

The logo features the text "Pearson Online & Blended LEARNING" in a serif font, centered within a white circle. The background of the circle is dark blue with a repeating pattern of light blue, stylized, curved lines resembling Wi-Fi signals or sound waves.

# Pearson Online & Blended LEARNING

## Connexus V2 2019/20 Course Descriptions

### Elementary School (K-5)

#### MATHEMATICS

**Math K** Mathematical thinking and problem solving are introduced in kindergarten. Students explore topics and apply mathematical practices outlined in national and state standards. They learn how to identify numbers, write numbers zero to 20, and count to 100 by ones and tens. They also describe, sort, and compare objects and learn basic shapes. Stories and activities introduce addition and subtraction. A combination of interactive and hands-on exercises teaches students about money, time, fractions, and measurement.

**Math 1** In this course, students learn mathematical concepts related to addition and subtraction, measuring lengths, time, and representing and interpreting data. They also learn about counting, place value, comparing two-digit numbers, using models to add and subtract, reasoning with shapes, and parts of figures. Students use problem solving, reasoning, communicating, representing, and making connections to form mathematical concepts. The course supports the development of students' mathematical thinking by building both conceptual knowledge and procedural fluency.

**Math 2** In this course, students learn mathematical concepts related to addition and subtraction, even and odd numbers, time, and money. They also learn about measuring length, graphs and data, shapes and their attributes, and place value using models. Students use problem-solving, reasoning, communicating, representing, and making connections to form mathematical concepts. The course supports the development of students' mathematical thinking by building both conceptual knowledge and procedural fluency.

**Math 3** In this course, students learn mathematical concepts related to multiplication and division, patterns, rounding, and mental math. They also learn about 2-D shapes, area, perimeter, fractions, interpreting data, time, mass, and capacity. Students use problem solving, reasoning, communicating, representing, and making connections to form mathematical concepts. The course supports the development of students' mathematical thinking by building both conceptual knowledge and procedural fluency.

**Math 4** In this course, students learn mathematical concepts related to place value, adding and

subtracting multi-digit whole numbers, strategies for multiplication and division, factors, multiples, algebra, and patterns. They also learn about fraction equivalence, calculating fractions, comparing decimals, interpreting data, angles, lines, shapes, and measurement. Students use problem solving, reasoning, communicating, representing, and making connections to form mathematical concepts. The course supports the development of students' mathematical thinking by building both conceptual knowledge and procedural fluency.

**Math 5** In this course, students learn mathematical concepts related to place value, adding and subtracting decimals, using models to multiply and divide, the coordinate plane, algebra, patterns, and relationships. They also learn about 2-D figures, operations with fractions, volume, converting measurements, interpreting data, and equivalent expressions. Students use problem solving, reasoning, communicating, representing, and making connections to form mathematical concepts. The course supports the development of students' mathematical thinking by building both conceptual knowledge and procedural fluency.

**Gifted and Talented Math 3** In Gifted and Talented Math 3A, the student will learn mathematical concepts related to multiplication and division, patterns, rounding, mental math, and representing and interpreting data on line plots.

In Gifted and Talented Math 3B, the student will learn mathematical concepts related to fraction equivalence, adding, subtracting, and multiplying fractions, comparing decimals, using whole numbers to solve problems, area, and perimeter.

Concepts are developed using mathematical processes of problem-solving, reasoning, communicating, representing, and making connections. Building both conceptual knowledge and procedural fluency supports the student's development of mathematical thinking and reasoning in solving various problems of authentic contexts.

**Gifted and Talented Math 4** In Gifted and Talented Math 4A, the student will learn mathematical concepts related to place value, adding and subtracting multi-digit whole numbers, adding and subtracting decimals, using models to multiply and divide, the coordinate plane, algebra, patterns and relationships.

In Gifted and Talented Math 4B, the student will learn mathematical concepts related to angles, shapes and measurement, 2D figures, operations with fractions, volume, converting measurements, interpreting data, equivalent expressions, the coordinate plane, patterns and relationships.

Concepts are developed using mathematical processes of problem-solving, reasoning, communicating, representing, and making connections. Building both conceptual knowledge and procedural fluency supports the student's development of mathematical thinking and reasoning in solving various problems of authentic contexts.

**Gifted and Talented Math 5** For qualifying students, this first-semester course reinforces

students' understanding of mathematical concepts in preparation for higher level courses. Students learn to create, analyze, and interpret graphs in their study of statistics. Geometry continues to be explored, with students classifying polygons and using measurement skills to find the perimeter, area, and volume of geometric figures. In addition to learning basic probability and permutations, students begin their algebra studies with solving equations and inequalities.

## **LANGUAGE ARTS**

**Language Arts K** In kindergarten, students build a foundation for successful reading as they explore topics and apply reading, writing, speaking, and listening skills outlined in national and state standards. Learning activities combine phonics, listening, comprehension, and vocabulary instruction with daily exposure to books, including literature and informational texts. A combination of interactive and hands-on exercises encourages the development of fine motor skills. Students learn language skills as well as letter formation, and they practice these by drawing, dictating, and writing. By the end of kindergarten, many students will be reading, and all students should be able to recognize consonants as well as long and short vowel sounds.

**Language Arts 1** In this course, students master key foundational skills. They are exposed to a variety of fiction and nonfiction stories organized into themes such as "Getting to Know Us" and "Our Community." Examining literature through themes helps students make connections between texts and relate reading topics to personal knowledge and interests. Students build writing fluency by responding to various prompts, and they work toward mastery of standard language conventions through daily grammar and mechanics practice. The course teaches students how to communicate purposefully by giving them the opportunity to participate in collaborative discussions and take turns talking and listening carefully to a partner.

**Language Arts 2** In this course, students develop reading, writing, listening, and speaking skills essential for future success. Students expand their vocabularies while using an array of strategies—including main idea, problem and solution, and author's purpose—to comprehend complex texts. A variety of stories are organized into relevant themes such as friends and family, live and learn, and our life/our world. Students enjoy daily independent reading routines. Additionally, they use the writing process to produce various compositions including narrative texts, informative texts, and opinion texts. Students also master standard language conventions through daily grammar and mechanics practice. Engaging activities and discussions help students become proficient listeners and speakers.

**Language Arts 3** In this course, students use critical thinking and reading comprehension skills to analyze texts. Using a multi-draft reading approach, students make connections between their readings and the world. They will be asked questions such as, "How can learning help us grow?" and "What are ways people can take action?" Through the five-stage writing process—prewriting, drafting, revising, editing, and publishing—students practice writing quality sentences and well-organized compositions. Daily reading and writing activities help students continue to master spelling, grammar, and language skills. Students will also learn the strokes of cursive handwriting.

**Language Arts 4** In this course, students use critical thinking and reading comprehension skills to analyze texts. Using a multi-draft reading approach, students make connections between their readings and the world. They will be asked questions such as, “How can a challenge bring out our best?” and “How do different writers treat the same topic?” Through the five-stage writing process—prewriting, drafting, revising, editing, and publishing—students practice writing quality sentences and well-organized compositions. Daily reading and writing activities help students continue to master spelling, grammar, and language skills. Students will also learn the strokes of cursive handwriting.

**Language Arts 5** In this course, students use critical thinking and reading comprehension skills to analyze texts. Using a multi-draft reading approach, students make connections between their readings and the world. They will be asked questions such as, “What kinds of experiences can lead to new discoveries?” and “How do we decide what’s important?” Through the five-stage writing process—prewriting, drafting, revising, editing, and publishing—students practice writing quality sentences and well-organized compositions. Daily reading and writing activities help students continue to master spelling, grammar, and language skills. Students will also learn the strokes of cursive handwriting.

**Gifted and Talented Language Arts 3** In this course, the student will use critical thinking and reading comprehension skills to analyze fiction and nonfiction stories presented in McGraw-Hill’s Wonders. Using a multi-draft reading approach, the student will discuss, analyze, and critique stories in order to make connections between readings, other titles and the world. Stories from the Reading/Writing Workshop and Literature Anthology will ask the student to ponder and make connections to the following essential questions, “How can learning helps us grow?”; “What does it take to solve a problem?”; and “What are individual qualities important?”. The student will use textual evidence from one or more sources to support his ideas.

Throughout the course, the students will also develop writing skills. The basic writing content concentrates on writing quality sentences, organizing paragraphs, and adding detail to writing. The student will continue to use effective planning tools such as graphic organizers and outlines to create well-organized compositions. Through the five-stages of the writing process: prewriting, drafting, revising, editing, and publishing the student will write narrative and informative compositions. The student will continue to master spelling, grammar, and language skills. Wonders offers spelling lists based on the patterns and relationship of letters within words. Daily reading and writing activities reinforce the spelling strategies and give the student opportunities to use spelling words in context. The student will also learn the strokes of cursive handwriting.

Students enrolled in the course will also participate in the Junior Great Books program, during which they will read challenging works of literature and participate in LiveLesson® session discussions. Students will explore the themes of confidence and kindness while developing their critical thinking and writing abilities as part of a method of reading and discussion known as Shared Inquiry. Ultimately, students will develop the habits and strategies used regularly by

good readers, thinkers, and learners.

**Gifted and Talented Language Arts 4** In this course, the student will use his critical thinking and reading comprehension skills to analyze fiction and nonfiction stories presented in McGraw-Hill's Wonders. Using a multi-draft reading approach, the student will discuss, analyze, and critique stories in order to make connections between readings, other titles and the world. Stories from the Reading/Writing Workshop and Literature Anthology will ask the student to ponder and make connections to the following essential questions, "How can a challenge bring out our best?"; "What can animals teach us?"; and "How can you show your community spirit?". The student will use textual evidence from one or more sources to support his ideas.

Throughout the course, the students will also develop writing skills. The basic writing content concentrates on writing quality sentences, organizing paragraphs, and adding detail to writing. The student will continue to use effective planning tools such as graphic organizers and outlines to create well-organized compositions. Through the five-stages of the writing process: prewriting, drafting, revising, editing, and publishing the student will write narrative and informative compositions. The student will continue to master spelling, grammar, and language skills. Wonders offers spelling lists based on the patterns and relationship of letters within words. Daily reading and writing activities reinforce the spelling strategies and give the student opportunities to use spelling words in context. The student will also learn the strokes of cursive handwriting.

Students enrolled in the course will also participate in the Junior Great Books program, during which they will read challenging works of literature and participate in LiveLesson® session discussions. Students will explore the themes of trust and communication while developing their critical thinking and writing abilities as part of a method of reading and discussion known as Shared Inquiry. Ultimately, students will develop the habits and strategies used regularly by good readers, thinkers, and learners.

