CATHOLIC VIRTUAL

2023-2024

Course Offerings

Updated January 2023

Courses Available Starting July 1, 2023

2023-2024 Course Offerings

View our HGS Technology Requirements.pdf to learn more about the hardware and software needed for coursework in our program.

2023–2024 Course Offerings

HIGH SCHOOL ENGLISH

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.

Prerequisite: English I

Customer-Provided Required Physical Materials:

- *Picture Bride* by Yoshiko Uchida; ISBN-10: 9780295976167; ISBN-13: 978-0295976167[§]
- *Night* by Elie Weisel; ISBN-10: 9780374500016; ISBN-13: 978-0374500016[§]
- *To Kill a Mockingbird* by Harper Lee; ISBN-10: 0060935464; ISBN-13: 978-0060935467[§]
- *Fallen Angels* by Walter Dean Myers; ISBN-10: 0545055768; ISBN-13: 978-0545055765[§]
- *The Old Man and The Sea* by Ernest Hemingway; ISBN-10: 0684801221; ISBN-13: 978-0684801223[§]
- *Rita Hayworth and Shawshank Redemption* by Stephen King; ISBN-10: 1508218536, ISBN-13: 978-1508218531

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 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.

English I (1.0 credit) and Honors English I (1.0 credit)

English I has been designed to integrate all aspects of Language Arts standards into engaging and interactive units organized around reading, writing, and comprehension skills. Students will dissect and analyze the basic elements of plot, setting, mood, character development, narrative devices, theme, and author's perspective in a variety of literary genres. Students will analyze and synthesize information from different texts, including graphic aids. Students will write in a variety of modes and tap into the power of research as they deepen their understanding of a variety of topics. Throughout this year-long course, students will also reinforce skills that support the study of other disciplines such as science, math, world languages, and social studies.

English II (1.0 credit) and Honors English II (1.0 credit)

This course expands on skills gained in English I. Students will analyze a wide variety of world literature from ancient to contemporary literary periods, examining author's style and voice. 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)

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)

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

Each of these courses has been approved by the College Board.

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: (*All works have rhetorical merit for the AP English student; bold texts deal with mature subject matter or contain adult language or situations. Students are told, "If this is a concern for you or your family, please choose a different text from the list."*)

Segment One: *Choose one of the following:*
- *Zen in the Art of Writing* by Ray Bradbury
- *On Writing Well* by William Zinsser

Segment Two: *Choose one of the following:*
- *Narrative of the Life of Frederick Douglass* by Frederick Douglass *(Note: This text can be read online.)*
- ***A Work in Progress: A Memoir* by Connor Franta**
- *The Reason I Jump: The Inner Voice of a Thirteen-Year-Old Boy with Autism* by Naoki Higashida
- ***The Color of Water: A Black Man's Tribute to His White Mother* by James McBride**
- ***The Glass Castle: A Memoir* by Jeannette Walls**
- ***I am Malala: The Girl Who Stood Up for Education and Was Shot by the Taliban* by Malala Yousafza**
- ***I Know Why the Caged Bird Sings* by Maya Angelou**
- *Dust Tracks on a Road* by Zora Neale Hurston

- *Incidents in the Life of a Slave Girl* **by Harriet Jacobs** *(Note: This text can be read online.)*
- *The Story of My Life* by Helen Keller *(Note: This text can be read online.)*

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

AP® English Literature and Composition (1.0 credit)[* ‡ ‡‡]

The AP® English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students 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: (*All works have rhetorical merit for the AP English student; bolded texts deal with mature subject matter or contain adult language or situations. If this is a concern for you or your family, please choose a different text from the list.*)

<u>Segment One:</u>
- *Death of a Salesman* by Arthur Miller
- *Interpreter of Maladies* by Jhumpa Lahiri
- *Heart of Darkness* by Joseph Conrad *(Note: This text is available online; keep in mind, however, hard copies of the book will be easier to read and annotate.)*
- *Wuthering Heights* by Emily Brontë *(Note: This text is available online; keep in mind, however, hard copies of the book will be easier to read and annotate.)*

Students choose one of the following:
- ***Half of a Yellow Sun* by Chimamanda Ngozi Adichie**
- ***The Handmaid's Tale* by Margaret Atwood**
- *Fahrenheit 451* by Ray Bradbury
- ***The Enchanted* by Rene Denfeld**
- *Invisible Man* by Ralph Ellison
- *Love in the Time of Cholera* by Gabriel Garcia Marquez
- *Water for Elephants* by Sara Gruen
- *For Whom the Bell Tolls* by Ernest Hemingway
- ***The Kite Runner* by Khaled Hosseini**
- *Brave New World* by Aldous Huxley
- *The Unbearable Lightness of Being* by Milan Kundera
- ***Circe* by Madeline Miller**
- *1984* by George Orwell
- ***Fear and Loathing in Las Vegas* by Hunter Thompson**

- ***The Color Purple* by Alice Walker**
- *Sing, Unburied, Sing* by Jesmyn Ward
- ***Native Son* by Richard Wright**

<u>Segment Two:</u>
- *The Grapes of Wrath* by John Steinbeck
- *Hamlet* by William Shakespeare *(Note: This text is available online; keep in mind, however, hard copies of the book will be easier to read and annotate.)*

<u>Students choose one of the following:</u>
- *Alias Grace* by Margaret Atwood
- *Sense and Sensibility* by Jane Austen
- ***Post Office* by Charles Bukowski**
- *The Stolen Child* by Keith Donohue
- *As I Lay Dying* by William Faulkner
- *Still Alice* by Lisa Genova
- ***Jude the Obscure* by Thomas Hardy**
- *Portrait of the Artist as a Young Man* by James Joyce
- *Poisonwood Bible* by Barbara Kingsolver
- *The Moor's Account* by Laila Lalami
- *The Spanish Prisoner* by David Mamet
- ***The Road* by Cormac McCarthy**
- ***Lolita* by Vladimir Nabokov**
- *Binti: The Trilogy* by Nnedi Okorafor *(Note: This is a trilogy of novellas, so all three books would be the equivalent of one of the other choices.)*
- ***Fight Club* by Chuck Palahniuk**
- ***Confederacy of Dunces* by John Kennedy Toole**
- ***The Hummingbird's Daughter* by Luis Alberto Urrea**
- *Bury My Heart At Wounded Knee* by Dee Brown
- *The Boys in the Boat* by Daniel James Brown

HIGH SCHOOL MATH

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

Algebra I is the foundation for high school mathematics and the bridge from the concrete to the abstract study of mathematics. Throughout this course, students will extend their experience with tables, graphs, and equations; solve linear equations, inequalities, and systems of linear equations and inequalities; and begin the process of working with polynomials and quadratic relationships. Algebra students will expand their knowledge of the number system to include irrational numbers, generate equivalent expressions, and use formulas.

<u>Prerequisite</u>: Pre-Algebra

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

In Algebra II students conceptualize, analyze, and identify relationships among functions. Topics in the course include equations and inequalities, systems, functions (from polynomial to logarithmic functions), conics, and trigonometry. Students also explore probability and statistical analysis while deepening an understanding of the applications of algebra, trigonometry, statistics, and geometry.

<u>Prerequisite</u>: Algebra I

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023

4

Consumer Math (1.0 credit)

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

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

Geometry is the branch of mathematics that studies the properties and relationships of lines, shapes, area of surfaces, and volume of solids. Geometry also answers questions about shape, size, relative position of figures, and the proportions of space by exploring objects in two and three dimensions. Throughout this year-long course, students will have the opportunity to make conjectures about geometric situations and to apply theorems and postulates for writing proofs. Students will also expand upon preexisting knowledge of algebra and basic geometry skills while studying trigonometry, coordinate geometry, and proofs.

Prerequisite: Algebra I or its equivalent

Honors Calculus (1.0 credit)* ‡ ‡‡

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

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

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

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, are, 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 3 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

Pre-Algebra

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

Precalculus (1.0 credit)[‡]

In the Precalculus course students will be presented with a comprehensive study of functions and move into an analysis of rudimentary calculus concepts, such as the difference quotient and the notion of "taking a limit." In addition to introducing students to terminology and concepts essential to the study of calculus, this course will also help develop reasoning and analytical skills that may be applied to problems in the real world. Familiarity with these topics is especially important for students intending to study calculus, physics or other sciences, and engineering in college.
Customer-Provided Required Physical Materials:
An online graphing calculator - Choose from one of the following:
- Symbolab - https://www.symbolab.com/graphing-calculator
- Mathway - https://www.mathway.com/graph
- GeoGebra - https://www.geogebra.org/graphing?lang=en
- Desmos - https://www.desmos.com/calculator

Statistics (1.0 credit) and Honors Statistics (1.0 credit)[‡]

Statistics 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:
An online graphing calculator - Choose from one of the following:
- Symbolab - https://www.symbolab.com/graphing-calculator
- Mathway - https://www.mathway.com/graph
- GeoGebra - https://www.geogebra.org/graphing?lang=en
- Desmos - https://www.desmos.com/calculator

ADVANCED PLACEMENT® MATH

Each of these courses has been approved by the College Board.

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® 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:
- Students will need a computer or laptop for this course; tablets are not sufficient.
- graphing calculator
- JAVA, BlueJ (free download)

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

Anatomy and 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.

Biology (1.0 credit) and Honors Biology (1.0 credit)

Biology is the science of life or living matter in all its forms and phenomena, including its origin, growth, reproduction, structure, and behavior. Throughout this course, students will investigate the relationship between structure and function and apply it to the study of topics such as molecules, cells, organisms, and biological systems. They will learn how the human body works and what makes living things unique. Students will also learn about the interdependence and interactions of biotic and abiotic components of the environment, and about mechanisms that maintain continuity and lead to changes in populations over time.

Chemistry (1.0 credit) and Honors Chemistry (1.0 credit)[‡]

Chemistry is the investigation of atomic and molecular-level properties and interactions. The course focuses on properties of matter, atomic structure, and basic atomic bonding.

