REACH

CYBER CHARTER SCHOOL

COURSE CATALOG

High School (9-12)

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ENGLISH LANGUAGE ARTS

English Language Arts 9A & 9B (Semester 1 & 2) Grade Level: 9

Credits: 1.0

The English 9 course is an overview of exemplar selections of literature in fiction and nonfiction genres. Students read short stories, poems, a full-length novel, and a full-length Shakespeare play, analyzing the use of elements of literature in developing character, plot, and theme. Each unit includes informational texts deepening their understanding of thematic topics within the lessons. Throughout the course, students consistently use thorough textual evidence for their written and oral responses.

English Language Arts 10A & 10B (Semester 1 & 2) Grade Level: 10

Credits: 1.0

Pre-Reqs: ELA 9A & 9B, Honors ELA 9A & 9B

The English 10 course is an overview of exemplar selections of literature in fiction and nonfiction genres. Students read short stories, poems, a full-length novel, and a full-length play, analyzing the use of elements of literature. Each unit includes informational texts to deepen their understanding of thematic topics within the lessons. Throughout the course, students consistently use thorough textual evidence for their written and oral responses. This course focuses on writing and preparing students to take the Pennsylvania state Keystone Exam.

English Language Arts 11A & 11 B (Semester 1 & 2) Grade Level: 11

Credits: 1.0

Pre-Reqs: ELA 10A & 10B, Honors ELA 10A & 10B

In the English 11 course, students examine the writers, events, and literature that have shaped the United States. In this course, students analyze a wide range of literature, both fiction and nonfiction. They build writing skills by composing several types of written responses. Overall, students gain an understanding of the way American literature represents the array of voices contributing to our multicultural identity.

English Language Arts 12A & 12B (Semester 1 & 2) Grade Level: 12

Credits: 1.0

Pre-Reqs: ELA 11A & 11B, Honors ELA 11A & 11B

In this English 12 course students experience a survey of dynamic British literature. Throughout this course, students analyze a wide range of literature, both fiction and nonfiction. Emphasis is placed on major literary movements, British authors and classics, and the impact of historical events on literary works. Students consistently use thorough textual evidence for their written and oral responses. This course is most suitable for students who are college bound.

Honors English Language Arts 9A & 9B (Semester 1 & 2) Grade Level: 9

Credits: 1.0

Pre-Reqs: 90% in ELA 8 or Teacher Recommendation

The English 9 Honors course is designed for the advanced and self-directed learner with an increased emphasis on evidence-based analysis and critical thinking skills. Selections of literature in fiction and nonfiction include short stories, poems, several full-length novels, and a full-length Shakespeare play. Each unit includes informational texts to deepen their understanding of thematic topics within the lessons. Throughout the course, students consistently use thorough textual evidence for their written and oral responses.

Honors English Language Arts 10A & 10B (Semester 1 & 2) Grade Level: 10

Credits: 1.0

Pre-Reqs: 90% in ELA 9 A&B or 80% in Honors ELA 9 A&B

The English 10 Honors course is designed for the advanced and self-directed learner with an increased emphasis on evidence-based analysis and critical thinking skills. Selections of literature in fiction and nonfiction include short stories, poems, several full-length novels, and a full-length play. Each unit includes informational texts to deepen their understanding of thematic topics within the lessons. Throughout the course, students consistently use thorough textual evidence for their written and oral responses. This course focuses on writing and preparing students to take the Pennsylvania state Keystone Exam.

Honors English Language Arts 11A & 11B (Semester 1 & 2) Grade Level: 11

Credits: 1.0

Pre-Reqs: 90% in ELA 10 A&B or 80% in Honors English 10 A&B

The English 11 Honors course is designed for the advanced and self-directed learner with an increased emphasis on evidence-based analysis and critical thinking skills. Students examine the writers, events, and literature that have shaped the United States. In this course, students analyze a wide range of literature, both fiction and nonfiction. They build writing skills by composing several types of written responses. Overall, students gain an understanding of the way American literature represents the array of voices contributing to our multicultural identity.

Honors English Language Arts 12A & 12B (Semester 1 & 2) Grade Level: 12

Credits: 1.0

Pre-Reqs: 90% in ELA 11 A&B or 80% in Honors English 11 A&B

In this English 12 course students experience a survey of dynamic British literature. Throughout this course, students analyze a wide range of literature, both fiction and nonfiction. Emphasis is placed on major literary movements, British authors and classics, and the impact of historical events on literary works. Students consistently use thorough textual evidence for their written and oral responses. This course is most suitable for students who are college bound.

AP English Language & Composition A & B (Semester 1 & 2) Grade Level: 11

Credits: 1.0

Pre-Reqs: 90% in ELA 10 A&B or 80% in Honors ELA 10 A&B

AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style.

AP English Literature & Composition A & B (Semester 1 & 2) Grade Level: 12

Credits: 1.0

Pre-Reqs: 90% in ELA 11 A&B or 80% in Honors ELA 11 A&B

AP English Literature and Composition is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works.

MATH

Algebra 1A & 1B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Pre- Algebra A&B

Algebra I builds students' command of linear, quadratic, and exponential relationships. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include problem-solving with basic equations and formulas; an introduction to functions and problem solving; linear equations and systems of linear equations; exponents and exponential functions; sequences and functions; descriptive statistics; polynomials and factoring; quadratic equations and functions; and function transformations and inverses.

Algebra 1 Part 1A (Semester 1) Grade Level: 9-12

Credits: 0.5

Algebra I-A is a part of a two-year course sequence designed for students who are not prepared for the academic challenges of the traditional one-year Algebra I curriculum. Focusing on reviewing pre-algebra skills and introductory algebra content, Algebra I-A allows students to deepen their understanding of real numbers in their various forms and then extend their knowledge to linear equations in one and two variables. Algebra I-A features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

Algebra 1 Part 1B (Semester 2) Grade Level: 9-12

Credits: 0.5

Pre-Reqs: Algebra 1 Part 1A

Algebra I-B is part of a two-year course sequence that covers a review of introductory algebra; measurement; graphing data; linear equations; systems of linear equations; polynomials; factoring of polynomials; factoring of quadratic functions; rational expressions; and radical expressions. Algebra I-B features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

Algebra 1 Part 2A (Semester 1) Grade Level: 9-12

Credits: 0.5

Pre-Reqs: Algebra 1A Part 1, Algebra 1B Part 1, Algebra 1 Part 1A & 1B

Algebra I-2A is the second part of a two-year course sequence designed for students who are not prepared for the academic challenges of the traditional one-year Algebra I curriculum. Focusing on review of Algebra 1-A skills and introductory algebra content, Algebra I-B allows students to deepen their understanding of linear equations, systems of linear equations, and exponential properties and radicals. Algebra I-2A features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

Algebra 1 Part 2B (Semester 2) Grade Level: 9-12

Credits: 0.5

Pre-Reqs: Algebra 1A Part 1, Algebra 1B Part 1, Algebra 1 Part 1A, Algebra 1 Part 1B, Algebra 1 Part 2B

Algebra I-2B is part of a two-year course sequence that covers a review of introductory algebra; polynomials; factoring; descriptive statistics; exponents; and a keystone review. Algebra I-2B features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

Algebra 2A & 2B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra 1A Part 1, Algebra 1B Part 1, Algebra 1 Part 1A & 1B, Algebra 1 Part 2A & 2B

Algebra II introduces students to advanced functions, with a focus on developing a strong conceptual grasp of the expressions that define those functions. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include quadratic equations and functions; polynomial functions; rational expressions and functions; radical expressions and functions; exponential and logarithmic functions; trigonometric functions; modeling with functions; probability and inferential statistics; probability distributions; and sampling distributions and confidence intervals.