**Gifted and Talented Language Arts 5** In this course, the student will use his critical thinking and reading comprehension skills to analyze fiction and nonfiction stories presented in McGraw-Hill's Wonders. Using a multi-draft reading approach, the student will discuss, analyze, and critique stories in order to make connections between readings, other titles and the world. Stories from the Reading/Writing Workshop and Literature Anthology will ask the student to ponder and make connections to the following essential questions, "Where can an idea begin?"; "What does it take to put a plan into action?"; and "What kinds of experiences can lead to new discoveries?". The student will use textual evidence from one or more sources to support his ideas.

Throughout the course, the students will also develop writing skills. The basic writing content concentrates on writing quality sentences, organizing paragraphs, and adding detail to writing. The student will continue to use effective planning tools such as graphic organizers and outlines to create well-organized compositions. Through the five-stages of the writing process: prewriting, drafting, revising, editing, and publishing the student will write narrative and informative compositions. The student will continue to master spelling, grammar, and language

skills. Wonders offers spelling lists based on the patterns and relationship of letters within words. Daily reading and writing activities reinforce the spelling strategies and give the student opportunities to use spelling words in context. The student will also learn the strokes of cursive handwriting.

Students enrolled in the course will also participate in the Junior Great Books program, during which they will read challenging works of literature and participate in LiveLesson® session discussions. Students will explore the themes of fitting in and self-respect while developing their critical thinking and writing abilities as part of a method of reading and discussion known as Shared Inquiry. Ultimately, students will develop the habits and strategies used regularly by good readers, thinkers, and learners.

## **SCIENCE**

**Science K** The key to science is stimulating curiosity. A combination of interactive and hands-on exercises encourages students to observe, describe, measure, and question the world around them. Life, Earth, and physical sciences are introduced. Students investigate living things, such as plants and animals, and nonliving things, such as matter and mixtures.

**Science 1** This course encourages students to explore the natural world. They study Earth, its resources, ways to protect the planet, and how plants and animals grow and change. They create a model of a mountain and investigate the way sunlight affects leaves. Students also learn about the scientific method and explore careers in science.

**Science 2** This course stimulates students' curiosity about the world around them. They investigate energy and changing states of matter, such as liquid water changing to water vapor, and they create a weather chart. Students enjoy hands-on and virtual activities as they investigate the importance of water and vegetation in life science and explore forces in physical science.

**Science 3** Students explore the living world and the sky above. In life science, students begin by analyzing things that make up the living world and then study life cycles and ecosystems. They study the composition of Earth as well as its location in relation to the sun and moon. In physical science, students investigate the properties of matter.

**Science 4** Students in this course use the scientific method to perform hands-on and virtual explorations. In the area of life science, they explore the differences and similarities among organisms. In Earth science, students investigate the differences between rocks and minerals and explore forces and forms of energy. Students are also introduced to the idea of a career in science.

**Science 5** Students continue to sharpen their investigative skills. In life science, students examine the living world; in physical science, they explore characteristics of matter, sound, and light. Students also learn about the Earth's composition and the forces that shape its surface. The scientific method is reinforced, and careers in science are discussed.

**Gifted and Talented Science 3** This course introduces science as an adventure in learning about the world around us. Through hands-on activities, student-designed experiments, research, and guided readings, students begin exploring the life and Earth sciences. In the Earth science unit, students learn about the Earth and its changing features. In life science, they explore the living world and its organisms. Designed to accommodate a variety of learning styles, the lessons encourage students to apply new concepts through activity-centered learning, reading, and traditional research and instruction methods. Students also explore the scientific method and various careers in science.

**Gifted and Talented Science 4** This course deepens the student's understanding of the life and Earth sciences through observation, research, and experimentation. Our life science unit explores the differences and commonalities between organisms. The Earth science unit investigates the Earth's different land features and how to care for the Earth in the 21st century. Students become engaged while observing seed growth, exploring the effects of flooding on a riverbank, and conducting a variety of experiments.

**Gifted and Talented Science 5** This exciting course encourages students to see themselves as scientists by empowering them to make their own discoveries. Students begin by studying the roles of scientists and the scientific method and then explore the Earth and life sciences in the context of the discoverer. In life science, they study cells and heredity. In Earth science, students design their own experiments for investigating the earth's composition and the factors affecting that composition. A range of activity-based learning and traditional instruction engages students of diverse learning styles.

## **SOCIAL STUDIES**

**Social Studies K** Students learn the concepts of community, nation, and world in this course. They answer essential questions including "How do people get what they need?"; "How is culture shared?"; and "How does life change throughout history?" A combination of interactive and hands-on exercises teaches students about personal responsibility, good citizenship, and basic geography. While learning about America's past and important historical figures, students research their personal histories and heroes.

**Social Studies 1** Students learn about the ways in which people contribute to their communities and work together to the benefit of all. This course explores the concepts of good

citizenship, neighborhoods, and economics. Students also study maps, photographs, biographies, illustrations, poetry, and music to help explain the concept of communities and extend it to the larger world.

**Social Studies 2** Students explore basic concepts of history, geography, economics, and government while discovering more about world cultures. Students practice basic map, chart, graph, and critical-thinking skills. They also learn about ordinary people who demonstrate good citizenship and famous people who have influenced the United States and the world.

**Social Studies 3** This course focuses on the theme of community, with an emphasis on history, civics, economics, and geography. Students compare communities and examine the American political system, including the Declaration of Independence, the US Constitution, and the three branches of government, all within the context of a citizen's rights and responsibilities. Students are introduced to economics by studying money, prices, and supply and demand, with a special emphasis on making good personal economic decisions.

**Social Studies 4** A regional approach is used to examine the geography and history of the United States in this course. During their studies, students learn how to use different types of maps and apply geographic skills and concepts. The course emphasizes the role of the individual in the community and the concept of change over time. (Course may vary by state.)

**Social Studies 5** In this course, students trace the history of the United States from the earliest Americans to the 21st century. Students practice map skills as they chart the growth of the nation and develop their ability to compare, sequence events, and interpret sources. Students also study how geography has affected culture and historic events.

## **ELECTIVES**

### **HUMANITIES**

**Art K** In art, students explore color, line, and shape. A combination of interactive and hands-on studio projects encourages students to create art. They sharpen their fine motor skills and explore the areas of art they find interesting. Artistic modes include drawing, painting, assembling, and sculpting. Course may not be considered elective in some states.

**Art 1** Students expand their understanding of color, line, and shape. Activities include drawing, cutting, creating designs, and paper construction. The concepts of texture and three-dimensional forms are also introduced. Course may not be considered elective in some states.

**Art 2** Students learn how the elements and principles of art are combined to create unique and expressive artwork. They explore how art is connected to other subjects such as science and math. Students also learn the basics of drawing, painting, and three-dimensional design.



Course may not be considered elective in some states.

**Art 3** Students engage in arts and crafts that explore the characteristics of the four seasons. As they study the art of various cultures, they are introduced to art history and art criticism. Students also use a variety of media to create two- and three-dimensional projects. Course may not be considered elective in some states.

**Art 4** In this course, students are introduced to works of art from several continents. As they become more familiar with art elements and the principles of design, they learn how these are applied in creating visual art in diverse cultures around the world. In addition, students use various media to create two- and three-dimensional projects. Course may not be considered elective in some states.

**Art 5** Students are introduced to various works of art, and they become familiar with the elements of art and the principles of design. They examine how these elements and principles were applied to create visual art in different time periods and cultures. Students use assorted media to create two- and three-dimensional projects. Course may not be considered elective in some states.

**Discovering Music I** Designed for students in grades 3–5, this course teaches fundamental musicianship skills from a Western-Classical approach, while aligning to the National Core Arts Standards. The course challenges the student to improve listening, notation, analysis, performance, and improvisation skills. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

**Discovering Music II** Designed for students in grades 3–5, this course builds on fundamental musicianship skills introduced in Discovering Music I. Aligning to the National Core Arts Standards, the course teaches the student to explore new concepts in rhythm and notation, as well as improve listening, notation, analysis, performance, and improvisation skills. The student will use a basic understanding of the orchestra to explore instrumentation and orchestration in more depth, and analyze compositional style from a range of periods. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

**Discovering Music III** Designed for students in grades 3–5, this course enhances the student's knowledge of musical cultures as he or she discovers a musical identity. Aligning to the National Core Arts Standards, this course provides the student with engaging opportunities to combine musical knowledge with an exploration of different art forms to create new personal works. The student will apply foundational knowledge of music to a variety of musical styles and cultures. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

**Experiencing Music I** Designed for students in grades K–2, this course explores differences between music and everyday sounds, and also how the body hears and responds to music. Aligning to the National Core Arts Standards, the course introduces skills that assist the student

in making music individually and with another person. The student will identify instrument characteristics and sounds and begin to consider the way music of the student's own culture might sound different to a person from another culture. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

**Experiencing Music II** Designed for students in grades K–2, this course introduces basic components of music: melody and rhythm. Aligning to the National Core Arts Standards, the course teaches the student to explore an individual voice by creating beats and rhythms. In addition, the student will use critical listening skills to analyze music while participating in interactive experiences. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

**Experiencing Music III** Designed for students in grades K–2, this course deepens the student's understanding of the roles musicians play in today's society. Aligning to the National Core Arts Standards, this course uses dynamic media to help the student discover a musical identity while expanding knowledge of the foundations of music. The student will apply foundational knowledge to different musical styles and literature. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience.

## **INTERDISCIPLINARY**

**Home Life** In this course, students select from a number of activities that develop their skills through fun, experiential learning projects. Activities include cooking, crafts, sewing, home maintenance, family outings, and genealogy.

## **LANGUAGE ARTS**

**Gifted and Talented Literature Study 2** This course, for second graders only, is organized around the themes of friendship, responsibility, and bravery. The Junior Great Books® program, which is the basis for this course, employs the Shared Inquiry™ method. This method enables students to discuss these themes and make interpretations. This approach to learning fosters a vibrant environment where students acquire the habits and strategies of self-reliant thinkers, readers, and learners.

**Gifted and Talented Literature Study 3 (TX Only)** The Junior Great Books® program employs the method of interpretive readings and discussion being known as the Shared Inquiry™ method. This distinctive approach to learning enables leaders—the teachers and Learning Coaches—to foster a vibrant environment in which a student acquires the habits and strategies of a self-reliant thinker, reader, and learner. Through their own curiosity and attentive questioning, leaders serve as partners in inquiry with the student, helping him work with other students to discover meaning in a reading selection and to build interpretations. The process reaches its fullest expression in Shared Inquiry discussion, where leaders and students think and talk about an interpretive question that arises from a particular story. Using LiveLesson®

sessions, the student will interact with peers twice during each unit for Shared Inquiry and presentation of personal writing.

Junior Great Books includes outstanding works of literature by award-winning authors. Praised for their rich language and international range, and chosen carefully for their ability to support multiple interpretations, the stories in Junior Great Books capture students' attention and imagination and engage the best of their thinking. Progressing in reading level, conceptual complexity, and length throughout the series, the stories are the foundation for a thoughtful process of reading, discussion, and writing.