Customer-Provided Required Physical Materials:

An online graphing calculator - Choose from one of the following:

- Symbolab - https://www.symbolab.com/graphing-calculator
- Mathway - https://www.mathway.com/graph
- GeoGebra - https://www.geogebra.org/graphing?lang=en
- Desmos - https://www.desmos.com/calculator

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

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

- 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)

Environmental Science (1.0 credit)

Environmental Science is a course designed to show thematic connections between a variety of science disciplines including biology, chemistry, and physics. Throughout this year-long course, students will gain 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.

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.

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.

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

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

Physics examines the relationship between matter and energy and how the two interact. Using an inquiry-based approach throughout this year-long course, students explore both physics concepts and the math used to describe them. The course integrates STEM and physics content standards for topics including mechanics, waves and sound, light and optics, electricity and magnetism, nuclear science, and modern physics.

ADVANCED PLACEMENT® SCIENCE

Each of these courses has been approved by the College Board.

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

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

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* – Raymond Chang and Jason Overby – 13th Edition, 2019, ISBN-13: 9781259911156; ISBN-10: 1259911152
- *Princeton Review AP Chemistry Premium Prep*, 2022; ISBN-10: 0525570578; ISBN-13: 978-0525570578
- 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

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:
- graphing calculator
- *OpenStax College Physics Digital*; ISBN-10: 1947172018; ISBN-13: 9781947172012
- *Cracking the AP Physics 1 Exam, 2020 Edition*; ISBN-10: 0525570705; ISBN-13: 978-0525570707
- Lab Materials (https://accelerate.education/wp-content/uploads/2019/08/APPhysics_MaterialsInfo.pdf)

HIGH SCHOOL SOCIAL STUDIES

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.

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.

Economics (0.5 credit) and Honors Economics (0.5 credit)

Economics introduces the principles and the applications of economics in everyday life. Students develop an understanding of limited resources and compare it with unlimited wants and needs. Economics allows students to learn how individual and national economic decisions are made to allocate goods and services among competing users, problem solve as they focus on understanding economic problems, learn the laws of demand and supply, examine market organization (labor and financial markets), discover how firms deal with competition, and how poverty and economic inequality impact individuals in the community. The goal of this single-semester course is for students to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting focused on developing their own views on current economic and monetary issues.

Honors Art History and Criticism I (1.0 credit)* ‡‡

In this course, students will understand the political, cultural, and religious changes throughout history that are depicted within art. This course is an opportunity for students to reflect on how art was and is used as a vehicle to communicate, depict political and religious propaganda, and serve as evidence of cultural shifts and changes. Students will be challenged to contemplate the connection between art and context through reflective writing assessments and will build upon knowledge to understand how art reflects and communicates cultural change and evolution.

Psychology (1.0 credit)

Students in this course will learn a brief history of psychologists and their experimental methods. In the first semester, they will examine personality theories, human development, consciousness, and more. In the second semester, students exam the nature of intelligence in humans and animals, learn about classical and operant conditioning, and investigate social psychology and psychological disorders.

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.

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 make up the modern government of the United States. In this single-semester course, 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 the 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. Another goal is to teach the power of the media and of public opinion. These concepts will illuminate the past and current struggles for civil rights and liberties, as well as how representative government functions in the United States.

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

U.S. History expands upon basic skills and knowledge acquired from previous history and social studies courses. Throughout this year-long course, students will learn about historical trends, breaks with tradition, and systems of political thought that supported and gave rise to the United States as a democratic republic. Additionally, students will study early exploration, colonization, the rise of empires, revolutions, and broad historical movements such as westward expansion and progressivism.

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.

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

World History expands upon basic skills and knowledge acquired from previous history and social studies courses. Throughout this year-long course, students will examine important world civilizations from different eras, continents, and regions. Students will study ancient civilizations in the cradles of civilization, including Mesopotamian civilizations in the Fertile Crescent. The course also traces the rise and fall of important empires or dynasties in Egypt, China, India, Africa, and the Middle East. Students trace the causes and effects of colonization; slavery; global trade; economic systems; international diplomacy; political, economic, and social revolutions; and military conflicts, as well as how they helped to shape the modern world.

ADVANCED PLACEMENT® SOCIAL STUDIES

Each of these courses has been approved by the College Board.

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® 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* (12th edition, eText); ISBN-10: 0135260434; ISBN-13: 9780135260432
- *Princeton Review AP European History Premium Prep, 2022*; ISBN-10: 0525570659; ISBN-13: 978-0525570653

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

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   12

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® 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

AP® World History Modern (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
- *Princeton Review AP World History: Modern Premium Prep, 2022;* ISBN-10: 0525570810; ISBN-13: 978-0525570813

HIGH SCHOOL WORLD LANGUAGES

American Sign Language I (1.0 credit)* ‡‡

Jump start an American Sign Language journey by learning the basics of this visual language and exploring the Deaf culture. Students will broaden their concept of communication through connections and comparisons to their own culture and community.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   13

American Sign Language II (1.0 credit)* ‡‡

This course reinforces the fundamental skills acquired in the American Sign Language I course. Students continue their journey by increasing their interpretive and communication skills of this visual language while continuing to explore the Deaf culture. Students will broaden their concepts of communication through connections and comparisons to their own culture and community.

Prerequisite: American Sign Language I

Chinese I (1.0 credit)* ‡‡

Students will immerse themselves in the beauty of the Chinese language and the richness of its diverse cultures. In the Chinese I course; students will learn beginning grammar and vocabulary skills to help build basic fluency and language proficiency. They will explore the culture and apply what they learn through written practice, listening, and speaking exercises.

Chinese II (1.0 credit)* ‡‡

Chinese II enables students to further develop the communicative skills of listening, speaking, reading, and writing of Mandarin Chinese at a more advanced level. Students are immersed in Chinese culture as virtual exchange students in China. Virtual excursions from one Chinese city to another expand their vocabulary helping them learn to interact with others and use appropriate terms to communicate in a variety of everyday situations.

Prerequisite: Chinese I

Chinese III (1.0 credit)* ‡‡

In Chinese III, students continue their study of Chinese Mandarin, continuing to build their knowledge of vocabulary, sentence patterns, and grammar points in communicative contexts. Students enhance their Chinese Mandarin listening and speaking skills, such as pronunciation and intonation while also developing in-depth reading and writing strategies and skills. This course improves students' reading abilities, and students can write in Chinese in various formats including journals, letters, invitations, and essays. The course also improves students' knowledge and skills in writing simplified Chinese characters. In this course students continue learning about Chinese culture, including the origins, histories, anecdotes, and etiquettes for various cultural settings, events, and occasions. Students also learn to compare the Chinese culture with their own.

Prerequisites: Chinese I and II

French I (1.0 credit)

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

French II (1.0 credit)

In French II, students focus on the continuation and enhancement of language skills presented in French I. Vocabulary and grammar structures are revisited and expanded to provide students an opportunity to move towards an intermediate comprehension level. Speaking and listening skills are enhanced through recommended real-life voice activities. Listening skills are honed through online dialogues. Reading and writing skills are developed through access to completion of meaningful activities, reading of culturally-related articles of interest and responding to reading in the French language.

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

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

Latin I (1.0 credit)* ‡‡

Latin I is designed to build a foundation in Latin grammar and vocabulary. Students are acquainted with Olympic gods and with the everyday life of the typical Roman as they set out on a journey as big as their imagination, with a passport to some of the world's most exciting places. Students improve their command of the English language by studying Latin and gain a better understanding of today's laws and culture by getting into the Roman mind. **Special Note**: Latin students will focus more on reading and interpreting written passages rather than using oral modes of communication.

Latin II (1.0 credit)* ‡‡

In the Latin II course, students will build upon their first level grammar and vocabulary skills to help increase fluency and language proficiency. They will explore the culture and apply what they learn through translation practice as well as writing, listening, and conversation exercises. Students will learn all about the different eras of Rome—from Foundation to Fall.
Special Note: Latin students will focus more on reading and interpreting written passages rather than using oral modes of communication.
Prerequisite: Latin I

Latin III (1.0 credit)* ‡‡

In Latin III, students take their knowledge to the next level by strengthening their Latin vocabulary and appreciation for well-crafted writing. Students read some of the best Latin prose and poetry ever written or spoken and recognize why Latin, and those who spoke it, are still relevant today. In Latin III, students access the timeless words of the greatest Roman poets, storytellers, and orators. Students' skills with the Latin language give them direct access to the beauty and power of these great authors' thoughts. Caesar tells how he conquered the three parts of Gaul. Cicero reminds Romans of the virtues that made their country great. Catullus shows how he could express the deepest human emotions in just a few, well-chosen words. **Special Note**: Latin students will focus more on reading and interpreting written passages rather than using oral modes of communication.

Prerequisite: Latin II

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

Honors Spanish III (1.0 credit)* ‡‡

In Honors Spanish III, students dive into the rich diversity of Hispanic culture across the globe by exploring the tastes, sights, and sounds of this dynamic language that reflects triumph, struggle, celebration, and so much more. During this cultural journey, students improve conversational, vocabulary, and writing skills through authentic tasks. Short of obtaining a passport, there is no better way to discover new lands, peoples, or experiences as students take their Spanish language abilities to the next level.

Prerequisites: Spanish I and II

Honors Spanish IV (1.0 credit)* ‡‡

This enhanced version of Spanish IV will certainly expand the student's language skills. However, it will also take them on a fascinating cultural journey. Students will experience the language's rich traditions and superstitions. Through exploring the past, students will come to understand the importance of community, family, and personal relationships. They will be immersed in culture—movement, art, music, literature. Meeting real people and hearing their stories will allow students to gain new vocabulary, have better command of the language, and understand their role as a global citizen.

Prerequisites: Spanish I, II, and III

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

ADVANCED PLACEMENT® WORLD LANGUAGES

Each of these courses has been approved by the College Board.

AP® French Language and 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 and Culture (1.0 credit)‡

In AP Spanish Language and Culture, students will use the three modes of communication – interpretive, interpersonal, and presentational. Students will be provided opportunities to demonstrate their proficiency in each of the three modes. Each module is theme-based, providing ample opportunities to interpret written, print, visual, audiovisual, and audio text; speak with and write to others, and present by speaking and writing for an audience. This course prepares students for the AP exam.