Calculus A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1

Pre-Reqs: Algebra 2, Geometry, Precalculus

In Calculus, students will experience interactive text and graphing software combined with the exciting on-line course delivery to make the course an adventure. This course includes a study of limits, continuity, differentiation, and integration of algebraic, trigonometric, and transcendental functions, and the applications of derivatives and integrals.

Consumer Math A & B (Semester 1 & 2) Grade Level: 9-12

Credits:1.0

Consumer Math focuses on real-world financial literacy, personal finance, and business subjects. Students apply what they learned in Algebra I and Geometry to topics including personal income, taxes, checking and savings accounts, credit, loans and payments, car leasing and purchasing, home mortgages, stocks, insurance, and retirement planning.

Explorations in Mathematics A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Explorations in Math explores foundational concepts in math. Students master basic skills and extend their knowledge as they prepare for more advanced work. Topics include basic number concepts such as whole numbers, counting, place value, rounding, exponents, and negative numbers; addition and subtraction; and multiplication and division. The course also covers fractions, operations with fractions, decimals, precents, ratios, problem solving, basic concepts in geometry, and measuring shapes.

Geometry A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Regs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

Geometry builds upon students' command of geometric relationships and formulating mathematical arguments. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include reasoning, proof, and the creation of sound mathematical arguments; points, lines, and angles; triangles and trigonometry; quadrilaterals and other polygons; circles; congruence, similarity, transformations, and constructions; coordinate geometry; three-dimensional solids; and applications of probability.

Precalculus A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra I, Algebra II, Geometry

In Precalculus students will expand their knowledge of functions by analyzing their key features and combining them to solve real-world problems. Learn about trigonometric functions and their applications, along with new ways to use the coordinate plane to represent several types of functions. Apply these skills to

discover the power mathematics has in everyday life and to prepare for advanced mathematical studies in college or your future.

Statistics A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

Statistics will introduce students to exploring data, sampling and experimentation by planning and conducting studies, anticipating patterns using probability and simulation, and employing statistical inference to analyze data and draw conclusions.

Honors Algebra 1A & 1B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: MS Algebra

Honors Algebra I builds a deep understanding of linear, quadratic, and exponential relationships. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include an introduction to functions and problem solving, measurement; problem solving with basic equations and formulas, linear equations and systems of linear equations, exponents and exponential functions, sequences and functions, descriptive statistics, polynomials and factoring, quadratic equations and functions, and function transformations and inverses.

Honors Algebra 2A & 2B (Semester 1 & 2) Grade Level: 9-12

Credits 1.0

Pre-Reqs: Algebra 1A, Algebra1A Part 1, Algebra 1B Part 1, Pre-Algebra A, Honors Algebra 1A, MS Algebra 1A

Honors Algebra II introduces students to advanced functions, with a focus on developing a strong conceptual grasp of the expressions that define them. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include quadratic equations, polynomial functions, rational expressions and equations, radical expressions and equations, exponential and logarithmic functions, trigonometric identities and functions, modeling with functions, probability and inferential statistics, probability distributions, and sample distributions and confidence intervals.

Honors Geometry A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

Honors Geometry builds upon students' command of geometric relationships and formulating mathematical arguments. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations. Course topics include reasoning, proof, and the creation of sound mathematical arguments; points, lines, and angles; triangles and trigonometry; quadrilaterals and other polygons; circles; congruence, similarity,

transformations, and constructions; coordinate geometry; three-dimensional solids; and applications of probability.

Honors Precalculus A & B (Semester 1 & 2) Grade Level: 9-12

Credits 1.0

Pre-Reqs: Algebra I, Algebra II, Geometry

In Honors Precalculus students will dive deeper into their knowledge of functions by analyzing their key features and combining them to solve real-world problems. Learn about trigonometric functions and their applications, along with new ways to use the coordinate plane to represent several types of functions. Apply these skills to discover the power mathematics has in everyday life and to prepare for advanced mathematical studies in college or your future.

AP Calculus AB A & AB B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: 90% in Precalculus A&B or 80% in Honors Precalculus A&B

In AP Calculus AB, students experience an interactive course framework that delivers an exciting on-line course delivery to make calculus an adventure. The course includes a study of limits, continuity, differentiation, integration, differential equations, and the applications of derivatives and integrals. This course consists of a full high school year of work that is comparable to calculus courses in colleges and universities. It is expected that students who take an AP course in calculus will seek college credit, college placement, or both, from institutions of higher learning. Most colleges and universities offer a sequence of several courses in calculus, and entering students are placed within this sequence according to the extent of their preparation, as measured by the results of an AP examination or other criteria.

AP Calculus BC A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: 80% in AP Calculus AB

The AP Calculus BC course covers many topics, including limits, continuity, differentiation, integration, differential equations, the applications of derivatives and integrals, parametric and polar equations, and infinite sequences and series, including Taylor, Maclaurin and power series. This Advanced Placement (AP) calculus course covers a full year of material equivalent to college-level calculus. Students who complete this course often seek to earn college credit or advanced placement. Colleges and universities generally assign students to appropriate calculus courses based on their preparation, which is often evaluated through AP exam results or other criteria.

AP Statistics A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: 90% in Algebra II or 80% in Honors Algebra II, or 90% in Statistics

In Advanced Placement Statistics students will be introduced to exploring data, sampling and experimentation by planning and conducting studies, anticipating patterns using probability and simulation, and employing statistical inference to analyze data and draw conclusions.

SOCIAL STUDIES

American Government (Semester 1 & 2) Grade Level: 11

Credits: 0.5

In this course, students learn about the structure of government and how it shares power at the local, state, and federal levels. This course also explores founding principles that inspired the Constitution and Bill of Rights, preserving the freedoms that students experience daily. Students will examine the processes of each branch of government, the election process, and how citizens can impact public policy. They will additionally discover ways the United States interacts with countries around the world, through domestic, foreign, and human rights policy.

