




**CATHOLIC**  
**VIRTUAL**



2021-2022

**Course Descriptions**

February 2021

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## 2021-2022 Course Descriptions

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# 2021–2022 Course Descriptions

## HIGH SCHOOL ENGLISH

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

This course is designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing and comprehension skills. Students will analyze the basic elements of plot, setting, mood, character development, and more in a variety of literary genres.

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

This course expands on skills gained in English I. Students will critique arguments, establish patterns of persuasion, and delve into the language of poetry, history and culture by way of Greek tragedy and Medieval romance.

**Prerequisite:** English I recommended

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

In this course, students explore American passages from its beginnings (1600-1800) up to the present day. The course examines the process of writing, vocabulary development, and research in English through interactive and traditional learning exercises. **Prerequisites:** English I & II recommended

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

Students enrolled in this course will explore passages from the Anglo-Saxon and Medieval periods (449-1485) up to the Victorian Age (1832-1901). The course examines writing, research, world languages and more through interactive and traditional learning experiences.

**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. Students learn about the elements of argument and composition as they develop their critical-reading and writing skills. Students read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade the reader of something. This course will effectively prepare students for the AP English exam.

**Prerequisites:** English I & II

#### **Customer-Provided Required Physical Materials:**

Semester A: Choose one of the following:

- *Zen in the Art of Writing* by Ray Bradbury<sup>§</sup>
- *On Writing Well* by William Zinsser<sup>§</sup>

Semester B: Choose two of the following:

- *Narrative of the Life of Frederick Douglass* by Frederick Douglass<sup>§</sup>
- *A Work in Progress: A Memoir* by Connor Franta<sup>§</sup>
- *The Reason I Jump: The Inner Voice of a Thirteen-Year-Old Boy with Autism* by Naoki Higashida<sup>§</sup>
- *The Color of Water: A Black Man's Tribute to His White Mother* by James McBride<sup>§</sup>
- *The Glass Castle: A Memoir* by Jeannette Walls<sup>§</sup>
- *I am Malala: The Girl Who Stood Up for Education and Was Shot by the Taliban* by Malala Yousafzai<sup>§</sup>

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\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ††Must purchase full year.



- *I Know Why the Caged Bird Sings* by Maya Angelou<sup>§</sup>
- *Dust Tracks on a Road* by Zora Neale Hurston<sup>§</sup>
- *Incidents in the Life of a Slave Girl* by Harriet Jacobs<sup>§</sup>
- *The Story of My Life* by Helen Keller<sup>§</sup>

Semester B: Choose one of the following:

- *Pilgrim at Tinker Creek* by Annie Dillard<sup>§</sup>
- *Nickel and Dimed: On (Not) Getting By in America* by Barbara Ehrenreich<sup>§</sup>
- *Mountains Beyond Mountains: The Quest of Dr. Paul Farmer, A Man Who Would Cure the World* by Tracy Kidder<sup>§</sup>
- *The Devil in the White City: Murder, Magic, and Madness at the Fair that Changed America* by Erik Larson<sup>§</sup>
- *Up from Slavery: An Autobiography* by Booker T. Washington<sup>§</sup>
- *Into Thin Air* by Jon Krakauer<sup>§</sup>
- *The Immortal Life of Henrietta Lacks* by Rebecca Skloot<sup>§</sup>
- *Warmth of Other Suns* by Isabell Wilkerson<sup>§</sup>
- *Bury My Heart At Wounded Knee* by Dee Brown<sup>§</sup>
- *The Boys in the Boat* by Daniel James Brown<sup>§</sup>

## **AP<sup>®</sup> English Literature and Composition (1.0 credit) \* †**

The AP<sup>®</sup> English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students learn how to understand and evaluate works of fiction, poetry, and drama from various periods and cultures through the reading of literary works and writing of essays to explain and support their analysis of passages they've read. This course prepares students for the AP English Literature and Composition exam.

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

### **Customer-Provided Required Physical Materials:**

#### Required Novels:

- *Barron's How to Prepare for the Advanced Placement Exam English Literature and Composition* by George Ehrenhaft
- *Frankenstein* by Mary Shelley; ([found on GP](#))
- *The Hollow Men* by T. S. Eliot; ISBN-10: 9780156806473, ISBN-13: 978-0156806473
- *Heart of Darkness* by Joseph Conrad; ([found on GP](#))
- *Wuthering Heights* by Emily Brontë; ([found on GP](#))
- *The Grapes of Wrath* by John Steinbeck; ISBN-10: 0143039431, ISBN-13: 978-0143039433
- *Hamlet* by William Shakespeare; ([found on GP](#))
- *Hamlet* video (versions available: Mel Gibson, Kenneth Branagh, Laurence Olivier)
- *The Awakening* by Kate Chopin; ([found on GP](#))
- *The Importance of Being Earnest* video

Choose one of the following for the research paper:

- *The Joy Luck Club* by Amy Tan<sup>§</sup>
- *Adventures of Huckleberry Finn* by Mark Twain<sup>§</sup>
- *The Color Purple* by Alice Walker<sup>§</sup>
- *Glass Menagerie* by Tennessee Williams<sup>§</sup>

Choose one of the following:

- *One Hundred Years of Solitude* by Gabriel García Márquez<sup>§</sup>
- *Great Expectations* by Charles Dickens<sup>§</sup>
- *Jane Eyre* by Charlotte Brontë<sup>§</sup>
- *Adventures of Huckleberry Finn* by Mark Twain<sup>§</sup>
- *Moby-Dick* by Herman Melville<sup>§</sup>

\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit. †Customer provided materials required. ††Must purchase full year.



- *Tess of the d'Urbervilles* by Thomas Hardy<sup>§</sup>
- *Pride and Prejudice* by Jane Austen<sup>§</sup>
- *The Color Purple* by Alice Walker<sup>§</sup>
- *Things Fall Apart* by Chinua Achebe<sup>§</sup>
- *The Stranger* by Albert Camus<sup>§</sup>
- *The Catcher in the Rye* by J. D. Salinger<sup>§</sup>
- *Beloved* by Toni Morrison<sup>§</sup>

Choose one of the following:

- *Things Fall Apart* by Chinua Achebe<sup>§</sup>
- *A House Made of Dawn* by Scott Momaday<sup>§</sup>
- *Cry the Beloved Country* by Alan Paton<sup>§</sup>
- *Othello* by William Shakespeare<sup>§</sup>

## HIGH SCHOOL MATH

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

This course is the foundation for high school mathematics. Students will develop fluency in working with linear equations, tables, graphs, inequalities and more.

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

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

In this course, the basic concepts from Algebra I are enriched. Topics include equations and inequalities; linear equations; linear systems and matrices; quadratic functions and factoring; polynomials and more.

**Prerequisite:** Algebra I

### Precalculus (1.0 credit)

This course prepares students for topics covered in an elementary Calculus course at the college level. Facility with these topics is especially important for students to study calculus, physics or other sciences, and/or engineering in college.

### Honors Calculus (1.0 credit)<sup>‡</sup>

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.

**Prerequisites:** Algebra 1, Geometry, Algebra 2, and Pre-Calculus or Trigonometry/Analytical Geometry

**Customer-Provided Required Physical Materials:** graphing calculator (TI83 or above)

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## 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 extend their pre-existing experiences with algebra and geometry to trigonometry, coordinate geometry, and probability.