Prerequisite: Spanish I, II, and III
Customer-Provided Required Physical Materials:
- Abriendo paso: *Temas y lecturas* 2014 Realize ISBN: 9780328954445 (1 year)
- Abriendo paso: *Gramatica* 2014 Realize ISBN: 9780328954346 (1 year)
- Optional: Princeton Review *AP Spanish Language & Culture Prep*, 2023

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.

Adobe After Effects (0.5 credit)† ††

In this course, students will explore the comprehensive Adobe After Effects software. Adobe After Effects is the industry standard for making motion graphics and special effects for presentations, internet content, and video. Both Windows and Mac OS systems can run After Effects, so students will uncover the nuances of working with each. The modules in the course will take students through the creation of a project from defining the audience to organization to publishing their creations.
Note: Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, students will need a laptop or computer for this course.

Advanced Drawing (0.5 credit)** ‡ ††

In Advanced Drawing, students review basic drawing skills and the elements and principles of design. They explore how each of these are used in art, expand their knowledge of art history, and explore, in depth, several different types of media and artistic styles in order to begin to define their personal aesthetic. All projects in this course will be original compositions by the student. At the end of the last four modules, students will participate in either a self- or peer-critique to help them learn to analyze their work and grow as an artist from the input of others. At the end of the course, students will compile and organize their artwork into a digital portfolio and write an artist statement that can be used as a record of personal accomplishment or as an application to a secondary art program or job.

Customer-Provided Required Physical Materials:

- drawing pencil set 2H, HB, 2B, 4B, 6B, 8B (preferably woodless)
- 9×12 multimedia sketch book – 60 sheets
- 18×24 pastel paper, assorted colors (gray, tan, black, and burnt umber) – 10 sheets
- oil pastels – at least 24-piece set
- high-quality colored pencils – 36-piece set (recommend Prismacolor brand or similar quality)
- chalk pastels – 24-piece set
- high-quality art markers (tombow, Prismacolor, or similar brand) water based or alcohol based – primary colors and flesh tones
- 1 black fine point Sharpie
- 1 black ultra-fine point Sharpie
- 1 kneaded eraser
- 1 white eraser
- 1 hand-held pencil sharpener

Optional Materials:

- Finishing spray for pastels
- Assorted blending stumps and tortillons
- 18×24 portfolio to keep artwork
- toolbox to keep supplies

Aeronautics and Space Travel (0.5 credit)††

This course introduces students to the history and near future of space travel. Students will explore the possibilities of moon bases, Mars colonies, and visiting the outer planets in our solar system and their moons. Students will also discuss important ethical and legal issues around space exploration, such as asteroid mining and war in space. The course gives an expansive view of the technologies, science, and theories that will make far-fetched dreams into realities during the student's lifetime.

Agricultural Communications II (1.0 credit)* †† ‡‡

Agricultural Communications II prepares students with specialized knowledge in agriculture and media as they learn to design and develop marketing materials, engage in the community, and address needs of agricultural producers and consumers in a moral and ethical way. Students write news stories, compose photographs, create publications, and develop audio and video press materials. They also practice presenting speeches and visual presentations, developing real-world skills that apply across career fields. Throughout the course, students explore opportunities and develop employability skills to prepare for a career in the agricultural communication field.

Prerequisite: Agriscience Foundations I recommended

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   18

Agricultural Communications III (1.0 credit)* †† ‡‡

As the global need for agricultural products grows, so does the need for effective communication between consumers and producers. Agricultural Communications III combines agricultural topics and science with the application of communication studies. Students continue the study of visual, verbal, and written techniques to communicate agricultural information to consumers, businesses, and government agencies. This course will provide real-world practice in writing, speaking, photography, graphic design, and web communication to prepare students to report and present agricultural topics with a detailed knowledge aimed to gain attention. Students will create a communications campaign, learn how to use social media to deliver communication messages, prepare a media kit, produce persuasive videos, modify photographs, create a web page, and effectively use their voice to present and debate agricultural topics.

Prerequisites: Agriscience Foundations I, Agricultural Communications II

Agriscience Foundations I (1.0 credit)* †† ‡‡

Agriscience Foundations involves the scientific study of agriculture and its local and global impact. Students will dive into agricultural history, learn about scientific and research concepts that drive the field, animal, and plant systems, as well as the effects of agriculture on the environment. This course also teaches about career opportunities available in the field and how students can promote themselves to land a dream job. Specialized lab activities provide students the hands-on practice needed to master the content, and they will have the unique experience of interviewing an agriscience worker related to a career of interest. At the end of the course, students have the opportunity to earn an industry certification!

Agriscience I (0.5 credit)††

This course will prepare students for careers in agriscience. Agriculture is the world's largest industry, so the critical nature of understanding how agriculture must thrive in unpredictable conditions cannot be overstated. Throughout the modules, students will gain an understanding of some of the fundamental issues in agriscience, including safety, environmental factors such as climate change and extreme weather conditions, plant and animal science, and food safety. Additionally, students will explore how they can emerge as leaders in such a complex and exciting industry!

Agriscience II (0.5 credit)††

In this course will explore the various components of agriscience careers and agricultural living. Beginning with career exploration, students will become familiar with the vast array of opportunities that exist in agriscience. They will discover what is necessary for the proper care and management of livestock from keeping living quarters clean to caring for newborn animals. Students will understand the ways in which plants, crops, and vegetation thrive in varying conditions. They will explore the fundamentals of running a successful agriscience operation as well as how agriscience affects and is affected by global economic conditions.

Prerequisite: Agriscience I

Agriscience III (0.5 credit)††

This course further delves into agriscience as a core global business. Students will explore fundamental business operations and structures as well as financial considerations. Students will understand the nutritional needs of livestock in order for them to be free from disease and be able to thrive in good health. Plants are heavily dependent on proper fertilization, irrigation, and nutrition to prosper. Thus, students will take a comprehensive look at the systems necessary to produce bountiful crops. The course will be rounded out learning about the tools and techniques needed to run an agriscience business and harvest crops.

Prerequisites: Agriscience I and II

Architectural Design I (0.5 credit)‡ ††

In this course, students will learn various concepts used in the design and architecture field. They will gain an understanding of basic architectural and civil drawings as well as prepare for the Autodesk® Certified User certification in AutoCAD exam. In addition to learning fundamental architectural drawing concepts like creating site plans, floor plans, and electrical plans, students will learn functions of Computer-Aided Drafting (CAD). CAD functions build on the foundation of architectural drawing, using specialized tools for enhancement, layout, and scale. Students will review the essentials of civil drawings including the interpretation and development of topographical illustrations. To round out the course, students will prepare computer-aided drawings to demonstrate utilizing software to perform activities such as drawing site plans, roof plans, and wall sections. Finally, students will be provided an overview of the requirements, structure, and preparation techniques for the Autodesk® Certified User certification in AutoCAD exam.

Customer-Provided Required Physical Materials:

AutoCAD - https://www.autodesk.com/education/edu-software/overview?sorting=featured&filters=individual (free)

Architectural Design II (0.5 credit)‡ ††

In Architectural Design II, students will review various concepts used in the design and architecture field. They will learn about additional CAD functions, professional ethics, and legal responsibilities as well as explore career options and complete a comprehensive Architectural Design project.

Prerequisite: Architectural Design I

Customer-Provided Required Physical Materials:

AutoCAD - https://www.autodesk.com/education/edu-software/overview?sorting=featured&filters=individual (free)

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.

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
- 2 sheets white watercolor paper (rough, heavy, stiff)
- 2 sheets rice paper 9 1/2 x12 (soft, translucent)
- 25 sheets newsprint, 9×1
- 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) programing 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

Building Maintenance Technology I (0.5 credit)††

The Building Maintenance Technology course will focus on all aspects of the construction industry from health and safety to the tools that every construction professional needs in their collection. Students will learn about the various roles in the industry as well as job outlooks, educational and experiential requirements, and salary information. Some activities will focus on career exploration to discover career options that best align with interests and talents. Students will learn basic construction math and how it is applied during design and building phases of projects. They will learn specifics about carpentry, construction drawings, framing floor systems, framing walls, and framing roofs. Throughout, they will establish a foundation for what opportunities exist for them in the industry.

Building Maintenance Technology II (0.5 credit)††

The Building Maintenance Technology II course will focus on construction components, masonry skills, and OSHA. Students will learn about the various masonry and concrete skills as well as safety measures. Some activities will focus on the real-world application of learned skills with hands-on components. Students will learn about erecting, plumbing, and bracing in relation to concrete as well as laying masonry units. Finally, students will learn important science skills for the construction industry and prepare for OSHA 30-hour Construction certification exam.
Prerequisite: Building Maintenance Technology I

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.

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.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   22

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.

Child Development (0.5 credit)[††]

This course is designed to help prepare students for their responsibilities as parents and caregivers of children. Topics include prenatal care, growth and development through age six, teen pregnancy, maternal health, parenting skills, and child guidance.

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 and Network Security Fundamentals (1.0 credit)[* †† ‡‡]

This inspiring course covers the fundamentals of computer safety, network security, and prevention of digital attacks. Students experience a hands-on approach to security strategies, expand their computer and networking security techniques, and improve their problem-solving skills. Students will also explore numerous employment opportunities in one of the fastest-growing industries – Cybersecurity.
Prerequisite: Digital Information Technology (recommended)

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.

Construction: Fundamentals and Careers (0.5 credit)[††]

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

Cybersecurity (0.5 credit)[††]

In the Cybersecurity course, students will learn about the practice of protecting networks, systems, and programs from digital attacks. They will better understand the aim of these attacks, such as destroying information, extorting money and resources, or disrupting business operations. They will learn about the challenges and opportunities that implementing cybersecurity measures can present. As attackers become more innovative, it is more important than ever to have effective cybersecurity channels in place to counter them. Students will learn about countermeasures and role recovery and their integral function in the cybersecurity realm. Additionally, students will learn what makes certain networks and systems more vulnerable to attacks. They will become adept at identifying potential viruses, worms, threats, and malware. The Cybersecurity course acts as a foundation on which to build extensive knowledge about threats to digital security.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   23

Cybersecurity Essentials (1.0 credit)* †† ‡‡

Have you or someone you know ever had personal information compromised? This inspiring course covers defensive strategies for computer, mobile device, and network security. You'll experience a hands-on approach to security strategies, expand your computer and networking security techniques, and improve your problem-solving skills. You will also explore numerous employment opportunities and prepare for one of the fastest-growing industries: cybersecurity.