Economics (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

In this course, students will recognize examples of economics in their daily lives. Students will see how the economic choices of larger groups, like businesses and governments, affect students and others. As students' progress through the course, they will recognize that the costs and benefits of choices connect individuals and groups around the world. The purpose of this course is to help students become smart consumers who understand the flow of an economy between individuals, businesses, governments, and the rest of the world.

Geography & Society (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

Students learn how diverse people have physically influenced the world around them and how they, in turn, are changed by their surroundings. Let’s explore the important relationship between humans and their environments.

Personal Finance (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

Students explore how to spend and save their money wisely. They learn key financial concepts around taxes, credit, and money management. Students also discover how education, career choices, and financial planning can lead them in the right direction to making their lives simpler, steadier, and more enjoyable.

Psychology A & B (Semester 1 & 2) Grade Level: 12

Credits: 1.0

Psychology provides a solid overview of the field's major domains: methods, biopsychology, cognitive and developmental psychology, and variations in individual and group behavior. By focusing on significant scientific research and on the questions that are most important to psychologists, students see psychology as an evolving science. This course is built to state standards and informed by the American Psychological Association's National Standards for High School Psychology Curriculum.

Sociology (Semester 2) Grade Level: 10-12

Credits: 0.5

Sociology examines why people think and behave as they do in relationships, groups, institutions, and societies. Major course topics include individual and group identity, social structures and institutions, social change, social stratification, social dynamics in recent and current events, the effects of social change on individuals, and the research methods used by social scientists. Students reflect critically on their own experiences and ideas and on sociologists' ideas.

United States History A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The United States began as an experiment in freedom and democracy. Since its establishment, the country and its people have endured social, political, and economic transformations. In this course, students will investigate the people, events and ideas that have shaped the United States from the end of the Civil War through today. Students are asked to analyze and evaluate decisions made by political, business, and military leaders. Emphasis is placed on connections between events of the past and present. This course also gives students the opportunity to investigate primary sources and conduct research to apply their learning.

World History A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

Students will learn about history on the world stage in this year long course. Starting with the Roman Empire and the Middle Ages, students will investigate the foundations of modern society. They will then dive into the advancements of science and thought during the Age of Enlightenment. As students navigate through the 19th century, they will learn about the transformation from an agricultural to an industrial world and the many changes that resulted from that shift. Students then learn about the interconnectedness of nationalism and colonialism and the resulting world wars. The course ends with students learning about development in our modern world and the implications that historical events have on us today.

Honors American Government (Semester 1 & 2) Grade Level: 11

Credits: 1.0

This course more rigorously investigates the founding principles that inspired the Constitution and Bill of Rights, preserving the freedoms that students experience daily. Students will examine the processes of each branch of government, the election process, and how citizens can impact public policy. Students learn about the structure of government and how it shares power at the local, state, and federal levels. They will additionally discern ways the United States interacts with countries around the world, through domestic, foreign, and human rights policy. Students should have had at least a B in their previous history course to take the honors version of this course.

Honors United States History A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

This course provides a deeper dive into the social, political, and economic transformations at the heart of the establishment of the United States. students will investigate the people, events and ideas that have shaped the United States from the end of the Civil War through today. Students are asked to analyze and evaluate decisions made by political, business, and military leaders. Emphasis is placed on connections between events of the past and present. This course also gives students the opportunity to investigate primary sources and conduct research to apply their learning. Students should have had at least a B in their previous history course to take the honors version of this course.

Honors World History A & B (Semester 1 & 2) Grade Level: 10

Credits: 1.0

This course provides a more rigorous investigation of history on the world stage. Starting with the Roman Empire and the Middle Ages, students will investigate the foundations of modern society. They will then dive into the advancements of science and thought during the Age of Enlightenment. As students navigate through the 19th century, they will learn about the transformation from an agricultural to an industrial world and the many changes that resulted from that shift. Students then learn about the interconnectedness of nationalism and colonialism and the resulting world wars. The course ends with students learning about development in our modern world and the implications that historical events have on us today. Students should have had at least a B in their previous history course to take the honors version of this course.

AP Psychology A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: 90% in Psychology or Sociology

Immerse yourself in the scientific study of human behavior and cognition. Learn about notable figures and current psychological research utilizing new techniques and technologies. Investigate ethical considerations related to human and animal research. In this college-level course, you will learn about and apply important terms, concepts, and phenomena associated with each major area of psychology and enhance your critical thinking skills.

AP United States History A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: 90% in US History A&B or 80% in Honors US History A&B

AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance —American and national identity; politics and power; work, exchange, and technology; culture and society; migration and settlement; geography and the environment; America in the World— provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in various times and places.

SCIENCE

Anatomy & Physiology A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: Biology (10th graders will be considered with a high GPA or a strong drive/passion for medical science. You must pass A&P Semester A to take Semester B.)

Whether you plan to pursue a career in health sciences or simply looking to gain an understanding of how the human body works, you'll first need to understand the relationship between anatomy and physiology. Learn how to read your body's story through understanding cell structure and their processes and discover the functions and purposes of all 12 body systems. In addition, we will study diseases that affect those systems, and how medical practitioners' complete health assessments with subjective and objective data for diagnosis.

Astronomy A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Discover answers to these questions and explore the origin of the universe, the Milky Way, and other galaxies and stars, including the concepts of modern astronomy and the methods used by astronomers to learn more about the universe. Students will be taken on an exciting journey through the solar system to explore the sun, comets, asteroids, meteors, life cycles of stars, and planets' properties. Additionally, students will become familiar with the concepts of space travel and settlements, and what it could be like to live and work in space.

Biology A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Req: Physical Science A, Honors Physical Science A

This Biology course guides students through the study of living and non-living systems and how they interact with one another. Students explore the world in which they live by posing questions and seeking answers through scientific inquiry. Discovery takes place through observation and data collection. The students will be introduced to the structure, function, diversity, and evolution of living matter. This course is required by the PA Department of Education for graduation and is one of three Keystone-tested subjects.

Chemistry A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Physical Science, Biology, Algebra 1

The Chemistry course is a study of the foundations of chemistry, building on the concepts and scientific thinking laid in middle school science. Students use scientific inquiry and higher-order problem solving as they explore the composition, properties, and changes of matter and their applications through interactive simulations, engineering solutions, and virtual and hands-on experiences. Scientific inquiry, research, experimental procedures, data collection and analysis, and making inferences are an integral part of the learning experience. In addition, technology, engineering, and mathematics (STEM) concepts are integrated throughout the course. Through phenomenon-based learning, students demonstrate a vast understanding of the importance of chemistry in the world, enabling them to apply these principles to their everyday lives and our global society.

Criminal Investigation (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

In Criminal Investigation, students will learn about various aspects of life: psychological, biological, sociological, all of which have different perspectives and influences on crime. Additionally, students will investigate not only how these variables affect the criminal mind but also how crimes are investigated and handled in the criminal justice system.

