a course that expands upon basic skills and knowledge acquired from previous history/social studies classes. Students within this course will apply their broader knowledge of historical study and American history to a more specific era within United States history. This course will closely examine American history following the era of post-Reconstruction to illustrate the dynamic growth and change of the nation following the most devastating era of US history, the Civil War. During this course, students will focus on such themes as cultural immigration, ethnic diversity, social problems, political developments, religious diversity, economics, and international diplomacy.

### **World History (1.0 credit) and Honors World History (1.0 credit)**

The purpose of World History is to explore the variety of cultures, beliefs and lifestyles that have existed throughout the globe from the earliest days of human existence. This course will connect students to the world of the past to help them gain an understanding of human progression, and an appreciation for the countless achievements that were necessary to allow us to exist in our modern world.

---

\*Course requires the purchase of physical materials.





---

## ADVANCED PLACEMENT® SOCIAL STUDIES

### AP® European History (1.0 credit)\*

AP® European History is a study of European history since 1300, introducing students to economic, cultural, social and political developments. These developments played a fundamental role in shaping the world. Second semester will introduce students to the birth of modern political thought, the Great Depression, and World War II. Students will study the Cold War and the collapse of communism and wrap up with the dawn of the 21st Century. Students will complete a project at the end of each unit, with the final project being a critical analysis.

#### **Required Materials:**

- *Western Heritage, since 1300* (11th Edition) – Donald Kagan; ISBN-13: 978-0134050225; ISBN-10: 134050223
- *Cracking the AP European History Exam*, 2020 Edition; ISBN-13: 978-0525568261; ISBN-10: 0525568263

### AP® Human Geography (1.0 credit)

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

### AP® Macroeconomics (0.5 credit)

AP® Macroeconomics is an introductory college-level macroeconomics course. Students cultivate their understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies.

**Prerequisite:** Algebra I recommended

### AP® Microeconomics (0.5 credit)

AP® Microeconomics is an introductory college-level microeconomics course. Students cultivate their understanding of the principles that apply to the functions of individual economic decision-makers by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like scarcity and markets; costs, benefits, and marginal analysis; production choices and behavior; and market inefficiency and public policy.

**Prerequisite:** Algebra I recommended

### AP® Psychology (1.0 credit)

The AP® Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students will explore and apply psychological theories, concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students will employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

---

\*Course requires the purchase of physical materials.



---

### **AP® U.S. Government and Politics (1.0 credit)**

Students investigate key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study the structure of the Constitution throughout the course, as well as its implications for the functioning of government today. Other foundational documents, landmark Supreme Court cases, and opportunities for research and civic action are key elements in this rich course that prepares students to be informed and active participants in U.S. society.

**Prerequisite:** United States History recommended

### **AP® U.S. History (1.0 credit)\***

Within AP® U.S. History, students will develop and use historical thinking skills (chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence, and historical interpretation and synthesis) to examine the history of the United States from 1491 to the present. Students will learn through active participation as they analyze sources and collaborate to gain a conceptual understanding of U.S. history. The AP® U.S. History course is structured around nine time periods outlined within the College Board Advanced Placement United States History Framework. Each time period is divided into key concepts meant to contextualize history and show continuity and well as change over time. The intention is for students to explore history, establishing economic, political, and social patterns.

**Prerequisite:** World History recommended

### **AP® World History (1.0 credit)\***

AP® World History is structured around the investigation of selected themes covering distinct chronological periods. It is equivalent to an introductory college survey course. The course has a three-fold purpose. First, it is designed to prepare students for successful placement into higher-level college and university history courses. Second, it is designed to develop skills of analysis and thinking in order to prepare students for success in the 21st century. Finally, it is intended to make the learning of world history an enjoyable experience. Students will show mastery of the course goals by taking part in the AP World History exam at the end of the school year.

#### **Required Materials:**

- *Bentley, Traditions & Encounters: A Global Perspective on the Past UPDATED AP Edition* © 2017, 6e, Student Edition; ISBN-13: 978-0076681280; ISBN-10: 0076681289
- *AP World History Modern Prep Plus 2020 & 2021*; ISBN-13: 978-1506248127; ISBN-10: 1506248128

## **HIGH SCHOOL ELECTIVES**

### **Accounting (0.5 credit)**

In this semester course, students will explore accounting, including investigating accounting careers. Students 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.

### **Adobe® Illustrator Certification Course (0.5 credit)**

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.

---

\*Course requires the purchase of physical materials.



---

### **Adobe® InDesign Certification Course (0.5 credit)**

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.

### **Adobe® Photoshop Certification Course (0.5 credit)**

This course prepares students to demonstrate expertise in Adobe's 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's exam specifications. Students will leave this course with career-ready, real-time skills in one of the most popular software programs in the world!

### **American Sign Language I (1.0 credit)**

The beginning of this full-year course will introduce you to vocabulary and simple sentences, so that you can start communicating right away. Importantly, you will explore Deaf culture: social beliefs, traditions, history, values and communities influenced by deafness. The second semester will introduce you to more of this language and its grammatical structures.

### **American Sign Language II (1.0 credit)**

In this course, students will build on the skills they learned in American Sign Language (ASL) I and explore the long and rich history of Deaf culture and language. They will expand their knowledge of the language as well as their understanding of the world in which it is frequently used. Students will grow their sign vocabulary and improve their ability to interact using facial expressions and body language. They will also learn current trends in technology within ASL as well as potential education and career opportunities.

**Prerequisites:** American Sign Language I

### **Anatomy & Physiology (1.0 credit)**

This course covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. This course also introduces common human disease processes and will prepare students to take advanced anatomy and physiology courses.

### **Anthropology I: Uncovering Human Mysteries (0.5 credit)**

The aim of anthropology is to use a broad approach to gain an understanding of our past, present and future, and in addition address the problems humans face in biological, social and cultural life. This course will explore the evolution, similarity and diversity of humankind through time. It will look at how we have evolved from a biologically and culturally weak species to one that has the ability to cause catastrophic change. Exciting online video journeys to different areas of the anthropological world are just one of the powerful learning tools utilized in this course.

### **Anthropology II: More Human Mysteries Uncovered (0.5 credit)**

Anthropology has helped us better understand cultures around the world and through different time period. This course continues the study of global cultures and the ways that humans have made sense of their world. We will examine some of the ways that cultures have understood and gave meaning to different stages of life and death. The course will also examine the creation of art within cultures and examine how cultures evolve and change over time. Finally, we will apply the concepts and insights learned from the study of anthropology to several cultures found in the world today.

---

\*Course requires the purchase of physical materials.



---

## Art Appreciation (0.5 credit)

Art Appreciation investigates how quality is determined and created by artists, in order to evaluate and appreciate art on a deeper level. Students will be introduced to the elements and principles of art and the importance of artists' context and perspective. The course covers different periods in art history, different techniques in art, and how to research and evaluate art, emphasizing why each contributes to valuing a piece of art and provides the necessary knowledge to do so.

## Art History (0.5 Credit)

This Art History course integrates the four components of art study: art production, historical and cultural context, critical process and aesthetic process. Students will be able to identify and describe art from prehistoric times to modern time. Throughout this course, students will discuss various artworks, research artists, and create documents and presentations demonstrating concepts learned.

## Arts Careers (0.5 credit)\*

For every Broadway dancer, every television star, and every pop singer, there are countless people behind the scenes helping to make it happen. Arts Careers introduces students to the skills that are part of many fascinating careers in the arts. Studying the arts creates independent and innovative thinkers and many doors are open to an artist with the proper training.

### **Required Materials:**

- digital camera (camera phone, DSLR and other devices with a camera is acceptable)
- video camera (camera phone, DSLR and other devices with a camera is acceptable)
- video software (iMovie and other video editing software is acceptable)

## Augmented and Virtual Reality (0.5 credit)

Recent advances in technology have allowed augmented and virtual reality (AR/VR) systems to become extremely sophisticated and realistic. This course introduces students to the technologies that underpin AR/VR systems. The course walks through five applications of AR/VR and how they will change and impact numerous aspects of our lives and the economy. Students will also learn about and discuss the risks and side effects of these systems on health, privacy, and ethical implications.

## Basic Web Design (0.5 credit)\*

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.

### **Required Materials:**

- HTML Text Editor (choose one):
  - TextEdit – For use on Mac – comes with OS
  - Notepad – For use on Windows – comes with OS
  - Text – For use on Chromebook – free app download from the Google Store
- image editing software (choose one):
  - Pixlr – <https://pixlr.com/editor/> (in-browser)
  - GIMP – <http://www.gimp.org/downloads/> (downloadable program)
- webhosting and basic in-browser FTP:
  - Neocities – <https://www.neocities.org>

---

\*Course requires the purchase of physical materials.



---

### **Beginning Painting (0.5 credit)\***

This course introduces students to classical and contemporary painting, techniques and concepts, with emphasis on the understanding of its formal language and the fundamentals of artistic expression. Painting from still life, landscape, and life models from observation will be geared towards realism; at the same time, various other painting styles could be explored. Color theory, linear perspective, compositional structure, figure/ground relationships, visual perception, spatial concepts, and critical thinking skills will all be emphasized. Students will study and research major painting styles and movements in historical context. The hope is that students will use this global approach to develop a “critical eye” in evaluation of contemporary painting. Acrylic and watercolors are the mediums used in this class. The main emphasis of this course is to encourage and nourish individuality and creativity.

#### **Required Materials:**

- chromacryl tube of acrylic paints
- round brush
- flat brush
- watercolor paints (includes brush)
- set of markers
- painting paper (The pad of paper may be labeled watercolor paper. Please use for all paintings, including acrylic.)
- newsprint paper (This paper is for sketches and testing paints. Do not use for painting projects.)
- 1–4b pencil
- 7 project cardstock pages

### **Biology Creationism (1.0 credit)**

In this class, students will study the cell, the molecular basis of heredity, biological creation, interdependence of organisms, matter and energy, and organization in living systems and the behavior of organisms. We will explore the nature of science, discuss the ideas behind both creationism (intelligent design) and evolutionary science, survey some of the evidence for evolution and natural selection, and learn about the societal conflict between modern creationism and evolution (both in the courtroom and in the classroom). We will explore these themes through readings, discussions/debates, and multimedia (including music, film, and internet sources).

### **Business Computer Information Systems (1.0 credit)**

Business Computer Information Systems is a year-long course that explores the use of technology applications in both business and personal situations. The course provides key knowledge and skills in the following areas: communication, business technology, word processing, spreadsheet, and database applications, telecommunications, desktop publishing, and presentation technology, computer networks, and computer operating systems.

### **Business Law (0.5 credit)**

In this course, students will learn about the American legal system. They will examine ethics, court systems, criminal law, and torts. They will explore how the court systems work together, and which types of misconduct result in going to court. As they progress through the course, students will also gain an understanding of what is right and wrong in business actions and employment law. Study will focus on the formation of a business and the basic legal issues associated with each type of business.

### **Career Planning (0.5 credit)**

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.

---

\*Course requires the purchase of physical materials.





---

## Character Education (0.5 Credit)

This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement as students and experience more success and satisfaction as adults.

## Civics (0.5 credit)

In this course students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the United States government. Students will examine the purposes and functions of federal, state and local government, the justice system, political systems the environment, and the economy. Learners will evaluate their role and civic responsibility to their families, communities, and country including voting and being a productive member of society. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others including disabilities. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and Power Point presentations to enhance and reinforce learning. Learners receive frequent feedback from teacher and peers through discussions. By the end of the course students will have a deep understanding of their civic responsibilities as well as the difference one individual can make in society.

## College and Career Readiness (0.5 credit)

This course will assist students in learning about a variety of college writing assignments, as well as the most efficient and effective methods to complete them. Each unit focuses on a different type of college writing and techniques.

## Computer Basics (0.5 credit)

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.