**Gifted and Talented Literature Study 4 (TX Only)** The Junior Great Books® program employs the method of interpretive readings and discussion being known as the Shared Inquiry™ method. This distinctive approach to learning enables leaders—the teachers and Learning Coaches—to foster a vibrant environment in which a student acquires the habits and strategies of a self-reliant thinker, reader, and learner. Through their own curiosity and attentive questioning, leaders serve as partners in inquiry with the student, helping him work with other students to discover meaning in a reading selection and to build interpretations. The process reaches its fullest expression in Shared Inquiry discussion, where leaders and students think and talk about an interpretive question that arises from a particular story. Using LiveLesson® sessions, the student will interact with peers twice during each unit for Shared Inquiry and presentation of personal writing.

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**Gifted and Talented Literature Study 5 (TX Only)** The Junior Great Books® program employs the method of interpretive readings and discussion being known as the Shared Inquiry™ method. This distinctive approach to learning enables leaders—the teachers and Learning Coaches—to foster a vibrant environment in which a student acquires the habits and strategies of a self-reliant thinker, reader, and learner. Through their own curiosity and attentive questioning, leaders serve as partners in inquiry with the student, helping him work with other students to discover meaning in a reading selection and to build interpretations. The process reaches its fullest expression in Shared Inquiry discussion, where leaders and students think and talk about an interpretive question that arises from a particular story. Using LiveLesson® sessions, the student will interact with peers twice during each unit for Shared Inquiry and presentation of personal writing.

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multiple interpretations, the stories in Junior Great Books capture students' attention and imagination and engage the best of their thinking. Progressing in reading level, conceptual complexity, and length throughout the series, the stories are the foundation for a thoughtful process of reading, discussion, and writing.

## **TECHNOLOGY**

**Educational Technology and Online Learning K** In this course, students explore the features of a draw and paint program as a tool to support emerging reading, writing, and mathematics skills. They learn to locate letters and numbers on the keyboard. A study skills unit introduces them to listening and visualization techniques that support learning. Students also learn to recognize safe and responsible use of technology resources so they can become model digital citizens.

**Educational Technology and Online Learning 1** In this course, students build on foundational skills while using software to draw, type, and format text. They also create presentations to support academic skills. Students learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

**Educational Technology and Online Learning 2** In this course, students use appropriate technology tools and resources to complete projects and solve problems. Students use software to draw, write, organize, and present information. Students learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

**Educational Technology and Online Learning 3** In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. They learn listening and organizational skills and set attainable learning goals. Students become responsible users of technology as they learn about Internet safety and appropriate online behavior.

**Educational Technology and Online Learning 4** In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. Students become responsible users of technology as they learn about Internet safety, appropriate online behavior, and effective search and website evaluation strategies.

**Educational Technology and Online Learning 5** In this course, students use appropriate technology tools and resources to complete projects, manage information, and solve problems. Students use software to write, organize, analyze, and present information. Students learn listening and organizational skills and set attainable learning goals. Students become responsible communicators and users of technology as they learn about intellectual property, Internet safety, and effective search and evaluation strategies.

**WebQuest** Students who sign up for this elective take part in an interactive experience that connects them to their local communities. The course encourages students to become active, contributing members of their communities through participation in a project focused on maintaining or improving their local environment. Over the course of 12 site visits, students will collect data, take notes, and complete activities to support a community effort of their choice.

## **WORLD LANGUAGES**

**Elementary Chinese I, II** Students learn Mandarin Chinese through conversations with a native speaker. Cultural explorations lead students to make connections between their culture and that of people in the Mandarin-speaking world. These introductory courses use many interactive components to engage students with the Chinese language and culture. (The courses are offered to students in third, fourth, and fifth grade.)

**Elementary Sign Language** This course introduces students to the fundamentals of American Sign Language through the use of vocabulary, grammar, and conversation as well as basic signing and fingerspelling techniques. Special activities and exercises help students understand the culture of the deaf and hard-of-hearing community.

**Elementary Spanish I, II** These highly interactive courses enable students to communicate with a native speaker and make connections between their culture and the culture of people in the Spanish-speaking world. Students further develop their Spanish communication skills as they study familiar topics such as school, clothes, and community. (These courses are offered to students in third, fourth, and fifth grade.)

## **HEALTH AND PE**

**Physical Education K** In kindergarten, physical education encourages students to develop their fine motor skills, movement, and confidence to enjoy healthy physical activity regularly. A combination of interactive and hands-on activities teaches students essential skills. Students learn how to respect themselves and others while playing. Course may not be considered elective in some states.

**Physical Education 1** Each week, students learn new games and activities that are grouped into thematic units including Making Healthy Choices and Games Around the World. In addition to completing the activities described in the lessons, students have the option of participating in yoga or an individual or a team sport. Course may not be considered elective in some states.

**Physical Education 2** Each week, students learn a new game or activity based on thematic units including games they can make and games from around the world. In addition to doing the activities described in the lessons, students have the option of participating in yoga or an individual or a team sport. Course may not be considered elective in some states.

**Physical Education 3** By third grade, students are expected to understand and demonstrate clearly defined combinations of movements, and they learn one or more new activities each week. Students learn the importance of nutrition as it relates to health and physical fitness. They also have the option of participating in yoga or an individual or a team sport. Course may not be considered elective in some states.

**Physical Education 4** By fourth grade, students have improved hand–eye coordination, and they understand rules and the importance of following them. This prepares them for more advanced instruction in both individual and partner activities. Students learn the importance of nutrition and exercise as they relate to health and physical fitness. They also have the option of participating in yoga or an individual or a team sport. Course may not be considered elective in some states.

**Physical Education 5** By fifth grade, students understand the concepts of fair play and playing by the rules. Respecting themselves and others is emphasized during cooperative physical education activities. Students learn the importance of nutrition and exercise as they relate to health and physical fitness. They also have the option of participating in yoga or an individual or a team sport. Course may not be considered elective in some states.

## Middle School (6–8)

### MATHEMATICS

**Math 6** Students connect ratio and rate to whole number multiplication and division and also use the concepts of ratio and rate to solve problems. In addition, they expand their ability to divide fractions and to write, interpret, and apply expressions and equations. They also develop an understanding of statistical thinking.

**Math 7** Students build on their knowledge of proportional relationships and operations with rational numbers. They solve real-world problems involving scale drawings, geometric constructions, area, surface area, and volume. Students also draw inferences about populations based on samples.

**Algebra Readiness (Pre-Algebra)** Students prepare for algebra as they expand their understanding of expressions and equations. They solve linear equations and systems of linear equations, use functions to describe quantitative relationships, and analyze two- and three-dimensional space and figures.

**Gifted and Talented Math 6 (Pre-Algebra)** Students prepare for algebra as they expand their understanding of expressions and equations. They solve linear equations and systems of linear equations, use functions to describe quantitative relationships, and analyze two- and

three-dimensional space and figures.

**Gifted and Talented Math 7 (Algebra)** In this course, students explore the properties of real numbers and apply this knowledge to equations, inequalities, and multi-step equations. Students learn to identify, write, and graph functions and equations, simplify radical expressions, and solve quadratic equations. They learn to factor and perform operations with binomials and polynomials. Students calculate slope and use slope-intercept form to graph linear equations. They also learn to solve systems of equations and inequalities both graphically and algebraically. This course is offered to qualified students.

**Gifted and Talented Math 8 (Geometry)** This course guides students through the exploration of geometric figures. They analyze plane figures and three-dimensional figures and apply formulas to calculate area, surface area, and volume. They learn how to use inductive and deductive logic to conduct formal proofs through predictions, counterexamples, and drawing conclusions. Students also conduct detailed analyses of the properties of parallel and perpendicular lines, triangles, polygons, quadrilaterals, and circles, including similarity and transformations.

## LANGUAGE ARTS

**Language Arts 6** Through the study of authors such as Elizabeth Partridge, Gary Soto, and Langston Hughes, students ponder such questions as “Is conflict always bad?”; “How do we decide who we are?”; and “How much do our communities shape us?” Short-term research engages students’ curiosity and critical-thinking skills. Students are encouraged to support their ideas with evidence as they practice narrative, informative, and persuasive writing.

**Language Arts 7** By studying authors such as Amy Tan, Emily Dickinson, and Laurence Yep, students ponder such questions as “Does every conflict have a winner?”; “What is the best way to communicate?”; and “Do others see us more clearly than we see ourselves?” Short- and long-term research engages their curiosity and critical-thinking skills. Students are encouraged to integrate knowledge and ideas into their work as they practice narrative, informative, and persuasive writing.

**Language Arts 8** Through the study of authors such as Nikki Giovanni, Elie Wiesel, and Mark Twain, students ponder such questions as “Can all conflicts be resolved?”; “Is it our differences or our similarities that matter most?”; and “Are yesterday’s heroes important today?” Students exercise their curiosity and critical-thinking skills through short- and long-term research. They refine and reinforce their skills by practicing narrative, informative, and persuasive writing.

**Gifted and Talented Language Arts 6** This course provides students opportunities to work at an accelerated pace, while engaging in more complex and challenging instructional activities. Students are provided opportunities for increased student-teacher interaction and discussion, as well as increased interaction with their peers. This course deepens students’ appreciation of literature through the reading and comprehension of a variety of works from poetry to novels.

Grammar, vocabulary, and spelling are incorporated to help students master the mechanics of English. Students create paragraphs and short essays to promote their understanding of the writing process and respond to literature.

**Gifted and Talented Language Arts 7** This course provides students opportunities to work at an accelerated pace, while engaging in more complex and challenging instructional activities. Students are provided opportunities for increased student-teacher interaction and discussion, as well as increased interaction with their peers. This course uses a variety of texts to guide students into becoming better readers. Students enhance their writing skills through grammar, mechanics, and language development, and they learn useful writing techniques in the context of crafting autobiographical accounts, research papers, poetry, and persuasive essays.

**Gifted and Talented Language Arts 8** This course provides students opportunities to work at an accelerated pace, while engaging in more complex and challenging instructional activities. Students are provided opportunities for increased student-teacher interaction and discussion, as well as increased interaction with their peers. Building on the reading comprehension skills learned in Language Arts 7, this course delves more deeply into literature and writing and prepares students for high school coursework. In addition to improving reading comprehension and communication skills, two novels are read and analyzed, enhancing skills such as predicting, clarifying, summarizing, and identifying plot development.

## SCIENCE

**Science 6** This media-rich science course enable students to engage actively in inquiry-based investigations and science, technology, engineering, and math (STEM) projects, as well as cross-disciplinary and cross-curricular activities. Students are encouraged to make connections, collaborate, and reflect on their learning as they work through the content.

**Science 7** This media-rich science course enable students to engage actively in inquiry-based investigations and science, technology, engineering, and math (STEM) projects, as well as cross-disciplinary and cross-curricular activities. Students are encouraged to make connections, collaborate, and reflect on their learning as they work through the content.