Digital Art Imaging I (1.0 credit)* †† ‡‡

You interact with digital art every day, why not learn how to create it? In Digital Art Imaging I, you will explore the fundamental concepts, tools, and techniques of digital imaging. You'll learn how to use computers, digital cameras, editing software, and more to create digital artworks and use the critique process grow artistically as you evaluate and respond to your own work.

Digital Information Technology (1.0 credit)* †† ‡‡

Dive into an exciting course that will provide you with the foundational skills needed for exciting careers like game development, military defense, web design, and software engineering! You will explore Microsoft Office online applications, web design, emerging technologies, operating systems, project management, communication methods, Information Technology careers, and much more in this course. Learn about your strengths and how they relate to different career paths.

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 Savvy (1.0 credit)‡ ††

Digital Savvy is a one-year (two-semester) course covering required topics in most introductory "Information Technology" classes. Students should have minimal computer usage skills (e.g., keyboarding, mouse, and operating system navigation) prior to starting this course.
Customer-Provided Required Physical Materials: computer with the Windows 7, 8, or 10 operating system or MacOS 10.7 or higher course operating systems.

Early Childhood Education I (0.5 credit)††

The Early Childhood Education course is designed to provide an overview of the expectations and roles of the early childhood educator. The course provides details about childhood development, health, nutrition, and guidance strategies to help students understand the exciting and unique opportunities that a career in early childhood education can offer. The course is intended to prepare students for challenges they may face, but to emphasize the rewards of being able to influence the life of a young child. The ability to offer support to children as they learn, and grow is a point that is highlighted throughout each lesson.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Early Childhood Education II (0.5 credit)††

The Early Childhood Education II Course is designed to provide an overview of the professional expectations of being an early childhood educator. Throughout the course, students will learn about what it means to be a professional, including the significance of professional development in any educational role. They will review observational methods and the history of education in the United States, with a focus on early childhood and school-age programs. They will spend a significant portion of the course learning about the importance of Developmentally Appropriate Practice (DAP) and how to implement these strategies. Designing physical, social, and temporal environments will also be a major focus of the course, as will developing relationships with families and communities to strengthen their position and knowledge. Additionally, this course will prepare students for the Child Development Associate (CDA) certification exam.

Prerequisite: Early Childhood I

Education and Teaching Advanced (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.

Prerequisite: Teaching as a Profession

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.

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

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 and Safety (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.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Forensic Science I (1.0 credit)* †† ‡‡

Take a new look at forensics through the lens of some of the world's most famous and intriguing crime cases. This course examines the latest forensic techniques and innovations used to solve crimes. It also focuses on basic scientific principles and laboratory processes used in the field, such as DNA testing, presumptive tests, and material analysis. Investigative experiences for students include electrophoresis and evidence analysis techniques such as fingerprinting, blood typing, and fiber analysis. Students also study crime scene investigation (CSI) and evidence collection using mock crime scenes. **Note**: Case studies in forensic science examine evidence that may be sensitive to some students.
Prerequisite: Biology recommended

Foundations of Programming (1.0 credit)* †† ‡‡

Foundations of Programming will teach students the fundamentals of programming using the computer language Python. The course provides students with the concepts, techniques, and processes associated with computer programming and software development. Students will also explore the many programming career opportunities available in this high-demand field.

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.

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.

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

Health (1.0 credit)

In this course, students acquire the knowledge and skills they need to lead a healthy life. Topics include the impact of personal decisions on the student's own health; the basic science behind nutrition, exercise, stress, and psychology, and examine how these factors affect a person's overall health; the dramatic changes that the human body experiences from birth to death; and improving or maintaining one's own health.

Health and Fitness (1.0 credit)

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

Health Careers (0.5 credit)[††]

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

Health Science Foundations (1.0 credit)[* †† ‡‡]

Step into the Health Science Foundations course and learn what it takes to be a healthcare professional. This course is designed to provide the student with in-depth knowledge of the health care system and introduce them to various occupations in the field. Students will explore the educational requirements, licenses, and certifications for careers at multiple levels within the health care system. The learning focuses on communication and interpersonal skills, use of technology, ethics, and the development of critical thinking and problem-solving skills. Students will also learn first aid skills and how to assess vital signs.
Prerequisite: Anatomy and Physiology suggested

Healthcare Information and Management Systems (0.5 credit)[††]

In this course, students will explore the comprehensive world of healthcare information and management. Throughout the modules, students will learn about the history of the healthcare system as well as the current best practices in the field. They will explore the innovative technologies being developed and applied in patient care and patient privacy. Students will become familiar with the specific terminology utilized within the clinical and information technology systems. Students will investigate the complexities of the business of healthcare including data organization and security considerations. Finally, students will identify the ways in which communication and leadership go hand in hand with a thriving career in healthcare information and management systems.

Human Growth and Development (1.0 credit)[* †† ‡‡]

In this course, you'll learn about human growth development from infancy through adolescence, including ways to plan for working with students through those stages. You'll learn about different theories of development, as well as how to apply those theories to meet the varying needs of students in your classroom. You'll also learn what can affect a student's development, including health and safety concerns, heredity, and their environment. By continuing to develop a portfolio and participating in field observations, you'll observe children of various ages to see first-hand how teachers make the connection between theory and the classroom.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   27

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.

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.

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 Communications and Speech (0.5 credit)[††]

Beginning with an introduction that builds student understanding of the elements, principles, and characteristics of human communication, this course offers fascinating insight into verbal and nonverbal messages and cultural and gender differences in the areas of listening and responding. High school students enrolled in this one-semester course will be guided through engaging lectures and interactive activities, exploring themes of self-awareness and perception in communication. The course concludes with units on informative and persuasive speeches, and students are given the opportunity to critique and analyze speeches.

Introduction to Hospitality and Tourism (1.0 credit)[* †† ‡‡]

Introduction to Hospitality and Tourism dives into the numerous career avenues and business opportunities of the hospitality and tourism industry. Students will learn about airline, hotel, and cruise ship industries in addition to customer service and selling techniques. This course prepares students to launch their career in hospitality and tourism, with projects and take-aways for immediate use to help land their dream job.

Introduction to Information Technology (1.0 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
- Students will need a computer or laptop for this course; tablets are not sufficient.

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.

JavaScript (0.5 credit)‡ † ††

In this course, students learn how to start programming with JavaScript. Students learn the basics of JavaScript including testing, functions, objects, arrays, loops, conditional code, operators, and syntax basics. Students learn timing and animations, and how to debug. The class will conclude with a robust project that incorporates everything they learned in the semester. Note: Some YouTube videos are embedded within course.
Prerequisite: Students should have a working knowledge of HTML and CSS prior to taking this course.
Required materials:
- HTML Text Editor (choose one):
    - TextEdit – for use on Mac – comes with OS
    - Notepad – for use on Windows – comes with OS
- 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
- Students will need a Windows PC or Mac for this course; Chromebooks, iPads, and tablets are not sufficient.

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.

Leadership Skills Development (1.0 credit)* ‡‡

In Leadership Skills Development, students build skills to succeed in high school, college, and life. Students learn to act by pressing their "Turbo Button", manage their time by staying in the "Lasting Zone", chart their goals by creating a "North Star", and many other proven leadership techniques developed by the leadership training institute Mawi Learning. Whether students are struggling or already at the top of their game, Leadership Skills Development will give them new skills for a successful life.

Leadership Skills Development II (0.5 credit)

Increase your confidence and build your social skills as you learn how to overcome many of the toughest challenges teens face. Discover how your "super-charged" teen brain really works, so you can make better decisions, have more fun, and achieve more. Learn how to conquer peer pressure, social anxiety, and the unnecessary risks that can derail your future. By the end of your training, you will have new power to direct your own life and lead your classmates. Throughout the course, you will be coached by Mawi Asgedom, a Harvard graduate and student success expert who has written eight books and trained over 1,000,000 students.

LEED Green Associate (0.5 credit)††

This course introduces students to the LEED process. LEED, or Leadership in Energy and Environmental Design, is the global standard for green building certification. Throughout the course, students will gain an understanding of the various components of green building. The theme of sustainability and sustainable construction is woven throughout each module both in terms of physical environment and as it pertains to LEED certification.

Media and Communications (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.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   30

Microsoft® Excel (0.5 credit)‡ ††

This course introduces students to the world of Microsoft Excel. Students will get an insight into the use of the product within the business setting. Over 8 modules, students will learn everything from absolute basics like navigating Microsoft Excel to performing complex tasks like formulas and functions. This course prepares students for the Microsoft Office Associate Microsoft Excel Certification.

Customer-Provided Required Physical Materials: Microsoft® Excel

Microsoft® Outlook (0.5 credit)‡ ††

In this course, students will navigate Microsoft Outlook, which is the preferred email client for sending and receiving emails from the Microsoft Exchange Server. Outlook includes access to contact, email, calendar, and task management tools. Microsoft Outlook is a component of Office 365 and the Microsoft Office suite, including Microsoft Excel and PowerPoint. From fundamental processes like adding an account to more complex tasks such as customizing features to better accommodate specific needs, students will explore all that Microsoft Outlook can do.

Customer-Provided Required Physical Materials: Microsoft® Outlook

Microsoft® PowerPoint (0.5 credit)‡ ††

This course introduces students to the world of Microsoft PowerPoint. Students will get an insight into the use of the product within the business setting. Over 11 modules, students will learn everything from absolute basics like navigating Microsoft PowerPoint to performing complex tasks like 3DModels, Animations, and Transitions. This course prepares students for the Microsoft Office Associate Microsoft PowerPoint Certification.

Customer-Provided Required Physical Materials: Microsoft® PowerPoint

Microsoft® Word (0.5 credit)‡ ††

This course introduces students to the world of Microsoft word. Students will get an insight into the use of the product within the business setting. Over 11 modules, students will learn everything from absolute basics like navigating Microsoft Word to performing complex tasks like graphic elements and collaboration. This course prepares students for the Microsoft Office Associate Microsoft Word Certification.

Customer-Provided Required Physical Materials: Microsoft® Word

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.