Earth Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Physical Science A, Honors Physical Science

In Earth Science, students will be captivated by the wonders and beauty of the third planet from our Sun, Earth. The course is a laboratory course focusing on the study of space, geological structures and forces, the waters on our planet, and atmospheric conditions. Through experimentation and investigation, students explore the earth's systems including the geosphere, hydrosphere, cryosphere, atmosphere, and the carbon cycle. This course offers interactive experiences, higher-order thinking, collaborative projects, and real-world application along with various assessments. Upon completion of the course, students understand the dynamic forces at work in the world around them, becoming better caretakers of our planet, Earth.

Environmental Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The Environmental Science course discusses the environmental challenges that impact on our future, such as land use, pollution, climate change, and loss of biodiversity. This course is centered around achieving global sustainability to meet the needs of a growing human population, while also maintaining natural resources and protecting Earth's various systems. The short- and long-term consequences of our actions to human health and the environment are also a course focus. With the collaboration of the Guy Harvey Ocean Foundation and additional professional partners, this course highlights the research and field experiences of professors, scientists, conservationists, lawyers, and more, while sharing practical and sensible strategies for preserving the delicate balance between land, ocean, air, and life. In addition, this course creates a call to action for students by teaching them how to protect the world's biodiversity and resources by adjusting the way they live, work, play, and govern in the future.

Forensic Science (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

In Forensic Science, students will explore the riveting job of crime scene analysis, and learn the techniques and practices applied during a crime scene investigation, including how clues and data are recorded and preserved. Students will discover how technology is applied to make discoveries and bring criminals to justice.

Meteorology A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Sun or clouds, rain, or snow, warm or cold? These questions are asked every day by people around the world, and in this class, students will learn how to provide those answers. In this course, students will learn about our Atmosphere and all other global systems that impact our daily lives through weather. Students will compete against each other, staff, and TV weather personalities in forecasting competitions. Students will become literate in the analysis of weather and climate maps, charts, and figures. With Reach’s very own weather station, students will learn how to use data available only to us, in order tell the story of our atmosphere.

Physical Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

This Physical science course teaches the foundational concepts of physics and chemistry. Using scientific inquiry, interactive experiences, higher order thinking, collaborative projects, and real-world application students can demonstrate an understanding of the physical and chemical properties around them, enabling them to apply these properties to their everyday lives.

Physics A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, students will be immersed in the contributions of scientific geniuses that have changed the way we observe and think about matter, forces, and energy in the universe. Starting with how matter moves, students will learn that all motion can be described, analyzed, and predicted. Then students will explore the causes of changing motion, forces! Energy is a fundamental property essential to human existence, and physics will take students through all the forms of it: electricity, light, sound, heat, and more. Discover how waves travel and interact with matter and the smallest particles in the universe. From tiny atoms to galaxies with millions of stars, the universal laws of physics are explained through real-world examples. Through laboratory activities, simulations, and graphical analysis, combined with rigorous mathematical efforts and problem solving, students follow in the footsteps of some of the world's greatest thinkers and learn to process their world in a unique way.

Honors Biology A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Physical Science A, Honors Physical Science

This Honors Biology course has students dive deep into the study of living and non-living systems and how they interact with one another. Students explore the world they live in by posing questions and seeking answers through scientific inquiry. Discovery takes place through observation and data collection. The students will be introduced to the structure, function, diversity, and evolution of living matter. This is a course with real relevance. It encourages curiosity and provides opportunity for students to work on hands on lab activities and develop relationships through collaborative learning. Engaging in the study of biological science broadens the picture of the world around us.

Honors Chemistry A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The Honors Chemistry course is a deep dive into chemistry, building on the concepts and scientific thinking laid in middle school science. Students use scientific inquiry and higher-order problem solving as they explore the composition, properties, and changes of matter and their applications through interactive simulations, engineering solutions, and virtual and hands-on experiences. Scientific inquiry, research, experimental procedures, data collection and analysis, and making inferences are an integral part of the learning experience. In addition, technology, engineering, and mathematics (STEM) concepts are integrated throughout the course. Through phenomenon-based learning, students demonstrate a vast understanding of the importance of chemistry in the world, enabling them to apply these principles to their everyday lives and our global society.

Honors Earth Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Honors Biology A, Honors Physical Science A

In Honors Earth Science, students will dive deep into the wonders and beauty of the third planet from our Sun, Earth. This honors course is a laboratory course focusing on the study of space, geologic structures and forces, the waters on our planet, and atmospheric conditions. Through experimentation and investigation, students explore the earth's systems including the geosphere, hydrosphere, cryosphere, atmosphere, and the carbon cycle. This course offers interactive experiences, higher-order thinking, collaborative projects, and real-world application along with various assessments. Upon completion of the course, students understand the dynamic forces at work in the world around them, becoming better caretakers of our planet, Earth.

Honors Physical Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

This Honors Physical Science course dives deep into the concepts of physics and chemistry. Using scientific inquiry, interactive experiences, higher order thinking, collaborative projects, and real-world application students can demonstrate an understanding of the physical and chemical properties around them, enabling them to apply these properties to their everyday lives.

AP Biology A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: A average in Honors Biology and A average in Honors Physical Science, Chem credit preferred or concurrently enrolled in Chemistry.

This AP Biology course is designed to provide college-level experience and prepare students for the AP exam. Students will develop a foundation for understanding biological concepts through scientific inquiry, investigations, interactive experiences, higher-order thinking, real-world applications, writing analytical essays, statistical analysis, interpreting and collecting data. AP Biology 'big ideas' include system interactions, evolution, energetics, information storage, and transmission. Students will participate in a variety of engaging activities that enhance their mastery of biology concepts.

AP Environmental Science A & B (Semester 1 & 2) Grade Level: 11-12

Credits: 1.0

Pre-Reqs: Algebra 2A, Honors Algebra 2A

This AP Environmental Science course explores the current changes in global climate, rising sea levels, and warming oceans. It is important for students to discover the state of Earth's systems and the consequences of human activities. AP Environmental Science provides students with a global view of their world and their role in it. It examines the scientific principles and concepts required to understand the interrelationships between ocean, land, and atmosphere that guide the natural world and allow Earth to be a planet suitable for life. Laboratory activities within the course support learning of these relationships through reflective, hands-on, or virtual experiences. In addition, students identify and analyze environmental problems that are natural and human-made, determining their own ecological footprint in the world to discover how their

activities affect the world around them. Students evaluate the relative risks associated with environmental problems and examine alternative solutions including clean energy, sustainable practices, and conservation, for resolving or preventing future environmental problems.

HEALTH & PHYSICAL EDUCATION

Health Foundations (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

Students begin by exploring the different dimensions of healthy intra-and interpersonal relationships. They examine stress and the importance of learning to manage it. Next, students are introduced to the concept of neurodiversity and some of the characteristics of neurodiverse people. A discussion of mental health, mental illness, and suicide prevention follows. Students then explore the short-and long-term effects of violence on health and look at ways to prevent or reduce violence. The semester concludes with an overview of end-of-life care, death and dying, and the grieving process. A minimum grade level of 9th grade is suggested.