**Science 8** This media-rich science course enable students to engage actively in inquiry-based investigations and science, technology, engineering, and math (STEM) projects, as well as cross-disciplinary and cross-curricular activities. Students are encouraged to make connections, collaborate, and reflect on their learning as they work through the content. As students advance through the courses, they receive an internationally benchmarked science education that covers the topics listed below. Because each course is designed to meet state-based standards, the sequence of content will vary by state and may include the following:

- Structure of the cell
- Organism systems and information processing in the body
- Transfer of matter and energy in organisms and ecosystems
- Interdependent relationships in ecosystems



- Natural selection and adaptations
- Growth, development, and reproduction of organisms
- Earth and space systems
- Earth's surface and interior processes
- Weather and climate
- Human impact on Earth
- Structure and properties of matter
- Chemical reactions
- Forces, energy, and motion
- Waves and electromagnetic radiation

**Gifted and Talented Science 6** Students learn how science is around them every day. Through interactive labs and engaging assignments, students discover the key elements of Earth, life, and physical sciences. The nature of matter is explored, covering the properties of a simple atom to those of more complex molecules. Energy and motion are also introduced, and a biology unit examines organisms and the principles of heredity. Units on Earth and space science provide detailed information about the planet, the universe, and the relationships between them.

**Gifted and Talented Science 7** Science for seventh graders is an integrated approach with opportunities for students to explore concepts in earth science, life science, and physical science. Students learn lab report processes and protocols, and these skills are utilized throughout the course. Earth science investigates the properties of rocks and minerals, patterns in the atmosphere, and the solar system. Students describe the structures of living things, explore how living things interact, and learn about various human body systems in the life science unit. Physical science covers physical and chemical properties of matter, different types of forces and motion, and various forms of energy.

**Gifted and Talented Science 8** Focusing on the fundamentals of Earth, life, and physical sciences, Science 8 lessons are designed to engage students through exploration and discovery. Life science units expose students to traits and how they change, relationships between organisms and their environments, and cycles in nature. Earth's changing geology is studied in the Earth science unit, in which students learn the causes and effects of earthquakes and volcanoes and the bodies that comprise the solar system. In the physical science unit, students learn about atoms and elements and how to calculate different forms of motion and force.

## **SOCIAL STUDIES**

**Social Studies 6** Students focus on ancient civilizations. They begin by understanding a historian's role and utilizing the tools and skills he or she would use, including analyzing timelines, studying geography, and evaluating multiple sources. Students trace how societies

shifted from hunting and gathering to farming. They also trace the development of ancient China, India, Mesopotamia, Egypt, Greece, and Italy. Students enhance their critical thinking by interpreting primary sources and reading eyewitness accounts to draw conclusions.

**Social Studies 7** Students study political, economic, and social changes from the fifth century to modern times. They utilize their critical-thinking skills by making connections between historical events, such as the rise and fall of empires and the rise of democracy, and by analyzing long-term changes and recurring patterns in world history. Students complete a comprehensive study of the history, geography, and cultures of nations in North and South America. Thinking as historians, they analyze timelines, read primary source documents, form hypotheses, and draw conclusions.

**Social Studies 8** In this course, students study the history of the North American continent. The course covers the early cultures that thrived in the Americas for thousands of years, the European exploration and colonization of the continent, and the subsequent rise of the United States. Students learn about the Civil War and the Reconstruction that followed. The course traces the advances made over the last century and a half and the role the United States has played in a changing world.

## ELECTIVES

### HUMANITIES

**Art 6** The middle school art program is organized around the three artistic processes of creating, presenting, and responding. In addition, the program emphasizes how art and design can drive innovation in the same way science, technology, engineering, and mathematics do. Throughout the courses, students use various media and techniques to construct projects, collaborate with peers, and critique their own work as well as the work of other artists.

**Art 7** In Art 7, students explore the wide range and variety of visual arts. They learn the basic elements of art and principles of design and apply them in their own creative ways. The course culminates in a study of factors involved in evaluating and critiquing art.

**Art 8** In Art 8, students consider the preservation and protection of art. They then explore how international, national, and local art influences ideas, actions, cultures, and environments. Using this information, students build their own ideas of the role art plays in their lives.

**Exploring Music I** Designed for students in grades 6–8, this course teaches fundamental musicianship skills approached from a Western-Classical style, while aligning to National Core Arts Standards. The course challenges the student to improve listening, notation, analysis, performance, and improvisation skills. With audio, visual, and interactive technologies, the course provides a unique and advanced learning experience for the student.

**Exploring Music II** Designed for students in grades 6–8, this course reviews and expands fundamental musicianship skills approached from a Western-Classical style, while aligning to the National Core Arts Standards. The student will review and expand basic skills and concepts of rhythm and notation that were introduced in Exploring Music I. The student will use classic repertoire to analyze compositional style and improve listening, notation, analysis, performance, and improvisation skills. With audio, visual, and interactive technologies, the course provides a unique and advanced learning experience. Exploring Music I is a prerequisite for this course.

**Exploring Music III** Designed for students in grades 6–8, this course enhances the student’s knowledge of musical cultures as he or she discovers a musical identity. Aligning to the National Core Arts Standards, this course provides the student with engaging opportunities to combine musical knowledge with an exploration of different art forms to create new personal works. The student will apply foundational knowledge of music to a variety of musical styles and cultures. With audio, visual, and interactive technologies, this course provides a unique and advanced learning experience. Exploring Music I and Exploring Music II are prerequisites for this course.

## **INTERDISCIPLINARY**

**Home Life** In this course, students select from a number of fun, experiential learning projects that develop their skills. Activities may include cooking, crafts, sewing, home maintenance, family outings, photography, and genealogy.

## **OTHER**

**Middle School Art and Design** There are so many different types of art in this world—fine art, classical art, visual art—but the impact of digital art and design is all around us, often in ways that people probably aren’t even aware of! After taking Digital Art and Design, the student will enjoy a deeper understanding and appreciation for all things digital as he explores this special genre of art found in everything from advertising to animation to photography and beyond. In this course, the student will learn about the evolution of art, the basic principles of art and design, and the role of art in politics and society. Additionally, the student will actually create original digital art and make it come alive. The student will give his creative side a boost with this Digital Art and Design course!

**MS Career Exploration I** When you think about your future, what careers do you see? Police officer? Nurse? Farmer? Restaurant manager? In Middle School Career Exploration, you’ll explore careers in more than 15 different career areas. From the energy field to sales and from law to transportation, you’ll learn more about what careers are available and what you need to do to be a success. In addition, you’ll examine how to choose the career that is best for you based on your own unique personality and interests. And you can begin developing your leadership skills now. Middle School Career Exploration will help you prepare for your future now! What do you want to be?

**MS Journalism** Who? What? When? Where? Journalism provides us with the answers to these questions for the events that affect our lives. In this course, the student will learn how to gather information, organize ideas, format stories for different forms of news media, and edit stories for publication. The course will also examine the historical development of journalism and the role of journalism in society.

## **SOCIAL STUDIES**

**Social Studies Skills** This course is designed to help you develop the skills needed for success in your social studies courses and give you a broad base of knowledge about the world and the people who live in it. You will practice using different kinds of visual aids, apply longitude and latitude concepts, use timelines and follow the appropriate process for creating a research paper. In addition, this course hits the highlights of world history, geography, psychology, United States history, and U.S. government.

## **TECHNOLOGY**

**Educational Technology and Online Learning 6-8** Students use electronic media and software to apply academic concepts as they create meaningful organizers, projects, and presentations. Students locate, retrieve, and evaluate data in order to construct and analyze databases. They produce presentations on Internet safety, online predators, and cyberbullying. Students become effective communicators and collaborators as they plan, evaluate, and synthesize research emphasizing current issues in the field of technology.

**WebQuest** Students who sign up for this elective take part in an interactive experience that connects them to their local communities. The course encourages students to become active, contributing members of their communities through participation in a project focused on maintaining or improving their local environment. Over the course of 12 site visits, students will collect data, take notes, and complete activities to support a community effort of their choice.

## **WORLD LANGUAGES**

**Middle Chinese I, II** Students have the opportunity to “see it, hear it, say it, and write it” as they interact with content and communicate with native speakers of Mandarin Chinese throughout the courses. Familiar characters introduce students to lesson content and serve as tour guides as students visit the Great Wall, meet pandas in Sichuan, and celebrate the Lantern Festival.

**Middle Sign Language** This course introduces students to the fundamentals of American Sign Language. They explore vocabulary, grammar, and conversation by using basic signing and fingerspelling techniques. Special activities and exercises help students understand the culture of the deaf and hard-of-hearing community

**Middle Spanish I, II** These courses introduce students to Spanish language and culture. Student guides share information on topics such as family and friends, home, food, clothing, and neighborhoods. Culture is presented throughout the courses to help students make connections between their culture and the culture of people in the Spanish-speaking world. Opportunities for students to communicate with native speakers throughout these courses provide a real-world context.

## HEALTH AND PE

**Health and Physical Education 6** In this course, students will meet a crew of virtual characters that will help them explore health and understand fitness. Among them is Coach Cardio, who will help students measure their growing fitness level by learning to keep their bodies physically fit. Students will complete various projects as they learn about themselves, fitness and the world around them.

**Health and Physical Education 7** In this course, students will reach new levels of fitness through sports, dance, aquatics, and more. Course characters will help guide and enhance their experience. Students will learn safety rules for exercises to improve their skills, how different activities target different parts of their body, and how to reach new goals.

**Health and Physical Education 8** This course will provide students practice in game strategy, sport skills and performance. Students will discover the diversity of sports, nutrition, and peer pressure, while learning how to make effective decisions.

## High School (9-12)

### MATHEMATICS

**Algebra 1** Students learn about the properties of real numbers and apply their knowledge to equations, inequalities, and multi-step equations. They move on to identify, write, and graph functions and equations; simplify radical expressions; solve quadratic equations; and factor and perform operations with binomials and polynomials. Students calculate slope and use the slope-intercept form to graph linear equations. They also learn to solve systems of equations and inequalities both graphically and algebraically.

**Algebra 2** Students engage in high-level mathematical discussions and apply algebraic concepts to real-world scenarios as they build on prior knowledge of functions, systems of equations, the quadratic formula, and factoring. Students also continue to study arithmetic and geometric sequences and series, probability and statistics, and trigonometric identities and equations.

**Algebra with Finance** In this course, students explore the properties of real numbers and apply this knowledge to equations, inequalities, and multistep equations. Students learn to identify, write, and graph functions and equations, simplify radical expressions, and solve quadratic equations. They learn to factor and perform operations with binomials and polynomials. Students calculate slope and use slope-intercept form to graph linear equations. They also learn to solve systems of equations and inequalities both graphically and algebraically. This course is offered to qualified students.

