

Houghton Academy

Course Offerings 2021 - 2022



PART A: HIGH SCHOOL COURSES

PLEASE NOTE:

- ❑ *Elective courses are subject to sufficient student interest. Electives are designated with an **
- ❑ *Some courses are offered with an Honors option which include higher expectations of student achievement. Depending on the course, this may entail increased pace or amount of work, depth of understanding or amount of application. Students seeking honors credit are required to obtain both faculty and parental permission for this rigorous coursework.*

Business

Financial Accounting:

This is a dual credit online course offered through [Grand Canyon University](#).

Christian Studies

Bible Survey A

This course studies a cross section of biblical books in order to present the general plot arc, primary genres, and central doctrinal tenets of the Bible. Loosely organized around seven major questions, this course includes a thread of Christian apologetics. The companion course Bible Survey B is similar but encompasses different biblical texts and different major questions. Students completing either course will be exposed to the gospel and the redemptive arc of the scriptures. Students completing both courses will have also encountered a majority of the books of the Bible and gained introductory knowledge of the majority of central teachings of Christianity.

Bible Survey B:

This course studies a cross section of biblical books in order to present the general plot arc, primary genres, and central doctrinal tenets of the Bible. Loosely organized around seven major questions, this course includes a thread of Christian apologetics. The companion course Bible Survey A is similar but encompasses different biblical texts and different major questions. Students completing either course will be exposed to the gospel and the redemptive arc of the scriptures. Students completing both courses will have also encountered a majority of the books of the Bible and gained introductory knowledge of the majority of central teachings of Christianity.

Worldviews & World Religions:

This course begins with a compact presentation of Christian systematic theology, proceeds to introduce dominant alternative worldviews and their relationship to Christianity, then concludes with a brief examination of how worldviews find expression in major world religions.

Christian Social Engagement:

This course articulates a Christian perspective on contemporary and often provocative cultural issues such as poverty, race relations, politics, creation care, sexual brokenness and many more. The course not only introduces biblically-rooted methodology but also seeks to foster in students a heart for redemptive action. One quarter of the course is comprised of the senior capstone project on a social issue of their choice.

* Christianity and the Arts (one semester):

This elective course builds a uniquely Christian theology of the musical, visual and literary arts. Topics include art in the Bible, a history of art and the church, a Christian theology of the arts, and the arts in worship and witness. A significant scripture memory component will be included, and each student will complete a major work of art themselves.

Communication

*** Leadership (one semester):**

A one-semester elective course in which students engage in discussion and reflection on the topic of servant leadership. Students will challenge their critical thinking skills by solving and discussing leadership problems and case studies. Students will gain an understanding of the dimensions of leadership in order to make a difference in their school, community, their nation and beyond. Students will study leadership experts and read related literature along with creating their own life mission statements. Students will be evaluated on written assignments, individual and group presentations, class participation and tests.

Computer Science

***CSC140.Computer Science 1 (dual 4 credit-hour Roberts Wesleyan College):**

This course meets 5 periods/week for the entire year. The Robert's catalog reads: "This is an introductory course in Computer Science primarily geared to majors, minors, and other mathematics/science students. This course will introduce students to structured, disciplined programming using an object-oriented language. Additional topics will include the history of computing and basics of computer operation. Students will learn to design, code, document, test, and debug their own programs. This course involves three credits of lecture and one credit of hands-on programming in a laboratory format. Prerequisite: High school algebra or trigonometry or permission of the Computer Science Department." Strongly recommended: CSC101.Introduction to Computers & Applications

***CSC101.Introduction to Computers & Applications (dual 2 credit-hour Roberts Wesleyan College):**

This course meets 5 periods/week for the entire year. The Robert's catalog reads: "This is an introductory course on computers and their applications in cross-disciplinary areas. The course includes both lecture and hands-on exploration of computer applications in a laboratory format. Lecture topics include an introduction to computer hardware and software, input/output devices, data representation and storage, networking, operating systems, the history of computing, and social issues. In the laboratory, students are introduced to commercial and open-source application software packages. The applications studied are typical applications used in both professional and personal computing environments." At the Academy, we focus on building a knowledge base as a practical application to learn these apps.

***Procedural Programming (Full Year, 1 Credit):**

This course uses C to teach the main constructs of procedural program. C is the basis for the world's major programming languages. The base logic learned here is foundational across computer fields. This course requires 5 periods of study for the entire academic year.