## Consumer Math (1.0 credit)

This course focuses on the mathematics involved in making wise consumer decisions. Students explore the many ways in which mathematics affects their daily lives. The first semester will cover paychecks and wages, taxes, insurance, budgets, bank accounts, credit cards, interest calculations, and comparison shopping. Second semester topics include vehicle and home purchasing, investing, and business and employee management.

## Contemporary Novels (0.5 credit)\*

For this course, students will read a set of novels and novellas that were written during the twentieth century and reflect themes common to contemporary literature, such as the ability of the human spirit to rise above seemingly-impossible circumstances. Through creative projects and writing assignments, students will identify and analyze each novel's themes and also compare and contrast the novels' treatment of common themes. Please note that, like most contemporary literature, the novels assigned for this course contain realistic situations and language. In addition to the novels listed, each student will read another contemporary novel of his or her choosing that the instructor must approve. MLA (Modern Language Association) documentation is required on all papers submitted.

### Required Materials:

- *Picture Bride* by Yoshiko Uchida; ISBN-10: 9780295976167; ISBN-13: 978-0295976167
- *Night* by Elie Weisel; ISBN-10: 9780374500016; ISBN-13: 978-0374500016
- *To Kill a Mockingbird* by Harper Lee; ISBN-10: 0060935464; ISBN-13: 978-0060935467
- *Fallen Angels* by Walter Dean Myers; ISBN-10: 0545055768; ISBN-13: 978-0545055765
- *The Old Man and The Sea* by Ernest Hemingway; ISBN-10: 0684801221; ISBN-13: 978-0684801223

---

\*Course requires the purchase of physical materials.



---

## Creative Writing (1.0 credit)

At the beginning of the semester, students consider the importance of word play exercises in improving their facility with language while building a compelling and creative writing style. Focusing on word nuances and precision, later lessons guide students to write in a variety of short modes—including poetry, song lyrics, prose poetry, short short stories, and creative nonfiction. There are several opportunities for peer review in this semester, during which students learn best practices for participating in writing workshops, and then revise their work using feedback from their peers. This semester focuses on longer works of fiction: short stories, plays, and novels. Students learn basic techniques of plot and character development along with strategies for creating suspense and building a theme, and they have opportunities to write in several different genres. Lessons cover a few special topics as well, including graphic novels, animation, comedy, and improvisation. Students apply what they have learned about writing workshops and revising to the longer pieces of writing they create for this semester.

## Cybersecurity (1.0 credit)

We depend more and more on the technologies we interact with every day, and we put more and more of our personal data out there online. Can all of that data really be kept “secret”? We all need to know more about how to protect our personal information, especially given how much we rely on and use our network devices and media. You’ll learn about the various parts of your computer, how they work together, and how you can manipulate them to keep your data safe. You’ll also dive into the tools, technologies, and methods that will help protect you from an attack and discover the many opportunities in the rapidly growing field of cybersecurity.

## Digital Media (0.5 credit)\*

Digital Media is a project-based survey of different forms of digital media, such as digital audio, imaging and illustration, movie editing, and animation. The course is oriented toward teaching broad, flexible tools and concepts that are not tied to any one platform or program. Each module ends with a culminating task (such as a podcast or short film). Students will be able to draft and develop projects as they build their skills over each lesson.

**Required Materials:** printer, camera, scanner (optional), and one of the following programs: Audacity, GIMP, Inkscape, DaVinci Resolve (free version), Pencil2D, Blender, GDevelop, or Piskel.

## Digital Photography (0.5 credit)\*

Understanding the tools available in digital photography opens the possibilities to create images with impact. In Digital Photography, students will study the history of photography as well as the basic operation of a digital camera. As they are introduced to different styles of photography and photographers, students will begin to develop artistic skills as well as their own voice through their photographs.

**Required Materials:** digital camera (tripod, lenses, lights optional), paper, scissors, glue, access to photo manipulation software.

## Drawing (0.5 credit)\*

In Basic Drawing, students will experiment with several different art materials and tools to see what each tool can do best. Students will explore ordinary things around them to become more observant of the structures and meanings of things which can be seen in your their home and community. Your work will be your own study of the forms, textures, movements, and patterns of the things that you see every day.

Each project and each lesson is based on the one before it; so always do the lessons in the order they are given. Be sure to follow the directions exactly regarding which materials, sizes, and subject matter to use for each project. Each lesson will be a study of a new way of drawing. The examples given will show only the method and materials to be used, never the same subject or size as the project assigned. The examples are never to be copied. An example will only show one way of using the technique described. By becoming more observant, by experimenting with new materials, and by exploring a

---

\*Course requires the purchase of physical materials.



---

variety of methods, students will continue to grow in artistic skill and enjoyment. Beyond fundamental skills are various levels of creativity. Each lesson provides room for expressing the technical skill learned in a unique, creative way.

**Required Materials:**

- 1 drawing pencil, 2B
- 1 round hair brush #10
- 1 bottle India Ink, black
- 1 Pilot Varsity Pen, self-contained black ink
- 2 conté crayons: white, black
- 1 Art gum eraser
- 1 white, wax Crayola crayon
- 40 sheets white drawing paper, 9×12
- 5 sheets construction paper, 9×12, black
- 15 sheets grey construction paper, 9×12
- 14 large envelopes, 10 x 13
- 2 sheets white watercolor paper (rough, heavy, stiff)
- 2 sheets rice paper 9 1/2 x12 (soft, translucent)
- 25 sheets newsprint, 9×12
- 1 bottle white glue (obtain locally)

### **Drones – Remote Pilot Certification (0.5 credit)**

The field of unmanned aerial vehicles is growing rapidly, as the opportunities to use them for search and rescue, photography, recreation, inspection, and many other applications continue to multiply. This course prepares students to take the Federal Aviation Administration's Part 107 exam, which is essential to becoming a commercial drone pilot. Students will learn critical facts to prepare for the test, including regulations, airspace and requirements, weather, loading and performance, and operations. The course will conclude with a look at the most promising careers in the field of drones.

### **E-Sports and the History of Video Games (0.5 credit)**

In this course, students will learn about the technologies and design principles that have been the foundation of video game technology and development 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.

### **Earth Science (1.0 credit)\***

In this course, students will learn about scientific inquiry, the structure and composition of the universe, and features of the solar system. Students learn the importance of scientific inquiry and how to communicate the results of scientific investigations. Specific topics include the Big Bang theory; the motions of celestial objects; stellar evolution; features of the sun and planets; weather, climate, and earth's water cycle; the atmosphere and clouds; factors that influence local and global climate; the physical structure of the earth and earth's tectonic system; weathering, erosion, and soil formation; the earth as a system; geologic history, including the evolution of Earth's atmosphere, the geologic time scale, and the fossil record; natural resources and the effects of human population on natural resources; how science and technology work together, and the technological design process in earth science applications.

**Prerequisites:** Pre-Algebra, Physical Science 8

**Required Materials:**

- uninflated round balloon
- permanent marker

---

\*Course requires the purchase of physical materials.



- 
- 50 small candies that have letters on one side of them (like M&Ms or Skittles)
  - a small zipper seal plastic bag
  - two kitchen mixing bowls
  - ice cubes
  - water
  - a permanent marker
  - a block of wood
  - a pair of pliers
  - a pair of needle-nose tweezers
  - a slotted spoon
  - a drinking straw
  - sunflower seeds in the shell
  - colored water
  - a long narrow vase
  - rice grains
  - small block of Styrofoam
  - 3 or 4 large marshmallows
  - a teaspoon of herbs (any kind will do, like basil or parsley)

### **Engineering and Product Development (0.5 credit)**

This semester-long course provides an overview of the concepts of product engineering and development. Students analyze the life cycle of a product to prepare a product for distribution and for target markets. The course begins with building an understanding of the product life cycle, from the initial idea to drafting requirements to using 3-D modeling tools and other design tools. The final unit focuses on assembling the pieces within a project plan to achieve a product and evaluating the plans for a successful product launch. In addition, the course provides information about the different careers available to students interested in engineering, product development, and project management.

### **Entrepreneurship and Small Business (0.5 credit)**

This course prepares students for the Entrepreneurship and Small Business Certification exam. This certification has been designed to test concepts around starting and managing a small business. These topics include entrepreneurship, evaluation of opportunities, preparation to start a business, operation of a business, marketing, and management of finances. Students gain insights and understand real-world applications that will not only allow them to succeed in passing the certification exam, but also in successfully starting, working in, or running a small business.

### **Fashion and Interior Design (0.5 credit)\***

Do you have a flair for fashion? Are you constantly redecorating your room? If so, the design industry might just be for you! In this course, you'll explore what it is like to work in the industry by exploring career possibilities and the background that you need to pursue them. Get ready to try your hand at designing as you learn the basics of color and design then test your skills through hands-on projects. In addition, you'll develop the essential communication skills that build success in any business. By the end of the course, you'll be well on your way to developing the portfolio you need to get your stylishly clad foot in the door of this exciting field.

#### **Required Materials:**

- clothing items
- sewing machine
- digital camera
- thread
- fabric

---

\*Course requires the purchase of physical materials.



- 
- clothing Patterns
  - measuring tape
  - sketchpad
  - paper
  - scissors

### **Film and Television (0.5 credit)**

The culture of cinema and television tells a unique story of history and innovation. Students in Film and Television will be introduced to industry icons and stars of the big and small screen. By studying and writing about film and television, students will analyze trends in technology and culture and better understand how to be an informed viewer.

### **Financial Literacy (0.5 credit)**

This course is designed to help students budget, keep a checkbook and filing system, deal with debt and credit, and become wiser consumers. Students will learn how money and the dynamics surrounding it affect their relationships, their lifestyles, and their retirement.

### **First Aid (0.5 credit)**

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.

### **Flying Cars and the Future of Transportation (0.5 credit)**

This course introduces students to new and cutting-edge, futuristic transportation technologies. Students will gain familiarity with the history of transportation development and understand a framework with which to evaluate new transportation modes. Students will examine 10 different technologies on the horizon, the pros and cons of each mode, and explore potential career paths in these emerging fields.

### **French I (1.0 credit)**

French I is designed to focus on successful communication through speaking, writing, reading, and listening, and provides a thorough grounding in aspects of culture. Activities blend different forms of communication and culture to ensure that students meet all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

### **French II (1.0 credit)**

French II is designed to focus on successful communication through speaking, writing, reading, and listening, and provides a thorough grounding in aspects of culture. Activities blend different forms of communication and culture to ensure that students meet all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** French I

---

\*Course requires the purchase of physical materials.





---

### **French III (1.0 credit)**

In this course, students will deepen their understanding of French by focusing on the three modes of communication: Interpretive, interpersonal, and presentational. Each unit consists of a variety of activities which teach students how to understand more difficult written and spoken passages, communicate with others through informal speaking and writing interactions, and express their thoughts and opinions in more formal spoken and written contexts. Students will be actively engaged in their own language learning; use correct vocabulary terms and phrases naturally; incorporate a wide range of grammar concepts consistently and correctly while speaking and writing; participate in conversations and respond appropriately to conversational prompts; analyze and compare cultural practices, products, and perspectives of various French-speaking countries; read and analyze important pieces of French literature; and take frequent assessments to monitor progress. The course is conducted almost entirely in French, and is aligned to national standards as set forth by ACTFL (American Council on the Teaching of Foreign Languages).

**Prerequisite:** French II

### **Future of Education (0.5 credit)**

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.

### **Future of Healthcare Careers (0.5 credit)**

This course introduces students to the exciting and varied career opportunities in the health care industry that will be in demand in their future! The course will introduce the roles and tasks, identify education and skills needed, identify responsibilities of roles which support or supervise their role, analyze legal and ethical responsibilities, limitations, and implications for each of these professions.

### **Future of Home Construction (0.5 credit)**

This course introduces students to the evolving industry of construction! In addition to building on standard concepts such as technical skills, project planning, and regulations, students will learn about the variety of career possibilities within construction. They will also explore the entrepreneurial side of construction and discover what it takes to start and run your own business in this field. Finally, the course will look towards the future and analyze trends in green materials, energy efficiency, and technology to determine how these will impact the homes we build and live in.