Music of the World (1.0 credit)* †† ‡‡

Get ready to elevate your music knowledge to the next level. In this course, you will learn about Global musical traditions as you explore the function of music in a multitude of cultures. You will examine the fundamentals, sound, and structure of music to understand how music is representative of the culture it was created in.

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.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

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.

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)
- Students will need a laptop or computer for this course; Chromebooks, iPads, and tablets are not sufficient.

Procedural Programming (1.0 credit)[* †† ‡‡]

Procedural Programming (ProP) teaches advanced programming concepts using the computer language Python. You will learn techniques and processes associated with computer programming and software development. This course continues the study of computer programming concepts with a focus on the creation of software applications employing procedural programming techniques.

Project Management (0.5 credit)[††]

The Project Management course is intended to identify the key components of a career as a project manager. Students will review the basics in project management terminology, such as designating distinctions among projects, products, programs, and portfolios. They will delve into concepts like managing deliverables and creating engaging relationships with stakeholders. The primary components of project planning will be laid out and described in detail. Students will explore teams and organizational structures. They will discover project management tools and innovation being used in the industry. Overall, they will develop a greater understanding of the mechanisms that are in place to effectively carry out projects of any size through specific project management techniques.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

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 laptop or computer for this course; Chromebooks, iPads, and tablets are not sufficient.

Quickbooks® (0.5 credit)[‡ ††]

In this course, students will explore the functionality of QuickBooks Online. The subscription-based QuickBooks Online enables users to operate independently while on the go. All devices, including computers, tablets, and smartphones, can access and sync data. Users receive immediate access to the most current product and feature upgrades, and data is safely backed up. To help consumers save even more time, QuickBooks Online can link to more than 300 apps. Students will learn how to set up and manage their subscriptions. Additionally, they will learn about the various services and products that can be added. As students learn about the accounting functions, they will discover how to record transactions, expenses, and receipts.

Customer-Provided Required Physical Materials: QuickBooks® Online (subscription-based purchase)

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.

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.

Social Media (0.5 credit)[††]

This course will teach students that the world of Social Media revolves around them–their actions, decisions, and interests. They will examine how Social Media has evolved. They will understand how to find authenticity and truth within an online world where people can "be" anyone. They will also learn how their digital footprint makes a bigger impression than their physical one. Students will also discover that their voice is important. They are not only a reader–they are a writer. They don't just follow the news–they report it as a citizen journalist. And they don't just gather information–they crowdsource it.

Social Media Business Marketing (0.5 credit)[††]

The Social Media Business Marketing course is intended to prepare students to become Social Media Strategists. This course begins with an introduction to Social Media platforms and then goes in depth into the marketing and advertising strategies used to support a business in Business Social Media Marketing. Through activities and projects students will gain firsthand knowledge of this fulfilling field. This course prepares students for the Social Media Strategist certification.

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.

Startups and Innovation (0.5 credit)[††]

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

Study Skills and 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.

Swift App Development (0.5 credit)[‡ ††]

In this course, students will learn about the Swift App and its components. Apple developed the powerful and user-friendly programming language Swift for creating iOS, Mac, Apple TV, and Apple Watch apps. Developers have more freedom than ever before, and the open-source app allows anyone with an idea to create something incredible. From planning to navigation to building, students will learn how to take an idea and create something potentially revolutionary!
Note: Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, students will need a laptop or computer for this course.
Customer-Provided Required Physical Materials: Swift open-source app

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Teaching as a Profession (0.5 credit)††

Teaching can be a highly rewarding profession. Throughout the course, students will explore career opportunities within the field of education. They will learn what it means to be a professional in the classroom, whether it be working alongside co-teachers or managing an inclusive and diverse group of students. Students will learn about the code of conduct expected of educational professionals. Students will explore the history and best practices in the teaching profession as well as professional development opportunities. They will discover what it means to emerge as leaders in the field.

Technology for Hospitality and Tourism (1.0 credit)* †† ‡‡

This course takes the knowledge acquired in the Introduction to Hospitality and Tourism and narrows the focus to a study of how technology impacts the industry. This is the second course in a series to dive into the career avenues and business opportunities of the hospitality and tourism field, with a special focus on the computer technology and computer-related skills necessary to succeed in the profession. This course will prepare you even further for your launch into a hospitality and tourism career, with projects and activities that you will be able to apply to your search for a job in this high-demand industry.

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 of half of the course will guide you through all of the elements of putting on a professional theatrical production. You will learn about the entire production process, from playwriting through opening night, including elements of technical theater, the rehearsal process, and audience response. Whether you're an aspiring actor, technician, director, or producer, or even just an avid theater-goer, this course is for you.

Theatre, Cinema, and Film Production (1.0 credit)* †† ‡‡

Lights, camera, action! In Theatre, Cinema, and Film Production, students explore the elements of theatre and cinematic techniques used by those who create performance productions. Students compare the elements in theatre and film that serve the story and articulate the theme. Students also reflect upon the historical and cultural influences on productions and how those influences affect audiences. This course offers a detailed view of the creative, performance, and technical operations of theatre and film. Theatre, Cinema, and Film Production provides an elective credit and fulfills the performing/fine art requirement for high school graduation.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   35

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® (Not Credit-Bearing)

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

Virtual Tutor: SAT® (Not Credit-Bearing)

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

Wearable 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.

MIDDLE SCHOOL LANGUAGE ARTS

Language Arts 6‡

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:

Required Materials:

- *Seedfolks* by Paul Fleischman; ISBN-10: 0590511904; ISBN-13: 978-0064472074
- *The Giver* by Lois Lowry; ISBN-10: 9780544336261, ISBN-13: 978-0544336261
- *Esperanza Rising*; ISBN-10: ,9780439120425 ISBN-13: 978-0439120425

Optional Novels (1 per semester):

- *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
- *True Confessions of Charlotte Doyle* by Avi; ISBN-10: 0545477115; ISBN-13: 978-0545477116

Language Arts 7‡

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:

Required Anthology:

- *Poetry Speaks Who I Am* by Elise Paschen – ISBN-10: 1402210744, ISBN-13: 978-1402210747

Required Novels:

- *Julie of the Wolves* by Jean Craighead George; ISBN-10: 0064400581, ISBN-13: 978-0064400589 (Semester A)
- *The Outsiders* by S.E. Hinton; ISBN-10: 014240733X, ISBN-13: 978-0142407332 (Semester B)

Optional Novels (Choose 2):

- *A Day No Pigs Would Die* by Robert Newton Peck; ISBN-10: 0679853065; ISBN-13: 978-0679853060
- *Where the Red Fern Grows* by Wilson Rawls; ISBN-10: 0440412676; ISBN-13: 978-0440412670
- *Nothing but the Truth* by Avi; ISBN-10: 0545174155, ISBN-13: 978-0545174152
- *The Cay* by Theodore Taylor; ISBN-10: 0440416639; ISBN-13: 978-0440416630
- *A Christmas Carol*, by Charles Dickens; ISBN-10: 1503212831, ISBN-13: 978-1503212831([found on GP](#))

Language Arts 8[‡]

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:

Required Materials:
- *Poetry Speaks Who I Am* by Elise Paschen – ISBN-10: 1402210744, ISBN-13: 978-1402210747
- *Roll of Thunder, Hear Me Cry* by Mildred D. Taylor; ISBN-10: 0142401129, ISBN-13: 978-0142401125
- *Diary of a Young Girl: The Definitive Edition* by Anne Frank; ISBN-10: 0553577123, ISBN-13: 978-0553577129

Optional Novels (1 per semester):
- *My Brother Sam is Dead* by James Lincoln Collier; ISBN-10: 0439783607, ISBN-13: 978-0439783606
- *Across Five Aprils* by Irene Hunt; ISBN-10: 0425182789; ISBN-13: 978-0425182789
- *The Ox-Bow Incident* by Walter Van Tilburg Clark; ISBN-10: 0812972589, ISBN-13: 978-0812972580
- *That Was Then, This is Now* by S. E. Hinton; ISBN-10: 0140389660, ISBN-13: 978-0140389661
- *The Pearl* by John Steinbeck; ISBN-10: 014017737X, ISBN-13: 978-0140177374

MIDDLE SCHOOL MATH

Math 6

In this course, students will build on their basic math skills, learning how to add, subtract, multiply and divide integers, decimals, and fractions.

Math 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.

Pre-Algebra

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

Algebra I (High School Course – 1.0 credit)[§§]

Algebra I is the foundation for high school mathematics and the bridge from the concrete to the abstract study of mathematics. Throughout this course, students will extend their experience with tables, graphs, and equations; solve linear equations, inequalities, and systems of linear equations and inequalities; and begin the process of working with polynomials and quadratic relationships. Algebra students will expand their knowledge of the number system to include irrational numbers, generate equivalent expressions, and use formulas.

Prerequisite: Pre-Algebra

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   38

MIDDLE SCHOOL SCIENCE

Integrated Science 6‡

Science 6 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science, and then moves into forces and gravity, the stars, the Earth, the moon, and the solar system. In the second semester, the course focuses on ecosystems, the energy flow of life, green plants, energy, heat, and Newton's Laws.

Customer-Provided Required Physical Materials: common household materials

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.

Integrated Science 7‡

Science 7 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science, and then moves into waves and sound, light, lenses, electricity, and magnets and electricity. In the second semester, the course focuses on matter and chemical reactions, cells, the digestive system and human nutrition, the respiratory and circulatory systems, body movement and body systems including information processing and chemical messages.

Customer-Provided Required Physical Materials: common household materials

Integrated Science 8‡

Science 8 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature and history of science, and then moves into simple and compound machines; modern machines; Earth's history and structure; air, climate, and weather; and water. In the second semester, the course focuses on reproduction, heredity, and evolution; classification of living things; invertebrates and vertebrates; pollution; and human impacts on populations.

Customer-Provided Required Physical Materials: common household materials

Physical Science 8‡

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 ([Physical Science Lab Materials](#))

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.

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.

World Geography
This one-semester middle school course focuses on the regions of the world and helps students understand Earth's physical and human geography. Students analyze population and settlement patterns and how these impact human activities and their interactions with the physical environment.