***Relational Database Reasoning with SQL and API Use(Full Year, 1 Credit)**

An IS system is driven by relational databases (RDB). Those that understand the underlying principles of a relational database are better equipped for designing or deploying an IS. The student will learn these underlying principles by putting them to practice. They will learn how to define a relational database using SQL, one of the most used languages. They will use an API (Application Interface) to write a Python program to interact with their database. The most distributed database, SQLite, will be used. SQLite is used to solve many small problems, including most of what happens on a person's smartphone. This course will enhance the students' understanding of Object-Oriented Programs (OOP). The student will be able to combine SQL and OOP to their scripting experience to be able to solve additional problems in the workplace. Prerequisite CSC140.Computer Science 1

***Sphinx Documentation (Half Year, 0.5 Credit):**

Documentation is key to the success of a software system. Sphinx is a tool that makes it easy to create intelligent and beautiful documentation. It has excellent facilities for the documentation of software projects in a range of languages. The student will learn reStructuredText formatting. This course requires 5 periods of study for half the academic year.

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***(Independent Study) Applied Networking (Full Year, 1 Credit):**

This course is referred to as "applied" rather than simply "networking" or an "introduction to networking" because the student learns networking as they work on specific real life projects for the Information Technology Manager. The project requirements are documented. The student will work with the IT Manager to achieve the project, during which they will learn the networking required to finish the project.

***(Independent Study) Dynamic Website Creation using a Web Framework and Database (Full Year, 1 credit):**

The creator of Facebook would have loved to have the tools available today that allow us to develop powerful websites. This is not a course about website development in the normal sense where you learn how to use WordPress. This course teaches you a web framework that allows you to build powerful tools to accomplish specific work for your IS (Information System). You will be using Python with the web framework Django (the system used by Instagram, Spotify, YouTube, DropBox and many others) to build sites to interface with a database. This way you can add programming logic specific to your organization to your site. As a macro allows you to extend a spreadsheet, what you learn in this course will allow you to extend what your site does beyond the typical site. Prerequisite: Relational Database Reasoning with SQL and API Use

English Language Arts

Literary Studies and Composition I:

This course is designed to be the first course in high school language arts sequence. Literature & Composition I is designed to help students write concisely, speak clearly, read critically, and listen carefully. Within the context of a Christian World View, students will learn to respond to various kinds of literature, to complete inquiry based research, to engage in thoughtful discussion, and to communicate with clarity and creativity, both in written and oral form. Work will be done on grammar competency, vocabulary acquisition, research skills, and writing fluency. Student work and progress will culminate in a digital portfolio of collected written work and self-reflection.

Literary Studies and Composition II:

Literature & Composition II is designed to help students write concisely, speak clearly, and read critically. Students read titles from World Literature including novels, short stories, dramas, and poems. A continued emphasis is placed on vocabulary acquisition and writing fluency to include literary analysis, non-fiction reader responses, research writing in MLA, and digital portfolio development. Successful completion of Literary Studies and Composition I required to take this course.

American Literature and Composition:

English 11 is a college preparatory course that focuses on some of the major writers and genres of American Literature from the Puritans through the twentieth century. Students will conduct literary analysis, practice vocabulary acquisition, complete a research project in MLA format and assemble a portfolio of their writing.

English 12:

English 12 is a college preparatory course that focuses on both major writers and major genres of British and World Literature. Beowulf and Chaucer continue with Shakespeare, Dickens, Shelley, and other 19th and 20th century authors. The course also includes a research paper in MLA or APA style, public speaking development, and portfolio development.

College Principles of Writing (dual credit one semester - Roberts Wesleyan College):

This course focuses on effective analytical and academic writing. Students will use the writing process to produce four essays in four different modes of discourse including a research paper in MLA or APA style. The writing process is used to produce writing appropriate for college level work. There is an added tuition & text fee for this course.

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College Introduction to Literature (dual credit one semester - Roberts Wesleyan College):

This course focuses on the principles of literary interpretation. Students will study various genres of western literature from classical to the postmodern era. The students will learn critical reading, interactive discussion, use of various literary lenses for interpretation, and formal literary analysis writing. There is an added tuition and text fee for this course.