**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.

**Customer-Provided Required Physical Materials:** graphing calculator (TI83 or above)

## ADVANCED PLACEMENT® MATH

### AP® Calculus AB (1.0 credit) \*‡

In AP® Calculus AB, an introductory college-level calculus course, students explore the concepts, methods, and applications of differential and integral calculus. They work to understand 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 function. 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

**Customer-Provided Required Physical Materials:** graphing calculator (TI83 or above)

### AP® Calculus BC (1.0 credit) \*‡

AP® Calculus BC is an introductory college-level calculus course in which students explore the concepts, methods, and applications of differential and integral calculus, including topics such as parametric, polar, and vector functions, and series. 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

**Customer-Provided Required Physical Materials:** graphing calculator (TI83 or above)

### AP® Statistics (1.0 credit) \* ‡

AP® Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools used for collecting, analyzing, and drawing conclusions from data. Students explore statistics through discussion and activities, and design surveys and experiments. This course prepares students for the AP Statistics exam.

**Prerequisite:** Algebra II

**Customer-Provided Required Physical Materials:** graphing calculator (TI83 or above)

## 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 population over time.

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## 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.

## Environmental Science (1.0 credit)

This course 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. Students explore physics concepts such as thermodynamics, magnetism, waves and sound, and more.

## ADVANCED PLACEMENT® SCIENCE

### AP® Biology (1.0 credit)\* ‡

AP® Biology is an introductory college-level biology course in which students study the core scientific principles, theories, and processes that govern living organisms and biological systems. Students perform hands-on laboratory work to investigate natural phenomena. This course prepares students for the AP Biology exam.

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

**Customer-Provided Required Physical Materials:** household items for lab experiments

### AP® Chemistry (1.0 credit)\* ‡

In AP® Chemistry course, the equivalent of an introductory college chemistry course, students learn about the fundamental concepts of chemistry including structure and states of matter, intermolecular forces, and reactions. Students do hands-on lab investigations and use chemical calculations to solve problems. This course prepares students for the AP Chemistry exam.

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

**Customer-Provided Required Physical 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/>)

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

AP® Environmental Science provides students with the opportunity to explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. Students take part in laboratory investigations and field work. scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. This course prepares students for the AP Environmental Science exam.

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

**Customer-Provided Required Physical Materials:** household items for lab experiments

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## AP® Physics 1 (1.0 credit)\* ‡

In AP® Physics 1, an algebra-based physics course, students learn about the foundational principles of physics as you explore Newtonian mechanics; work, energy, and power; mechanical waves and sound; and introductory, simple circuits. They do hands-on laboratory work to investigate phenomena. This course prepares students to take the College Board's Advanced Placement Physics exam.

### **Customer-Provided Required Physical Materials:**

- StudyForge digital textbook
- 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. Students will learn the principles of economics and how the subject applies to everyday life.

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

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)**

Students in this course will apply their broader knowledge of historical study and American history to a more specific era within U.S. history. The course explores the dynamic growth and change of the nation following important events such as the Civil War.

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

This course explores the variety of cultures, beliefs and lifestyles that have existed throughout human existence. Students will gain an understanding of human progression and appreciation for the achievements necessary to allow us to exist in our modern world.

## ADVANCED PLACEMENT® SOCIAL STUDIES

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

In AP® European History students study the cultural, economic, political, and social developments that have shaped Europe from c. 1450 to the present. Students analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. This course prepares students for the AP European History exam. **Customer-Provided**

### **Required Physical 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

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## **AP® Human Geography (1.0 credit) \***

In AP® Human Geography course students explore how humans have understood, used, and changed the surface of Earth. Students use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. This course prepares students for the AP Human Geography exam.

## **AP® Macroeconomics (0.5 credit) \***

AP® Macroeconomics is a semester-length introductory college-level course in which students explore the principles of economics that apply to an economic system as a whole. Students use graphs, charts, and data to analyze, describe, and explain economic concepts. This course prepares students for the AP Macroeconomics exam.

**Prerequisite:** Algebra I recommended

## **AP® Microeconomics (0.5 credit) \***

AP® Microeconomics, a semester-long introductory college-level microeconomics course, allows students to study the principles of economics that apply to the behavior of individuals within an economic system. They use graphs, charts, and data to analyze, describe, and explain economic concepts. This course prepares students for the AP Microeconomics exam.

**Prerequisite:** Algebra I recommended

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

In this course, students study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. They analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. This course prepares students to take the College Board's Advanced Placement World History exam.

**Customer-Provided Required Physical 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

## **AP® Psychology (1.0 credit) \***

The AP® Psychology course provides students with the opportunity to explore the ideas, theories, and methods of the scientific study of behavior and mental processes. Students examine the concepts of psychology through reading and discussion and analyze data from psychological research studies. This course prepares students for the AP Psychology exam.

## **AP® U.S. Government and Politics (0.5 credit) \***

Within AP® U.S. Government and Politics, a semester-long course, students study the key concepts and institutions of the political system and culture of the United States. They read, analyze, and discuss the U.S. Constitution and other documents as well as complete a research or applied civics project. This course prepares students for the AP U.S. Government and Politics exam.

**Prerequisite:** United States History recommended

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

AP® U.S. History, an introductory college-level course, gives students an opportunity to study the cultural, economic, political, and social developments that have shaped the United States from c. 1491 to the present. Students analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. This course prepares students for the AP United States History exam.

**Prerequisite:** World History recommended

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## HIGH SCHOOL ELECTIVES

### Accounting (0.5 credit)

In this semester course, students explore accounting and accounting careers. They 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 also learn how to reconcile a bank statement and to prepare payroll records.

### Advanced Drawing (0.5 credit) \*\* ‡

The advanced drawing course provides students with an opportunity to build upon their skills as an artist to establish a portfolio that demonstrates their drawing abilities. This course focuses on refining drawing techniques and concepts as well as helps students advance their understanding of human anatomy from an artist's perspective. During the course, students will study and research major drawing styles and movements found throughout history to help them develop a "critical eye" in the evaluation of contemporary drawing.

#### Customer-Provided Required Physical Materials:

- 2 sheets of tracing paper
- 1 marker
- 1 woodless drawing pencil
- 1 drawing pencil
- 1 drawing paper pad
- 1 eraser
- 1 colored pencil set
- 20 sheets of newsprint paper
- 1 pencil sharpener
- 2 sheets of colored paper

### 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, immune, respiratory, digestive, urinary and reproductive systems.

### 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 are 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.

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‡Customer provided materials required. ‡‡Must purchase full year.



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## 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 identify and describe art from prehistoric times to modern time. Throughout this course, students 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.

### **Customer-Provided Required Physical 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)

## Arts Explorations (0.5 credit) ‡

The Arts Explorations course encourages students to experience each of the modern arts disciplines—visual arts, theatre, music, media arts, and dance. Students 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 as they move quickly through the lessons in the course.

### **Customer-Provided Required Physical Materials:** Funny Photomaker (free download)

## Augmented and Virtual Reality Applications (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 also learn about and discuss the risks and side effects of these systems on health, privacy, and ethical implications.