MIDDLE SCHOOL WORLD LANGUAGES

French I (High School Course – 1.0 credit)[§§]
French I focuses on developing listening skills by repeated exposure to the spoken language. Speaking skills are encouraged through recommended assignments using voice tools. Reading and writing skills, as well as language structures, are practiced through meaningful, real-life contexts. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

French II (High School Course – 1.0 credit)[§§]
In French II, students focus on the continuation and enhancement of language skills presented in French I. Vocabulary and grammar structures are revisited and expanded to provide students an opportunity to move towards an intermediate comprehension level. Speaking and listening skills are enhanced through recommended real-life voice activities. Listening skills are honed through online dialogues. Reading and writing skills are developed through access to completion of meaningful activities, reading of culturally-related articles of interest and responding to reading in the French language.
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

Spanish Beginning

Immerse yourself in the beauty of the Spanish language and the richness of its diverse cultures. In the beginning Spanish course, you will learn basic grammar and vocabulary skills to help build your fluency and language proficiency. You will explore the culture of Spanish-speaking countries through engaging interactive games, videos, and audio recordings and apply what you learn through written practice, listening, and speaking exercises.

Spanish Intermediate

Immerse yourself in the beauty of the Spanish language and the richness of the diverse cultures of the people who speak it. In the Middle School Intermediate Spanish course, students continue learning grammar and vocabulary skills to help build basic fluency and language proficiency. Explore more of the culture of Spanish-speaking countries through engaging interactive games, videos, and audio recordings and apply what you learn through written practice, listening, and speaking exercises.
Prerequisite: Spanish Beginning

Spanish I (High School Course – 1.0 credit)[§§]

Spanish I is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will learn to express their thoughts, feelings, and opinions in Spanish using basic, real-life situations and learning scenarios.

Spanish II (High School Course – 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

MIDDLE SCHOOL ELECTIVES

Each of these courses is a one-semester course except where identified as two-semesters.

Art Appreciation (8 only)

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 Explorations[‡]

Introducing students to diverse areas in the arts can broaden their perspective on the arts in general. Arts Explorations encourages students to experience each of the modern arts disciplines including Visual Arts, Theatre, Music, Media Arts and Dance. Students will also be able to identify areas of special interest where they would like continued study and the ways that the arts can be a part of their career paths.
Customer-Provided Required Physical Materials: Funny Photomaker (free download)

Beginning Painting‡

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 Keyboarding‡ †

Using a special in-house typing software, SimpleType, students will gain typing speed while learning the proper technique to become a keyboarding master. Students will learn introductory word processing and electronic presentation best practices in addition to computer hardware, internet, and business application skills to prepare for their future career.

Customer-Provided Required Physical Materials: Students will need a computer or laptop for this course; tablets are not sufficient. Students will also need a Microsoft Office 365 account.

Character Education (7 and 8 only)

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.

Computer Science Discoveries I‡ †

Computer Science Discoveries 1 will take students on a journey into one of the fastest-growing and exciting fields of the century. The course explores how computer science exists all around us, even when we're not aware. It gives students the opportunity to fine-tune their computer knowledge and coding skills, learn binary, and to create innovative projects. No previous coding experience is needed to succeed in this course.

Customer-Provided Required Physical Materials: Students will need a computer or laptop for this course; tablets are not sufficient. Students will also need to download Scratch software and have access to a printer.

Computer Science Discoveries II[‡][†]

Computer Science Discoveries II introduces students to computer science as a vehicle for problem-solving, communication, and personal expression. The course focuses on the visible aspects of computing and computer science and encourages students to see where computer science exists around them and how they can engage with it as a tool for exploration and expression. Centering on the immediately observable and personally applicable elements of computer science, the course asks students to look outward and explore the impact of computer science on society. Students should see how a thorough student-centered design process produces a better application, how data is used to address problems that affect large numbers of people, and how physical computing with circuit boards allows computers to collect, input and return output in a variety of ways.

Prerequisite: Computer Science Discoveries I

Customer-Provided Required Physical Materials: Students will need a computer or laptop for this course; tablets are not sufficient. Students will also need to download Scratch software and have access to a printer.

Digital Art and Design I (two-semesters)

You see digital art every day, and in this course, you not only will investigate digital art, but you'll learn how to create it yourself! In this course, you will explore the tools, basic concepts, and techniques artists use to create digital art. You'll learn how to use computers, digital cameras, editing software, and more to create digital artworks and grow artistically as you evaluate and respond to your own work.

Digital Savvy (two-semesters)[‡]

Digital Savvy is a one-year (two-semester) course covering required topics in most introductory "Information Technology" classes. Students should have minimal computer usage skills (e.g., keyboarding, mouse, and operating system navigation) prior to starting this course.

Customer-Provided Required Physical Materials: computer with the Windows 7, 8, or 10 operating system or MacOS 10.7 or higher course operating system.

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.

Individual and Team Sports

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.

Keyboarding[**][‡][†]

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

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

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Music Appreciation (8 only)

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.

Python Multiplayer Adventure[‡][†]

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, iPads, and tablets are not sufficient.

Scratch Coding[‡][†]

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

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

Study Skills and Strategies (8 only)

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.

Visual Art I[‡]

Ever wonder about how you can create art? In this course, you'll connect with art created by other artists as you learn how to plan, create, and reflect on your own art. You'll discover tools and techniques artists use as you create your own drawings, sculptures, paintings, photographs, and mixed-media works. You'll need to purchase supplies for this class. But don't worry, you have choices in what you can use!

Customer-Provided Required Physical Materials:
- Pencil
- Sketchbook
- Charcoal or oil pastels
- Paper towels

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

- Two-dimensional surface to draw on, like cardboard, construction, or white paper
- Camera or device to take photographs
- Air-hardening clay or other sculpting material
- Objects to make texture in the clay, like a toothpick or plastic knife
- Wax paper or newspaper
- Crayons or colored pencils
- Ruler or straightedge
- Acrylic or washable paint in red, yellow, blue, black, and white
- Watercolor paint
- Three paint brushes: liner, flat, and round
- Thick watercolor paper or cardboard
- Water cup
- Paper plate, cardboard, or paint palette

Optional Materials:
- Protractor
- Compass
- Grid paper
- Kneaded eraser
- Fixative spray, page protector, or frame
- Materials that could be used for sculptures, including recycled objects, flexible materials, objects from nature, broken electronics, repurposed objects
- Glue or another adhesive
- Box to store sculpture
- Apron or large shirt
- Easel
- Tape
- Photo editing program

Visual Art II‡

Ready to continue your artistic journey? In this course, you will explore artistic themes as you continue to plan, create, and reflect on your own art. You'll work to grow your artistic skills and will experiment with mediums and techniques you've already experienced while learning to use even more! You'll need to purchase supplies for this class. But don't worry, you have choices in what you can use!

Prerequisite: Visual Art I

Customer-Provided Required Physical Materials:
- Pencil
- Sketchbook
- Mirror
- Camera or device to take photographs of artwork
- Natural materials, like leaves, sticks, or rocks
- Charcoal, pastels, watercolor, or acrylic paint
- Ruler or straightedge
- Black and white paper
- Scissors or art knife
- Glue or tape

- Cutting mat or cardboard
- Flexible material like paper or fabric
- Digital art software
- Sticks, toothpicks, straws, or another building object
- Shells, seeds, or another small object
- String, glue, or another adhesive

<u>Optional Materials:</u>
- Charcoal or pastels
- Paint and paintbrushes
- Clay or other sculpting materials
- Collage or assemblage materials
- Ruler
- Digital art software
- Sand
- Glue
- Toothpick
- Food coloring
- Plastic bag or container
- Colored pencils or markers
- Charcoal or pastels
- Compass or protractor
- Pastels
- Stylus

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.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   47

ELEMENTARY MATH

Math 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.

Math 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.

Math 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.

Math 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.

Math 4

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

Math 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.

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 WORLD LANGUAGES

Spanish Introductory Level‡‡

Elementary Spanish is a year-long exploratory introduction to the Spanish culture and language. Students will learn the language in a story-based framework, providing a fun and positive experience within the learning. Each lesson is taught through an engaging, authentic story that gives students an opportunity to see and hear the language in context.

Spanish 1‡‡

Elementary Spanish Level 1 is a year-long exploratory introduction to the Spanish culture and language. Each lesson is taught through an engaging, authentic story that gives students an opportunity to see and hear the language in context. Students will learn foundational skills in listening and speaking in this early level.

Spanish 2‡‡

In the year-long Elementary Spanish Level 2 course, students learn foundational skills in listening and speaking, and beginning at this level, they start adding Spanish literacy skills. The course also provides strategically-based reviews of past learning and is built on connections to an authentic culture of a specific Spanish-speaking region through the arts, celebrations, and traditions.
Prerequisite: Elementary Spanish Level 1

Spanish 3‡‡

Elementary Spanish Level 3 is taught through an engaging, authentic story that gives students an opportunity to see and hear the language in context. The year-long course provides audio and visual stimuli for all learning types and ample opportunities to hear, speak, read, write, and record the language. The course is built on connections to an authentic culture of a specific Spanish-speaking region through the arts, celebrations, and traditions. Students are led on the path to becoming global citizens.
Prerequisite: Elementary Spanish Level 2

Spanish 4‡‡

In Elementary Spanish Level 4, students review their past learning. Students have ample opportunities to hear, speak, read, write, and record the language. The year-long course provides a natural progression of learning through the language acquisition stages of preproduction, early production, speech emergence, and intermediate fluency.
Prerequisite: Elementary Spanish Level 3

Spanish 5‡‡

Elementary Spanish Level 5 focuses on the following new skills: location, countries, and culture of Central America and Costa Rica; greetings, introductions, and goodbyes; differences between English and Spanish sentence structure; adjectives and articles agreeing in gender and number; travel vocabulary; adjectives used to describe physical appearance; parts of the house; reading, understanding, and writing advertisements; places in the community; reading a menu and placing an order; body parts; and expressing and talking about feelings and emotions. In this year-long course, students will walk away with many grammar and conversational skills preparing them for communicating with native-Spanish speakers.
Prerequisite: Elementary Spanish Level 4

ELEMENTARY ELECTIVES

Each of these courses is a full year course except where identified as one-semester.