**Calculus** Students study limits, continuity, and differentiation while exploring integrated algebraic, trigonometric, and transcendental functions and the applications of derivatives and integrals. Major topics and concepts include differentiation and integration rules, rates of change, derivative tests, and differential equations. A TI-83+ or TI-84+ graphing calculator is strongly recommended, but it is not provided by Connections Academy.

**Consumer Math** Students focus on math skills and problem-solving strategies that are relevant to practical financial applications. Topics include planning and managing a budget, avoiding common financial pitfalls, and posing questions to businesses and companies. Students also learn to examine their own spending behavior and evaluate purchasing decisions.

**Explorations in Mathematics** Students delve into fundamental math concepts and apply them to real-life situations. Topics covered include prime factorization, operations with rational numbers and integers, solving equations, properties of real numbers, and basic statistics. The goal of this course is to establish a solid base for the study of more advanced math.

**Geometry** This course guides students through the exploration of geometric figures. They analyze plane figures and three-dimensional figures and apply formulas to calculate area, surface area, and volume. They learn how to use inductive and deductive logic to conduct formal proofs through predictions, counterexamples, and drawing conclusions. Students also conduct detailed analyses of the properties of parallel and perpendicular lines, triangles, polygons, quadrilaterals, and circles, including similarity and transformations.

**Pre-Algebra** In this course, students are provided with a solid foundation for success in future high school mathematics. They refine their operational skills as they work with exponents, fractions, decimals, and integers, and they learn to use variables and expressions to write and solve equations and inequalities. Students are introduced to relations and functions, as well as multi-step equations, which they learn to solve and graph. Units on geometric skills focus on development of spatial thinking and an understanding of basic geometric terms and formulas.

(This course is not offered at all schools.)

**Pre-Calculus** In this course, students analyze various functions. They study quadratics, sequences, and series. Students expand their knowledge of trigonometric concepts and explore vectors and parametric equations. Finally, students examine concepts, including limits and derivatives, in preparation for their study of calculus. Throughout the course, lessons focus on ways in which mathematics is applied in the real world and is essential to everyday life. This, combined with an emphasis on mathematical reasoning and critical thinking skills, prepares students for future college and career opportunities.

**Statistics** This course addresses descriptive statistics topics including frequency distributions, histograms, graphs, and measures of center and spread. Probability topics include addition rules, multiplication rules, conditional probabilities, counting rules, binomial distribution, and normal distribution. Inferential statistics topics include estimations for population measures, hypothesis testing, correlation, goodness-of-fit, and statistical process control.

## LANGUAGE ARTS

**English 9** Classic and contemporary works of American, British, and world literature in a variety of genres are introduced in English 9. Students analyze short fiction, nonfiction, and poetry selections. Students also read and analyze novels and other major literary works. Reading and writing assignments strengthen students' understanding of literary elements in poetry, fiction, and drama; the characteristics of narrative, expository, and persuasive writing; correct grammar and usage; and research skills. The thematic units include works by Homer, Gabriel García Márquez, and Leslie Marmon Silko.

**English 10** The timeless themes in world literature are emphasized in English 10, drawing from literature of the Americas, Europe, the Middle East, Asia, the Pacific Rim, and Africa. A classic world literature selection introduces each region, followed by short fiction, nonfiction, poetry, and/ or drama. Students explore the cultures surrounding each piece of literature and consider the similarities that unite the human family. The survey of world literature includes works by Margaret Atwood, Pablo Neruda, and Eugène Ionesco. Students continue to strengthen their mastery of the writing process and compose for various purposes. Skills are further developed, including the research process and oral communication.

**English 11** Students focus on the literary movements that comprise American literature and trace the chronology of national literature from the early American and colonial period through the contemporary period. Students read selections from the Native American oral tradition; seminal historical documents and essays; and fiction, nonfiction, poetry, and drama. The survey of American authors includes Mark Twain, Ralph Ellison, and Julia Alvarez. Students continue to strengthen and apply higher-level critical reading, literary analysis, and research skills through the use of graphic organizers and note-taking strategies.

**English 12** Students study classical and contemporary British literature from the Anglo-Saxon period to the modern era. They examine how the historical, social, and cultural contexts of each period influenced writers. Particular attention is given to the form and function of different types of literature, including epic poetry, allegory, lyric poetry, fiction, nonfiction, and drama. The survey of British literature includes excerpts from Geoffrey Chaucer, William Shakespeare, and Virginia Woolf. Students write creative and analytical compositions and participate in collaborative discussions to refine their writing products.

## SCIENCE

**Biology** Students have frequent opportunities to debate scientific findings and analyze how biology impacts society as they study topics such as ecology, genetics, and anatomy. Using both hands-on experiments and interactive tools, they also study cells, compare microorganisms, investigate plant and animal structure and function, and explore the history of life on Earth.

**Biotechnology** In today's world, biotechnology helps us grow food, fight diseases, and create alternative fuels. In this course, students will explore the science behind biotechnology and how this science is being used to solve medical and environmental problems.

**Chemistry** Students are given the opportunity to model atomic structure and to observe, represent, and interpret reactions between atoms and molecules. Students investigate the properties of solutions and analyze the nature of solids, liquids, and gases using interactive tools. They describe and calculate the energies of different types of reactions and explore electrochemistry.

**Earth Science** Students look at our planet's place in the universe, at its composition, and at the many changes it may undergo. In addition, they study Earth's history by comparing landforms, investigating the properties of rocks and minerals, analyzing weather patterns, and examining the relationships between the Earth, moon, and sun.

**Physical Science** This course is designed as an interactive, 21st century course focusing on basic physics and chemistry. Topics include forces and motion, energy through waves, electricity and magnetism, the matter around us, and chemical bonding and reactions. This course will provide a foundation for the study of the physical sciences.

**Physics** Students apply the math and science skills they have already learned to explain the laws of motion, analyze the laws of thermodynamics, describe the behavior of waves, and investigate the relationship between electricity and magnetism. They are introduced to quantum physics and are asked to apply physics concepts to real-life situations.



## **SOCIAL STUDIES**

**American Government** Students examine concepts such as democracy, federalism, separation of powers, and checks and balances. The branches of government—legislative, executive, and judicial—are studied in depth. Students learn about the basic rights and responsibilities of U.S. citizens; the influence of political parties, the media, and interest groups; and the structure of local and state governments. The course presents information in a context relevant to students. Activities are designed to develop students' ability to read and evaluate different forms of information and communicate their ideas.

**Economics** This course addresses concepts of economics, including a review of the American free enterprise system. Students learn about markets, business and labor, and banking and finance in the microeconomics sections, and then learn about measuring economic performance, the government's role in the economy, and international trade and development in the macroeconomics section.

**Geography and Society** Students explore geography skills and principles as they examine several case studies with geographic implications. They gain an understanding of the ways in which geography influences the daily lives of people around the world. This course covers the concepts of physical geography, human and environmental interaction, human systems, and the movement of peoples and their cultures.

**United States History** This course contains lessons addressing historical periods from the American Revolution to globalization and the 21st century. The lessons address key concepts, important historical figures, and significant events to help students gain an understanding of the political, economic, military and social structures of the early years of the United States through its emergence as a global superpower.

**World Geography** Students explore the world's cultural regions by focusing on location, physical characteristics, demographics, historical changes, economic activity, and land use. They are encouraged to examine real-life situations, develop an understanding of multiculturalism, and explore the relationship between people and their environment.

**World History** This course provides students with a comprehensive examination of world history, from ancient times through present day. Students explore prehistory and early civilization, focusing on the ancient civilizations of the Americas, Egypt, India, China, Greece, and Rome. They study Medieval Christian Europe from the early to late Middle Ages; regional civilizations including the Muslim world, Africa, and Asia; and early modern times with a focus on the Renaissance, Reformation, and Global Age. The course explores social, political, and economic changes of the 19th and 20th centuries, including the industrial age and independence movements. Students study the impact of nationalism, imperialism, and the world wars. Finally, they explore the Cold War, new nations, and the effects of globalization.

## **ADVANCED PLACEMENT®**

**AP Art History** Students will examine major forms of artistic expression from the past and present and from a variety of cultures. While learning to look at these works of art critically, with intelligence and sensitivity, students will articulate what they see or experience.

**AP Biology** This challenging course is designed to provide a college-level experience and prepare students for the AP Biology exam. Students are engaged in a wide variety of activities with substantial emphasis on interpreting and collecting data in virtual labs, writing analytical essays, mastering biology concepts, and making connections. The key themes in the course include the scientific processes; the effects of science on technology and society; the chemistry and makeup of living organisms; and genetics, diversity, and evolution.

**AP Calculus AB** This college-level course covers such concepts as derivatives, integrals, limits, approximation, applications, and modeling. In the first semester, students begin by reviewing function notation, and then they explore absolute value, piecewise, exponential, logarithmic, trigonometric, polynomial, and rational functions. After studying limits and continuity, students move on to concepts of derivatives, including the chain rule, differentiation, implicit differentiation, and logarithmic differentiation. Toward the end of the course, students apply what they have learned to solve integration problems. This course prepares students for the AP Calculus AB exam. A TI-83+ or TI-84+ graphing calculator is required for this course, but it is not provided by Connections Academy.

**AP Calculus BC** This course, an extension of AP Calculus AB, emphasizes broad concepts and applicable methods. Students describe and analyze functions, limits, and graphs; calculate and apply derivatives; interpret and apply integrals; and study polynomial approximations and series. The course provides opportunities for students to apply concepts to real-world situations. This course prepares students for the AP Calculus BC exam. A TI-83+ or TI-84+ graphing calculator is required for this course, but it is not provided by Connections Academy.

**AP Computer Science** This course involves developing the skills to write programs or part of programs to correctly solve specific problems. Students will learn design techniques to make programs understandable, adaptable, and reusable.

**AP English Language and Composition** This course provides high school students with college-level instruction in language, rhetoric, and exposition. Students study and write various kinds of analytic and persuasive essays on literary and non-literary topics. Students become skilled readers of prose written in various periods, disciplines, and rhetorical contexts. Both reading and writing assignments are designed to make students aware of the interaction among a writer's subject and purpose and the audience's expectations, as well as the way in which conventions and language contribute to effectiveness in writing. This course prepares

students for the AP English Language and Composition exam by enabling them to read, comprehend, and write about complex texts while developing further communication skills at a college level.

**AP English Literature and Composition** This course prepares high school students for the AP English Literature and Composition exam by providing them with college-level instruction in various kinds of analytic and persuasive essays on literary and non-literary topics. Students become skilled readers of prose written in various periods, disciplines, and rhetorical contexts. Through their integrated reading and writing activities, students analyze and evaluate the interaction among a writer's subject and purpose and the audience's expectations, as well as the way in which conventions and language contribute to effectiveness in writing.