## Basic Drawing (0.5 credit) \*\* ‡

In Basic Drawing, students experiment with several different art materials and tools to see what each tool can do best. Students explore ordinary things around them to become more observant of the structures and meanings of things which can be seen in their home and community. Each lesson provides room for expressing the technical skill learned in a unique, creative way.

### **Customer-Provided Required Physical 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

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- 2 sheets white watercolor paper (rough, heavy, stiff)
- 2 sheets rice paper 9 1/2 x12 (soft, translucent)
- 25 sheets newsprint, 9x1
- 1 bottle white glue (obtain locally)

### Basic Web Design (0.5 credit) ‡

In this course, students learn how to design a beautiful and functional website, and how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programming languages. Students learn about the use of color, layout, and when to use different techniques, typography rules, and the importance of imagery. 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.

#### Customer-Provided Required Physical 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>

### 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. Acrylic and watercolors are the mediums used in this class.

#### Customer-Provided Required Physical 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

### Business Law (0.5 credit)

In this course, students will learn about the American legal system as they 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.

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### **Career Exploration in Finance (0.5 credit)**

This course introduces students to the challenging and lucrative world of finance through a review of key financial terms and various groups, positions, and roles within financial institutions. Students learn about resumes, interviews, and networking, and discuss ethics on Wall Street and the role of finance within society.

### **Career Exploration in Healthcare (0.5 credit)**

This course introduces students to the exciting and varied career opportunities in the healthcare industry by introducing roles and tasks, identifying education and skills needed, determining responsibilities of roles which support or supervise positions, and analyze legal and ethical responsibilities, limitations, and implications for each of these professions.

### **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 consider the many factors that impact career success and satisfaction. Using a process of investigation, research, and self-discovery, students acquire the understandings critical to the career planning process, and upon completion, students will have a practical and comprehensive college or career transition portfolio that reflects their skills and abilities, as well as their interests, values, and goals.

### **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 learn about the significance of government, law, and politics. They examine the United States foundational documents and how they shaped the United States government, the purposes and functions of federal, state and local government, the justice system, political systems the environment, and the economy.

### **Cloud Technologies and the Internet of Things (0.5 credit)**

This course examines the technologies, hardware, and software that underpin the Internet of Things. Students examine a variety of end-market applications in homes, businesses, and cities, as well as the many career opportunities that the Internet of Things enables.

### **Computer Basics (0.5 credit)**

In this course students 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. Course topics may include paychecks and wages, taxes, comparison shopping, budgets, interest calculations and more.

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\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ††Must purchase full year.



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## 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.

### **Customer-Provided Required Physical Materials:**

- *Picture Bride* by Yoshiko Uchida; ISBN-10: 9780295976167; ISBN-13: 978-0295976167<sup>§</sup>
- *Night* by Elie Weisel; ISBN-10: 9780374500016; ISBN-13: 978-0374500016<sup>§</sup>
- *To Kill a Mockingbird* by Harper Lee; ISBN-10: 0060935464; ISBN-13: 978-0060935467<sup>§</sup>
- *Fallen Angels* by Walter Dean Myers; ISBN-10: 0545055768; ISBN-13: 978-0545055765<sup>§</sup>
- *The Old Man and The Sea* by Ernest Hemingway; ISBN-10: 0684801221; ISBN-13: 978-0684801223<sup>§</sup>
- *Different Seasons* by Stephen King; ISBN-10: 1501143484, ISBN-13: 978-1501143489

## 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. The second 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.

## 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.

**Customer-Provided Required Physical Materials:** printer, camera, scanner (optional), and one of the following programs: Audacity (free download), GIMP (free download), 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.

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

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\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ††Must purchase full year.





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## Early Childhood Education I (0.5 credit)

The Early Childhood Education I course provides an overview of the expectations and roles of the early childhood educator through a focus on childhood development, health, nutrition, and guidance strategies. The course is intended to prepare students for being able to influence the life of a young child.

## Earth Science (1.0 credit) ‡

Earth Science introduces students to the complex workings of Earth's systems, including oceanography, rocks and minerals, weather, environmental issues and more.

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

### **Customer-Provided Required Physical Materials:**

- uninflated round balloon
- permanent marker
- 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.

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## 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 personal finance 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.

## French I (1.0 credit)

In French I, students are introduced to the language and cultures of French speaking countries. Students will gain a basic understanding of reading, writing, speaking and understanding the language at a beginner's level.

## 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.

**Prerequisite:** French I

## French III (1.0 credit) ‡

In this expanding engagement with French, high school students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. In addition, students read significant works of literature in French and respond orally or in writing to these works. Continuing the pattern and building on what students encountered in the first two years, each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major French-speaking areas in Europe and the Americas.

**Prerequisite:** French I and French II

**Customer-Provided Required Physical Materials:** French-English dictionary is recommended

## Fundamentals of Bitcoin and Cryptocurrency (0.5 credit) \*\*

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 transaction bitcoin. Key principles such as mining, wallets, and hashing will be introduced. And finally they will be familiarized with the nascent industry of digital currencies and how they function.

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## Fundamentals of Blockchain and Cryptography (0.5 credit) \*\*

Blockchain seems to be the latest buzzword that the business world is talking about. But what is it? And why should a high school student care? This course will seek to answer those questions. It will strip away the layers of complexity and sophistication to help students understand the key concepts of the blockchain. The course will introduce and discuss areas where blockchain has the greatest potential.

## German I (1.0 credit)

This introductory course teaches basic communication and comprehension in German. Students are introduced to the fundamentals of German conversation and grammar.

## 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.

**Customer-Provided Required Physical 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)

This course provides an overview of how students can take charge of their personal fitness and health. Students will learn about proper nutrition, cardiovascular health, exercise and more.

## 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.

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## 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.

## 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. Physical education is much more than just fitness and exercise. Emphasis in this course is placed on the value of sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports.

## 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.

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## 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 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 Education and Teaching (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.

## Introduction to Information Technology (0.5 credit)

This course introduces students to the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the field of IT.

## Introduction to JAVA Programming (0.5 credit) ‡

JAVA is one of the most widely used computer languages in the world. This course teaches 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.

**Customer-Provided Required Physical 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.

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## JavaScript Game Design (0.5 credit) ‡

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.

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

**Customer-Provided Required Physical Materials:** Students will need a Windows PC or Mac for this course; Chromebooks and tablets are not sufficient. 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 is carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as thorough grounding in aspects of culture. Course activities blend different forms of communication and culture to ensure that students meet all standards.

## Latin II (1.0 credit)

Latin II expands on the concepts in Latin I, encouraging students to increase their knowledge and understanding of the language through vocabulary study, discussions, multimedia presentations, self-checks, practice activities and games, quizzes and exams.

**Prerequisite:** Latin I

## Latin III (1.0 credit)

Latin III expands on the concepts in Latin I and Latin II, encouraging students to increase their knowledge and understanding of the language through vocabulary study, discussions, multimedia presentations, self-checks, practice activities and games, quizzes and exams.

**Prerequisite:** Latin II

## 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.

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‡Customer provided materials required. ††Must purchase full year.





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## 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 Finance (0.5 credit)

The Personal Finance course prepares students to be successful financial citizens as they learn about the role and responsibilities as a responsible financial planner and saver as well as learn about the services, functions, and products of the financial industry.