Healthy Living (Semester 1 & 2) Grade Level: 9-12

Credits 0.5

Students begin this life course by exploring the different dimensions of good health and ways they can take charge of managing their health. The semester continues with a focus on good nutrition and safe food preparation and handling. Then, students take an in-depth look at the elements of physical fitness and its importance across the lifespan. A discussion of infectious and noninfectious diseases follows, with an emphasis on preventing disease. Students then investigate substance use and abuse, their effects on health, and ways to avoid or quit using. The course concludes with a focus on community and environmental health along with safety in the home, school, and community. A minimum grade level of 9th grade is suggested.

Personal Fitness (Semester 1 & 2) Grade Level: 9-12

Credits 0.5

In the Personal Fitness course, students will learn about body functions, safety, diet, goals, and strategies for longevity. Students will be able to explore the world of healthy living and see how real fitness can be achieved through intention, effort, and just the right amount of knowledge.

Physical Education (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

Physical Education combines the best of online instruction with actual student participation in weekly cardiovascular, aerobic, and muscle toning activities. The course promotes a keen understanding of the value of physical fitness and aims to motivate students to participate in physical activities throughout their lives.

ART

Advanced Drawing A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

This course is primarily designed for students who want to pursue art after high school. In Advanced Drawing, students will be using the drawing skills and the principles of design from the previous course at a deeper level. Students will also explore, in-depth, several distinct types of media and artistic styles with the goal of defining their personal aesthetic and designing their own compositions. In each section, students will observe and analyze various artworks to expand their knowledge of art history and develop their personal aesthetics. All projects in this course will be originally composed by the student.

Animation A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

In this intensive Animation course, students will develop their own story by exploring design, the 12 principles of animation, creating a storyboard, and leveraging the tools of the trade. Additionally, students will meet industry players such as directors, animators, and 3D modelers. In this hands-on course, students will start exploring the software Blender, your gateway to 3D modeling, computer animation, and postproduction procedures used in the film industry. Additionally, students will discover and explore 3D modeling and animation of characters, the basics of human anatomy and form to apply rigging, joints, and texture. Examine rendering and lighting effects and how to apply sound. And discover careers so you can start using their new skills right away.

Art Appreciation A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Art Appreciation is a survey of the history of Western visual arts, with a primary focus on painting. Students begin with an introduction to the basic principles of painting and learn how to critique and compare works of art. Coverage of each artistic movement highlights historical context and introduces students to key artists that represent a variety of geographic locations. Throughout the course, students apply what they have learned about art critique to analyze and evaluate both individual artists and individual works of art. Topics include Prehistoric to Late Middle Ages (includes Ancient Greece, Rome, Egypt, and Minoan), Renaissance, Rococo, Baroque, Modernity of the 19th and 20th Century, and "Beyond Western Influence" (Includes Asia, Americas, Africa, and Oceania).

Art Exploration A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

This course introduces students to diverse areas in the arts that can broaden their perspective on the arts in general. Arts Explorations encourage students to experience each modern arts discipline including Visual Arts, Theatre, Music, Media Arts and Dance. Students will also be able to identify areas of special interest where they would like to continue studying and the ways that the arts can be a part of their career paths.

Digital Photography A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this Digital Photography course, students will learn the basic principles of design, the tools needed to succeed in the industry and how to design objects for specific purposes and audiences. Students will also learn how to market themselves and open their own design business while building a portfolio. Additionally, students will continue building the foundational skills necessary to become successful graphic designers. Students will learn and apply effective communication and people skills, explore, and implement the design process, create images, effectively use equipment, and evaluate and market your own designs. By the end of the course, students will be better able to decide if a career in digital design is for them.

Introduction to Drawing A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, students will experiment with several different art materials and tools to see what each tool can do best. Students will explore ordinary things around them to become more observant of the structures and meanings of things which can be seen in their home and community. Their work will be their own study of the forms, textures, movements, and patterns of the things that you see every day. By becoming more observant, by experimenting with new materials, and by exploring a variety of methods, students will continue to grow in artistic skill and enjoyment.

Introduction to Graphic Design A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

This course is an introduction to elements of design, spatial relationships, typography, and imagery. Students explore the basic foundations of design through a series of visual projects that investigate the principles and elements of design. Students will work both with analog and digital media as they explore two-dimensional and three-dimensional design along with color theory. This course will help develop and explore a student's ability to communicate visually.

MUSIC

Living Music (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

In this course, students explore elements and pieces of music through the historical context, musicians and composers, and influence of music from the Middle Ages to the 21st century. Students learn how to listen and really hear the different music that makes up our world.

Music of the World (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

In this course, you will learn about Global musical traditions as you explore music in many cultures. You will examine the fundamentals, sound, and structure of music to understand how music is representative of the culture it was created in.

COMPUTER SCIENCE

Explore Computer Science HS A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The Explore Computer Science course introduces students to computer science through exploration of engaging and accessible topics. Through creativity and innovation, students will use critical thinking and problem-solving skills to implement projects that are relevant to students' lives. Students will gain a fundamental understanding of the history and operation of computers, programming, game design, physical computing, cybersecurity, and web design. Students will also be introduced to potential careers and will examine societal and ethical issues of computing. The Explore Computer Science course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive, making it engaging for those new to computer science.

Cybersecurity 1A & 1B (Semester 1 &2) Grade Level: 9-12

Credits: 1.0

This is the first course in the Reach Cyber Program. Students will learn about cyber ethics, fundamentals of computing, networking, cryptology, Linux, system administration, cybersecurity threats, risk identification, and much more. Students can expect an engaging learning environment with simulations and authentic cybersecurity applications during class.

Java Programming A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

Pre-Reqs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

The CodeHS Intro to Java (Latte) course is a year-long course designed to help students master the basics of Java. All learning materials and resources teachers and students need for a successful year-long Java course can be found on the CodeHS website.

JavaScript Programming A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

This course introduces computer programming to the beginner computer science student using the JavaScript programming language. JavaScript is most used to create and control dynamic website content. Students will learn how to use control structures such as if/else statements and loops to make advanced

programs and solve new challenges. You will write reusable code using functions and graphics to develop your logical reasoning, systematic thinking, and problem-solving skills. By the end of this course, students will build simple games using basic graphics and animation and learn material equivalent to a semester college introductory JavaScript course.

Physical Computing with Arduino A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The Physical Computing with Arduino course is a semester-long high school course that will utilize Arduino devices to give students the opportunity to apply their knowledge of basic programming concepts (control structures, variables, functions, etc.) to a physical device using C++. They will learn how to perform basic physical tasks using LEDs, buttons, and basic sensors. Previous coding experience required.