TOEFL Prep:

In order to prepare students to succeed on their TOEFL test, garnering a score that will allow for entry into their preferred undergraduate program in the United States or Canada, this class familiarizes students with the test by teaching the test-taking techniques and by reinforcing English language skills. Focusing on all four sections, speaking, writing, listening, and reading, this semester intensive course requires students dedicate themselves to disciplined practice of both official practice tests as well as with non-official materials and exercises that enforce their overall English skills, such as in class debates, speaking partner practice, and vocabulary tests.

Student Publications:

A year-long elective course in which students will gain hands-on experience in publishing a school newspaper and yearbook. This course provides the study and practice of interviewing, note taking and gathering/analyzing information for the purpose of writing, editing and publishing student publications. Effective journalistic techniques will be explored in the areas of writing, layout, photography and design. Responsible journalism and examples of amateur and professional publications will be studied.

Fine and Performing Arts

Studio Art I:

This one-year course introduces students to the Elements of Art and the Principles of Design. Studio experiences in the classroom will give students opportunities to explore art processes and materials such as drawing, painting, 2D and 3D design as well as digital art. The study of art history will also accompany appropriate studio projects. Students will demonstrate their ability to analyze and to interpret their own artwork and the work of others through discussions, critiques and written assignments.

Studio Art II:

This upper level course provides an opportunity for students to expand on the art concepts introduced in Studio Art I. The focus of this course is to develop the student's individual style and to continue studying Art History alongside studio projects. Students are given more in depth problems to solve creatively while becoming more adept through a broad exposure to various media.

AP Studio Art 2D:

AP Studio Art is not based on a written exam: instead, students submit portfolios near the end of the year for evaluation. Twenty four art pieces are required for the portfolio. Twelve pieces show a sustained investigation of a theme and twelve different pieces show a range of breadth. Students use 2D design principles to organize an image on a picture plane in order to communicate content. They demonstrate mastery through any 2D medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Depending on the student's performance in their portfolio and on the college board's policies, Advanced Placement college credit may be received.

AP Studio Art Drawing:

AP Studio Art is not based on a written exam: instead, students submit portfolios near the end of the year for evaluation. Twenty four art pieces are required for the portfolio. Twelve pieces show a sustained investigation of a theme and twelve different pieces show a range of breadth. Students explore drawing issues including line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making through a variety of means, such as painting, printmaking or mixed media. Depending on the student's performance in their portfolio and on the college board's policies, Advanced Placement college credit may be received.

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Band:

For students in grades 6-12. Students will focus on both ensemble playing and solo playing, working on pieces together as a group and individually. Class time will include time spent on working on ensemble music and individual lesson time. The ensemble will play different genres of music that fit a small ensemble including playing in a worship band style, collaborating with the Senior Choir, and playing in Zimala. As well as more traditional band music students will learn and perform bucket drumming in class.

Senior Choir:

Senior Choir is available as an elective for all students in grades 9-12. Our choir classes seek to develop essential skills and technique, e.g. singers' breathing and posture, diction, and musicality. In addition, the technical skills of rhythm reading and sight singing are stressed, encouraging a growing independence as a singer. Levels in each area are age appropriate, using NYSSMA standards as a guideline.

Senior Bells:

Given the performance nature of this class, there are not study units per se, but ongoing emphases and knowledge which progress during the course of the school year. The students will learn: Rhythm Reading, Note Reading, Dynamics and Tempo, and Handbell Language.

Music:

General Music is designed for the student to experience and learn about music in many facets. Music is a gift of God and an avenue to learn of His character and worship Him as Creator of all. It gives the opportunity for one's own participation and creative expression as a reflector of the Creator. To that end, students will learn of the origins and purposes of music, the created properties of sound, the mechanics of music construction and composition, the expression of musical styles through the centuries, and the expression of music in different cultures. Learning will involve written and oral work, composition, analysis, interviews and performances. Our aim is for students to be equipped to be competently involved in music for a lifetime.

Health and Fitness

Health:

The main purpose of this course is to help students develop and maintain a healthy lifestyle physically, socially, emotionally and spiritually. This is done as we look at the many issues that present a challenge to maintaining good health, and try to develop strategies to confront and handle the issues in a way that results in positive outcomes for personal health. Issues are dealt with from a Biblical perspective to encourage students to develop a view of their lives and bodies which reflects scriptural principles.