### **Future of Space Travel: Facts, Fiction, and Possibilities (0.5 credit)**

This course introduces students to the history and near future of space travel. Students will explore the possibilities of moon bases, Mars colonies, and visiting the outer planets in our solar system and their moons. Students will discuss ethical and legal issues around space exploration such as asteroid mining and war in space. The course gives an expansive view of the technologies, science, and theories that may become realities during students' lifetimes.

### **German I (1.0 credit)**

This introductory course teaches basic communication and comprehension in German. It coordinates the study of language with culture through the use of video, audio, and mass media. This course introduces the fundamentals of German conversation and grammar. Students will begin to develop a functional competency in the four primary language areas: Speaking, reading, listening, and writing; and establish a solid grammatical base. In the second semester, students will further develop their skills in pronunciation, grammar, grammar structures, and vocabulary. The different cultures of the German-speaking world are emphasized through readings, videos, and other activities.

---

\*Course requires the purchase of physical materials.



---

## German II (1.0 credit)

In this course, students will build on their German grammar and language skills. Students will review basic grammar skills, learn and study stem-changing verb conjugation, and explore cultural themes regarding current events, famous German people, music, and festivals. In the second semester, students will increase their proficiency by forming more complex sentences. Cultural themes are entwined throughout the course.

**Prerequisite:** German I

## Graphic Design (0.5 credit)\*

This Graphic Design course 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, students will explore the principles and elements of design through visual projects. Students will work with both analog and digital media as they explore two-dimensional and three-dimensional design and color theory. This course will improve students' ability to communicate visually. Students are given the room to express new technical skills in their own creative ways.

**Required Materials:** one of the following software programs: Adobe Illustrator (cost associated), Adobe Photoshop (cost associated), GIMP (free download), or Pixlr (free browser-based program). Additional required materials include the following: triangle, Exacto knife, markers, pencil, paper note pad, colored pencils, dotted line paper, glue stick, ruler, scanner or camera for submitting finished work.

## Health and Fitness (1.0 credit)

The purpose of this course is to develop and enhance healthy behaviors that influence lifestyle choices and student health and fitness. The course provides opportunities to prepare for and implement healthy actions and set personal goals. Students will engage in daily physical activity, design a personal fitness plan, and monitor progress as they implement their fitness plans. Nutrition and other healthy lifestyle topics are covered.

## Health Careers (0.5 credit)

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 Concepts (1.0 credit)

This year-long course introduces high school students to the fundamental concepts of anatomy and physiology—including the organization of the body, cellular functions, and the chemistry of life. As they progress through each unit, students learn about the major body systems, common diseases and disorders, and the career specialties associated with each system. Students investigate basic medical terminology as well as human reproduction and development. Students are introduced to these fundamental health science concepts through direct instruction, interactive tasks, and practice assignments. This course is intended to provide students with a strong base of core knowledge and skills that can be used in a variety of health science career pathways.

---

\*Course requires the purchase of physical materials.

---

### Individual and Team Sports (0.5 credit)

To improve and maintain optimum health, it is necessary for people of all ages to participate in physical exercise. There is little doubt that, in addition to students in schools, the number of adults participating in sports and recreational activities in the United States has increased in recent years. Physical education is much more than just fitness and exercise. A well-planned program will cause you to think and express your emotions about different situations. In addition, a good program can make a valuable contribution to your education. These experiences will help you develop a sense of wellness.

Emphasis in this course is placed on the value of these sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports. The sports covered in this course are archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer. Information about the playing area and equipment, basic rules, safety considerations, and terminology for each sport are included in the discussions. For the most part, the information presented in each lesson applies to sports programs throughout most sections of the United States.

### Integrated Math 1 (1.0 credit)

In Integrated Math 1, students use arithmetic properties of subsets of integers and rational, irrational and real numbers by simplifying expressions, solving linear equations and inequalities, graphing equations, finding the equation of a line, working with monomials and polynomials, and factoring and completing the square. Students use properties of the number system to judge the validity of results, justifying each step of the procedure to prove or disprove statements. Students compute perimeter, circumference, area, volume and surface area of geometric figures. Students also use basic trigonometric functions defined by the angles of a right triangle.

### Integrated Math 2 (1.0 credit)

Students in Integrated Math 2 will focus on pulling together and applying the accumulation of learning that they have acquired from their previous math courses. They will apply methods from probability and statistics; expand their repertoire of functions to include polynomial, rational, and radical functions; and expand their study of right triangle trigonometry. In addition, they will bring together all of their experience with functions and geometry to create models and solve contextual problems.

**Prerequisite:** Integrated Math 1

### Integrated Math 3 (1.0 credit)

Students in Integrated Math III will focus on pulling together and applying the accumulation of learning that they have from their previous courses. They will apply methods from probability and statistics. Students will expand their repertoire of functions to include polynomial, rational, and radical functions. They will expand their study of right triangle trigonometry. Students will use all of their experience with functions and geometry to create models and solve contextual problems.

**Prerequisite:** Integrated Math 2

### Introduction to Agriculture, Food, and Natural Resources (0.5 credit)

This semester-length high school course introduces students to the basic scientific principles of agriculture and natural resources. Students recognize and research plant systems, animal systems, government policy, “green” technologies, agribusiness principles, and sustainability systems. In this course, students apply understanding of ecosystems and systems thinking to the management of natural resources to maximize the health and productivity of the environment, agriculture, and communities. Students also analyze community practice or policy development related to sustainability in agriculture, food, and natural resources. Finally, students apply adaptive ecosystem management to a common pool resource problem in a manner that addresses ecological, socioeconomic, and institutional contexts.

---

\*Course requires the purchase of physical materials.



---

### **Introduction to Artificial Intelligence (0.5 credit)**

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 Bitcoin and the Future of Money (0.5 credit)**

In this course, students will learn about the nascent industry of digital currencies and how they function. Upon completion of this course, students will understand bitcoin, including its history, development, and context within the modern global economy. Students will learn the basic cryptographic principles that underlie bitcoin and gain confidence by demonstrating strong security principles in storing and transacting with bitcoin. Key principles such as mining, wallets, and hashing will be introduced.

### **Introduction to Blockchain Technology (0.5 credit)**

In this course, students will learn about blockchain, distributed ledger technology that allows us to exchange value electronically. Topics include what blockchain is, why it is significant today, its key concepts, and areas where blockchain has the greatest potential. Students will explore how blockchain has the potential to reshape society in a wide range of arenas including reducing diploma fraud; protecting one's own data and identity; giving musicians, artists, and photographers more control over their creations; eliminating voter fraud; and improving health records.

### **Introduction to Business (0.5 credit)**

This course introduces students to basic business concepts that will help them understand how a business survives in today's economy and the role that consumers play in the same economy. Students will learn how to balance a checkbook, save for the future, and use credit wisely. Students will also learn how to create a resume and how to participate in a job interview.

### **Introduction to Careers in Dentistry (0.5 credit)**

This course introduces students to the exciting and varied career opportunities in the dentistry profession, from dental assistant all the way up through oral surgeon. Students will review the history of dentistry globally and in the U.S., and will learn key dental terminology. The course will introduce the roles and tasks done as well as skills and education required of nearly every member of the dental staff. Students will gain an understanding of what it takes to perform each position, and how they work together.

### **Introduction to Careers in Finance (0.5 credit)**

Introduction to Careers in Finance is a semester-long course that provides the fundamentals of the financial services industry in the United States and explores the jobs and career opportunities that the industry offers. Course units address a broad set of services in the industry including finance overview, financial services, securities analysis, investments, principles of corporate finance, banking services, risk management, and insurance.

---

## Introduction to Consumer Services (0.5 credit)

In this semester-long course, students analyze various career paths in terms of employment opportunities and educational requirements, such as hard and soft skills, certifications, and licensures for different pathways. Developing research, analytical, and presentations skills are key components. This course is designed as an overview to prepare students for a consumer services-related career and to introduce them to specialty areas. Emphasis is placed on the human services aspect (vs. corporate concerns) of consumer services. Social issues and advocacy, as well as ethics and legalities, are a recurring theme. Students gain knowledge of current issues affecting various consumer services professions, and the impact of local, state, national and global issues on consumer services.

## Introduction to JAVA Programming (0.5 credit)\*

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, including games such as mad libs, player vs. computer games, battleship, tic-tac-toe, picture shuffler, and many more. This course assumes no Java coding experience and includes self-graded quizzes and tests.

**Required materials:** HTML Text Editor (TextEdit, Notepad, or Text) and [Eclipse](#)

## Introduction to Network Systems (0.5 credit)

This semester-long course introduces students to the fundamental technology and concepts that make networking systems possible. The most important concept introduced is that of the OSI reference model and its bottom four layers, which are most directly concerned with networking instead of computing. The course explores the software and hardware supporting LANs, WANs, and Wi-Fi networks. Students are introduced to the protocols in the TCP/IP stack that are used to communicate across a network, and to networking hardware, including hubs, switches, bridges, routers, and transmission media. Students explore questions of security, network management, and network operating systems.

## Introduction to Nursing (1.0 credit)

This two semester course introduces students to the field of nursing. In the first semester students will learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. Students will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention. In semester two students will examine various nursing theories, as well as focus on the nursing process, including assessment, diagnosis, and treatment options. Students will also learn about professional and legal standards and ethics. Additional skills of communication, teaching, time and stress management, patient safety, crisis management will be included.

## Introduction to the Internet of Things (0.5 credit)

Today's world is increasingly becoming the internet of things. With advances in battery power, sensors, and computer chips, more and more devices are being connected to the internet, allowing them to be monitored, controlled, and used more effectively for people and businesses. This course examines the trends and opportunities surrounding the Internet of Things. Students will learn about the technologies, hardware, and software that underpin the Internet of Things. Students will investigate a variety of end-market applications in our homes, businesses and cities. Finally, students will learn about the many career opportunities that the Internet of Things will enable.

## Introduction to Wall Street and Financial Careers (0.5 credit)

This course introduces students to the world of finance and the role of finance within society. Students will review 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.

---

\*Course requires the purchase of physical materials.





---

### JavaScript Game Design (0.5 credit)\*

In this course, students will learn how to start programming with JavaScript. Students will learn the basics of JavaScript including testing, functions, objects, arrays, loops, conditional code, operators and syntax basics. Students will learn timing, animations, and how to debug and complete a final project that incorporates everything they learned in the semester.

**Prerequisite:** Students should have a working knowledge of HTML and CSS prior to taking this course.

**Required materials:** text editor (TextEdit, Notepad, or Text), Image Editing Software ([Pixlr](#) or [GIMP](#)), and Webhosting and basic in-browser FTP like [Neocities](#).

### Journalism (0.5 credit)

This course is designed to prepare you to become a student of journalism and media. The work we do here will equip you with the critical skills you must have to succeed in high school media, college media, and beyond. We will read a variety of journalistic material and do a great deal of news writing. We will also look at journalism from legal, ethical, and historic vantage points. Expect to complete numerous writing activities in a variety of styles including editorial, hard news, feature, review, and more. If you participate actively, you will gain tremendous skills that will serve you for the rest of your life. Individual and group project will also be a part of this class. This course is a project-based course and does not include traditional tests, unit level understanding is assessed through unit projects.

### Latin I (1.0 credit)

Latin I has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

### Latin II (1.0 credit)

Latin II has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** Latin I

### Latin III (1.0 credit)

Latin III has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** Latin II

---

\*Course requires the purchase of physical materials.



---

### **LEED Green Associate Certification (0.5 credit)**

This course prepares students for the LEED Green Associate certification exam. This exam tests knowledge of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating Systems. The LEED Green Associate demonstrates knowledge of green design, construction, and operations. It is the prerequisite credential to advance in the field of environment, green design, and green construction.