Python 3 Programming A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra 1A, Algebra 1A Part 1, Algebra 1B Part 1, Honors Algebra 1A, MS Algebra 1A

This course introduces students to the Python 3 language and uses C++ to code their physical Arduino device. Students will be provided with an Arduino kit.

Raspberry Pi 400 A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Python with Arduino A, Python with Arduino B, Python 3 Programming A, Python 3 Programming B

This course uses the Raspberry Pi 400 computer to create projects using Scratch and Python coding. Students will be provided with a Raspberry Pi 400 kit and textbook.

Raspberry Pi Robotics A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

This project-based course introduces students to simple robotics devices using the Python 3 language. Students will be provided with a Raspberry Pi 4B and kit.

Web Design A & B (Semester 1 & 2) Grade Level: 10-12

Credits: 1.0

This project-based course introduces students to two new coding languages essential for building websites: HTML & CSS. You will hand code web pages from scratch, and use the Bootstrap framework to create tangible, professional, mobile responsive websites.

WORLD LANGUAGES

American Sign Language 1A & 1B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, students learn introductory vocabulary and simple sentences so that you can start communicating right away. Students also explore Deaf culture – social beliefs, traditions, history, values, and communities influenced by deafness.

American Sign Language 2A & 2B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: American Sign Language 1A & 1B

This course moves beyond introductory ASL signs as students start forming more compelling signs for communication. Students explore how expressions can enhance signs and lend dimension to conversations, while learning vocabulary for descriptions, directions, shopping, making purchases, and dealing with emergencies. This course also includes a deeper dive into the Deaf community and culture.

American Sign Language 3A & 3B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: American Sign Language 2A & 2B

This course provides more advanced ASL signing, including unique grammar features and advanced classifiers, and locatives. Students will also learn, compose, and present their new-found vocabulary and narratives by immersing themselves in Deaf culture and community. From opinions, slang, and idioms, to using technology and media that offers authentic Deaf perspectives. Explore how travel, cultural differences, and geography affect sign language. Gain better understanding of Deaf culture by learning notable events and examining topics such as education, science, and literature.

French I A & I B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

French 1 focuses on developing basic language skills by repeated exposure to the spoken language. Listening and speaking skills are encouraged through technology embedded in the assignments. Reading and writing skills, as well as language structures, are practiced through meaningful, real-life contexts. Authentic language development fosters cultural understanding about the French-speaking world.

French II A & II B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: French I A & I B

Students build upon the foundation developed in French 1. They continue to build vocabulary, learn new verb tenses and other grammar concepts, as they increase their ability to communicate with others. They will learn more advanced ways to express themselves and tell stories using multiple tenses about themselves and others.

French III A & II1 B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: French I A & B, French II A & B

Students in French 3 continue to develop their ability in reading, writing, speaking, and understanding French through a systematic review of its structure and additional new tenses to learn. Students focus on applying vocabulary and grammar in a wider array of situations by digging deeper into global issues that affect the French-speaking world.

Spanish I A & I B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Spanish 1 is an introduction to Spanish language and culture. Students learn to start with the basics of greetings and basic conversation, working to incorporate ideas from their life and experiences in Spanish conversation. Through real-life scenarios and learning examples, students will describe situations, in Spanish, both verbally and written.

Spanish II A & II B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Spanish I A & I B

Students build upon the foundation developed in Spanish 1. They continue to build vocabulary, learn new verb tenses and other grammar concepts, and they increase their ability to communicate with others. They will explore new countries where Spanish is spoken and continue to keep abreast of current events in the Spanish-speaking world.

Spanish III A & III B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Spanish II A & II B

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

Spanish IV A & IV B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Spanish III A and III B

This course will continue to expand student language skills while taking them on a fascinating cultural journey. Students will experience the rich traditions and superstitions associated with the language, while being immersed in culture—movement, art, music, literature. Meeting real people and hearing their stories will allow students to gain new vocabulary, have better command of the language, and understand their role as a global citizen.

FAMILY AND CONSUMER SCIENCE

Child Development (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

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

Culinary Arts A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In the Culinary Arts course, students will be able to explore basic cooking and knife skills while preparing them for entry into the culinary world. Students will discover the history of food culture, food service, and global cuisines while learning about food science principles and preservation. In the course, it will prepare students by building professional, communication, leadership, and teamwork skills crucial to a career in the culinary arts. Students will discover how to elevate their culinary skills through creating stocks, soups, sauces, and learn baking techniques. Additionally, students will be able to examine sustainable food practices and the benefits of nutrition while maintaining taste, plating, and presentation. Explore careers in the culinary arts for ways to channel a newfound passion.

Early Childhood Education A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

The Early Childhood Education course is designed to provide an overview of the expectations and roles of the early childhood educator. The course provides details about childhood development, health, nutrition, and guidance strategies to help students understand the exciting and unique opportunities that a career in early childhood education can offer.

CAREERS

Career Readiness 1 (Semester 1 & 2) Grade Level: 9

Credits: 0.5

Prepare for your future with Career Readiness 1, focusing on your personal strengths, goal setting, soft skills, and career exploration. Learn to identify your strengths, optimize your learning style, and set effective goals using S.M.A.R.T. criteria. Students will be introduced to career clusters, begin building a high school resume, understand the importance of teamwork, and evaluate factors for future career decisions.

Career Readiness 2 (Semester 1 & 2) Grade Level: 10
Credits: 0.5
Pre-Reqs: Career Readiness 1

Career Readiness 2 builds on Career Readiness 1, focusing on job interview preparation and deeper career exploration. Learn to leverage your strengths, align high school courses with career goals, explore workplace opportunities, and build confidence in resume writing and job applications. Gain insights into support networks and post-secondary planning to achieve career success.

Career Readiness 3 (Semester 1 & 2) Grade Level: 11
Credits: 0.5
Pre-Reqs: Career Readiness 2

Empower your future with Career Readiness 3! In this course, students will identify a career path that aligns with their interests, skills, and life goals. Strengthen your resume through extracurricular activities and community involvement, while preparing for industry certification and college entrance exams. Utilize support networks to plan for your future success and develop self-confidence and financial planning skills for your post-secondary education journey.

Career Readiness 4 (Semester 1 & 2) Grade Level: 12
Credits: 0.5
Pre-Reqs: Career Readiness 3

Enhance your marketability with Career Readiness 4! This course covers college prep, personal finance, entrepreneurship, and personal branding. Learn to navigate post-secondary options, apply for schools, jobs, and scholarships, and develop a strong personal brand for resumes and interviews. Gain practical budgeting and financial planning skills for your future.

Carpentry 1 (Semester 1) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Students must be in 10th grade to start program.

The Reach Carpentry program gives students opportunities to explore woodworking and carpentry skills. Students are provided with tools and lumber to build projects. Students will learn tool safety, measuring practices, and construction basics from site layout to floor construction. Careers in carpentry and other trades will be explored during the course. This program is for students that are good with hands-on projects. Students who successfully complete all four projects in this course will earn project book certification from the Carpenter's Union.