## 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. Students are introduced to exercise and how it relates to well being, the work of the body's bones and joints, muscles, cardio, respiratory, and energy systems, and healthy habits including eating and drinking as it relates to exercise.

## Photojournalism (0.5 credit) †

Students are introduced to some of the pioneers who set the standards for this unique way of storytelling. They study the principal types of photojournalism and the ethical responsibilities a photojournalist has behind the lens.

**Customer-Provided Required Physical Materials:** digital camera (tripod, lenses, lights optional)

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†Customer provided materials required. ‡‡Must purchase full year.



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## Physical Science (1.0 credit) †

This course is an introduction to the physical sciences and scientific methodology. Students will gain a basic knowledge of the physical properties and chemistry of matter.

**Customer-Provided Required Physical 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

## Principles of Architecture (0.5 credit) †

In Principles of Architecture, students review various concepts used in the design and architecture field to learn about basic drafting equipment and how to use and maintain it. They analyze challenges and solutions within the development of design and learn how to prepare drawings manually and using AutoCAD software. A substantial portion of the course will be spent on sequential processes so that students develop an understanding of creating and annotating drawings as well as how to apply standard rules regarding line types, offset objects, creating layers, and setting up a page for plotting.

**Customer-Provided Required Physical Materials:** AutoCAD software (free download - <https://www.autodesk.com/education/edu-software/overview?sorting=featured&page=1>)

## 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.

**Customer-Provided Required Physical Materials:** Python Version 3 (<https://www.python.org/downloads/>). 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: Applications and Careers (0.5 credit)

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

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### **Smart Cities: Technology and Applications (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 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.

### **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.

**Prerequisite:** Spanish I

### **Spanish III (1.0 credit)**

In this course, students will build upon the concepts developed in Spanish II. 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.

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## 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.

## The History of Gaming and Esports (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.

## 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 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.

## Transportation Technologies (0.5 credit)

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

## Virtual Tutor: ACT<sup>®\*\*</sup>

This course provides students with the opportunity to prepare to successfully complete the ACT<sup>®</sup> 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<sup>®\*\*</sup>

This test preparation course effectively prepares students for all sections of the SAT<sup>®</sup> 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.

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\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ††Must purchase full year.



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### **Wearable Technology Innovations (0.5 credit)**

From hearing aids to pedometers to smart watches, humans have made and worn devices to overcome physical deficiencies, count their steps, and communicate. With the continue miniaturization of chips and sensors, combined with increasing sophistication of artificial intelligence, wearable technology has proliferated into countless end-markets. This course will introduce students to wearable technologies and the components and software that make these technologies possible. The course will also evaluate several applications of wearable technologies in various industries. Finally, the course will examine and discuss the implications of wearable technology, including its pros and cons, and potential implications to our health, privacy, and society.

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

In this course, students apply cultural and physical perspectives to examine how location affects economic and cultural activities in cities, regions, countries, and continents around the world.

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## ADVANCED PLACEMENT® HIGH SCHOOL ELECTIVES

### AP® Art History (1.0 credit) \*

AP® Art History explores the history of art across the globe from prehistory to the present. Students analyze works of art through observation, discussion, reading, and research. This course prepares students for the AP Art History exam.

**Prerequisite:** World History recommended

### AP® Computer Science A (1.0 credit) \*‡

The AP® Computer Science A course, which is equivalent to the first semester of a college level computer science course, allows students to get familiar with the concepts and tools of computer science as you learn a subset of the Java programming language. Students do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. This course prepares students for the AP Computer Science A exam.

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

**Customer-Provided Required Physical Materials:**

- graphing calculator
- JAVA, BlueJ (free download)

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

French Language and Culture is an advanced language course in which students acquire proficiencies that expand their cognitive, analytical, and communicative skills. The course prepares students for the AP French Language and Culture Exam. It uses as its foundation the three modes of communication (interpersonal, interpretive, and presentational) as defined in the Standards for Foreign Language Learning in the Twenty-First Century. The course is designed as an immersion experience requiring the use of French exclusively. The online learning coach only uses French to communicate with students. In addition, all the reading, listening, speaking, and writing is in French. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. The course contains a forum where students share their opinions and comments about various topics and comment on other students' posts. The course makes great use of the Internet for updated and current material.

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

Spanish Language and Culture is an advanced language course in which students acquire proficiencies that expand their cognitive, analytical, and communication skills. The course prepares students for the AP Spanish Language and Culture Exam. It uses as its foundation the three modes of communication (interpersonal, interpretive, and presentational) as defined in the Standards for Foreign Language Learning in the Twenty-First Century. The course is designed as an immersion experience and is conducted almost exclusively in Spanish. In addition, all student work, practices, projects, participation, and assessments are in Spanish. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. In addition, students participate in a forum where they are able to share their opinions and comments about various topics and comment on other students' posts. The course also makes great use of the Internet for updated and current material.

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## MIDDLE SCHOOL LANGUAGE ARTS

### Language Arts 6<sup>‡</sup>

Student assignments include writing narrative essays and completing a book report. Students will learn about storytelling, myth, poetry and composition.

#### **Customer-Provided Required Physical 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<sup>§</sup>

### Language Arts 7<sup>‡</sup>

Through analysis of written, spoken, and multimedia texts, students will become more critical consumers of information and various forms of media.

#### **Customer-Provided Required Physical 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

### Language Arts 8<sup>‡</sup>

In this course, students will analyze the poetry of noted writers. They will also learn sentence structure, verb tenses, punctuation, grammar rules and logic, essay and letter writing, and more.

#### **Customer-Provided Required Physical 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

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## 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.

### Mathematics 7

Students in this course will work on their problem solving skills and learn basic algebra, geometry, decimals, fraction, data analysis, percentage, integer use and more.

### 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.

### Algebra I (High School Course – 1.0 credit) <sup>§§</sup>

This course is the foundation for high school mathematics. Students will develop fluency in working with linear equations, tables, graphs, inequalities and more.

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

## MIDDLE SCHOOL SCIENCE

### Life Science 6

Students will explore the study of cells, heredity, biological populations, and their changes over time. This course provides opportunity for students to conduct and design experiments as well as identify and classify organisms.

### Earth and Space Science 7

In this middle school course, students will learn about the scientific method and hone their use of scientific measurements in earth and space science.

### Physical Science 8<sup>‡</sup>

This course is an introduction to the physical sciences and scientific methodology. Students will gain a basic knowledge of the physical properties and chemistry of matter.

**Customer-Provided Required Physical Materials:** Basic Kitchen Lab Supplies

## 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 paths of migration around the Earth.

### Social Studies 7

This course emphasizes how ideas, events, and philosophies have shaped the history of the United States. Study begins with the earliest arrivals of people and concludes at the Civil War.

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## Social Studies 8

In this course, students will understand the significance of government, law, and politics and learn their role in civic responsibility, including voting and being a productive member of society.

## MIDDLE SCHOOL ELECTIVES

### Art Appreciation

Art Appreciation investigates how quality is determined and created by artists, in order to evaluate and appreciate art on a deeper level. Students are 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.

### Arts Careers<sup>‡</sup>

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.

#### **Customer-Provided Required Physical 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)

### Arts Explorations<sup>‡</sup>

The Arts Explorations course encourages students to experience each of the modern arts disciplines—visual arts, theatre, music, media arts, and dance. Students 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 as they move quickly through the lessons in the course.