### **Marine Science (0.5 credit)**

About 70% of the Earth is covered by water. Even today, much of the world's oceans remain unexplored. Marine scientists make exciting new discoveries about marine life every day. In this course, students will discover the vast network of life that exists beneath the ocean's surface and study the impact that humans have on the oceans.

### **Media and Communication (0.5 credit)**

From banner ads to billboards, newspaper articles, and Facebook feeds, people are constantly sharing ideas. This course looks at the many facets of mass media. Students will learn how the media shapes every aspect of our lives. We examine the role of newspapers, books, magazines, radio, movies, television, and the growing influence of Facebook, YouTube, and Twitter.

### **Medicine (0.5 credit)**

This course provides students with an introduction to healthcare, with emphasis on modern, clinical medicine. Students will review basic human anatomy and physiology and study major health concerns affecting people in the U.S. and the world. Topics include infectious diseases, cancer, traumatic injuries, and healthcare career opportunities.

### **Music Appreciation (0.5 credit)**

In this course, students will gain a thorough understanding of music by studying the elements of music, musical instruments, and music history, as well as music advocacy. Students will be introduced to the orchestra and composers from around the world. They will be required to be a composer, performer, instrument inventor, and advocate.

### **Nutrition (0.5 credit)**

This course takes students through a comprehensive study of nutritional principles and guidelines. Students will learn about world-wide views of nutrition, nutrient requirements, physiological processes, food labeling, healthy weight management, diet related diseases, food handling, nutrition for different populations, and more. Students will gain important knowledge and skills to aid them in attaining and maintaining a healthy and nutritious lifestyle.

### **Paleontology (0.5 credit)**

In this course, students will learn about the creatures both large and small that roamed the earth before modern man. Students will watch videos from experts at the Royal Tyrrell Museum, a leading paleontology research facility, and discover how the field of paleontology continues to provide insight into early life on earth.

### **Personal Fitness (0.5 credit)**

This course helps students understand what it is to live a healthy life, maintain fitness, and gain an understanding of the body and how it influences personal fitness. First, students are introduced to exercise, how it relates to well being, and what an unhealthy lifestyle can do to the body. Then students learn about the body's bones and joints, muscles, cardio, respiratory, and energy systems so they may better see the effects of exercise on the body. Next they learn about eating and drinking as it relates to exercise. The course explores digestion and explains how students should keep in mind how much they eat and how to make good choices. They will also learn about the psychology of exercise and the influence of chemicals in the human body. Lastly, students will explore methods to make positive changes that will lead to a healthy lifestyle.

---

\*Course requires the purchase of physical materials.



---

### Photojournalism (0.5 credit)\*

A powerful image can tell an eloquent story without words. Students in Photojournalism will be introduced to some of the pioneers who set the standards for this unique way of storytelling. As they study the principal types of photojournalism and the ethical responsibilities a photojournalist has behind the lens, students will develop their own storytelling skills through their writing and their photographs.

**Required Materials:** digital camera (tripod, lenses, lights optional)

### Physical Science (1.0 credit)\*

This is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

**Required Materials:** lab materials

### Pre-Algebra (1.0 credit)

In this course, students will move from the world of simple mathematics to the exciting world of Algebra and Geometry, developing skills that will be necessary throughout their lives. Students will stretch their thinking by learning increasingly abstract concepts and solving real world problems. Concepts are presented using examples of the skills and strategies students need. Students attain concrete understanding of the basics for algebraic thinking.

**Prerequisite:** Math 7

### Psychology (1.0 credit)

In this Psychology course, students will begin with a brief history of psychologists and their experimental methods. They will examine personality theories; human development from infancy through adulthood; and consciousness, intelligence and how to measure it, learning and conditioning, social psychology, and psychological disorders.. Students are encouraged to increase their own self-awareness as they move through the course and complete projects in which they play the role of teacher, parent, or psychologist.

### Python Multiplayer Adventure (0.5 credit)\*

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.

**Required Materials:** students will need a Windows PC or Mac for this course; Chromebooks and tablets are not sufficient.

### Renewable Energy (0.5 credit)

In this course, students will investigate sustainability and the importance of finding new, innovative ways to ensure that we can provide for global energy needs today and in the future. Students will take a balanced and evidence-based look at climate change, ways that we can harness renewable resources, sustainable societies, biodiversity, and smart growth.

### Robotics and Artificial Intelligence (0.5 credit)

This course teaches students what a robot is and how it relates to other key technologies such as artificial intelligence and machine learning. Students examine 10 applications of robots and how they will evolve to impact more aspects of our lives and the economy, including employment and creativity.

---

\*Course requires the purchase of physical materials.



---

### Smart Cities (0.5 credit)

A smart city uses Internet of Things sensors and tech to connect components across a city to ultimately improve the lives of citizens. In this course, students will learn about the history and development of smart cities. They will explore how technology are affecting a city's energy, transportation, and government. With rapidly increasing urbanization globally, this field presents a world of career opportunities for students.

### Sociology (0.5 credit)

This course examines the basics of sociology, which is the study of society including individuals, human groups, and organizations. Students will explore four main areas: The sociological perspective, social structures, inequality in society, and social institutions and change. Students will examine controversies around social change, inequality, gender, and race. Projects offer students the chance to explore their worlds from a sociologist's perspective.

### Space Exploration (0.5 credit)

This course will examine the history and future of space travel. Students will learn about landmark 20th century events, find out what it takes to put people in space, and what it will take for us to reach new frontiers, including Mars and beyond. Topics include launch and landing systems, manned vs. unmanned spaceflight, and low earth vs. beyond earth orbit.

### Spanish I (1.0 credit)

Spanish 1 is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts, grammatical concepts, and cultural information will be introduced in context while incorporating various listening, speaking and writing activities.

### Spanish II (1.0 credit)

In this course, students will build upon the foundation developed in Spanish I. They continue to build vocabulary, learn new verb tenses and grammar concepts, and improve their ability to communicate with others. Students will learn new concepts such as reflexive verbs, infinitive expressions, commands, the imperfect tense. They will explore new countries where Spanish is spoken and monitor current events in the Spanish-speaking world.

**Prerequisite:** Spanish I

### Spanish III (1.0 credit)

In this course, students will continue to develop their abilities in reading, writing, speaking, and understanding Spanish through a systematic review of its structure. Students focus on applying vocabulary in a wider array of situations by learning about the past progressive and subjunctive moods and the present perfect, future, and conditional tenses.

**Prerequisite:** Spanish II

### Startups and Innovation (0.5 credit)

In this course, students will explore the entrepreneurial mindset of searching for opportunities, creating value, and solving pain points to create the next world-class startup. They will explore how this mindset applies not just to business, but to schools, non-profits, and many other types of organizations. They will investigate how to apply this mindset in their own experiences.

---

### **Study Skills & Strategies (0.5 credit)**

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.

### **Theater Studies (0.5 credit)**

Have you ever wondered how a play goes from the playwright's mind all the way into a multi- million dollar Broadway production? In this course, you'll learn the whole process! This course provides a thorough introduction to the theater by providing an overview of major topics in theater studies, with a blend of theoretical and practical lessons. In the first half of this course you will learn about the definitions of theater, theater history, and contemporary theatrical genres. The second of half of the course will guide you through all of the elements of putting on a professional theatrical production. You will learn about the entire production process, from playwriting through opening night, including elements of technical theater, the rehearsal process, and audience response. Whether you're an aspiring actor, technician, director, or producer, or even just an avid theater-goer, this course is for you.

### **Virtual Tutor: ACT® (1.0 credit)**

This course provides students with the opportunity to prepare to successfully complete the ACT® college-entrance exam. Practice tests diagnose and target areas of opportunity, and students are prescribed individual study paths. The learning experience includes video-based instruction by highly qualified teachers, interactive assignments, and frequent assessment opportunities to track progress.

### **Virtual Tutor: SAT® (1.0 credit)**

This test preparation course effectively prepares students for all sections of the SAT® exam. Course content is broken into strands, allowing students to focus on each subject extensively before moving on to the next area of study. Within each strand, a diagnostic pretest identifies students' strengths and weaknesses and tailors a personalized study plan for each test-taker.

### **Wearable and Implantable Technology (0.5 credit)**

This course will introduce students to wearable technologies (smart watches, pedometers, hearing aids, and other devices) along with the components and software that make these technologies possible (the continued miniaturization of chips and sensors and increasing sophistication of artificial intelligence). Students will evaluate several applications of wearable technologies in various industries and discuss the pros, cons, and potential implications of wearable technology for our health, privacy, and society.

### **World Geography and Cultures (1.0 credit)**

In this course, students will learn to use the skills of map reading and development, geographic technology, and the recognition of geographic themes to make sense of the world. The course examines world regions including the nations, people, and cultures of the Americas and Western Europe, Central Europe and Northern Eurasia, Central and Southwest Asia, South Asia, Africa, East Asia, and the Pacific.

---

\*Course requires the purchase of physical materials.





---

## ADVANCED PLACEMENT® HIGH SCHOOL ELECTIVES

### AP® Art History (1.0 credit)

Within AP® Art History, students will explore the interconnections between art, culture, and historical context using critical analysis through the critical lenses of artistic expression, cultural awareness, and purpose. Using a defined art historical skill set and reflective learning, students will analyze relationships across cultures with a global lens. The examination of how people have responded to and communicated their experiences through art will enable students to think conceptually about art ranging from prehistoric to contemporary. Students will be active participants, engaging with art and its context as they read, research, and collaborate to learn about art, artists, art making, and responses to and interpretations of art.

**Prerequisite:** World History recommended

### AP® Computer Science A (1.0 credit)

The AP® Computer Science A course is equivalent to the first semester of a college level computer science course. The course involves developing the skills to write programs or part of programs to correctly solve specific problems. AP® Computer Science A also emphasizes the design issues that make programs understandable, adaptable, and when appropriate, reusable. At the same time, the development of useful computer programs and classes is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, and the study of standard algorithms and typical applications. In addition an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course.

**Prerequisites:** Algebra I, Geometry, and Algebra II required. Foundations of Programming and Procedural Programming recommended

### AP® French Language & Culture (1.0 credit)\*

AP® French Language and Culture is taught exclusively in French and focuses on proficiency across the three modes of communication: Interpretive, interpersonal, and presentational. Students will be exposed to authentic materials that are representative of the French-speaking world. Materials include but are not limited to a variety of media including newspaper and magazine articles, literary works, podcasts, videos, movies, and blogs. Students will be expected to communicate at the advanced level as defined in the ACTFL (American Council on the Teaching of Foreign Languages) performance guidelines.

**Required Materials:**

- The textbook below is required to purchase for Semester B (Jan-May)
  - *Barron's AP French Language and Culture*; ISBN-13: 978-1438011752; ISBN-10: 143801175X

### AP® Latin Language and Culture (1.0 credit)

This Advanced Placement® course focuses on the in-depth study of selections from two of the greatest works in Latin literature: *Vergil's Aeneid* and *Caesar's Gallic War*. Students cultivate their understanding of classics through preparing and translating readings and considering themes in the context of ancient literature as they explore concepts like literary techniques, Roman values, war and empire, leadership, views of non-Romans, history and memory, and human beings and the gods and prepares students for the AP® Latin Language and Culture exam.

**Prerequisite:** Latin III

---

\*Course requires the purchase of physical materials.

---

## AP® Spanish Language & Culture (1.0 credit)\*

AP® Spanish Language and Culture is taught exclusively in Spanish and focuses on proficiency across the three modes of communication: Interpretive, interpersonal, and presentational. Students will be exposed to authentic materials that are representative of the Latin-speaking world. Materials include but are not limited to a variety of media including newspaper and magazine articles, literary works, podcasts, videos, movies, and blogs. Students will be expected to communicate at the advanced level as defined in the ACTFL (American Council on the Teaching of Foreign Languages) performance guidelines.