**AP Environmental Science** The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand interrelationships in the natural world, identify and analyze environmental problems that are natural and human-made, and prepare for the AP Environmental Science exam. Students evaluate the relative risks associated with these problems and examine alternative methods for resolving or preventing problems. Hands-on and virtual lab experiences support students' ability to master the content.

**AP Human Geography** This course is designed to provide college level instruction on the patterns and processes that impact the way humans understand, use, and change Earth's surface. Students use geographic models, tools, and geographical data to examine spatial patterns and analyze the changing interconnections among people and places.

**AP Macroeconomics** Students will understand the choices they must make as producers, consumers, investors, and taxpayers. This course provides students with the knowledge and decision-making tools necessary for understanding how a society must organize its limited resources to satisfy its unlimited wants.

**AP Microeconomics** This course introduces the ways in which people make use of limited resources. Students examine supply and demand, factors of production, the roles of labor and management, the relationship between the environment and the economy, and the impact of government policies on individuals' economic decisions. Students also study the stock market and track the progress of various stocks. This course prepares students for the AP Microeconomics exam.

**AP Psychology** This is a college-level course providing students an overview of the development of human behaviors and thoughts. Along with preparation for the AP Psychology exam, the goals of this course are to immerse students in modern psychological investigation techniques, to accentuate the ethics and morality of human and animal research, and to emphasize scientific critical thinking skills in application to the social sciences. **AP Spanish Language** The main objective of this course is to develop students' interpersonal communication skills and prepare them for the AP Spanish Language exam. Students develop a strong command of the Spanish language and become very proficient in reading, writing, and speaking. Students are exposed to Spanish literature, historical and current events, music,

movies, radio, and television.

**AP Statistics** Students gain an understanding of the vocabulary, method, and meaning of statistics. They explore data and patterns found in the world around them by analyzing information and noting statistical relationships. They apply their knowledge to relevant, open-ended tasks requiring them to connect multiple statistical topics together. To demonstrate their comprehension, students actively construct experiments to understand, interpret, communicate, and apply statistical methods. General topics of study include planning and designing a study, anticipating patterns, and making statistical inferences. This course prepares students for the AP Statistics exam.

**AP United States Government** Students will research the roles of the media, political parties, interest groups, states, candidates, bureaucracy, and the public in the governmental process. They will experience the production of policy building in the areas of economic/social policy, foreign policy, and public administration.

**AP United States History** Woven into the chronology of this course are the key themes of American History. Issues of American identity, diversity, religion, and culture are examined. Economic transformations, the development of political institutions, and reform movements are evaluated. War, slavery, and demographic changes are assessed. Globalization and environmental issues are analyzed.

## ELECTIVES

### **Business, Communication, Science, and Technology**

**2-D Animation** Do you wonder what it would be like to create the next blockbuster animated movie or do you want to make the next big video game? Do you have an eye for drawing, technology, and timing? If so, Animation is the course for you! You will learn how to use animation tools to conceptualize and bring your creations to life. You'll learn the ins and outs of creating 2D and 3D animation, from start to finish. You'll even begin working on our own design portfolio and get hands on experience with creating your own animation projects. Learning about Animation could lead to a thriving career in the growing world of technology and animation.

**Accounting I** This course provides students with an introduction to accounting concepts and principles, financial statements, internal control design, and accounting for partnerships.

**Accounting II** The student will build upon knowledge gained in Accounting I and continue to explore topics such as corporate accounting and financial statements, long-term liabilities, cash flow, financial statement analysis, managerial accounting, budgeting, and the use of financial data to make business decisions. E

**Administrative Duties and Office Management** Students learn the skills and knowledge

required to perform tasks in the administrative department of a medical office. Topics include, but are not limited to, receiving patients, scheduling appointments, handling medical records, and processing insurance claims.

**Advertising and Sales Promotion** Do you have a business idea but are unsure about how to market your ideas to customers? Do careers in business appeal to you? In this Introduction to Marketing class, the student will master the basics of marketing, including core concepts such as financing, pricing, distribution, product management, and more. Throughout the course, the student will learn about the basics of economics and economic systems, managing business finances accounting practices, operating a business in the global marketplace, generating business ideas and seeking out business opportunities, creating a business plan, and promoting and advertising a business.

**Anatomy and Physiology** Students learn about the anatomical structures and physiology of the human body. Body systems are discussed in terms of how each participates in homeostasis of the body. Students learn about selected major pathologies, including causes, symptoms, diagnostic procedures, and treatments, as well as common changes that occur throughout the lifespan.

**Astronomy: Exploring the Universe** In this course the student will explore a broad range of astronomy topics, including the planetary system, stars, galaxies, and the universe. The student will also apply the scientific method and examine the evolution of scientific ideas. By the end of the course, the student will be able to:

- Assess the nature, scope, and evolution of the Universe
- Apply fundamental concepts underlying astronomy
- Evaluate the evolution of scientific ideas in astronomy
- Analyze data to determine patterns, relationships, perspectives, and credibility

**Business Communication** Students explore business communication, including letters, memos, electronic communication, written reports, oral presentations, and interpersonal communication. Resumes, application letters, interviewing tips, and employment follow-up are also covered.

**Business Information Systems** This course introduces students to various information and communications technologies and explains how information systems are used to solve problems and make better business decisions.

**Business Law** Students explore principle areas of business law and topics such as torts, crimes, intellectual property, contracts, negotiable instruments, agency, employment, and forms of business organization. They learn rules of law and legal terminology, as well as legal solutions for business-related issues.

**Business Math** The student will explore topics such as business statistics, profit calculations, payroll, banking, interest calculations, insurance, taxes, and other business topics.

**Concepts of Engineering and Technology** Each day, we are surrounded by technology and engineering projects. From our phones to the bridges we drive over, engineering and technology influence many parts of our lives. In Concepts of Engineering and Technology, the student will learn more about engineering and technology careers and what skills and knowledge he will need to succeed in these fields. The student will explore innovative and cutting-edge projects that are changing the world we live in and examine the design and prototype development process. Concepts of Engineering and Technology will also help the student understand the emerging issues in this exciting career field.

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

**Emergent Computer Technology** In this course, students learn the basics of building safe websites, including the use of hypertext markup language (HTML). They then plan their own sites and learn how to link and navigate pages. As they progress to more complex design techniques, students also learn how graphics can make a site more attractive.

**Entrepreneurship: Starting Your Own Business** Do you dream of owning your own business? This course can give the student a head start in learning about what he will need to own and operate a successful business. The student will explore creating a business plan, financing a business, and pricing products and services.

**Game Design I** This course is for anyone who loves gaming and wants to design games. The student will learn how to use popular game design software to create engaging, interactive games in a variety of genres. In addition, the student will get a solid foundation in the basic concepts of game development. By the end of this course, the student will have a variety of polished games for your game development portfolio.

**Game Design II** This course is for anyone who loves gaming and wants to design games. You'll learn how to use popular game design software to create engaging, interactive games in a variety of genres. In addition, you'll get a solid foundation in the basic concepts of game development. By the end of this course, you will have a variety of polished games for your game development portfolio.

**Health, Safety & Nutrition** Students learn about the physical and psychological needs of children, from birth to age eight, and how to meet these needs in group settings. Topics include

wellness of young children, standards, guidelines and national initiatives, children's nutritional needs, safe and healthy environments, emergency response, child abuse and neglect, educational experiences, and partnering with families.

**Human Resource Management** The student will learn important human resource management skills used by business managers in day-to-day operations. While focusing on various aspects of human resource management and practices, problem-solving and critical-thinking skills are applied.

**International Business** From geography to culture global business is an exciting topic in the business community today. This course is designed to help students develop the appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace. Students will gain a global view of business, learn how today's businesses are more interconnected than ever, and investigate why and how companies go international. The course further provides students a conceptual tool by which to understand how economic, social, cultural, political and legal factors influence both domestic and cross-border business. Business structures, global entrepreneurship, business management, marketing, and the challenges of managing international organizations will all be explored in this course. Students will cultivate a mindfulness of how history, geography, language, cultural studies, research skills, and continuing education are important in both business activities and the 21st century.

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

**Introduction to Computer Applications** In this course, students use electronic media and software to apply academic concepts in the creation of meaningful organizers, projects, and presentations. Students locate, retrieve, and evaluate data in order to construct and analyze databases. Students produce presentations on Internet safety, online predators, and cyberbullying. At the end of the course, students become effective communicators and collaborators as they plan, evaluate, and synthesize research emphasizing current issues with technology.

**Introduction to Finance** Students gain an understanding of financial management, including key language and terminology, time-value of money, financial markets and securities, financial statements, financial analysis, risk and return, valuation of stocks and bonds, capital budgeting and valuation, cost of capital and capital structure, working capital management, dividend policy, and international finance. Students apply financial tools and understand how they impact financial decision making.

**Introduction to Graphic Design** Can people communicate without using words? Do different colors invoke different emotions? Can artists use various textures to communicate a range of ideas? Absolutely! Designed to develop an understanding and appreciation for design, the Introduction to Graphic Design A course teaches the student to interpret visual representations

and to communicate his or her own ideas and information graphically. By raising the student's awareness of design, this intermediate-level course establishes a strong foundation in the basic principles of graphic design. This course, the first in a two-semester series, introduces the student to scenarios that can be solved by applying creative techniques that yield innovative and effective design solutions. Though the course is structured around computer-assisted graphic design, the student will examine other types of design as well. The student will also learn to use Inkscape, an image editing program that is provided, and will create several design compositions using this program.

**Introduction to Online Learning** Learning online and learning in a classroom are such different experiences -- from the presentation of material to interacting with your teachers and classmates to test taking. To be a successful learner in an online environment you need strategies. In this course, you will be equipped with best practices for working, studying, and researching efficiently. Coaching you to become a responsible digital citizen, this course will show you how to protect your privacy, how to communicate and to collaborate with others respectfully, and more!

**Introduction to Psychology** Students gain an understanding of human behavior, including biological foundations and the brain, sensation, motivation, and perception. Students explore the relationship between learning and memory; various personality theories; emotions; states of consciousness; cognition; life-span development; and applied psychology.

**Introduction to Sociology** Students examine the sociological processes that underlie everyday life, focusing on globalization, cultural diversity, critical thinking, new technology, and the growing influence of mass media.

**Introductory Astronomy** Students explore a broad range of astronomy topics, including the planetary system, stars, galaxies, and the universe. Students also learn about the scientific method and the evolution of scientific ideas. E

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

**Java Programming II** Students explore essential object oriented programming concepts, exception handling, recursion, generics, and important data structures in the Java Collections Framework. They also learn more advanced topics including algorithm analysis using Big O notation, a comparison of major sorting algorithms, and the creation and traversal of a binary search tree.

**Leadership and Supervision in Business** This course examines the roles and responsibilities of supervisors in private, service, and public organizations. The student will gain an



understanding of the expanded scope of supervisory responsibilities for business personnel ranging from first-time, first-line supervisors to top-level executives.