Carpentry 2 (Semester 2) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Carpentry 1

This course builds upon Carpentry 1, focusing on wall framing, window and door installation, roof framing, and ceiling framing. Students will receive tools and materials to learn practical skills in structural carpentry through hands-on activities. Emphasis is on safety, precision, and industry standards, preparing students for advanced carpentry projects or further education in construction trades. Students who successfully complete all four projects in this course will earn an additional project book certification from the Carpenter's Union.

Carpentry 3A & 3B (Semester 1 & 2)

Credits: 1.0

Pre-Reqs: Carpentry 1 & 2

Building on Carpentry 1 and 2, this course focuses on residential drywall installation, stair construction, and commercial metal framing. Students will utilize provided tools and materials to gain hands-on experience in these specialized areas. Through practical application and theoretical understanding, students will develop proficiency in key techniques, preparing them for careers in construction or further education in related fields. Students who successfully complete the stair frame and capstone project will earn the final project book certification from the Carpenter's Union. Students will also have the opportunity to complete the OSHA 10 certification.

Cosmetology 1: Introduction to Cosmetology (Semester 1) Grade Level: 9-12

Credits: 0.5

The Cosmetology 1 Course engages students in hands-on hairstyling techniques, starting with essential safety protocols for utilizing hair tools and products. Through an introductory study of hair anatomy, scalp properties, design principles, and hair care techniques, students develop foundational skills in hairstyling. Each student is provided with a comprehensive Cosmetology kit essential for the course, allowing them to explore their passion for hairstyling. Additionally, this course offers a certification in Barbicide Salon safety.

Cosmetology 2: Foundations of Hair: Texture and Color (Semester 2) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Cosmetology 1

Cosmetology 2: Foundations of Hair: Color & Texture introduces students to the science and artistry of hair coloring and chemical texture services within a professional salon context. Students develop foundational knowledge of color theory, types of hair color, lightening techniques, and introductory chemical texture services while exploring creative application methods and corrective approaches. Through hands-on practice using their cosmetology kits and guided demonstrations, learners build technical confidence while also strengthening professional skills such as client communication, service planning, time management, and portfolio development. This course is ideal for students interested in hair-focused services and provides essential foundational skills that support continued growth in the cosmetology pathway and future success in advanced training.

Cosmetology 3: Beauty Foundations and Professional Skills (Semester 1) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Cosmetology 2

Cosmetology 3 introduces students to foundational techniques in makeup and nail services while emphasizing safety, sanitation, and professional industry standards. Students learn proper use of nail tools, basic makeup application, and an introduction into salon management. Students will learn through hands-on practice with their cosmetology kits and guided demonstrations. The course also highlights leadership development, legal and ethical standards, and effective communication to prepare students for client-centered environments and future careers in the beauty industry. Students may earn the industry-

recognized SP/2: Safety & Pollution Prevention Certification as they continue building skills within the cosmetology pathway.

Cosmetology 4: Advanced Cosmetology & Professional Practice (Semester 1) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Cosmetology 3

Advanced Cosmetology & Professional Practice is the capstone course in the Reach Cosmetology program, designed to build upon the foundational skills developed in Cosmetology 1–3 through a comprehensive, industry-aligned curriculum. Students strengthen their knowledge of sanitation and safety, skin analysis, and client-centered services while refining technical skills in hair, makeup, nails, and advanced beauty applications through hands-on practice using their cosmetology kits and guided demonstrations. The course also emphasizes professionalism, client communication, workplace readiness, and an introduction to salon operations and the beauty industry. Completion of the cosmetology pathway provides students with a strong foundation for postsecondary cosmetology training and preparation for state board licensure, along with opportunities to earn SP/2 and OSHA certifications and the Reach Cyber Charter School Cosmetology Pin.

Introduction to Vet Science A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

Explore the science behind animal care across diverse environments and species with this introductory course. Designed as a steppingstone to Vet Science 1 or Vet Science 2, students will gain essential knowledge on caring for domestic, farm, and wild animals. Students will learn about common diseases and ailments and explore a range of veterinary treatments. Whether you dream of working with beloved pets or exotic wildlife, this course lays the groundwork for your future in animal science and veterinary medicine.

Vet Science 1 (Semester 1 & 2) Grade Level: 10-12

(Vet Science 1 & 2 alternate year by year, do not need to be taken in order)

Credits: 1.0

Pre-Reqs: Intro to Vet Science

From business management to responsible pet ownership, handling techniques to effective communication, explore the multifaceted world of working with animals. Through project-based learning, virtual field trips, and guest speaker spotlights students will gain deeper insight into a career in veterinary science. This course will build upon the fundamental concepts explored in the prerequisite course: Intro to Veterinary Science. Students will gain both practical knowledge and essential skills vital for real-world success in the field, alongside a thorough study of veterinary medical terminology, office procedures, and the care and management of companion, large, and exotic animals.

Vet Science 2 (Semester 1 & 2) Grade Level: 10-12

(Vet Science 1 & 2 alternate year by year, do not need to be taken in order)

Credits: 1.0

Pre-Reqs: Intro to Vet Science

Vet Science 2 is a continuation of the concepts learned in Vet Science 1. Explore advanced subjects like Anatomy and Physiology, Genetics, Reproduction, and Surgical Assisting in this Veterinary Science 2 course. Students gain practical insights through clinical scenarios, preparing them to work with various animals including zoo, large/agriculture, laboratory, and exotic breeds. By the end of this comprehensive program, students will be equipped with essential skills for thriving in the veterinary industry and working across diverse animal contexts. Upon successful completion of all three veterinary science courses, students will earn their Reach Cyber Charter School Veterinary Science pin, symbolizing their commitment and accomplishments in the program.

BUSINESS, COMPUTERS, AND INFORMATION TECHNOLOGY (BCIT)

Accounting (Semester 1) Grade Level: 10-12

Credits: 0.5

Accounting I is a course for students who have a variety of career objectives. It is designed for students who want to begin vocational preparation for accounting careers. It is also designed for students planning careers in related business fields such as Entrepreneurship, Government, and/or Health and Human Services for which mastery of some accounting knowledge, understanding, and application is needed. It will fulfill the needs of students seeking the foundation on which to continue studying business and accounting at the college level.

Business Law (Semester 2) Grade Level: 10-12

Credits: 0.5

Business Law examines the role of the law in all aspects of business ownership and management. Throughout the course, students focus on legal ethics, court procedures, torts, contracts, consumer law, property law, employment law, environmental law, and international law. Students also explore the impact of laws, regulations, and judicial decisions on society at large.