Physical Education:

The purpose of the physical education curriculum is to help students develop their God-given physical gifts in such a way as to bring an enjoyment of athletic activities, a lifestyle that includes physical fitness, and a perspective of stewardship. One of the ways this is accomplished is through a curriculum that includes a variety of units for both individual and team sports. Between the major units there are additional activities which are included to provide enjoyment, exposure to other games, and fitness. These include: cooperative activities, outdoor/lawn games, fitness activities, and other organized games. Selection of these activities is based on age, class size, resources and space, and teacher preference. During the various units and activities covered, each physical education class includes: fitness activities, knowledge and strategy of the sport, and work on the skills necessary to participate in the sport.

History (Social Studies)

American History:

American History is an in-depth factual and analytical survey of the people, ideas and events influencing the founding and development of the United States of America. The survey begins with the migration of ancient peoples from Asia to the Americas and ends with the issues and challenges of the present day. The course includes a strong foundation in the creation and development of the American political and economic systems in preparation for a more in-depth and expanded study of American Government and Economics in your senior year. The course emphasizes the development of strong reading and writing skills with specific applications to the study of history.

College Survey of US History (dual credit one semester - Houghton College):

United States History is an in-depth factual and analytical survey of the people, ideas and events that influenced the founding and development of the United States of America. The survey begins with the migration of ancient peoples from Asia to the Americas and ends with the issues and challenges of the present day. The course includes a strong foundation in the creation and development of the American political and economic systems in preparation for a more in-depth and expanded study of American Government and Economics in your senior year. The course emphasizes the development of strong reading and writing skills with specific applications to the study of history.

American Government and Politics (one semester):

This course offers students an overview of the American system of governance, its origins, philosophical foundations, and the historical context that gave rise to the unique American political system. Students will look at the ideas, influences and people that shaped the United States Constitution. We will look at the Constitution has structured the government of the United States. Students will gain an understanding of the role political parties, lobbyists, PAC's and interest groups have on the current political landscape.

Intro to American Government and Politics (dual credit one semester - Houghton College):

This course offers students an in-depth look at the American system of governance, its origins, philosophical foundations, and the historical context that gave rise to the unique American political system. Students will look at the ideas, influences and people that shaped the United States Constitution. We will take an in-depth look at the governmental structures, procedures and processes established under the Constitution. Students will explore the influence of political parties, lobbyists, PAC's and interest groups on the current political landscape. Considerable attention will be given to the current political environment in the United States as we examine positions, platforms and ideas espoused by individuals and parties.

Economics:

Economics is broadly defined as the study of what constitutes rational human behavior in the endeavor to fulfill needs and wants. A more formal definition defines economics as the social science concerned with the factors that determine the production, distribution and consumption of goods and services. In this semester-long exploration of the social science of economics we will be examining the fundamental components of economic thought to provide each of you with a solid foundation in economic thinking and how these fundamentals impact your daily life.

World History:

The World History curriculum is a two-year course of study over grades 9 and 10. This course is designed to focus on the five social studies standards, common themes that recur across time and place and provide students with an overview of key periods and events in World History. The desired outcome of our study is for students to investigate issues and themes from multiple perspectives and make global connections and linkages that lead to in-depth understanding.

Grade 9

This course examines the origins of civilizations from a Biblical worldview and looks at man's progression from ancient history, the classical period and up through the age of exploration. Throughout this study we will

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explore non-western cultures, their histories and influence on world history. Special attention will be given to the legacy of western civilizations on the development of the western world.

Grade 10

This course explores the challenges and achievements of people around the world by studying world cultures and history from the 1500's through the modern era. Throughout this study we will examine the increasing connection between non-western and western cultures in an increasingly interdependent world.

***Recent History:**

Recent History is a history elective which picks up where story ends in 11th grade American history. It begins with the decision by the United States president to end the second world war with a cataclysmic bombing of Japan and then traces the roots of the Cold War which dominated America and the world from 1945-1990. The course offers an in-depth analysis of the conflicts in Korea and Vietnam as well as internal crises in the United States such as the Kennedy assassination, the Civil Rights movement and the Watergate scandal. The course continues up through the September 11th attacks on the United States and the subsequent war on terror. The course content includes the use and analysis of documentaries as well as some Hollywood movies depicting recent history. Students are encouraged to think and write critically about historical topics.