**Principles of Management** The student is introduced to common management philosophies and issues in today's changing world. The student will study globalization, ethics, diversity, customer service, and innovation from a managerial perspective.

**Principles of Marketing** Students explore factors influencing how marketing decisions are made, including the impact of marketing decisions on an organization and its customers. They gain a working knowledge of practical marketing and business vocabulary. They also evaluate how the actions of competitors influence marketing decisions in the global marketplace.

**Public Speaking** The student will gain a basic understanding of public speaking and the basic elements of a speech. The student will learn strategies to effectively communicate, to adapt to different audiences, and to practice organizational methods to create engaging speech content. Throughout the course, the student will develop and present original speeches to classmates.

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

**Web Design** This course provides a comprehensive introduction to the essentials of website design. From designing page layouts to coding with CSS and JavaScript®, students learn how to create a complete website. Through study of real-world design scenarios and hands-on projects, students create compelling, usable websites using KompoZer, one of the Internet's easiest-to-use open-source editing applications.

## **CAREER & TECHNICAL EDUCATION (CTE)**

**Adult Roles & Responsibilities** What do you want out of life? How do you achieve your dreams for the future? These can be difficult questions to answer, but with the right tools, they don't have to be. This course will encourage you to learn more about yourself and help you to prepare for the future. You will explore goal setting, decision making, and surviving college and career. You will also discover how to become a valuable contributing member of society. Now is the time to take action. It's your life, make it count!

**Career Planning and Skill Development** As a high school student, it may seem like an eternity before you'll be working for a living. However, you will be entering the working world sooner than you think—so it's important that you're prepared. Career Planning and Skill Development will learn about qualities that will make you a successful employee and additional career-related skills, such as problem-solving and communication.

**Criminal Investigation** Students examine the process of identifying and arresting criminal

suspects, types of crimes and offenses, and preparing for court. They study the history of criminal investigation and explore the relationship between investigation and the courtroom process by examining case studies.

**Culinary Arts and Hospitality Management** Have you always dreamed of running your own restaurant? Maybe you want to manage a restaurant for a famous chef. What goes on beyond the dining room in a restaurant can determine whether a restaurant is a wild success or a dismal failure. In Culinary Arts and Hospitality Management A, you'll learn the responsibilities of running a restaurant—from ordering supplies to hiring and firing employees. This course covers the different types of restaurants; managing kitchen and wait staff; food safety and hygiene; customer relations; marketing; using a point-of-sale system; scheduling employees; and dealing with difficult guests. Restaurant Management will prepare you for a steady career, whether you plan to buy a fast food franchise, operate a casual sit-down restaurant, or oversee a fine-dining establishment.

**Fashion and Interior Design** In this course, students explore what it is like to work in the industry by exploring career possibilities and the background needed to pursue them. Students will learn the basics of color and design then test their skills through hands-on projects. In addition, they'll develop the essential communication skills that build success in any business. By the end of the course, students be well on their way to developing the portfolio they need to get their stylishly clad foot in the door of this exciting field.

**Forensic Science** Fingerprints. Blood spatter. DNA analysis. The world of law enforcement is increasingly making use of techniques and knowledge from the sciences to better understand the crimes that are committed and to catch those individuals responsible. Forensic science applies scientific knowledge to the criminal justice system. This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

**Health Science Education I** Will we ever find a cure for cancer? What treatments are best for conditions like diabetes and asthma? How are illnesses like meningitis, tuberculosis, and the measles identified and diagnosed? Health sciences provide the answers to questions such as these. In this course, the student will be introduced to the various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. The student will explore the importance of diagnostics and research in the identification and treatment of diseases. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.

**Health Science Education II: Nursing** Nursing is an in-demand career, perfect for someone looking for a rewarding and challenging vocation in the healthcare sector. With a strong focus on patient care, a nurse must be skilled in communication, promoting wellness, and understanding safety in the workplace. In Health Science: Nursing, you will explore communication and ethics, anatomy and physiology, and the practice of nursing. Learn how to

build relationships with individuals, families, and communities and how to develop wellness strategies for your patients. From emergency to rehabilitative care to advances and challenges in the healthcare industry, discover how you can launch a fulfilling career providing care to others.

**Health Science Education II: Other Specialties** What is public health? Who is in control of our health systems and who decides which diseases get funding and which do not? What are the human and environmental reasons for health inequality? Health Science: Public Health answers all of these questions and more. You will study both infectious and non-communicable diseases as well as learn how we conquer these on a community and global level through various methods, including proper hygiene, sanitation, and nutrition. Explore the role current and future technologies play worldwide as well as consider the ethics and governance of health on a global scale. Discover unique career opportunities, and fascinating real-life situations.

**Introduction to Criminal Justice** Students explore law enforcement, the courts, and the correctional system. They study what crime is, how crime is measured, and theories of crime causation. They also examine issues and challenges within the criminal justice system and its future directions.

**Introduction to Early Childhood Education** This course provides the historical, theoretical, and developmental foundations for educating young children, with emphasis on creating inclusive environments and curricula for diverse children and their families. Topics include historical influences, program types, guidance strategies, professionalism, current trends and issues, and advocacy.

**Introduction to Culinary Arts and Hospitality** Food is fundamental to life. Not only does it feed our bodies, but it's often the centerpiece for family gatherings and social functions with friends. In this course, the student will learn all about food including food culture, food history, food safety, and current food trends. The student will also learn about the food service industry and try your hand at preparing some culinary delights. Through hands-on activities and in-depth study of the culinary arts field, this course will help the student hone his cooking skills and give him the opportunity to explore careers in this exciting industry.

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

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

**Introduction to Manufacturing** Think about the last time you visited your favorite store. Have you ever wondered how the products you buy make it to the store shelves? Whether it's video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In this course, the student will learn about the types of manufacturing systems and processes used to create the products we buy every day. The student will also be introduced to the various career opportunities in the manufacturing industry including those for engineers, technicians, and supervisors. As a culminating project, the student will plan his own manufacturing process for a new product or invention! If you thought manufacturing was little more than mundane assembly lines, this course will show the student just how exciting and fruitful the industry can be.

**Introduction to Medical Assisting** Students explore the role of the medical assistant, including professionalism, duties and responsibilities, and medical specialties. Also included is information on medical law and ethics, office management, and compliance and regulatory issues affecting the role of the medical assistant.

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

**Medical Law and Ethics** Students gain an understanding of the legal and ethical issues that can impact professional roles in health care settings. Laws that regulate the healthcare industry, such as HIPAA, the Patient's Bill of Rights, and standard of care, are introduced. Students are encouraged to consider the impact of personal ethics and morals on decision making.

**Medical Terminology** Students explore medical terminology and its symbols and abbreviations, as well as the application of this new language in health care. They learn medical terms relating to body structure and function, and how to construct terms using word parts such as roots, suffixes, and prefixes.

**Principles of Public Service** Are you familiar with the term "public service"? When we think about public service, our thoughts often turn to professionals such police officers, EMTs, and firefighters. While these are well-known public servants, many others work to keep our communities safe, healthy, and productive. In this course, you'll learn about many different areas of public service, including education, civil engineering, and social services. You'll also look at the requirements for public service in general, as well as the specific skills needed to be successful in each area of public service. Who knows? You may even discover the career you were meant to pursue!

**Research Methods** Students practice the fundamentals of scientific research methodology by examining a social issue. They develop a research question, find and evaluate existing research,

and design and implement an objective research method.

## HUMANITIES

**3-D Computer Modeling** Are you interested in a career in technology? Are you curious about working in fields like virtual reality, video game design, marketing, television and motion pictures, or digital imaging? If so, 3-D Computer Modeling is a great place to start as it is the foundation for all these career paths. The student will gain a deeper understanding of graphic design and illustration as he uses 3-D animation software to create virtual three-dimensional design projects. Hone in on drawing, photography, and 3-D construction techniques and develop the skills needed to navigate within a 3-D digital modeling workspace. This course is an excellent introduction to careers in the fast-growing field of technology and design.

**Art History** Students begin exploring the basic elements of art and its role in history through their examination of works from Paleolithic times to the Roman Empire. The goal is to enhance students' understanding of ancient history and show how art reflects historical events.

**Art and World Cultures** This course provides an introduction to fundamental techniques and concepts of representational and expressive drawing within a variety of media. Emphasis is on object representation, spatial illusion, and the organization of structural relationships in two-dimensional space.

**Cosmetology II** Interested in a career in cosmetology? This course provides an introduction to the basics of cosmetology. The student will explore career options in the field of cosmetology, learn about the common equipment and technologies used by cosmetologists, and examine the skills and characteristics that make someone a good cosmetologist. The students will also learn more about some of the common techniques used in caring for hair, nails, and skin in salons, spas, and other cosmetology related businesses.

**Digital Photography I** Have you ever wondered how photographers take such great pictures? Have you tried to take photographs and wondered why they didn't seem to capture that moment that you saw with your eyes? The Digital Photography I course focuses on the basics of photography, including building an understanding of aperture, shutter speed, lighting, and composition. Students will be introduced to the history of photography and basic camera functions. Students will use the basic techniques of composition and camera functions to build a portfolio of images, capturing people, landscapes, close-ups, and action photographs.

**Digital Photography II** In today's world, photographs are all around us, including in advertisements, on websites, and hung on our walls as art. Many of the images that we see have been created by professional photographers. In this course, we will examine various aspects of professional photography, including the ethics of the profession, and examine some of the areas that professional photographers may choose to specialize in, such as wedding photography and product photography. We will also learn more about some of the most

respected professional photographers in history, and we will learn how to critique photographs in order to better understand what creates an eye-catching photograph.

**Living Music I, II** This series of courses teaches students fundamental musicianship from a Western classical approach while aligning to national music education standards. Students use classic repertoire to analyze compositional style and are challenged to improve their rhythm, listening, notation, analysis, performance, and improvisation skills using virtual tools. With audio, visual, and interactive technologies, the course sequence provides a unique and progressively more advanced learning experience for students in grades 9–12.

**Music Appreciation** Music is part of everyday lives and reflects the spirit of our human condition. To know and understand music, we distinguish and identify cultures on local and global levels. This course will provide students with an aesthetic and historical perspective of music, covering a variety of styles and developments from the Middle Ages through the 21st century. Students will acquire basic knowledge and listening skills, making future music experiences more informed and satisfying.

**Philosophy** This course will take you on an exciting adventure that covers more than 2,500 years of history! Along the way, you'll run into some very strange characters. For example, you'll read about a man who hung out on street corners, barefoot and dirty, pestering everyone he met with questions. You'll learn about another eccentric who climbed inside a stove to think about whether he existed. Despite their odd behavior, these and other philosophers of the Western world are among the most brilliant and influential thinkers of all time. As you learn about these great thinkers, you'll come to see how and where many of the most fundamental ideas of Western civilization originated. You'll also get a chance to ask yourself some of the same questions these great thinkers pondered. By the time you've "closed the book" on this course, you will better understand yourself and the world around you—from atoms to outer space, and everything in between.