Art K‡

Using the Elements of Art and Principles of Design as the framework, kindergarten students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.
Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art 1‡

Using the Elements of Art and Principles of Design as the framework, first grade students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.
Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art 2‡

Using the Elements of Art and Principles of Design as the framework, second grade students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.
Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art 3‡

Using the Elements of Art and Principles of Design as the framework, third grade students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.
Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art 4‡

Using the Elements of Art and Principles of Design as the framework, fourth grade students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.
Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art 5‡

Using the Elements of Art and Principles of Design as the framework, fifth grade students will feel confident in creating their own style of art. Students will explore and safely use a variety of materials during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary and procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson, the students will make connections to art and various cultures around the world.

Customer-Provided Required Physical Materials:
Elementary Art Supply List (Elementary Art Supply Lists (K-5))

Art Development Level 1 (one-semester)‡

Art Development 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.

Customer-Provided Required Physical Materials: Basic Art and Crafting Supplies

Art Development Level 2 (one-semester)‡

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

Customer-Provided Required Physical Materials: Basic Art and Crafting Supplies

Art Development Level 3 (one-semester)‡

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.

Customer-Provided Required Physical Materials: Basic Art and Crafting Supplies

Art Development Level 4 (one-semester)‡

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.

Customer-Provided Required Physical Materials: Basic Art and Crafting Supplies

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   52

Arts and Crafts K^{** ‡}

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.

Customer-Provided Required Physical Materials:

- Crayons
- Yellow, blue, red, and black markers
- Multimedia paper
- Watercolor paper
- Pastels
- 11×14 or large 90lb watercolor paper
- Tempera paint in primary colors of red, yellow, and blue
- Brush – 3/4″ round
- Watercolor brush
- Craft stick
- Pine cone, bird seed
- Peanut butter, rice, beans
- Household items such as glue, scissors, tape, ruler, paper towels, cardboard, masking tape, straws

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.

Customer-Provided Required Physical Materials:

- Poster paper
- Watercolor paper
- Pastel/charcoal paper
- Tempera paint in primary colors of red, yellow, and blue
- Brush – 3/4″ round
- Watercolor brush
- Pastels
- Crayons
- Yellow, blue, red, and black markers
- Household items such as glue, scissors, tape, ruler, cardboard.

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.

Customer-Provided Required Physical Materials:

- Poster paper
- Watercolor paper
- Pastel/charcoal paper
- Tempera paint in primary colors of red, yellow, and blue
- Brush – 3/4″ round
- Watercolor brush
- Pastels
- Crayons
- Yellow, blue, red, and black markers
- Household items such as glue, scissors, tape, ruler, cardboard

Health K

Health for kindergarten 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. In this full year course, the topics include personal safety, healthy behaviors, nutrition, communication, disease prevention, basic anatomy and physiology, and the values of cooperation and teamwork.

Health 1

Health for first grade helps young students establish a basic understanding of health. In this full-year course offering, 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.

Health 2

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. In this full-year course, the topics include personal safety, healthy behaviors, nutrition, communication, disease prevention, basic anatomy and physiology, and the values of cooperation and teamwork.

Health 3

Health for grade 3 helps young students establish a basic understanding of health. In this full-year offering, 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.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   54

Health 4

In the full year of Health for grade 4, 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).

Health 5

In the full year of Health for grade 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).

Keyboarding (one-semester)** ‡ †

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 – Recorder 1 (one-semester)** ‡

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

Physical Education K

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

Physical Education 1

In this full year course, students in first grade establish a basic understanding of health and fitness. Topics include exercise safety, making healthy choices, nutrition, and more.

Physical Education 2

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

Physical Education 3

Students in third grade PE expand on their understanding of fitness and learn how to become more fit and healthy. in this full-year course, topics include goal setting, warm-up and cool down, flexibility, motor skills, and more.

Physical Education 4

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

Physical Education 5

Fifth grade students focus on fitness and learn about topics such as muscle strength, flexibility, water safety, and more in this full year course for physical education.

Scratch Coding (one-semester)‡ †

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; Chromebooks, iPads, and tablets are not sufficient.

Technology K‡

The kindergarten course enables students to develop basic skills in computer science through engaging and age-appropriate content. The course will expose students to concepts such as problem solving, algorithms, and computer basics skills. Students will learn block-based coding in an offline environment. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

Technology 1‡

First grade students develop basic skills in computer science through engaging and age-appropriate content. The course exposes students to concepts such as problem solving, algorithms, and computer basics skills. Students will learn block-based coding in an offline environment. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

Technology 2‡

In this second-grade course enables students to develop basic skills in computer science through engaging and age-appropriate content. The course exposes students to concepts such as problem solving, algorithms, and computer troubleshooting skills. Students will learn block-based coding in an offline environment and practice using the web-based Hour of Code site. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen. Students will be introduced to Microsoft Word Online, research skills, and constructive criticism to complete a final digital artifact project.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

Technology 3‡

This course, for third grade students, enables students to develop basic skills in computer science through engaging and age-appropriate content. The course exposes students, within developmentally appropriate stages, to concepts such as problem solving, algorithms, security/privacy/copyright, computer programming basics, and keyboarding skills. Students learn block-based coding in offline environments that build upon skills developed in previous grades. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen. The upper grades will complete research focused on adaptive technology, social media and/or robotics. The research will require students to evaluate reliable and relevant websites, organize data, receive and implement feedback, and produce a digital artifact.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

Technology 4‡

Fourth grade students develop basic skills in computer science through engaging and age-appropriate content. The course exposes students, within developmentally appropriate stages, to concepts such as problem-solving, algorithms, security/privacy/copyright, computer programming basics, and keyboarding skills. Students learn block-based coding in offline environments that build upon skills developed in previous grades. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen. The students will complete research focused on adaptive technology, social media and/or robotics. The research will require students to evaluate reliable and relevant websites, organize data, receive and implement feedback, and produce a digital artifact.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

Technology 5‡

In the fifth-grade course, students develop basic skills in computer science through engaging and age-appropriate content. The course exposes students, within developmentally appropriate stages, to concepts such as problem-solving, algorithms, security/privacy/copyright, computer programming basics, and keyboarding skills. Students learn block-based coding in offline environments that build upon skills developed in previous grades. In addition to the computer skills, the course integrates standards from social studies, health, and language arts, and also focuses on bullying/cyberbullying and being a responsible citizen/digital citizen. The students will complete research focused on adaptive technology, social media and/or robotics. The research will require students to evaluate reliable and relevant websites, organize data, receive and implement feedback, and produce a digital artifact.

Customer-Provided Required Physical Materials:

Elementary Technology Supply List

ENGLISH LANGUAGE LEARNING

Certification Levels Offered: A1, A1+ A2, A2+, B1, B1+, B2

Our comprehensive language learning suite seamlessly connects students to coursework and interactive language learning software as they increase their English language proficiency. Our program is aligned to the Common European Framework scale of English proficiency (CEFR), and students are placed in the ELL course that matches their instructional level. Using a series of listening, speaking, reading, and writing activities in the language learning software, students work on English language skills to improve their comprehension and use of the English language in an academic setting. Students then complete practice activities and assignments to demonstrate their mastery of the language. To progress from their current English proficiency level to the next level, students spend 30 minutes per day in the language learning software along with another 30 minutes per day in the coursework. Mastery tests measure their progress throughout the semester, and after 36 hours of instruction in the language learning software, students take a certification test. Upon successful completion of this test, students receive a certificate showing their mastery of their CEFR goal level.

Our comprehensive program can be further enhanced through highly appealing and collaborative weekly live lessons with a native English-speaking teacher. These live sessions provide students with multiple opportunities to practice communicating verbally and in writing as they discuss award-winning, authentic videos that focus on a variety of topics popular with Gen Z. Our highly trained ELL teachers foster a risk-free, trusting environment for students to explore and practice their English through active practice and learning that directly aligns to what they are learning in our program.

At each level, students learn a variety of communication skills.
- In the ELL Level A1 course, students are introduced to precision in time relations. They also learn to communicate their likes, dislikes, and favorites, and develop more detailed responses for family, job, and school.
- In the ELL Level A1+ course, students use more detail when they communicate about parts of their day, activities they do in school, and locations. They tie together more than one action using clauses with sequence words and begin to communicate about past and future events.
- In the ELL Level A2 course, students communicate about past and future events and build their vocabulary about weather, transportation, and duration. They also practice asking for and giving an opinion.
- In the ELL Level A2+ course, students learn how to use "will" for volunteering and "can" for future action. They compare and contrast similar and different objects and situations, state their thoughts and beliefs, and join concepts together into more complex phrases and sentences.
- In the ELL Level B1 course, students master increasingly difficult concepts for time relations, communication about the background of a past event, and describe an action that happened at a time that isn't specified. Their sentences include multiple clauses, and they demonstrate the ability to recognize and discuss academic definitions and explanations.
- In the ELL Level B1+ course, students use complex sentences with adverb and noun clauses to communicate about events that happen simultaneously, or one followed by another. They are exposed to a large amount of basic business language for jobs and companies, and are expected to talk about education and experiences, along with industry structures, products, and services.
- In the ELL Level B2, students use phrases such as "dramatically" or "steadily" or "linearly" to provide more description about increasing and decreasing amounts. They string together multiple verbs using gerunds, infinitives, and clauses, and are able to define, classify, and explain rhetorical grammatical structures. They paraphrase what they read and sequence events with detail.

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.

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 for 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, 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.

Who is Jesus Christ, 9th Grade (1.0 credit)

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. In the second half of the year, students gain an understanding of 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 (1.0 credit)

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.

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

Catholic Virtual - Proprietary & Confidential – January 2023   60

Sacraments and Life with Jesus Christ, 11th Grade (1.0 credit)

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. In the second half of the year, students gain an understanding 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.

The History of the Catholic Church, 12th Grade (1.0 credit)

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, 9th-12th Grade (0.5 credit)

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.

---

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

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"

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. ‡‡Requires purchase of a full year. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the last page of this document.