Mathematics

Algebra I:

Algebra I primarily involves the use of variables to represent unknown quantities and the manipulation of expression and equations. Topics include, Order of Operations, Properties of Numbers, Properties of Exponents, Linear Equations in One or More Variables, Ratios and Percents, Proportions, Graphing Lines, Inequalities, Factoring Quadratics, and Counting and Probability.

Geometry:

This course takes a proof based approach to Euclidean geometry. It is designed for people who have successfully completed Algebra I. Topics include, Angles, Triangles, Congruence, Similarity, Perimeter and Area, Quadrilaterals, Polygons, Circles, 3-Dimensional Geometry, Transformations and Analytic Geometry, and Introductory Trigonometry.

Algebra II:

Algebra II is a math course that aims to build on Algebra I and extend the student's understanding of numbers and algebraic manipulations. Topics include Quadratic Equations, Complex Numbers, Functions, Polynomials, Exponents and Logarithms, Sequences and Series, Trigonometry, and Counting and the Binomial Theorem.

*** College Calculus (dual credit):**

This course is designed to cover the topics that a student would encounter in a standard first semester college Calculus course. Interspersed with these topics will be the precalculus topics that are required for successfully engaging with the calculus concepts. Topics include: Functions and their graphs, Polynomial and Rational Functions, Limits and Their Properties, Differentiation, Applications of Differentiation, Integration, Exponential and Logarithmic Functions with Calculus, and Trigonometric Functions with Calculus.

*** (Independent Study) Introduction to Number Theory and Discrete Math (Full Year, 1 Credit):**

Students will explore topics including but not limited to Combinatorics, Probability, Expected Value, Pascal's Triangle, Base Numbers, Modular Arithmetic, and Linear Congruences with an emphasis on problem solving.

*** (Independent Study) Advanced Introduction to Number Theory and Discrete Math (Full Year, 1 Credit):**

Students will explore topics including but not limited to Combinatorics, Probability, Expected Value, Pascal's Triangle, Base Numbers, Modular Arithmetic, Linear Congruences, Set Theory, The Pigeonhole Principle, Mathematical Induction, Recursion, Generating Functions, and Graph Theory with an emphasis on problem solving.

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*** (Independent Study) Advanced Problem Solving 1 (Full Year, 1 Credit):**

Students will solve hundreds of competition level problems from a variety of branches of mathematics. Some of these topics will involve a more in depth look at familiar topics, others will be topics not normally covered in the scope of the high school curriculum. Students should come away from this course better prepared for math team and competitions like the AMC 10.

*** (Independent Study) Advanced Problem Solving 2 (Full Year, 1 Credit):**

Students will solve hundreds of competition level problems from a variety of branches of mathematics. A few of these topics will involve a more in depth look at familiar topics, but most will be topics not normally covered in the scope of the high school curriculum. Students should come away from this course better prepared for math team and competitions like the AMC 12 and the AIME.

Science

Earth Science:

Earth Science is a study of one of God's most fascinating creations, the planet Earth. Throughout this course the individual elements of the planet are examined including plate tectonics, geology, erosional features, weather, the oceans as well as astronomy. In addition, a critical view of evolution is studied and compared to a Biblical account of creation. The laboratory investigations are closely tied to the course material and allow students to have a hands-on approach to the topics at hand (for example, studying rocks and minerals or working with topographic maps).

Physical Science:

Physical Science is an introductory course in chemistry and physics. The first semester of the course introduces Chemistry: atomic structure, the periodic table, elements, compounds, solutions, and types of bonds. The second semester introduces Physics: mechanics including machines, Newton's laws of motion and energy, waves, light and sound. During the laboratory period, investigations are done to enhance learning of classroom material in a hands-on manner.

Biology:

In Biology, we emphasize the fact that God is the Creator of all things, living and nonliving. We teach the traditional Biology curriculum, emphasizing Biochemistry and Human Anatomy and Physiology. When we teach Evolution, we examine the scientific evidence for and against the theory. We hope to make it clear to our students that living things were created by God. During the laboratory period, investigations (including dissections) are done to enhance learning of classroom material.