#### **Customer-Provided Required Physical Materials:** Funny Photomaker (free download)

### Beginning Painting<sup>‡</sup>

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. Acrylic and watercolors are the mediums used in this class.

#### **Customer-Provided Required Physical 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

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## 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 as students and experience more success and satisfaction as adults.

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

In French I, students are introduced to the language and cultures of French speaking countries. Students will gain a basic understanding of reading, writing, speaking and understanding the language at a beginner's level.

## French II (High School Course – 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.

**Prerequisite:** French I

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

This introductory course teaches basic communication and comprehension in German. Students are introduced to the fundamentals of German conversation and grammar.

## 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.

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

**Customer-Provided Required Physical Materials:** text editor (TextEdit, Notepad, or Text), Image Editing Software (Pixlr or GIMP, and Webhosting and basic in-browser FTP like Neocities)

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## Keyboarding<sup>\*\* ‡</sup>

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.

**Customer-Provided Required Physical 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. Discussions cover information about playing area and equipment, basic rules, safety considerations, and terminology for each sport.

## Python Multiplayer Adventures<sup>‡</sup>

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.

**Customer-Provided Required Physical Materials:** Students will need a Windows PC or Mac for this course; Chromebooks and tablets are not sufficient. Python Version 3 (<https://www.python.org/downloads/>)

## Scratch Coding<sup>‡</sup>

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.

**Customer-Provided Required Physical Materials:** Students will need a computer or laptop for this course; tablets are not sufficient.

## Spanish I (High School Course – 1.0 credit)<sup>§§</sup>

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..

## Spanish II (High School Course – 1.0 credit)<sup>§§</sup>

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.

**Prerequisite:** Spanish I

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## 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, learn weekly sight words and reading comprehension, and produce letter sounds and frequently used phonograms. All Common Core K LA standards are met in this course.

### Language Arts 1

In this course, students learn to identify and write all letters, learn weekly sight words and reading comprehension, and produce letter sounds and frequently used phonograms. All Common Core 1 LA standards are met in this course.

### 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. All Common Core 2 LA standards are met in this course.

### Language Arts 3

This course teaches students reading comprehension skills and strategies along with spelling, vocabulary words, and grammar concepts that will help them become stronger writers. All Common Core Third Grade LA standards are met in this course.

### 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.

### 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.

## 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, how to tell time, and more. As they progress, students will learn to count to twenty and will learn the concepts of left and right.

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## 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.

## Mathematics 2

Students in this course will build fluency with basic math facts and add and subtract within 100 to solve word problems using strategic methods. They will also be introduced to working with money and time to compare value.

## Mathematics 3

In this course, students will build flexibility with numbers as they master addition, subtraction, multiplication, and division. In addition, students will learn to borrow, carry, find patterns, make estimations and more.

## Mathematics 4

This course focuses on developing understanding and fluency in multi-digit multiplication, fraction equivalence, and more.

## Mathematics 5

In this course, students will focus on several areas including division of fractions, operations with decimals, and more.

# ELEMENTARY SCIENCE

## Science K

In this course, students will use their senses to explore their world through nature walks, gardening, and imitative games.

## Science 1

Students in this course 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

In this course, students are introduced to the process of observation using their five senses. Students will use these observation skills as they examine different types of animals and their environments.

## Science 3

This course introduces students to experimentation as they learn about the earth, the sun, and the moon. Through simple experiments, students will explore the water cycle, gravity, and more.

## 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 and more.

## Science 5

In this course, students will study the solar system, light and sound, different types of energy, and more.

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## ELEMENTARY SOCIAL STUDIES

### Social Studies K

This course introduces students to their place in the community and their responsibilities as members of society. Students learn about everyday heroes, the importance of rules, table manners, and more.

### Social Studies 1

In this course, students explore the fundamentals of social studies, including map skills, jobs in the community, storytelling, and more.

### Social Studies 2

This course helps students explore social studies concepts such as culture, geography, history, and economics.

### Social Studies 3

In this course, students will look at the beginning of civilization and will take a close look at their own personal heritage by mapping their ancestry.

### Social Studies 4

In this course, students will apply their understanding of social studies skills to exploring local states and communities through topography, local wildlife, natural wonders, and more. They will also study U.S. colonial history and the frontier life of early American settlers.

### Social Studies 5

Students in this course study U.S. history through the Civil War. They also investigate early settlements of North America and what life was like for the colonists and Native Americans.

## ELEMENTARY ELECTIVES

### Art Level 1

Art Level 1, designed for first grade students, focuses on foundational art concepts. Students learn about art while also learning self-discipline, cooperation, and self-expression. Students use their senses and imaginative thinking to learn about artistic expressions and inventions from cultures around the world.

### Art Level 2

Art Level 2, designed for students in grades 2-3, focuses on concepts and foundational art, and builds upon activities and lessons in Art Level 1. Students learn about mixing colors, applying their imaginations and using their knowledge of nature to develop their art skills and understanding.

### Art Level 3

In this course designed for students in grades 3-4, students continue to learn about art while also learning self-discipline, cooperation, and self-expression. The student will see artistic expressions and inventions from cultures around the world.

### Art Level 4

In this course designed for students in grades 4-5, students continue to learn about art while also learning self-discipline, cooperation, and self-expression. The student will see artistic expressions and inventions from cultures around the world.

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## Kindergarten Arts & Crafts\*\* ‡

This course is designed to be an independent arts and crafts playtime experience for the kindergarten student. A foundation for artistic imagination and creativity are the focus. Students are introduced to lines, circles, recognizing and using shapes, and explore a variety of media such as pastels, watercolors, crayons, tempera, and pencil drawing. Students work with clay, draw with pastels, make fingerprint flowers, draw barns and animals using shapes and recognizing lines using the student's name, create a bird feeder, make pig puppets, craft paper flowers, make potpourri, craft a heart collage, construct a wind chime, and press flowers.

## Arts and Crafts 1\*\* ‡

This course is designed to be an independent arts and crafts playtime experience for the first grade student. In this course, children's inherent artistic imagination and creativity focus on 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 explore a variety of media such as pastels, watercolors, crayons, tempera, and pencil drawing as they create a watercolor tree, use a printing block, produce weather painting, and produce a watercolor painting. They will also be creating colorful calendars, stenciling, fashioning intricate flower drawings, revisiting symmetrical objects, and mixing colors.

## Arts and Crafts 2\*\* ‡

This course is designed to be an independent arts and crafts playtime experience for the second-grade student. Using their senses, students are encouraged to further develop what they already know as a source of knowledge and creativity. They will use watercolors to create a value chart and begin to understand symmetry in art, as well as work with clay and create a Memorial Clay. In the second semester, students create a 12 month calendar, focusing on a new month each week forming drawings and making a seasonal chart using objects familiar with each of the four seasons.

## Elementary Health Kindergarten and Grade 1

Elementary Health for kindergarten and first grade helps 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 2 and 3

Elementary Health for grade 2 helps 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 for grades 4 and 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

In this course, kindergarten students establish a basic understanding of health and fitness. Topics include exercise safety, making healthy choices, nutrition, and more.

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## Elementary Physical Education Grades 2 and 3

Second grade students expand on their understanding of fitness and learn how to become more fit and healthy. Topics include goal setting, warm-up and cool down, flexibility, motor skills, and more.