### Required Materials:

- The textbook below is required to purchase for Semester B (Jan-May)
  - *Cracking the AP Spanish Language & Culture Exam with Audio CD*, 2020 Edition; ISBN-13: 978-0525568346; ISBN-10: 0525568344

## MIDDLE SCHOOL LANGUAGE ARTS

### Language Arts 6\*

Semester A of English 6 is divided into two main categories: Storytelling and Heroes. Student assignments will include writing a narrative essay and completing a book report. Semester B covers two additional main topics: Myth and Poetry. Students will complete assignments including writing an original fairy tale and composing a poem.

### Required Materials:

- *The Giver* by Lois Lowry; ISBN-10: 9780544336261, ISBN-13: 978-0544336261
- *Roll of Thunder, Hear Me Cry* by Mildred D. Taylor; ISBN-10: 0142401129, ISBN-13: 978-0142401125
- *Walk Two Moons* by Sharon Creech; ISBN-10: 0064405176, ISBN-13: 978-0064405171
- *The Westing Game* by Ellen Raskin; ISBN-10: 014240120X; ISBN-13: 978-0142401200
- *Freak the Mighty* by Rodman Philbrick; ISBN-10: 9780439286060; ISBN-13: 978-0439286060
- *Seedfolks* by Paul Fleischman; ISBN-10: 0590511904; ISBN-13: 978-0064472074
- *True Confessions of Charlotte Doyle* by Avi; ISBN-10: 0545477115; ISBN-13: 978-0545477116
- *The Watsons Go To Birmingham* by Christopher Paul Curtis; ISBN-10: 9780440414124; ISBN-13: 978-0440414124

### Language Arts 7\*

Through analysis of written, spoken, and multimedia texts, students will become more critical consumers of information and various forms of media. They will synthesize and organize ideas to prepare structured narrative, persuasive, and expository essays. A review of basic English mechanics is included in many of the writing lessons, along with a discussion of levels of formality required for different purposes and audiences. Students will work in many modalities, including audiovisual presentations, videos, interactive activities, projects, and discussions. They will study the English language closely—both its history and evolution, and ways it can be used to convey meaning in poetry, drama, and humorous or satirical texts.

### Required Materials:

- *Poetry Speaks Who I Am* by Elise Paschen – ISBN-10: 1402210744, ISBN-13: 978-1402210747
- *Julie of the Wolves* by Jean Craighead George; ISBN-10: 0064400581, ISBN-13: 978-0064400589
- *The Outsiders* by S.E. Hinton; ISBN-10: 014240733X, ISBN-13: 978-0142407332
- *Where the Red Fern Grows* by Wilson Rawls; ISBN-10: 0440412676; ISBN-13: 978-0440412670
- *Nothing But the Truth, Isham*, by Frederic Stewart; (found on GP)
- *The Cay* by Theodore Taylor; ISBN-10: 0440416639; ISBN-13: 978-0440416630
- *A Christmas Carol*, by Charles Dickens; (found on GP)
- *A Day No Pigs Would Die* by Robert Newton Peck; ISBN-10: 0679853065; ISBN-13: 978-0679853060

---

\*Course requires the purchase of physical materials.



---

## Language Arts 8\*

In this course, students will master the Standard American English writing style, allowing them to express their ideas clearly and effectively. Students will analyze the poetry of noted writers such as Seamus Heaney, Robert Frost, and Jane Kenyon. Lessons focus on sentence structure, verb tenses, punctuation, and grammar rules and logic, formal letter writing, biographical essays, and creating a bibliography. Students will practice effective research techniques and prepare reports and essays using strategies such as the Sign and Design Mind and Clustering to help form their ideas and develop stories and arguments. Through careful study of parts of speech, verb forms, and sentence clauses, students will be prepared to write at the high school level.

### Required Materials:

- *Poetry Speaks Who I Am* by Elise Paschen – ISBN-10: 1402210744, ISBN-13: 978-1402210747
- *Julie of the Wolves* by Jean Craighead George; ISBN-10: 0064400581, ISBN-13: 978-0064400589
- *Roll of Thunder, Hear Me Cry* by Mildred D. Taylor; ISBN-10: 0142401129, ISBN-13: 978-0142401125
- *Diary of a Young Girl* by Anne Frank; ISBN-10: 9780553296983, ISBN-13: 978-0553296983
- *My Brother Sam is Dead* by James Lincoln Collier; ISBN-10: 0439783607, ISBN-13: 978-0439783606
- *Across Five Aprils* by Irene Hunt; ISBN-10: 0425182789; ISBN-13: 978-0425182789
- *The Ox-Bow Incident* by Walter Van Tilburg Clark; ISBN-10: 0812972589, ISBN-13: 978-0812972580
- *That Was Then, This is Now* by S. E. Hinton; ISBN-10: 0140389660, ISBN-13: 978-0140389661
- *The Pearl* by John Steinbeck; ISBN-10: 014017737X, ISBN-13: 978-0140177374

## MIDDLE SCHOOL MATHEMATICS

### Mathematics 6

In this course, students will build on their basic math skills, learning how to add, subtract, multiply, and divide integers, decimals, and fractions. Lessons also explore ratios and proportions, the order of operations, and how to use these in solving application problems. Students will be introduced to the basics of algebra and algebraic expressions. They will learn how to apply these problem-solving skills to percentages and solving single- and multiple-step equations, along with Geometry, probability, and statistics.

### Mathematics 7

In this course, students will work with problem-solving skills, beginning with basic algebra skills, geometry, decimals, fractions, data analysis, number theory and patterns, percentages, and integer use. Following this, they will work with fractions; unit conversions; proportions and rates; percentages; geometry topics including lines, angles, polygons, polyhedrons, perimeter, area, surface area, volume, and transformations; squares and square roots; permutations and combinations; and probability. Real-life application of concepts is emphasized in all units.

### Math 8: Pre-Algebra

This course will help students move from the world of simple mathematics to the world of Algebra and Geometry, learning to solve real world problems. Students will be introduced to increasingly abstract concepts and given a concrete understanding of the basics for algebraic thinking. With numerous hands-on activities and demonstration videos, they will have multiple opportunities to enhance their process solving skills.

### Algebra I (High School Course – 1.0 credit)

Algebra I introduces students to the world of Algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. This course also steers students through various real-world scenarios with the emphasis on using basic statistics to interpret the information given and found. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability.

---

\*Course requires the purchase of physical materials.



---

## MIDDLE SCHOOL SCIENCE

### Life Science 6

Life Science is the study of cells, heredity, biological populations, and their changes over time. It includes human biology, ecology, diversity of organisms and the history and nature of science. In this course, students will have the opportunity to conduct and design experiments, as well as identify and classify organisms. Students will work on developing skills in data recording, classifying, measuring, observing, hypothesizing, analyzing, evaluating, and inferring.

### Earth and Space Science 7

In this course, students will learn about the scientific method and hone their use of scientific measurements in earth and space science. Lessons cover earth maps and globes; finding specific locations using latitude and longitude; earth movements; seasons; the moon; tides; solar and lunar eclipses; the role of the sun; planets asteroids, meteors, comets and their orbits; how force gravity works; and stars, constellations, nebula, the Milky Way and galaxies beyond. Students benefit from the most updated information available in areas of new discovery. In earth science. students will study rocks and minerals, volcanoes, earthquakes, undersea ridges, trenches and mountains, and how geologic history helps explain these phenomena. Students will study soil and erosion, water in all its forms, and the atmosphere. they will explore the professions that currently exist in science and technology fields.

### Physical Science 8

This course is an introduction to the physical sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

## MIDDLE SCHOOL SOCIAL STUDIES

### Social Studies 6

This course introduces students to the beginnings of ancient civilization. Students will trace the path of human origins in Africa and follow the path of migration around the Earth. This course will help students understand why we study history and the process in which we form conclusions about events in the past. Students will begin to learn about major ancient civilizations and their cultures, and trace the path of human civilization from the Mediterranean through the Eastern world. An emphasis will be placed on critical thinking and connecting themes in history to our modern world.

### Social Studies 7

This course emphasizes how ideas, events, and philosophies have shaped the history of the United States. Students will learn about America's past while mastering the skills of historical interpretation. Study begins with the earliest arrivals of people and ends with the conclusion of the Civil War. Students will focus on how historical ideas, events, and philosophies have shaped the United States since Reconstruction.

### Social Studies 8

In this course, students will understand the significance of government, law, and politics. They will examine foundational U.S. documents and how they shaped the United States government. Students will examine the purposes and functions of federal and state government, law, and political systems. They will evaluate their role and civic responsibility, including voting and being a productive member of society. Students will closely examine the justice system, local government, the environment, and the economy. They will also learn proper ways to interact in society including interpersonal skills and respecting differences in others such as disabilities.

---

\*Course requires the purchase of physical materials.



---

## MIDDLE SCHOOL ELECTIVES

### Art Appreciation

In this course, students will examine the elements of art and principles of design. They will explore how artists have used these elements and principles in the creation of art for centuries. Through their exploration, students will understand what makes a given artwork a masterpiece, why artists create art, and the hallmarks of different periods and schools of thought.

### Art Explorations

The Arts Explorations course encourages students to experience each of the modern arts disciplines -- Visual Arts, Theatre, Music, Media Arts, and Dance. Students will also be able to identify areas of special interest where they would like continued study and the ways that the arts can be a part of their career paths.

### Beginning Painting\*

This course introduces students to classical and contemporary painting techniques and concepts, with emphasis on the understanding of a formal language and the fundamentals of artistic expression. Painting still lifes, landscapes, and life models from observation will let students explore realism as well as other painting styles. Color theory, linear perspective, compositional structure, figure/ground relationships, visual perception, spatial concepts, and critical thinking skills are emphasized. Students will study and research major painting styles and movements in historical context, developing a "critical eye" in evaluation of contemporary painting. Emphasis is on encouraging individuality and creativity.

#### Required materials:

- chromacryl tube of acrylic paints
- round brush
- flat brush
- watercolor paints (includes brush)
- set of markers
- 1–4b pencil
- painting paper (The pad of paper may be labeled watercolor paper. please use for all paintings, including acrylic.)
- newsprint paper (This paper is for sketches and testing paints. do not use for painting projects.)
- 7 project cardstock pages

### Character Education Grades 7 and 8

This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement, and experience more success and satisfaction as adults.

### Computer Basics

In this course students 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.

---

\*Course requires the purchase of physical materials.



---

## Drawing\*

In this course, students will experiment with different art materials and tools to see what each can do best. Students will become more observant of the structures and meanings of things which can be seen, studying the forms, textures, movements, and patterns of things we see every day. Each lesson exposes a new way of drawing. and provides students room for expressing new technical skills in unique and creative ways.

### **Required materials:**

- 1 drawing pencil, 2B
- 1 round hair brush #10
- 1 bottle India Ink, black
- 1 Pilot Varsity Pen, self-contained black ink
- 2 conté crayons: white, black
- 1 Art gum eraser
- 1 white, wax Crayola crayon
- 40 sheets white drawing paper, 9×12
- 5 sheets construction paper, 9×12, black
- 15 sheets grey construction paper, 9×12
- 14 large envelopes, 10 x 13
- 2 sheets white watercolor paper (rough, heavy, stiff)
- 2 sheets rice paper 9 1/2 x12 (soft, translucent)
- 25 sheets newsprint, 9×12
- 1 bottle white glue (obtain locally)

## French I (High School Course – 1.0 credit)

This course focuses on developing listening skills by repeated exposure to the spoken language. Speaking skills are encouraged through recommended assignments using voice tools. Reading and writing skills, as well as language structures, are practiced through meaningful, real-life contexts. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

## French II (High School Course – 1.0 credit)

This course enhances the language skills developed in Level 1. Vocabulary and grammar structures are expanded to help students move towards an intermediate comprehension level. Students enhance their speaking and listening skills through real-life activities, and their listening skills through online dialogues. Reading and writing skills are developed through meaningful activities and culturally-related articles of interest. Students will explore French-speaking areas around the world.