Chemistry:

Chemistry deals with matter and energy and the changes they undergo. We emphasize that the order found in nature and natural laws originates with God, the Creator and Sustainer of the Universe. The study of Chemistry is only possible because God created the Universe with order.

Chemistry includes a lab component. We teach Chemistry as an applied Math course. Therefore, Algebra II is a corequisite or prerequisite course.

Physics:

Physics is the study of matter and energy and how they relate. We emphasize that the order found in nature and natural laws originates with God, the Creator and Sustainer of the Universe. The study of Physics is only possible because God created the Universe with order. Physics includes a lab component. Our course is an applied Mathematics course. Therefore successful completion of Algebra II is a prerequisite.

World Languages

Spanish I:

Spanish 1 introduces students to Spanish language and culture through vocabulary, grammar, idiomatic phrases, reading and writing prompts, as well as audio and video clips. Students will develop their ability to converse, provide and obtain information, express feelings and emotions, and exchange opinions in the Spanish language. They will be able to read and comprehend materials with simple vocabulary and understand the main idea of extended passages with unfamiliar vocabulary. They will be able to express written ideas using different sentence structures in the present tense with limited reference to past and future events. Throughout the course students will gain an understanding of Latino culture, making connections and comparisons to their own culture.

Spanish II:

Spanish 2 is designed to elevate a student's existent Spanish ability to a higher level of proficiency. The course begins with a thorough review of the Spanish 1 curriculum, and develops into an intermediate course. Students will be able to sustain conversations about a variety of topics. Their speech and writing employs simple and complex sentence structures to convey meaning about past, present and future events. Students will use cognates and context to derive meaning from more complex texts and oral prompts, and be able to analyze, summarize, and draw conclusions. Students will increase their fluency by writing prayers and essays. They will continue to make connections and comparisons between their own culture and Latino culture.

PART B: MIDDLE SCHOOL COURSES

Christian Studies

Middle School Christian Studies:

This course is designed to help students clearly understand the tenets of the Christian worldview, and how they compare with other leading worldviews of our day. Students will learn how to apply their Christian faith to every area of life: theology, philosophy, ethics, biology, sociology, psychology, law, politics, economics, and history.

Computer Science

The middle school computer science curriculum is project-based and is divided into 3 parts:

- **Digital Citizenship:** students learn online safety and security, digital etiquette, the importance of digital downtime, recognizing & reporting cyberbullying, digital copyright laws, and more. Topics are different for each grade level.
- **Coding & Robotics:** students learn block-based coding (Scratch) and robotics (using Hummingbird robotics kits).
- **Intro to G-Suite:** students learn to use the apps that are required in their core courses... Google Docs, Sheets, & Slides. Content and project difficulty vary by grade level.

English Language

Middle School English 6-7:

Taught as a combination class, English 6/7 teaches the basics of reading for understanding and content, grammar skills, vocabulary development, creative writing, responsive writing, research skills and writing, oral interpretation, and presentation skills. Each of these areas of learning is shaped by the Christian worldview.

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Middle School English 8:

English 8 works to refine the basics of reading for understanding and content, grammar skills, vocabulary development, creative writing, responsive writing, research skills and writing, oral interpretation, and presentation skills. Each of these areas of learning is shaped by the Christian worldview.

Fine and Performing Arts

Middle School Art

This course is designed to help students learn how to problem solve creatively and tackle artistic challenges while learning life-long skills like persistence, reflection, observation and self-critique. As this is an introductory class, students will learn foundational art building skills while experimenting with a variety of mediums. As time goes by, more advanced processes and materials will be investigated and the study of art history will also be utilized. This class offers a great foundation for upper level art courses.

Band:

For students in grades 6-12. Students will focus on both ensemble playing and solo playing, working on pieces together as a group and individually. Class time will include time spent on working on ensemble music and individual lesson time. The ensemble will play different genres of music that fit a small ensemble including playing in a worship band style, collaborating with the Senior Choir, and playing in Zimala. As well as more traditional band music students will learn and perform bucket drumming in class.

Junior Choir:

The book of Psalms encourages all of us to sing with our mouth and with our heart, and to sing as long as we live. To that end, the junior choir is aimed at developing an awareness of this truth and the development of basic skills as a singer, laying the foundation for a lifetime of singing to God.

Junior Bells:

Given the performance nature of this class, there are not study units per se, but ongoing emphases and knowledge which progress during the course of the school year. The students will learn: Rhythm Reading, Note Reading, Dynamics and Tempo, and Handbell Language.