## Elementary Physical Education Grades 4 and 5

In this course, students in fourth and fifth grade focus on fitness and learn about topics such as muscle strength, flexibility, water safety, and more.

## Keyboarding<sup>\*\* ‡</sup>

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.

**Customer-Provided Required Physical Materials:** Students will need a computer or laptop for this course; tablets are not sufficient.

## Music—Recorders Level 1<sup>\*\* ‡</sup>

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.

**Customer-Provided Required Physical Materials:** a recorder

## Scratch Coding<sup>‡</sup>

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.

**Customer-Provided Required Physical Materials:** Students will need a computer or laptop for this course; tablets are not sufficient.

## ENGLISH AS A SECOND LANGUAGE

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

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 this course, students interact with a native English speaker and complete assignments that meet identified standards for Academic English in an American education program. This level also includes conversational language studies.

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\* Increased cost for course. \*\*Course will NOT have live sessions. §May be found in the public domain. §§Course awards high school credit.  
‡Customer provided materials required. ††Must purchase full year.



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# RELIGIOUS COURSE OFFERINGS

## CORE THEOLOGY COURSES

### **Jesus is Love!, Kindergarten**

This course introduces kindergarten-age students to the Catholic faith through teaching about love, family, community, and prayer. Students begin to develop a relationship with God through coming into a better understanding of creation, Jesus, Mary, the Holy Trinity, the Holy Spirit, the Bible, baptism, and the role of the church.

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

This course introduces first graders to 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. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

Second-grade students learn about the background of Jesus, the Son of God and our risen Savior and LORD, based on key teachings from both the Old and New Testaments. They also learn about the Catechism of the Catholic Church, how Jesus shows how-to live in love as God's children, and how to avoid sin and overcome selfishness through their participation in the Sacraments of the Eucharist and Reconciliation. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

Third graders learn about how they encounter God in many places in their lives, especially in their families. The Church is the family of God, and in this course 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. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

In this course, fourth-grade students focus on how God wants them to be happy and to live as His children. As a loving Father, He instructs through the Ten Commandments which keep them from sin and help them to do what is pleasing to Him. Students also learn how to love and serve others through the Beatitudes, which Jesus taught in the Sermon on the Mount. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

The Sacraments of the Church are a unique expression of God's love, and in this course, fifth-grade students learn three types of sacraments and reflect on the signs and symbols through which they are given a participation in God's own life and love. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

This sixth-grade theology course is 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. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

Seventh-grade students learn about the life and teachings of Jesus of Nazareth as portrayed in the four Gospels in this course. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

In this course, eighth-grade students review the four essential elements that make up the Christian faith: Profession of Faith in the twelve articles of the Creed; celebration of the faith in the liturgy of the Church and the seven sacraments; living of the faith by adhering to the Ten Commandments and the life of Christ; and prayer which is based on the prayer that Jesus gave us, the Our Father. Through engaging activities and discussions as well as time for reflection and prayer, students develop a deeper understanding of the Catholic religion and mission, building the foundations of a faith that may be applied to difficult situations in the future that require good choices.

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

Ninth-graders focus on gaining a deeper knowledge and understanding of the Sacred Scripture as the word of God. Through their study of the Bible, students explore the uniqueness of the Bible, authored by God through divine inspiration, and by men using various literary forms. They learn how to read the Bible with understanding and become familiar with the major sections of Scripture, and the books included in each section.

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

This course helps ninth-grade students understand all that God has done in and through His beloved Son, our Lord Jesus Christ. Students 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.

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

In this course, high school sophomores discover Christ in and through His Church so they may know Him and encounter Him there. 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. Through this course of study, students learn that for all eternity, God has planned for us to share eternal happiness with him, which is accomplished through the redemption Christ won for us. In the second half of the year, students are introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit.

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

The purpose of this course is to help high school juniors understand that it is only through Christ that they can fully live out God's plans for their lives. Students learn the moral concepts and 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.

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

In this course, eleventh-grade students understand the experience of a privileged encounter with Jesus in a profound way in and through the sacraments of the Church. 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.

## **The History of the Catholic Church, 12<sup>th</sup> Grade**

High school seniors develop a stronger understanding of the apostolic age as recorded in the "Acts of the Apostles" and then 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. 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.

## **ELECTIVE THEOLOGY COURSE**

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

The purpose of this one-semester high school elective course is to help students understand the vocations of life: how Christ calls us to live. In this course, students learn how all vocations are similar and how they differ. The course is structured around married life, single life, priestly life, and consecrated life and students learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

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# Elementary Materials List

## Elementary Supply Kit

The list below details the school supplies required to supplement the Grade Level Materials Kits.

### Materials Needed

|   |   |
|---|---|
| Colored Pencils (12pk)                    | Colored Pencils (12pk)                    |
| Composition Notebooks, QTY 4 Ruler        | Composition Notebooks, QTY 4 Ruler        |
| Glue Scissors                             | Glue Scissors                             |
| Highlighter, Yellow Scotch Tape           | Highlighter, Yellow Scotch Tape           |
| Marker, Black Permanent Watercolor Paints | Marker, Black Permanent Watercolor Paints |
| Paint Brushes                             |   |

## Grade K: Materials

The list below details the required materials that are needed for Kindergarten.

### Materials Needed

|  |   |
|--|---|
| Alfalfa seeds ½ teaspoon   | Bag of dry beans, QTY 100                                       |
| Beads (caution: buttons would be a choking hazard), QTY 50 of various size and color | Beads in three colors, 1/8" to 3/16" wide, QTY 30 of each color |
| Bean seeds, Lima, QTY 8  | Bean seeds, Scarlet runner, QTY 20                              |
| Blocks (Lego, building blocks, etc.), QTY 16   | Coin, Pennies (Caution: choking hazard) QTY 10                  |
| Cardboard, 8.5" X 11", QTY 2   | 3x5 Index Cards (100pk)   |
| Crayons (64ct)   | Cloth, (as a cape), 22" X 32"                                   |
| Coin, Dime (Caution: Choking hazard), QTY 1  | Coin, Nickels (Caution: Choking hazard), QTY 5                  |
| Chalk, sidewalk, 1 piece   | Cotton balls, 1.25 cups   |
| Cup, clear plastic, 12 oz (drinking glass)   | Cup, clear plastic, 9 oz (glass tumbler)                        |
| Cups, foam coffee, 8 oz  | Deck of cards, (like kid's Crazy 8s)                            |
| Dowel, 12" X 3/8"  | Felt, 8" X 8"   |
| Flashlight, easy to take apart standard type   | Garden stakes, 3' to 4' long, QTY 3                             |
| Iron filings, 3 cc   | Jar, wide mouth, 16 to 32 oz                                    |
| Magnets, 1 each of bar type and horse shoe type                                      | Magnifying glass, 50 to 75 mm                                   |
| Maple sugar, 1 tablespoon  | Mixture of soil, sand and peat, 1 cup                           |
| Modeling clay, about 2.5 lbs   | Nails, zinc 2" to 2.5", QTY 3                                   |
| Paper plate, 9", QTY 5   | Paper towel to use as blotter paper, 2 sheets                   |
| Pipe cleaners in various colors, QTY 26 total  | Plastic, vinyl, 6" X 6"   |
| Pots, starter peat pots (includes soil), QTY 5                                       | Rubber band, thick, 3" long                                     |
| Salt, 1 cup  | Sand or glitter, 1 teaspoon                                     |
| Seeds, flowers, QTY 10   | Straws, clear drinking, QTY 6                                   |
| String, 9'   | Sunflower seeds (to plant), QTY 25                              |
| Tacks / pushpins, QTY 26   | Toothpicks, QTY 10  |
| Poster Board (8.5 x 11, 9 pieces)  | Pen, black click (able to be taken apart)                       |
| Watercolor paper, 9" X 12", QTY 2  | Multi-Color Construction Paper                                  |
| Variety of containers  | Large piece of display board, about 36" X 48"                   |

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|  |                              |
|--|------------------------------|
| Textured fabrics and materials of different kinds (velvet, wool, sandpaper, bubble wrap, etc). | Sweet potato or avocado seed |
| Garden fork  | Potato                       |
| Apples   |                              |

## Grade 1: Materials

The list below details the required materials that are needed for grade 1.