**Prerequisite:** French I

## German I (High School Course – 1.0 credit)

This introductory course teaches basic communication and comprehension in German. It coordinates the study of language with culture through the use of video, audio, and mass media. This course introduces the fundamentals of German conversation and grammar. Students will begin to develop a functional competency in the four primary language areas: Speaking, reading, listening, and writing; and establish a solid grammatical base. In the second semester, students will further develop their skills in pronunciation, grammar, grammar structures, and vocabulary. The different cultures of the German-speaking world are emphasized through readings, videos, and other activities.

---

\*Course requires the purchase of physical materials.





---

## German II (High School Course – 1.0 credit)

In this course, students will build on their German grammar and language skills. Students will review basic grammar skills, learn and study stem-changing verb conjugation, and explore cultural themes regarding current events, famous German people, music, and festivals. In the second semester, students will increase their proficiency by forming more complex sentences. Cultural themes are entwined throughout the course.

**Prerequisite:** German I

## Health

This course will help students understand the importance of making decisions that will affect their physical, emotional, mental, and social health. It will provide students with the knowledge and resources they will need to make responsible, informed decisions about their health. Students will have an opportunity to evaluate their own values, opinions and attitudes about health.

## JavaScript Game Design\*

JavaScript is one of the best languages to learn, it makes the browser come alive! This course will teach students JavaScript through coding multiple computer games including, pong, fish, a platformer and tower defense! They then will code or customize their own game! Students will be writing all the code themselves from going through the individual lessons and watching the video reviews. They will learn about variables, functions, listening events, loops, arrays and objects. This course assumes no coding experience and includes self graded quizzes and tests. Students will also upload their work at the conclusion of each project while creating an online portfolio.

**Required materials:** Students will need a Windows PC or Mac for this course; Chromebooks and tablets are not sufficient.

## Keyboarding\*

This keyboarding course is appropriate for elementary and middle school students. The curriculum introduces new keys by rows where students first learn the middle row, then the top row and then the bottom row of the keyboard. The content focuses on sight and high-frequency words. This course assumes no keyboarding experience and will guide students across the keyboard.

**Required materials:** Students will need a computer or laptop for this course; tablets are not sufficient.

## Music Appreciation

In this course, students will gain a thorough understanding of music by studying the elements of music, musical instruments, and music history, as well as music advocacy. Students will be introduced to the orchestra and composers from around the world. They will be required to be a composer, performer, instrument inventor, and advocate.

## Physical Education

This course emphasizes the value of physical activity and sports. Students will learn about the rules and basic principles of a variety of sports, including archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer. Discussion cover information about playing area and equipment, basic rules, safety considerations, and terminology for each sport.

## Python Multiplayer Adventures\*

This course allows students to learn the Python language by first completing a text-based console game and then turning it into a multiplayer adventure! Students will learn Python and understand the client-server relationship. They will code in their own python web server, using variables, classes, functions, lists, dictionaries, generators, and proper Python formatting. This course assumes no coding experience and includes self-graded quizzes and tests.

**Required materials:** Students will need a Windows PC or Mac for this course; Chromebooks and tablets are not sufficient.

---

\*Course requires the purchase of physical materials.



---

## Scratch Coding\*

Scratch is a program developed by MIT which teaches students the basics of how computers think. This course will introduce students to coding programs and allow them to drag and drop coding blocks to create a fully functional program. The user interface and tutorials allow students to quickly create and run their code to see its results. This course assumes no prior computer coding knowledge and includes self-graded quizzes and tests.

**Required materials:** Students will need a computer or laptop for this course; tablets are not sufficient.

## Spanish I (High School Course – 1.0 credit)

Spanish I is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will learn to express their thoughts, feelings, and opinions in Spanish using basic, real-life situations and learning scenarios. New concepts, grammar, and cultural information will be introduced in the context of various listening, speaking, and writing activities.

## Spanish II (High School Course – 1.0 credit)

In this course, students will build upon the foundation developed in Spanish 1. They continue to build vocabulary, learn new verb tenses and grammar concepts, and improve their ability to communicate with others. Students will learn new concepts such as reflexive verbs, infinitive expressions, commands, the imperfect tense. They will explore new countries where Spanish is spoken and monitor current events in the Spanish-speaking world.

## Study Skills

This course equips students with skills and knowledge that are critical to effective learning. It weaves understanding about 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, this course challenges students to develop intentional approaches to learning. They will connect the strategies and skills they learn in this course to implementation in their other coursework. Students will gain greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans.

---

\*Course requires the purchase of physical materials.



---

## ELEMENTARY SCHOOL COURSES

\*\*Please note that all elementary school courses have grade specific required materials. You can find each by following the links below.

- [Elementary School Supply List](#)
- [Kindergarten](#)
- [First Grade](#)
- [Second Grade](#)
- [Third Grade](#)
- [Fourth Grade](#)
- [Fifth Grade](#)

## ELEMENTARY LANGUAGE ARTS

### Language Arts K\*\*

This course teaches students to identify and write all letters, and produce letter sounds and frequently used phonograms. Students will master weekly sight words and reading and comprehension strategies to grow as readers.

### Language Arts 1\*\*

This course teaches students to identify and write all letters, and produce letter sounds and frequently used phonograms. Students will master weekly sight words and reading and comprehension strategies to grow as readers.

### Language Arts 2\*\*

This course teaches students to spell and write vocabulary, read more fluently, apply grammar concepts, and participate in handwriting and writing activities through thematic units. Students will continue to master weekly sight words and reading and comprehension strategies to grow as readers.

### Language Arts 3\*\*

This course teaches students reading comprehension skill and strategies to help them become stronger readers. Students will master weekly spelling and vocabulary words and grammar concepts that will help them become stronger writers.

### Language Arts 4\*\*

This course integrates reading, writing, speaking, listening, and the study of vocabulary and grammar to help students build broad and diverse literacy skills. Students study classic literature as well as more contemporary forms, including media and multimedia products. Writing assignments focus on narrative and persuasive modes and emphasize the use of reasoning and details to support opinions. Students learn a writing process that begins with prewriting and ends by emphasizing one or more aspects of conventions of standard written English. They gain skills to read fiction, poetry, drama, and informational text. Students learn how to present information orally and using multimedia.

### Language Arts 5\*\*

This course integrates reading, writing, speaking, listening, and the study of vocabulary and grammar to help students build broad and diverse literacy skills. Students study classic literature as well as more contemporary forms, including media and multimedia products. Writing assignments focus on narrative and persuasive modes and emphasize the use of reasoning and details to support opinions. Students learn a writing process that begins with prewriting and ends by emphasizing one or more aspects of conventions of standard written English. They gain skills to read fiction, poetry, drama, and informational text. Students learn how to present information orally and using multimedia.

---

\*Course requires the purchase of physical materials.



---

## ELEMENTARY MATHEMATICS

### Mathematics K\*\*

In this course, students will learn foundational math facts. They will learn to count to 12, how to compare sizes, ordinal numbers putting items in order, a number line, basic measurements, and how to tell time. As they progress, students will learn to count to twenty. They will compare objects using the terms tall, longer, and shorter as well as lighter and heavier. They will continue their exploration of basic geometric shapes such as cones and spheres. They will work with the concept of first, middle, and last and arranging and sorting. Students will learn the concepts of left and right.

### Mathematics 1\*\*

In this course, students will build fluency with basic math facts. They will learn to count to 100, basic addition and subtraction facts, and how to add double-digit numbers. Students will be introduced to word problems, Venn diagrams, and basic geometric concepts. The course emphasizes practical skills such as reading thermometers, looking at maps, and understanding the value of coins. As they progress, students will begin counting by twos, fives, and tens. They will learn both vertical addition and subtraction. Lessons introduce multiplication and division. Students will study even and odd numbers and continue their exploration of geometric shapes through drawing and sorting.

### Mathematics 2\*\*

In this course, students will build fluency with basic math facts and add and subtract within 100 to solve word problems using strategic methods. Students will manipulate numbers to 1000 using knowledge of hundreds, tens, and ones. They will demonstrate arrays with repeated addition. They will use place value to add and subtract within 1000. They will measure and compare length and represent it on a number line. They will work with money and time to compare value. Students will collect and represent data on graphs. They will learn to recognize common 2-dimensional and 3-dimensional shapes by their specific characteristics.

### Mathematics 3\*\*

In this course, students will build flexibility with numbers as they master addition, subtraction, multiplication, and division facts. Students will understand relationships between addition and subtraction, and multiplication and division, as they learn to borrow, carry, and regroup in order to find sums and differences of two whole numbers up to 10,000. Students will learn the place value of base ten numbers up to 1,000,000 in order to find patterns and make estimations. They will implement a 4-step approach to solving problems and express numbers differently including translating them into roman numerals or expressing them as ordinal numbers. Students will explore concepts of measurement, including linear measurement, weight, volume, temperature, and time. They will recognize, compare, and convert fractions. Students will write amounts of money and make change. They will examine lines, polygons, and solid figures as they are introduced to basic concepts of geometry.

### Mathematics 4\*\*

This course focuses on developing understanding and fluency in three areas: multi-digit multiplication and dividing to find quotients; fraction equivalence, addition and subtraction of fractions with like denominators, multiplication of fractions with whole numbers, and converting fractions to decimals; equivalent measurements of length, weight, mass, and capacity. They will also learn skills in related to time, distance, and money.

### Mathematics 5\*\*

In this course, students will focus on several areas including developing fluency with addition, subtraction, multiplication, and division of fractions. They will extend division to 2-digit divisors, integrate decimal fractions into the place value system, and increase understanding of operations with decimals to hundredths. They will develop fluency with whole numbers and decimal operations. Activities model real life situations such as grocery shopping. Continuing work with fractions focuses on ratios and fraction application, models, and division. Students will explore measurement of length, weight, and volume.

---

\*Course requires the purchase of physical materials.



---

## ELEMENTARY SCIENCE

### Science K\*\*

In this course, students will use their senses to explore their world. Students experience nature walks, gardening, and imitative games by exploring varying concepts.

### Science 1\*\*

In this course, students will complete projects that allow for exploration and discovery. Through observations of the natural world, students conduct inquiries into topics related to their healthy development.

### Science 2\*\*

Second Grade Science introduces students to the process of observation and how important it is to the study of science. Learners will identify their five senses and why they are critical to observation. Students will use these observation skills throughout the course as they examine many different types of animals and their environments. Students begin by observing ants in their own environments and continue onto learning the different types of birds. Students will come to understand plant and animal rhythms and will perform small experiments with plants. Stories will be used to teach the students about nature and interactions that humans have with nature. They will continue to learn about animals and their characteristics habitats, and needs. Students will learn through video, audio stories, hands-on participation and observation with nature. The teachers will conduct live assessments for the topics that had been covered throughout the week's lessons. Grade 2 Science provides students with the opportunity to expand their minds and see for themselves the way that animals and nature are a part of their everyday lives. Semester B of Second Grade Science begins with the students learning the characteristics of the Weaverbird and Swiftlet bird. Learners will come to understand the different groupings of animals including those with vertebrates, invertebrates and warm and cold blooded animals, carnivores, herbivores and omnivores. Learners will be asked to recall the five senses that they discussed at the beginning of the course and compare them to the senses of animals. They will also learn how animals communicate and the relationship between animals and humans. The course ends with the students taking a closer look at the characteristics of reptiles, insects, birds of prey, and fish. At the close of the course students will have a deeper understanding and appreciation of animals and their habitats.

### Science 3\*\*

This course introduces students to experimentation as they journey through the earth and its many miracles. Students will learn about the earth, the sun, and the moon. By participating in simple experiments, students will explore the water cycle, gravity, weather, types of terrain, the role of plants in the production of oxygen, and their importance to human survival. Learners will understand that experiments require the use of instruments, observation, recording, and drawing evidence-based conclusions. Students move on to root formation, the interdependence of plants and humans, biomes of land and sea, extreme weather, rocks, vertebrates and invertebrates, as well as extinction.