General Music:

General Music is designed for the student to experience and learn about music in many facets. Music is a gift of God and an avenue to learn of His character and worship Him as Creator of all. It gives the opportunity for one's own participation and creative expression as a reflector of the Creator. To that end, students will learn of the origins and purposes of music, the created properties of sound, the mechanics of music construction and composition, the expression of musical styles through the centuries, and the expression of music in different cultures. Learning will involve written and oral work, composition, analysis, interviews and performances. Our aim is for students to be equipped to be competently involved in music for a lifetime.

Health and Fitness

Middle School Health:

The main purpose of this course is to foster student appreciation for the body God has given each of them, and to equip these students with the knowledge, skills, and motivation to live long and healthy lives. We will be covering important topics within all four areas of total health – physical health, mental/emotional health, social health, and spiritual health. Personal application of the health concepts we discuss will be emphasized, as well as sound and informed decision-making when it comes to different types of life choices. In short, this course is designed to inform students about how the health choices they make affect their everyday lives, and to ultimately motivate students to honor God with these choices.

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Physical Education:

The purpose of the physical education curriculum is to help students develop their God-given physical gifts in such a way as to bring an enjoyment of athletic activities, a lifestyle that includes physical fitness, and a perspective of stewardship. One of the ways this is accomplished is through a curriculum that includes a variety of units for both individual and team sports. Between the major units there are additional activities which are included to provide enjoyment, exposure to other games, and fitness. These include: cooperative activities, outdoor/lawn games, fitness activities, and other organized games. Selection of these activities is based on age, class size, resources and space, and teacher preference. During the various units and activities covered, each physical education class includes: fitness activities, exposure of the students to a variety of ways to physically care for and develop their bodies, knowledge and strategy of the sport, and work on the skills necessary to participate in the sport.

History (Social Studies)

Middle School Social Studies - United States History:

This course introduces students to the fundamentals of American History. It begins with European exploration and its collision of three cultures (Native American, European conquerors, and African Slave trade). Students then explore the colonial era, the Revolution and the founding of the American nation. Study continues with the Westward Expansion, the Industrial Revolution of the nineteenth century, and the causes and effects of the Civil War. The next units of study are Reconstruction and the Gilded Age, the emergence of the United States on the world stage, the Roaring Twenties, the Great Depression and the forces of the 20th century which led to two world wars. The course concludes with the Cold War and the Vietnam War.

Mathematics

Mathematics Gr. 6:

Mathematics Gr. 7:

Algebra I:

Algebra I primarily involves the use of variables to represent unknown quantities and the manipulation of expression and equations. Topics include, Order of Operations, Properties of Numbers, Properties of Exponents, Linear Equations in One or More Variables, Ratios and Percents, Proportions, Graphing Lines, Inequalities, Factoring Quadratics, and Counting and Probability.

Science

Science 6-7: Life Science/ Physical Science

Life Science involves studying God's living creation, from the simple life forms such as bacteria through the complex organ systems of humans. Throughout the course, the scientific method will be introduced and repeatedly used to find answers to the questions we have. Students will investigate life's structure and function in the forms of cells and their reproduction, interact with the world around us and learn about ecology, and get a deeper understanding of how their body works and functions on a daily basis. The course is a full year course. There is also a weekly laboratory component that will be used to investigate key components of the life around us and to give relevant experiences to students' lives. During this laboratory period specific hands-on investigations are performed.

Physical Science is an introductory course in chemistry and physics. The first portion of the course teaches mechanics including machines, Newton's laws of motion and energy. The middle portion of the course introduces

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chemistry, the periodic table, elements, compounds and types of bonds. The last portion of the course deals with light and sound. During the laboratory period, investigations are done to enhance learning of classroom material in a hands-on manner.

Science 8: Earth Science

Earth Science is a study of one of God's most fascinating creations, the planet Earth. Throughout this course the individual elements of the planet are examined including plate tectonics, geology, erosional features, weather, the oceans as well as astronomy. In addition, a critical view of evolution is studied and compared to a Biblical account of creation. The laboratory investigations are closely tied to the course material and allow students to have a hands-on approach to the topics at hand (for example, studying rocks and minerals or working with topographic maps).