### Materials Needed

|  |  |
|--|--|
| Bags, plastic zip close type, quart size, QTY 2                | Balance scale (small handheld)                                     |
| Ball, indoor safe, about 2"-3"                                 | Bean bags, QTY 2   |
| Beans, as counters, QTY 100                                    | Bird seeds, 1 cup  |
| Blindfold (bandana)  | Bowl, foam, 20 oz  |
| Bowl, foam, 12 oz  | Box, cardboard, shoe box size                                      |
| Thermometer, outdoor, with Celsius and Fahrenheit measurements | Cardstock printed with coins (included in the supply kit) or coins |
| Cardstock printed with sock shapes to cut out                  | Clay, 4-6 oz   |
| Compass, 25 mm or larger size                                  | Container, about 2 oz  |
| Cotton balls, 1-2 cups   | Deck of cards such as "Go Fish" game                               |
| Dowel, 8" X 5/8"   | Drinking glass, plastic 12 oz                                      |
| Forceps or tweezers  | Globe, inflatable  |
| Hole puncher, single   | Honey, small packet  |
| Inflatable ball (soccer ball size)                             | Inflatable beach ball, about 6"                                    |
| Jump rope, kid's size  | Magnet, with center hole   |
| Magnifying glass, 50mm or larger                               | Nails, 1.5"-2", QTY 3  |
| Paper clips, QTY 12  | Paper towels (blotting paper), 6 sheets                            |
| Paper, 8 1/2" X 11", QTY 10                                    | Paper, legal size, QTY 12  |
| Paper, poster, about 11" X 17", 3 Pieces                       | Paper, roll of blank white, 24" X 10'                              |
| Pin, sewing type   | Pine cones, QTY 3  |
| Plate, plastic, 9"   | Potting soil, 1.5 cups   |
| Push pins, QTY 3   | Starting pots, 2 1/2" X 2 1/2", QTY 2                              |
| Straw, plastic drinking  | String, cotton 16'   |
| Crayons (64ct)   | Tomato seeds, QTY 8  |
| Cardboard, about 11" X 17"                                     | Multi-Color Construction Paper                                     |
| Toothpicks, QTY 10   | Wax paper, 12" pieces, QTY 4                                       |
| Wood dowel (or stick), 12"                                     | Yarn, 12' for 4 pieces of finger knitting                          |
| Yarn, 8", 6 pieces   | Empty toilet paper roll  |
| Socks (from family laundry)                                    | Hard boiled eggs, QTY 7  |
| Large box (big enough for the student to sit in)               | Rope for tug of war  |
| Gallon or half gallon plastic milk jug                         | Hat  |
| Flowers or plants for pressing                                 | Old sheet or towel   |
| Soapy water  | Iron   |
| Pre-made calendar or available calendar                        | Peanut butter  |
| Empty milk carton  | 1 cup of Crisco or shortening                                      |
| Water  | Large pot, pitcher, or sink filled with water                      |

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|                      |                       |
|----------------------|-----------------------|
| Marbles (optional)   | Play Dough (optional) |
| Magazines (optional) | Popcorn (optional)    |
| Toys (optional)      |                       |

## Grade 2: Materials

The list below details the required materials that are needed for grade 2.

### Materials Needed

|   |  |
|---|--|
| Bag of Beans, for counters, about 130 beans | String, 13 feet  |
| Birdseed, 1 cup                             | Towel  |
| 3" X 5" Index Cards (100pk)                 | Multi-Color Construction Paper                         |
| Hole punch, single                          | Wax Paper, 10" X 12", QTY 10                           |
| Rubber bands, colored                       | Push pins, tall, QTY 25                                |
| Globe (inflatable)                          | Seeds, beans, QTY 6                                    |
| Pots for plants, 2.5" square, QTY 3         | Yarn, red, blue and green, 8' each                     |
| KoKo's Kitten (Francine Patterson) Book     | Yarn, 8", QTY 9  |
| Popsicle Sticks (craft sticks), QTY 2       | Potting soil, about 2 cups                             |
| Iron  | Small objects for measuring (string, paperclips, etc.) |
| Large grapefruit or orange                  | Leaves (evergreen and / or deciduous)                  |
| Old sheet or towel                          | Gum, about 10 pieces                                   |

## Grade 3: Materials

The list below details the required materials that are needed for grade 3.

### Materials Needed

|  |  |
|--|--|
| Balloons, 9", QTY 2                                  | Pitcher (Gallon)   |
| Brass Brad   | Plastic bowl, 12 oz  |
| Cardboard, 8.5" X 11", QTY 3                         | Clay, air dry, 2.5 pounds  |
| Clay, any color, 4 oz nondrying                      | Clear plastic or plastic wrap, 6" X 6"   |
| Construction paper, Blue 3 hole pre-punched, 7 pages | Printed sheet of coins with 50 pennies, 4 dimes, 1 nickel, 1 quarter, 1 dollar bill, and 30 counters |
| 3x5 Index Cards (300)                                | Tempera Paint (R,Y,B) with small roller  |
| Cups, foam, 3 to 6 oz, QTY 2                         | Cups, paper, 3-5 oz, QTY 3   |
| Cups, plastic clear, 12 oz, QTY 2                    | Cups, plastic clear, 9 oz, QTY 3   |
| Eye dropper  | Foam craft material, 8.5" X 11"  |
| Foam rod, round ½" X 20'                             | Food coloring (red and green), 5 mL each   |
| Globe, inflatable, 10" to 14"                        | Hole puncher, single hole  |
| Jar with lid, 6 oz to 12 oz                          | Liquid Measuring Cup, 1 cup (8 oz)   |
| Liquid Measuring Cup, 4 cups / 1 liter               | Magnifying glass, 2x to 10 x   |
| Nail, 2 ½"   | Outdoor thermometer / general purpose, F/C   |
| Paper clips, large, QTY 12                           | Permanent Marker, black  |

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|  |   |
|--|---|
| Plate, paper, 9"                               | Plate, plastic, 9"  |
| Plate, small paper 6", QTY 2                   | Cotton balls, about 1 quart                                   |
| Rubber band, 3"                                | Sheets of Hundred Blocks, QTY 13                              |
| Sponge, standard, 2" X 2" X ½" (clean)         | Sponge, standard, 2" X 4" X ½"                                |
| Spoon  | Steel washer, 7/16 – ½"                                       |
| String, cotton, 10 feet                        | Tablespoon  |
| Tape measure, 60" cloth with metric and inches | Teaspoon  |
| Toothpicks, box of 100                         | Watercolor paper  |
| Yarn, 14 feet                                  | Yarn, ball, 30-60 feet  |
| Wire hanger                                    | Cylinder object such as a crayon                              |
| Gallon job                                     | Meat thermometer  |
| Body temperature thermometer                   | Dictionary, print or online                                   |
| Lamp from your home or school                  | Gallon container or similar bowl or pan                       |
| Ice cubes                                      | Globe and / or world maps that indicate terrain (Google maps) |
| Avocado or sweet potato                        | Celery stalk  |
| Flower   | Leaf  |

## Grade 4: Materials

The list below details the required materials that are needed for grade 4.