### Science 4\*\*

This course covers the three main domains of science: Physical, life, and earth and space science. Students will use various kinds of experimenting, including field studies, systematic observations, models, and controlled experiences. The course begins with the scientific method, which students use and build upon throughout the course. Students explore life on planet earth, salt and fresh water, and fast and slow changes that occur on the planet. They study galaxies, the solar system, and other planets. They examine the ways that forces and motion can be measured, and the concept that a single kind of matter can exist as a solid, liquid or gas. Students go on to investigate the relationship between heat, light, sound, and electrical energy and the way they can be transferred between each other. Students distinguish between natural objects and objects made by humans as they examine technology and the role it plays in science. They look at life cycles of animals, plants, and humans and how they interact with each other.

---

\*Course requires the purchase of physical materials.



---

## Science 5\*\*

This course emphasizes earth and space science, life science, and physical science. Students will begin by focusing on earth and space science by looking at the solar system and planets. They investigate the different tools that can measure force, time, and distance. They learn how light and sound travel and interact with each other, as well as the different types of energy. They see the ways that organisms are interconnected. As they continue, students focus on the many ecosystems of the earth and the way these parts depend on each other. Students will learn the different types of ecosystems that exist. They will learn how ecosystems change and how changes affect their ability to support their populations. Students will examine plants and how their structures allow them to respond to different needs. They will also grow in their understanding of the importance of good nutrition to all living organisms. The course concludes with the scientific process and the importance of investigations and conclusions in the science.

## ELEMENTARY SOCIAL STUDIES

### Social Studies K\*\*

This course introduces students to their place in the community and their responsibilities as members of society. Great figures in U.S. history such as Pocahontas, George Washington, and Abraham Lincoln are a focus. Students will also learn about everyday heroes, the responsibilities of pet ownership, the importance of rules, table manners, and eating well. Students will practice retelling stories by recording audio, orally, or by writing. They will learn how to use details and basics of narratives. Students will be taught to read maps of the U.S. and the world. They will learn about symbols of the U.S. such as the American flag and the eagle, as well as holidays -- with a particular focus on Thanksgiving. Another focus is currency: What money is, how money can be spent, the power of buying locally, and the difference between wants and needs.

### Social Studies 1\*\*

In this course, students explore basic fundamentals of social studies, including map skills, cardinal directions, and maps of the U.S. and the globe. Students will be introduced to important figures from American history such as Pocahontas, George Washington, Abraham Lincoln, and Clara Barton. Students will practice retelling stories by recording audio, orally, or by writing. They will learn how to use details and basics of narratives. Students will make maps of their homes and neighborhoods, as well as a personal timeline. As they progress, students will study economics, including bartering, goods and services, jobs in the community, and how the marketplace works. They will focus on positive character traits such as honesty, aspects of personal responsibility, and how to help and respect others.

### Social Studies 2\*\*

In this course, students course will begin to explore the basic fundamentals of social studies including culture, geography, and economics. They will explore the ancient cultures of China, Africa, and the Celts through ancient folk tales and fables. They will create a photo book that describes the significant events in their own lives. They will examine the importance of geography and direction. Students will learn how to locate boundaries while using a world map. They will develop a basic understanding of map symbols as they locate continents, the equator, and oceans. Students will also learn to identify on a map where they live, as well as nearby rivers, mountain ranges, and lakes. They will learn about economics and the role that money plays in every civilization. They will take a closer look at the economy of the Celtic people. Students will learn the difference between natural, human, and capital resources. They will begin to understand the exchange of money for goods and services. Students will learn about desirable human qualities through the use of fables such as "The Boy Who Cried Wolf" And look at individuals who have made a difference in the greater community, such as Rosa Parks and Susan B. Anthony. Students will examine the diversity of the community they live in.

---

\*Course requires the purchase of physical materials.





---

### **Social Studies 3\*\***

In this course, students will explore basic fundamentals of social studies including geography, civics, and economics. Students will look at the beginning of civilization, examining the ancient Hebrew civilization, the Phoenicians, and the Kush tribe of ancient Africa. They will examine the Native American tribes of the Cherokee, Sioux, and Hopi. Students will look at the first explorers of the Americas and learn about the beginning of the United States. They will learn important geographical factors in ancient civilizations, Native American tribes, and the developing United States. Students will create maps and look at landscapes. They will take a close look at their own personal heritage by mapping their ancestry. As they progress, students will learn about economics and the role that money plays in every civilization. They will learn the difference between natural, human, and capital resources. They examine the production of goods, trade, specialization, and interdependence, and come to understand the importance that each individual plays in a society's economy. Students are introduced to civics and governmental structure through discussion and stories of the Ancient Hebrews, Ancient Phoenicians, and Native Americans.

### **Social Studies 4\*\***

In this course, students will use their understanding of social studies skills to explore local states and communities. They will learn the topography of their particular area by creating a detailed landscape model after researching their communities. Students will also research local animals. This course walks students through research and report writing steps. Students will complete projects based on their local geography, capitols, natural wonders, and landforms. Students will explore U.S. colonial history and the frontier life of early American settlers. Students will examine the difficulties that early settlers faced when reaching America. They will apply knowledge of historical thinking, chronology, turning points, individuals, and themes of local and United States history in order to understand how history has shaped the present and will shape the future. They will conduct research projects on how particular states became a part of the U.S.

### **Social Studies 5\*\***

Students in this course study United States history through the Civil War, including a geographical exploration of the United States and what it has to offer. Students will investigate early settlements of North America and what life was like for colonists and Native Americans. Students will understand the causes of the Revolutionary War and the people who played a significant role in it. As they progress, students will explore of American West and what life was like for those looking to find gold. They will look at slavery and the Civil War. The course will take an in-depth look at the cultures, people, and geography of the United States from past to present, exploring the country region by region.

## **ELEMENTARY ELECTIVES**

### **Art Level 1, Art Level 2, Art Level 3, and Art Level 4\*\***

Art provides an opportunity for students to develop the use of their senses. It offers students a way to express feelings and emotions. This course encourages self-discipline and cooperation while providing the student with an opportunity for self-expression by using imaginative thinking for creative solutions. Again, this is a necessity in lifetime experiences. The student will see the artistic expressions and inventions from cultures around the world that are part of the history of mankind and development. Modern media provides many opportunities to the student. However, the student has the benefit to experience it more closely in art classes. Repetition, important for young children, is evident in these lessons. Repetition is provided at different age levels while using various tools and mediums. Home, family and friends, pets, and toys are the young student's world. The student will begin with their personal world as they think they know it, and discover so much more about it. These lessons provide a deeper awareness of the world immediately around them, and eventually their journey will grow from there. Each student is an individual with unique ideas and talents. Our goal is to provide each student an opportunity for personal growth for themselves and the world in which we live.

---

\*Course requires the purchase of physical materials.



---

## **Kindergarten Arts & Crafts\*\***

This course provides a foundation for children's artistic imagination and creativity by sharing the basics of art and making art. Students are introduced to lines, circles, recognizing and using shapes, creating a collage, and concepts such as symmetry. Young artists will explore a variety of media such as pastels, watercolors, crayons, tempera, and pencil drawing. Students will work with clay, make fingerprint flowers, draw barns and animals using shapes and may create a bird feeder, pig puppet, paper flowers, potpourri, a heart collage, a wind chime, or pressed flowers.

## **Grade 1 Arts & Crafts\*\***

This course provides a foundation for children's' artistic imagination and creativity by sharing the basics of art and making art. Students are introduced to primary colors, the color wheel, shapes such as lines and circles, and concepts such as symmetry. Young artists will explore a variety of media such as pastels, watercolors, crayons, tempera, and pencil drawing. Students will create a watercolor tree, use a printing block, and produce a weather painting. As they progress, students will applying what they have learned to make more detailed works of art, creating colorful calendars, stenciling, fashioning intricate flower drawings, revisiting symmetrical objects, and mixing colors.

## **Grade 2 Arts & Crafts\*\***

Art provides an opportunity for students to develop the use of their senses. It offers students a way to express feelings and emotions. This course encourages self-discipline and cooperation while providing the student with an opportunity for self-expression by using imaginative thinking for creative solutions. Students will create a color wheel and explore the difference between primary, secondary, and complementary colors. They will use watercolors to create a value chart, begin to understand symmetry in art, and work with clay. As they progress, students will continue to explore their creativity while learning how art can be functional and enhance objects and materials that we use everyday. Students will work on form drawing and make a seasonal chart using objects for each of the four seasons.

## **Music—Recorders Level 1\*\***

This course combines music and performing arts. Students will experience and learn new songs and perform them using their bodies. In addition, the student will begin learning how to play the recorder.

## **Elementary Health Kindergarten and Grade 1, Grades 2 and 3\*\***

Elementary Health K/1 and Elementary Health 2/3 help young students establish a basic understanding of health. Students focus on the various aspects of their health and how they can make healthy choices. Topics include personal safety, healthy behaviors, nutrition, communication, disease prevention, basic anatomy and physiology, and the values of cooperation and teamwork.

## **Elementary Health Grades 4 and 5\*\***

In Elementary Health 4/5, students establish a basic understanding of the aspects of health. They focus on the various aspects of their health and how they can make healthy choices. Topics include personal safety, reducing illness, avoiding bullying, nutrition, healthy friendships, emergency situations, and the human body. Fourth grade will study the functioning systems of the body. Fifth grade will cover the reproductive system, puberty, and sexually transmitted diseases (STDs).

## **Elementary Physical Education Kindergarten and Grade 1\*\***

Elementary PE K/1 helps young students establish a basic understanding of health and fitness. Students focus on fitness and learn how to become more fit and healthy. Topics include exercise safety; making healthy choices; nutrition; the benefits, components, and principles of fitness; basic anatomy and physiology; and the values of cooperation and teamwork. Students learn age-appropriate motor, non-locomotor, and manipulative skills. They are required to participate in regular physical activity.

---

\*Course requires the purchase of physical materials.



---

### **Elementary Physical Education Grades 2 and 3\*\***

Elementary PE 2/3 helps young students establish a basic understanding of health and fitness. Students focus on fitness and learn how to become more fit and healthy. Topics include warm-up and cool down, water safety, goal setting, nutrition, muscle strength, and flexibility. Students learn age-appropriate motor, non-locomotor, and manipulative skills. They are required to participate in regular physical activity.

### **Elementary Physical Education Grades 4 and 5\*\***

Elementary PE 4/5 helps students establish a basic understanding of health and fitness. Students focus on fitness and learn how to become more fit and healthy. Topics include warm-up and cool down, water safety, goal setting, nutrition, muscle strength, and flexibility. Students learn age-appropriate motor, non-locomotor, and manipulative skills. They are required to participate in regular physical activity.

### **Keyboarding\*\***

This keyboarding course is appropriate for elementary and middle school students. The curriculum introduces new keys by rows where students first learn the middle row, then the top row and then the bottom row of the keyboard. The content focuses on sight and high-frequency words. This course assumes no keyboarding experience and will guide students across the keyboard.

### **Scratch Coding\*\***

Scratch is a program developed by MIT which teaches students the basics of how computers think. This course will introduce students to coding programs and allow them to drag and drop coding blocks to create a fully functional program. The user interface and tutorials allow students to quickly create and run their code to see its results. This course assumes no prior computer coding knowledge and includes self-graded quizzes and tests.

## **ENGLISH AS A SECOND LANGUAGE**

English as a Second Language courses are offered through the DynEd Pro English Certification program.

### **Certification Levels Offered: A1, A1+, A2, A2+, B1, B1+, B2, B2+, C1, and C2.**

Upon enrollment, a skills assessment is required. Following the assessment, the student will be placed into the ESL certification level appropriate for his or her skill level.