## LANGUAGE ARTS

**Creative Writing** For many hundreds of years, literature has been one of the most important human art forms. It allows us to give voice to our emotions, create imaginary worlds, express ideas, and escape the confines of material reality. Through creative writing, we can come to understand ourselves and our world a little bit better. This course will provide students with a solid grounding in the writing process from finding inspiration to building a basic story to using complicated literary techniques and creating strange hybrid forms of poetic prose and prose poetry. By the end of this course, the student will learn how to discover his creative thoughts and turn those ideas into fully realized pieces of creative writing.

**Journalism** As students work through each module, they will utilize Web 2.0 tools to respond to current news and shifts in journalism, create original projects, and reflect upon the changing face of news. Authentic assessments, interactive examples, and self-checks will deepen their understanding of the topics covered and prepare them for work or further study in the field of

journalism.

**Reading and Writing for Purpose** Context is the key to unlocking students' reading and writing abilities. Reading and Writing with Purpose personalizes students' experiences by placing its reading examples and writing activities in familiar contexts – personal, academic, and workplace. Guiding students through the reading and writing process, this course provides step-by-step instructions to breakdown each reading and writing skill, turning students into efficient readers and effective essay writers.

**Speech and Debate** Using video tutorials, students study verbal and nonverbal techniques—including those of famous orators—to use when presenting simple and complex ideas and when speaking to a group. Using an audiovisual tool to record their speeches, students learn how to speak persuasively, develop position statements, support their arguments, and think analytically. Brainstorming techniques, media analysis, research skills, and presentation strategies are also discussed.

**OTHER Peer Counseling** Helping people achieve their goals is one of the most rewarding human experiences. Peer counselors help individuals reach their goals by offering them support, encouragement, and resource information. This Peer Counseling course explains the role of a peer counselor; teaches the observation, listening, and emphatic communication skills that counselors need; and provides basic training in conflict resolution and group leadership. Not only will this course prepare you for working as a peer counselor, but the skills taught will enhance your ability to communicate effectively in your personal and work relationships.

## SCIENCE

**Earth Space Science** This is a laboratory course focusing on the study of space and the geologic and atmospheric forces that shape our world. Through experimentation and investigation, students will explore Earth's cycles, including the geosphere, hydrosphere, cryosphere, atmosphere, and the carbon cycle.

**Environmental Science** This course presents relationships between organisms and how these relationships relate to the functioning of ecosystems. Students learn the key concepts and processes of nutrient cycling, biomes, pollution, energy resources, and habitat destruction. The course also covers ways to promote biodiversity and create a sustainable future.

**Marine Science** Students will delve deep into Earth's bodies of water and study geologic structures and how they impact the oceans. They will investigate characteristics of various populations of aquatic life, patterns of distribution, and ongoing changes occurring in our ecosystem.

## SOCIAL STUDIES

**Ethnic Studies** How have African Americans shaped the culture of the United States

throughout history? Tracing the accomplishments and obstacles of African Americans from the slave trade through emancipation to the modern African diaspora, you will learn about the political, economic, social, religious, and cultural factors that have influenced African American life. In African American history, you'll come face to face with individuals who changed the course of history and learn more about slavery, racism, and the civil rights movement. You will also explore how the history of African Americans influences current events today.

**Personal Finance** Through real-world applications and clear, engaging lessons, Personal Finance prepares students for making sound financial decisions. Exercises illustrate the influence of economics in daily life and show how financial decisions made today affect the future. The course covers topics such as financial and career planning; banking, savings, and investment programs; and stocks, bonds, and mutual funds.

**Psychology** Through this highly interactive course students will acquire an understanding of and an appreciation for human behavior, behavior interaction, and the progressive development of individuals.

## **WORLD LANGUAGES**

**Chinese I** Spoken by one-fifth of the world's population, Mandarin is the dialect of Beijing and the basis for Modern Standard Chinese. This course emphasizes listening skills, including the mastery of Chinese tones and tonal changes, as well as vocabulary and grammar skills. Students also begin to identify and write Chinese characters.

**Chinese II** This course enables students to further develop the skills of listening to, speaking, reading, and writing Mandarin Chinese at a more advanced level. As they are immersed in Chinese culture, students expand their vocabulary, practice interacting with others, and learn the use of appropriate terms to communicate in various everyday situations.

**Chinese III** Students continue to expand their knowledge of Mandarin Chinese in this course. They build their knowledge of vocabulary, sentence patterns, and grammar points through communicative texts; enhance their listening and speaking skills through pronunciation and intonation; and work to improve their reading ability. Students advance their skills by learning to write in various formats, such as journals, essays, and letters, and by composing simplified Chinese characters. By studying Chinese culture, including origins, histories, anecdotes, and more, students learn to compare and contrast various aspects of this other culture with their own.

**French I** Students join various native French speakers as they offer a lively introduction to their language and rich culture. New words and phrases are introduced with pictures, audio clips and examples. After one semester, students engage in conversational French introducing themselves and exchanging basic information with others. Students also explore cultures of Canada and other French-speaking countries. Bon voyage!



**French II** Students join various native French speakers as they continue on their second-year journey through rich language and culture. They navigate French communicative skills with a heavy emphasis on listening and comprehension, in addition to speaking, reading and writing.

**French III** This course is designed for students with strong listening and speaking skills plus a solid vocabulary base. The focus is on verb conjugation, direct and indirect object pronouns, and tenses. Students also improve their writing and speaking skills as they study the culture, art, and governments of French-speaking countries.

**French IV** Students cover present, past, future, and conditional tense verbs, subjunctive mood, articles, and adjectives while delving more deeply into French culture. This course, rich in authentic reading material, uses native-speaker recordings to enrich the student's culture, grammar, and French vocabulary lessons.

**German I** Students use discussions and other activities to learn how to speak, read, write, and understand basic German. Simple grammar, punctuation, and spelling are reinforced with interactive lessons, games, and activities. Students also study German culture and history, as well as the influence of the German language.

**German II** In this course, students are introduced to increasingly complex vocabulary and grammar. There is more emphasis on improving spoken communication and listening comprehension.

**German III** Students learn to express themselves using an ever-increasing vocabulary, present-tense verbs, articles, and adjectives. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind, including listening, speaking, reading, and writing. Culture is sprinkled throughout the course in order to help the learner focus on the German-speaking world and its culture, people, geographical locations, and history.

**Japanese I** In today's business world, learning Japanese can be extremely valuable. This course focuses on spoken and written Japanese with a thorough grounding in Japanese culture. Using warm-up activities, reading, vocabulary studies, games, and multimedia presentations, students gain the foundation to communicate successfully in Japanese.

**Japanese II** Students practice listening, speaking, reading, and writing skills as they express themselves using new vocabulary, present-tense verbs, and adjectives. Grammar is introduced and practiced in innovative and interesting ways and with a variety of learning styles in mind. Students learn about the culture by focusing on the people, lifestyle, geography, and history of Japan.

**Latin I** Students build a foundation in Latin grammar and vocabulary as well as an appreciation and understanding of the Roman culture as the foundation for much of Western culture.

Through the study of Latin, students will gain insights into the grammatical constructs of the English language as they increase their vocabulary and understanding of word origins.

**Latin II** Students build on their knowledge of Latin grammar and vocabulary and gain a solid foundation in the structure of the language as well as an understanding of the life and times of ancient Romans. They learn to appreciate how Roman engineering, art, commerce, and law systems were all supported by a clear, expressive, and flexible language.

**Latin III** Students expand their knowledge of Latin by exploring prose written and spoken by Roman figures such as Caesar, Cicero, and Catullus. Through exposure to authentic texts, students strengthen their vocabulary as well as their understanding and appreciation of well-crafted writing.

**Sign Language I** In this course, students are introduced to the fundamental concepts of American Sign Language. Students explore vocabulary, grammar, and conversational skills using basic signing and fingerspelling techniques. They are exposed to activities and exercises that help them understand the culture of deaf and hard-of-hearing people.

**Sign Language II** In this course, students continue their study of American Sign Language (ASL). Students expand their ASL vocabulary, grammar, and conversational skills. In addition, students complete activities and exercises that help them understand the culture of the deaf and hard-of-hearing community, including analyzing Deaf View/Image Art (DeVIA).

**Spanish I** Students cover basic vocabulary, grammar, spelling, and punctuation to build a solid foundation for further study. Assignments include engaging in simple conversation, writing paragraphs, and listening to Spanish dialogue. Students also converse with a native speaker and study the history and culture of Spanish-speaking peoples.

**Spanish II** As they engage in more advanced conversations, write paragraphs and stories, and translate to and from Spanish, students improve their vocabulary and grammar. Intense listening comprehension exercises aid in understanding more complex thoughts and subjects. Students also practice their speaking skills through conversations with a native speaker.

**Spanish III** Students build their vocabulary and communication skills even further in Spanish III. Advanced grammar, including the study of tenses, sentence structure, and punctuation, is covered. Students also practice correct accents and learn to comprehend real-world native speech.

**Spanish IV** The fourth year of Spanish covers advanced grammar, including present, past, future, and conditional tense verbs, subjunctive mood, articles, and adjectives. Students focus on the Spanish-speaking world and its culture, people, geographical locations, and history.

## **HEALTH AND PE**

**Health, Fitness, and Nutrition** This course covers first aid, the benefits of good nutrition, and the dangers of alcohol and drug use. Students learn how to evaluate their own fitness and nutritional needs and how to make changes that lead to a healthier lifestyle over the long run. Also discussed are strategies for resisting peer pressure and ways fitness can influence self image and overall well-being.

**High School Health** This course provides the student with the opportunities to consider many influences on social, emotional, and physical health and well-being. The course covers information on healthy decisions, communication, goal setting and decision making, family dynamics, food and nutrition, substance abuse prevention, and prevention of STIs and HIV/AIDS. The student will also learn how to be a savvy consumer by being aware of consumer rights, techniques in advertising, and how to use checking and credit accounts responsibly.

**Nutrition and Wellness** Learn how to fuel your body, maintain your emotional and physical health, and find your way around the grocery store and kitchen in Nutrition and Wellness. This course prepares the student for a healthy life and provides him with the essential skills needed to plan and make healthy and delicious meals for himself, family, and friends. The student will learn how to budget for meals, shop for groceries, and fit cooking into a busy schedule of school, work, and other responsibilities.

**Personal Fitness** Get an in-depth understanding of what real fitness requires and how you can best increase your strength, endurance, and flexibility. Explore the world of healthy living, and see how real fitness can be achieved through intention, effort, and knowledge. **Physical Education** This course emphasizes self-directed activities that a student can participate in for a lifetime. This includes the option of learning and practicing yoga. Students' skill levels are measured with written assignments, class evaluations, and demonstrations of a particular skill.