### Materials Needed

|   |  |
|---|--|
| Aluminum Foil, about 12" X 10"                                      | il, zip lock                               |
| Bags, 4" X 6" 4 mil, zip-close plastic, QTY 3                       | Balloons, 9", QTY 3                        |
| Battery, D  | Bowl, 12 oz foam, QTY 4                    |
| Box for a diorama, shoebox size                                     | Car, small toy                             |
| Chalk, ½ Teaspoon, ground up  | Clay, air dry, 8 oz                        |
| Clay, modeling, 2 oz each (blue, brown, green, white, gray, yellow) | Container, plastic, 6 quarter, QTY 2       |
| 3x5 Index Cards (100pk)   | Highlighters – 4 Colors, No Yellow         |
| Craft sticks, small, wooden, QTY 4                                  | Cup, clear plastic, 9 oz                   |
| Cups, 12 oz clear plastic, QTY 8                                    | Cups, paper, about 3 oz, QTY 4             |
| Dirt, ½ teaspoon  | Drawing paper, 8.5" X 11", 28 pound, QTY 6 |
| Epsom salt, 12 oz   | File folders, manila, tabbed, QTY 7        |
| Flour, 1.1 cup  | Foam, plastic, 2" X 3" X ½"                |
| Food coloring (any color will work)                                 | Inflatable globe                           |
| Gumdrops, 5 of one color, 1 of each of 4 colors                     | Index cards, 4" X 6", QTY 30               |
| Indoor holiday light, 1 bulb with wires attached                    | Jars with lids, clear plastic, 6 oz, QTY 8 |
| Liquid measuring cup, 1 cup / 250 ml size (metric & standard)       | Match, QTY 3                               |
| Measuring spoon, ½ teaspoon   | Measuring spoon 1 tablespoon               |
| Nail, 3", zinc (galvanized nails are zinc coated)                   | Oil, ½ teaspoon cooking                    |
| Pebbles, 1 cup  | Pitcher ½ gallon                           |

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|  |   |
|--|---|
| Plate, white foam, 9", QTY 1             | Plywood, about 5" X 11"   |
| Potting soil, 1.5 quart                  | Protractor  |
| Salt, 1.75 cups                          | Sand, 1.25 quart  |
| Soap, ½ teaspoon liquid                  | Soap, ½ teaspoon solid laundry  |
| Socks, 1 pair                            | Sponge, 2" X 2" X ½" (simple, inexpensive sponge with no scrubber side) |
| Spoon, large mixing                      | Straight pin  |
| Straw, clear plastic drinking            | String, light cotton, 6'  |
| Sugar cubes, QTY 6                       | Sugar, 3 teaspoons of regular granular                                  |
| Thermometer, 6"                          | Thumbtacks, QTY 2 metal   |
| Toothpicks, QTY 16                       | Vinegar, 4.2 oz   |
| Wax paper, 12" long, QTY 7               | Wire, copper with insulation, ends stripped, 20 gauge, 12"              |
| Wire, copper, 3", bare thick 10-14 gauge | Wood block, about 1.5" X 3.5" X 4"                                      |
| Poster Board, 11" X 17", 3 Pieces        |   |

### Language Arts Novels

| Semester A                                    | Semester B                                       |
|---|--|
| A Tale of Despereaux by Kate Dicamillo        | Wringer by Jerry Spinelli                        |
| Bud, Not Buddy by Christopher Paul Curtis     | Pictures of Hollis Woods by Patricia Reilly Giff |
| Tales of a Fourth Grade Nothing by Judy Blume | Shiloh by Phyllis Reynolds Naylor                |

## Grade 5: Materials

The list below details the required materials that are needed for grade 5.

### Materials Needed

|   |   |
|---|---|
| Comb, 4-inch plastic  | Pennies, QTY 8  |
| Balloons, 12", QTY 2  | Cardboard, 8.5" X 11", QTY 2  |
| Cheesecloth, 8" X 8", QTY 2   | Clothespin  |
| Container, 6 qt plastic shoebox size (to hold the water)                        | Containers, small plastic with similar volume and different shapes, QTY 3 |
| Dice, QTY 2   | Dried mint leaves   |
| Dried sweet basil   | Fabric, soft such as lightweight flannel, 9" X 9", QTY 2                  |
| Flashlight  | Ground cloves   |
| Needle and thread   | Paper towel, 1 sheet  |
| Paper, drawing, 3 sheets  | Rubber bands, 3"  |
| Small mirror, about 2" X 3"   | Tape measure, cloth   |
| Three types of seeds: corn (maize), bean (lima or other large bean), and radish | Waxed paper, 4" X 3"  |
| Wineglass, with thin rim  | Ziploc or plastic lunch bag, quart size                                   |
| 3x5 Index Cards (10)  | Highlighter - Blue  |
| Masking Tape  | Multi-Color Construction Paper  |

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|                                |   |
|--------------------------------|---|
| Poster Board 8.5" X 11"        | Jars with lids, clear plastic, 6 oz, QTY 8  |
| Calculator, handheld or online | Rectangular prisms of any size from around your home or school (tissue box, shoe box, cereal box, etc.) QTY 5 |
| Graph paper, can be printer    | Paper towel tube  |
| Rose petals                    |   |

### Language Arts Novels

| Semester A  | Semester B                                 |
|---|--|
| Because of Winn Dixie by Kate Dicamillo                 | Maniac Magee by Jerry Spinelli             |
| Number the Stars by Lois Lowry                          | Out of the Dust by Karen Hesse             |
| The Watsons Go to Birmingham by Christopher Paul Curtis | Island of the Blue Dolphin by Scott O'Dell |

## NCAA Approved courses

Following is a list of NCAA approved course offered.

- Algebra I
- Algebra II
- Biology
- Chemistry
- Economics
- English I: Survey of Literature
- English II: World Literature
- English III: American Literature
- English IV: British Literature
- Environmental Science
- French I
- French II
- Geometry
- German I
- German II
- Honors Algebra I
- Honors Algebra II
- Honors Biology
- Honors Chemistry
- Honors Economics
- Honors Geometry
- Honors Physics
- Honors Statistics
- Honors U.S. Government
- Honors U.S. History
- Honors World History
- Latin II
- Latin III
- Physics
- Precalculus
- Spanish I
- Spanish II
- Spanish III
- Statistics
- U.S. Government
- U.S. History
- World History

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