### **ESL Course – Certification Level To Be Determined**

Upon enrollment, each student will complete a placement assessment that will allow the instructor to evaluate the student's current skill level and place the student into the appropriate course level. Certification level is based on skill level and does not conform with the traditional grade levels.

Using a series of online activities which include writing, reading, listening, and speaking, students work on language skills to improve their comprehension and use of English in an academic setting. In each course, students interact with a native English speaker and complete assignments that meet identified standards for Academic English in an American education program. The course also includes conversational language studies.

---

\*Course requires the purchase of physical materials.



---

## RELIGIOUS COURSE OFFERINGS

### **We Love Jesus!, 1st Grade**

Children naturally ask the question, “Who is God?” They also readily accept the answer that God is our Creator, a loving Father who made all things and all people. This natural curiosity is born from a desire to understand and discover the source of truth, beauty and goodness. This course introduces God as love, and the three Persons of God as a Divine Family. Students come to understand that it was out of love that God created all things and He invites us to share in His life and love through Jesus whom God sent into the world to save us and to lead us to His Father.

### **Jesus Loves Us!, 2nd Grade**

Second grade children are typically preparing for the Sacraments of Reconciliation and Eucharist. This course provides an in-depth background to the person of Jesus, the Son of God and our risen Savior and LORD, based on key teaching from both the Old and New Testaments, as well as the Catechism of the Catholic Church. Children will reflect on God’s goodness in Creation, as well as the unfortunate reality of original sin, which can be seen around us in a fallen world. As children are taught to think more closely about the good and bad choices that we make in our everyday lives the concept of sin is gradually introduced. They are taught that sin is a deliberate choice, which is contrary to the love of God revealed to us in Jesus, which makes us unhappy. Jesus shows us how to live in love as God’s children, and how to avoid sin and overcome selfishness through our participation in the Sacraments of the Eucharist and Reconciliation.

### **The Church is God’s Family!, 3rd Grade**

While we encounter God in many places in our lives, especially in our families, we encounter Him in a very special way in and through the Church that Jesus started. The Church is the family of God and we become members of the Church through Baptism. Students are taught about the beauty of the Church with her birthday on Pentecost, the growth of the Church through the Apostles, and the family of the Church with its unity and diversity. Special emphasis is given to faith as the means by which we entrust our lives to God and learn to live in His love at all times. We profess our faith through the Creed, which affirms our belief in the three Divine Persons, Father, Son and Holy Spirit.

### **God Guides Us!, 4th Grade**

God wants us to be happy and to live as His children. As a loving Father, He instructs us through the Ten Commandments which keep us from sin and help us to do what is pleasing to Him. We also learn how to love and serve others through the Beatitudes, which Jesus taught in the Sermon on the Mount. Children are provided with a clear understanding of the moral life based on the two great commandments, love for God and love for neighbor. Children are challenged to be generous in their commitment to loving and serving others in the way that Jesus has generously loved us.

### **Jesus Comes to Meet Us!, 5th Grade**

The Sacraments of the Church are a unique expression of God’s love for us because in the seven sacraments the Son of God comes to meet us and give us the joy of salvation. We experience this grace as a gift from God, something completely free and unmerited. Students learn three types of sacraments and reflect on the signs and symbols through which we are given a participation in God’s own life and love. Each of these sacraments was established by Jesus as a way of uniting us to Himself because they offer us the opportunity to live our lives in close communion with Him.

---

## **The Story of the Old Testament I, 6th Grade**

This course is designed to be a gradual introduction to the Old Testament, especially the major events and main characters in the story of Salvation History, from creation to John the Baptist. The goal of this course is to help students become more aware of the events and people who lived prior to the coming of Christ, and who prepared the way for the Messiah. Each lesson provides a brief narrative of part of the history of Israel, including important dates and names that students should know to understand the story of salvation in the Bible. The emphasis is on God's plan of salvation, which unfolds gradually for the coming of Christ in the fullness of time.

## **The Story of the Old Testament II, 6th Grade**

This course is designed to be a gradual introduction to the Old Testament, especially the major events and main characters in the story of Salvation History, from creation to John the Baptist. The goal of this course is to help students become more aware of the events and people who lived prior to the coming of Christ, and who prepared the way for the Messiah. Each lesson provides a brief narrative of part of the history of Israel, including important dates and names that students should know to understand the story of salvation in the Bible. The emphasis is on God's plan of salvation, which unfolds gradually for the coming of Christ in the fullness of time.

## **The Story of the New Covenant, 7th Grade**

This course introduces students to the life and teachings of Jesus of Nazareth as portrayed in the four Gospels. Students will begin to reflect on some key aspects of the public ministry of Jesus including his parables, the Sermon on the Mount, his miracles, and his establishment of the Church on the foundation of the faith of the Apostles. Special attention will be given to the Paschal Mystery, the death and resurrection of Jesus, which won salvation to the whole world. The course also provides students with an introduction to the Acts of the Apostles and the epistles as well as the Book of Revelation.

## **Believing, Living, and Praying our Faith, 8th Grade**

The Christian faith consists of four essential elements: our Profession of Faith in the twelve articles of the Creed; our celebration of the faith in the liturgy of the Church and the seven sacraments; our living of the faith by adhering to the Ten Commandments and the life of Christ; and our prayer which is based on the prayer that Jesus gave us, the Our Father. This course allows the student who is completing Middle grades to review each of these four elements and to discover new insights and way to faithfully live one's life as a committed disciple or follower of Christ. With this commitment, the student is also prepared for the celebration of the Sacrament of Confirmation if it is to be administered at this time. The course provides a sound doctrinal overview of the faith.

## **The Revelation of Jesus Christ in Sacred Scripture, 9th Grade**

The purpose of this course is to give students a deeper knowledge and understanding of the Sacred Scripture as the word of God. Through their study of the Bible, students will discover the living Word of God, who reveals to us that entire God wants us to understand for our salvation. Students will explore the uniqueness of the Bible, authored by God through divine inspiration, and by men using various literary forms. Students will also learn how to read the Bible with understanding and become familiar with the major sections of Scripture, and the books included in each section. Special emphasis is given to God's deeds revelation of Himself to us throughout salvation history.

## **Who is Jesus Christ?, 9th Grade**

This course helps students to understand all that God has done for us in and through His beloved Son, our Lord Jesus Christ. Students are encouraged to reflect on the mystery of God's plan and to seek deeper understanding of the mystery of Christ whom God sent into the world to make atonement for our sins. Students explore God's plan for us to share eternal happiness with Him through the redemption, which Christ has won for us. Jesus Christ is the one mediator between God and man, but He is also the Bridegroom of the Church and the fulfillment of many prophecies of old. Students are introduced to what it means to be a disciple of Christ and what life as a disciple entails, practically speaking, day-to-day.

---

\*Course requires the purchase of physical materials.



---

## **The Mission of Jesus Christ, 10th Grade**

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that from the first moment of creation, God has planned for us to share in Divine life as children of God the Father, sisters and brothers of the Son, united in the Holy Spirit. This is accomplished through the Redemption Christ has won for us. Students will learn how we share in this redemption through Christ and will also be introduced to what it means to be a disciple of Jesus Christ, responding to his call in our lives.

## **The Mission Continues in the Church, 10th Grade**

This course leads students to discover Christ in and through His Church so that they may know Him and encounter Him there. Christ, through the Apostles, informs students about the founding of the Church and how Christ through the Holy Spirit sustains the Church. Students come to understand the Church as the living Body of Christ today. Special emphasis is given to the four marks and mission of the Church, the hierarchy, consecrated life, and the role of the laity. Students learn about the mission of the Church to advance the Kingdom of God in the world.

## **Sacraments: Privileged Encounters with Christ, 11th Grade**

This course helps students to understand the experience of a privileged encounter with Jesus in a profound way in and through the sacraments of the Church. This is most true in the celebration and reception of the Eucharist in the Church's liturgy. Students examine each of the sacraments in detail to learn how they may both encounter Christ throughout their lives, as well as serve and follow Him by contributing to the growth of His Kingdom in this world. The course encourages students to reflect on their own experience of encountering Christ in and through the Sacraments that they have received. The final chapter focuses on sacraments and their role in the day-to-day lives of Catholics is included.

## **Life in Jesus Christ, 11th Grade**

This course helps students to understand the moral life and the teachings of the Church regarding moral issues. Students discover that it is only through Christ that they can fully live out God's plans for their lives. Students explore moral concepts and the precepts that govern the lives of Christ's disciples, as well as the call to holiness, which is taught by Jesus in the Beatitudes and the Sermon on the Mount. Students will also learn about the formation of conscience and the role of natural law in understanding moral truth.

## **Responding to the Call of Jesus Christ, 9th-12th Grade**

The purpose of this course is to help students to understand the vocations of life and how Christ calls us to live in committed, loving relationships with others. In this course, students discover how all vocations are similar and how they differ. The course is structured around developing a deeper understanding of the nature of marriage with its joys and challenges; life as an unmarried person in the world; a life of priestly service to others in the Church; and consecrated life with the vows of poverty, chastity, and obedience.

## **The History of the Christian Church Part I, 33-1550 A.D., 12th Grade**

This course offers a catechesis of the Church in time: fulfilling its nature and purpose to be a light to the nations. The course seeks to supply students with a general knowledge of the Church's history from apostolic times until the Protestant Reformation. The course begins with an overview of the apostolic age as recorded in the "Acts of the Apostles" and then shows the development of doctrine in the early centuries through the writings and work of the Church Fathers. Special emphasis is given to the formulation of the Creed and other essential dogmas in the early Ecumenical Councils.



---

## **The History of the Christian Church Part II, 1600-21st Century, 12th Grade**

Students follow developments in the Church through the Middle Ages, the Renaissance, the Reformation, the teaching of the Ecumenical Councils as well as the witness of saintly men and women who greatly influenced the history of the Church, and several outstanding Popes who, as the successor of Saint Peter, led the Church through difficult times. Students discover how the Church is sustained and renewed throughout history by the work of the Holy Spirit, and especially through the lives of the saints, and how the Church laid the foundations for western civilization itself.

## **The Pentateuch, 8th Grade**

This course studies the Pentateuch: Introduction, How to Read the Old Testament, Creation, The Fall, Abraham, Jacob, Joseph & Judah, Redemption, Covenant, Tabernacle, Key Themes in Leviticus, Key Passages in Leviticus, Theological Themes in Numbers, Key Passages in Numbers and The Big Picture of Deuteronomy.

## **Scriptures: The Historical Books**

This course studies the Historical Books: Introduction, Joshua, Judges, Ruth, Samuel, Kings, Chronicles, Ezra & Nehemiah and Esther.

## **Scriptures: The Gospels & Acts**

This course studies the Gospels & Acts: Review the Old Testament, The Four Gospels, How the Gospels Were Written, Introduction to Matthew, The Purpose of Matthew, The Kingdom of God in Matthew, Mark, John, and Introduction to Luke & Acts, Luke and Acts.

## **Scriptures: Paul's Letters**

This course studies Paul's Letters: Introduction to Paul's Letters, Romans, Corinthians, Galatians, Ephesians, Philippians, Colossians, Philemon, Thessalonians, Timothy, Titus and Timothy.

## **Scriptures: General Letters & Revelation**

This course studies General Letters & Revelation: Introduction, Hebrews, James, Peter, John, Jude, How to Read Revelation and Revelation.

## **Scriptures: Genesis**

This course studies Genesis: The Purpose & Setting of Genesis, How to Read Narrative Passages, The Structure of Genesis, The Sovereign Creator, God's Design in Creation, The Creation of Human Beings, The Good Creator, The Anatomy of Temptation, Hope for a Cursed World, The Downward Spiral of Sin & Death, God's Covenant with Abraham, Faith & Failure, Abraham as a Blessing to the World, The Faithfulness of God Despite Deceit, God Builds a Nation and Judah & Joseph.