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 ½" 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 ½" X 2 ½", 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
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
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
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

Required Materials Semester A	Required Materials 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
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

Required Materials Semester A	Required Materials 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

Credit Recovery

- Algebra I
- Algebra II
- Art History I
- Biology
- Chemistry
- Concepts in Probability and Statistics
- Earth Science
- Economics
- English Language Arts 9
- English Language Arts 10
- English Language Arts 11
- English Language Arts 12
- Environmental Science
- Financial Math
- Geometry
- Integrated Mathematics I
- Integrated Mathematics II
- Integrated Mathematics III
- Mathematical Models with Applications
- Modern World History
- Physics
- Pre-Algebra
- Pre-Calculus
- Psychology
- Statistics
- Strategies for Academic Success
- Survey of U.S. History
- Survey of World History
- Trigonometry
- U.S. Government
- U.S. History I
- U.S. History II

NCAA Approved Courses

To be successful in college, students need to be prepared for college coursework. In Division I and Division II, the National Collegiate Athletic Association (NCAA) sets academic initial-eligibility standards that take into account GPA, standardized test scores, core courses taken in high school and the grades earned in those core courses. Division III schools hold student-athletes to the same overall standards for the institution in which they're enrolling. All student-athletes also must meet the unique acceptance requirements of the college or university they plan to attend (which may exceed NCAA standards).

Not all high school classes count as NCAA core courses. Only classes in English, math (Algebra 1 or higher), natural or physical science, social science, foreign language, comparative religion, or philosophy **may be approved** as NCAA core courses. Remedial classes and classes completed through credit-by-exam are not considered NCAA core courses.

Catholic Virtual has received approval from the NCAA for the following courses:

- Algebra I
- Algebra I Credit Recovery
- Algebra II
- Algebra II Credit Recovery
- American Sign Language I
- American Sign Language II
- Anatomy and Physiology
- Biology
- Biology Credit Recovery
- Chemistry
- Chemistry Credit Recovery
- Chinese I
- Chinese II
- Chinese III
- Civics
- Contemporary Novels
- Creative Writing
- Earth Science
- Earth Science Credit Recovery
- Economics
- Economics Credit Recovery
- Engineering and Product Development
- English I
- English II
- English III
- English IV

- English Language Arts 9 Credit Recovery
- English Language Arts 10 Credit Recovery
- English Language Arts 11 Credit Recovery
- English Language Arts 12 Credit Recovery
- Environmental Science
- Environmental Science Credit Recovery
- French I
- French II
- French III
- Geometry
- Geometry Credit Recovery
- German I
- German II
- Honors Algebra I
- Honors Algebra II
- Honors Biology
- Honors Calculus
- Honors Chemistry
- Honors Economics
- Honors English I
- Honors English II
- Honors English III
- Honors English IV
- Honors Geometry
- Honors Physics
- Honors Spanish III

- Honors Spanish IV
- Honors Statistics
- Honors U.S. Government
- Honors U.S. History
- Honors World History
- Integrated Math 1
- Integrated Math 2
- Integrated Math 3
- Integrated Mathematics I Credit Recovery
- Integrated Mathematics II Credit Recovery
- Integrated Mathematics III Credit Recovery
- Introduction to Business
- Journalism
- Latin I
- Latin II
- Latin III
- Marine Science
- Paleontology
- Physical Science
- Physics
- Physics Credit Recovery
- Pre-Calculus Credit Recovery
- Precalculus
- Psychology
- Psychology Credit Recovery
- Renewable Energy

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the past page of this document.

- Sociology
- Space Exploration
- Spanish I
- Spanish II
- Spanish III
- Statistics
- Statistics Credit Recovery
- U.S. Government
- U.S. Government Credit Recovery
- U.S. History
- U.S. History I Credit Recovery
- U.S. History II Credit Recovery

- World Geography and Cultures
- World History
- AP Biology
- AP Calculus AB
- AP Calculus BC
- AP Chemistry
- AP Computer Science A
- AP English Language and Composition
- AP English Literature and Composition
- AP Environmental Science
- AP European History

- AP French Language and Culture
- AP Human Geography
- AP Macroeconomics
- AP Microeconomics
- AP Physics 1
- AP Psychology
- AP Spanish Language and Culture
- AP Statistics
- AP U.S. Government and Politics
- AP U.S. History
- AP World History Modern

UC A-G Approved Courses

The University of California A-G / College Entrance Requirements are a sequence of high school courses that students must complete (with a grade of C or better) to be minimally eligible for admission to the University of California (UC) and California State University (CSU). They represent the basic level of academic preparation that high school students should achieve to undertake university work.

The purposes of the A-G / College Entrance Requirements are to ensure that entering students:
- can participate fully in the first-year program at UC and CSU in a broad variety of fields of study
- have attained the necessary preparation for courses, majors, and programs offered at UC and CSU
- have attained a body of knowledge that will provide breadth and perspective to new, more advanced studies
- have attained essential critical thinking and study skills

Catholic Virtual has received approval from the UC A-G for the following courses:

- Accounting
- Aeronautics and Space Travel
- Algebra I
- Algebra I Credit Recovery
- Algebra II
- Algebra II Credit Recovery
- Anatomy and Physiology
- AP Art History
- AP Biology
- AP Calculus AB
- AP Calculus BC
- AP Chemistry
- AP Computer Science A
- AP English Language and Composition
- AP English Literature and Composition
- AP Environmental Science
- AP European History
- AP French Language and Culture
- AP Human Geography
- AP Macroeconomics
- AP Microeconomics
- AP Physics 1
- AP Psychology
- AP Spanish Language and Culture
- AP Statistics

- AP U.S. Government and Politics
- AP U.S. History
- AP World History Modern
- Art Appreciation
- Art History
- Art History I Credit Recovery
- Biology
- Biology Credit Recovery
- Business Law
- Chemistry
- Computer Basics
- Digital Media
- Earth Science
- Economics
- Economics Credit Recovery
- English I
- English II
- English III
- English IV
- English Language Arts 9 Credit Recovery
- English Language Arts 10 Credit Recovery
- English Language Arts 11 Credit Recovery
- English Language Arts 12 Credit Recovery
- Environmental Science

- Environmental Science: Credit Recovery
- Financial Literacy
- Financial Math: Credit Recovery
- French I
- French II
- French III
- Geometry
- Geometry Credit Recovery
- German I
- German II
- Health and Fitness
- Honors Algebra I
- Honors Algebra II
- Honors Biology
- Honors Calculus
- Honors Chemistry
- Honors Economics
- Honors English I
- Honors English II
- Honors English III
- Honors English IV
- Honors Geometry
- Honors Physics
- Honors Statistics
- Honors U.S. Government
- Honors U.S. History
- Honors World History

*Increased cost for course. **Course will NOT have live sessions. ***This course contains numerous videos that may not be accessible outside of the United States. §May be found in the public domain. §§Course awards high school credit. ‡Customer provided materials required. †Lightweight devices such as Apple iPads, Google Chromebooks, and tablets have limited support for Java and programming-based content. Therefore, these devices are not recommended for this course. ††See Career Exploration Listing on the past page of this document.

- Integrated Mathematics I Credit Recovery
- Integrated Mathematics II Credit Recovery
- Integrated Mathematics III Credit Recovery
- Introduction to Business
- Latin I
- Latin II
- Latin III
- Modern World History: Credit Recovery
- Music Appreciation
- Personal Finance
- Physics
- Physics Credit Recovery
- Precalculus
- Psychology
- Sacraments and Life with Jesus Christ
- Sociology
- Spanish I
- Spanish II
- Spanish III
- Statistics
- The History of the Catholic Church
- The Mission of Jesus Christ
- U.S. Government
- U.S. Government Credit Recovery
- U.S. History
- Who is Jesus Christ
- World Geography and Cultures
- World History

††Career Exploration

From STEM and Education to Art and Information Technology, we offer online courses in a variety of career disciplines. Career-focused courses help students get a head start in planning for their future. Students have an opportunity to focus on one discipline or explore several, helping them find the best fit for their skills and interests. Allow your students to explore their potential.

Agriculture, Food & Natural Resources
Agricultural Communications II
Agricultural Communications III
Agriscience Foundations I
Agriscience I
Agriscience II
Agriscience III
Introduction to Agricultures, Food, and Natural Resources

Architecture & Construction
Architectural Design I
Architectural Design II
Building Maintenance Technology I
Building Maintenance Technology II
Construction: Fundamentals and Careers
Principles of Architecture
Smart Cities: Technology and Applications

Arts, A/V Technology & Communications
Adobe After Effects
Advanced Drawing
Art Appreciation
Basic Drawing
Beginning Painting
Digital Art Imaging I
Digital Media
Graphic Design
Introduction to Communications and Speech
Journalism
Media and Communications

Music Appreciation
Music of the World
Theater Studies
Theatre, Cinema, and Film Production

Business Management & Administration
Introduction to Business
Project Management
Startups and Innovation

Education & Training
Child Development
Early Childhood Education I
Early Childhood Education II
Education and Teaching Advanced
Teaching as a Profession

Finance
Accounting
Career Exploration in Finance
Financial Literacy
Fundamentals of Bitcoin and Cryptocurrency
Personal Finance
Quickbooks®

Health Science
Career Exploration in Healthcare
Forensic Science I
Health Careers
Health Science Foundations
Healthcare Information and Management Systems
Medicine

Hospitality & Tourism
Introduction to Hospitality and Tourism
Technology for Hospitality and Tourism

Human Services
Career Planning
Human Growth and Development

Information Technology
Augmented and Virtual Reality Applications
Basic Web Design
Cloud Technologies and the Internet of Things
Computer and Network Security Fundamentals
Computer Basics
Cybersecurity
Cybersecurity Essentials
Digital Information Technology
Digital Savvy
Foundations of Programming
Introduction to Information Technology
Introduction to Java Programming
Introduction to Network Systems
JavaScript
Microsoft® Excel
Microsoft® Outlook
Microsoft® PowerPoint
Microsoft® Word
Procedural Programming
Python Multiplayer Adventure
Swift App Development

Law, Public Safety, Corrections & Security

Business Law

Marketing

Social Media
Social Media Business Marketing

Science, Technology, Engineering & Mathematics

Aeronautics and Space Travel
Anatomy and Physiology
Engineering and Product
 Development
Fundamentals of Blockchain and
 Cryptography
Introduction to Artificial Intelligence
LEED Green Associate
Paleontology
Renewable Energy
Robotics: Applications and
 Careers
The History of Gaming and
 Esports
Wearable Technology Innovations

Transportation, Distribution & Logistics

Space Exploration
Transportation Technologies