Careers in Criminal Justice (Semester 2) Grade Level: 10-12

Credits: 0.5

In the Careers in Criminal Justice course, students will explore some of the various occupations in this field, while simultaneously learning how they interact with each other and other first responders. Discover various interviewing techniques to uncover the truth. Students will learn the importance of making ethical decisions within a criminal justice career. The criminal justice system is a complex field that requires dedicated people willing to pursue equal justice for all. Students will additionally explore different career choices and how the juvenile justice system, the correctional system, and the trial process all work together to maintain social order.

Communication Skills for Business Certification (Semester 2) Grade Level: 11-12

Credits: 0.5

The Communication Skills for Business (CSB) course will help both students in school learn basic communication principles, plan for effective communication, discover best practices for business deliverables, hone message delivery, receive communications, and analyze communication scenarios. Effective communication is vital in interviews, presentations, and daily verbal and written communication. This course is mapped to the Communication Skills for Business (CSB) certification exam objectives, and it will help students prepare to sit for the exam.

Concepts of Engineering & Technology (Semester 1) Grade Level: 9-12

Credits: 0.5

Students learn how the momentum of science is continually propelling engineers in new directions towards a future full of insight and opportunity. Students will explore the different branches of engineering and how problem-solving, sketching, collaboration, and experimentation can change the very fiber of our human lives. By examining astounding engineering feats and complex ongoing issues, you will begin to question whether the word impossible really exists.

Entrepreneurship & Small Business (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

The Entrepreneurship & Small Business course is built to test and validate foundation-level concepts and knowledge in entrepreneurship and small business management. These core concepts include entrepreneurship; recognizing and evaluating opportunities; planning for, starting, and operating a business; marketing and sales; and financial management.

International Business (Semester 2) Grade Level: 10-12

Credits: 0.5

The International Business course, students will gain the knowledge, skills, and appreciation to live and work in the global marketplace. Students begin to understand how both domestic and international businesses are affected by economic, social, cultural, political, and legal factors and what it takes to become a true manager of global business in the 21st century.

Intro to Computer Apps (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

The Computer Applications course introduces software applications that prepare students to succeed in the workplace and beyond. Students will develop an understanding of professional communications and leadership skills while gaining proficiency with word processing, email, and presentation management software. Students will also demonstrate digital literacy through basic study web publishing and design, spreadsheets, and database software.

Intro to Medical Assisting (Semester 1) Grade Level 10-12

Credits: 0.5

In the Intro to Medical Assisting course, students acquire foundational knowledge required to pursue a career in the healthcare industry, and the education, training, and credentials needed to attain them. Students will learn basic medical terminology, principles of anatomy and physiology, and legal and ethical responsibilities. Additionally, students will be able to explore communication, teamwork, and leadership techniques – providing a solid basis for those wanting to advance through the health sciences.

Medical Law & Ethics (Semester 2) Grade Level :10-12

Credits: 0.5

In the Medical Law and Ethics course, students explore the roles health care professionals play in treating patients. Promoting wellness, communicating with patients, and understanding safety in the workplace are just a few of the essential skills students will learn, all the while becoming familiar with some of the more prominent areas in the field, such as emergency care, nursing, infection control, and pediatrics. Students will learn about some of the inherent challenges faced by this age-old profession and how you can become a significant part of the solution.

Medical Terminology A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In the Medical Terminology course students will be introduced to basic medical language and terminology that they would need to enter a health care field. Emphasis will be placed on definitions, proper usage, spelling, and pronunciation. They will study word structure and parts, including roots, prefixes, suffixes, and symbols and abbreviations. They will examine medical terms from each of the body's main systems, including skeletal, muscular, cardiovascular, respiratory, digestive, urinary, nervous, endocrine, reproductive, and lymphatic systems, and sensory organs. In addition, students will learn proper terminology for common tests, procedures, pharmacology, disease, and conditions.

Microsoft Access 2019 Certification (Semester 2) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Successful completion of Microsoft Word 2019

This Microsoft Access certification course prepares students to take the certification exam. In this course students will cover the main topics on the Access 2019 Expert, which includes managing databases, creating and modifying tables, creating and modifying queries, modifying forms, and modifying reports.

Microsoft Excel 2019 Certification (Semester 2) Grade Level: 10-12

Credits: 0.5

Pre-Reqs: Successful completion of Microsoft Word 2019

This Microsoft Excel certification course prepares you to take the certification exam for Excel. In the course you will cover ways to use excel to manage data, create charts, and use formulas.

Microsoft Outlook 2019 Certification (Semester 1) Grade Level: 9-12

Credits: 0.5

This Microsoft Outlook certification course prepares students to take the certification exam for Outlook. In the course, students will cover how to configure and customize the application, how to manage messages, schedules, calendars, meetings, contacts, and tasks.

Microsoft PowerPoint 2019 Certification (Semester 1) Grade Level: 9-12

Credits: 0.5

This Microsoft PowerPoint certification course prepares students to take the certification exam for PowerPoint. In the course, students will cover how to create and manage presentations, insert, and format shapes and slides, apply transitions, and use the new screen recording feature.

Microsoft Word 2019 Certification (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

This Microsoft Word certification course prepares students to take the certification exam for Word. In the course students will cover, sharing documents electronically, applying text effects, customizing tables of contents, inserting bibliographies, working with 3D models, adding, resolving, and deleting comments, along with so much more.

Sports Management (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

In the Sports Management course, students will trace the development of the sports and entertainment industries, dissect their dual nature, and discover what it takes to pitch, promote, and deliver these services. You ‘ll also explore the necessary steps to chart your own career path from among the professional roles that these industries need to operate. Let’s get off the sidelines and hop into the primetime of the sporting and entertainment worlds

SAT/ACT Prep (Semester 1 & 2) Grade Level: 10-12

Credits: 0.5

This comprehensive course equips high school students with the essential skills and strategies needed to excel on standardized college entrance exams. Students will develop proficiency across all major test sections—reading and writing, math, and science (ACT only)—through targeted instruction, practice problems, and practice tests. The course emphasizes both content mastery and test-taking strategies, including time management techniques, question analysis, and methods for avoiding common pitfalls. By the end of the course, students will be prepared to maximize their scores and strengthen their college applications.

Drivers Ed (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

In this Pennsylvania State-approved driver education course students will learn the fundamentals of safe driving and state driving laws. Not only will this course make students more responsible drivers, but it will also help them pass their written driver exam.

Journalism (Semester 1 & 2) Grade Level: 9-12

Credits: 0.5

This course introduces students to the role of the press in a democratic society and the skills needed to research, report, write, and publish news responsibly. Students will explore how journalism has evolved over time, how media shapes public opinion, and how journalists make ethical decisions in a fast-changing media landscape. Through analysis, discussion, and hands-on projects, students will develop critical thinking, media literacy, and clear communication skills.

CREDIT RECOVERY

CR Algebra 1 Part 1 (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra I Part IA (failing grade)

In this prescriptive course, students will focus on reviewing pre-algebra skills and introductory algebra content, allowing students to deepen their understanding of real numbers in their various forms while also extending their knowledge to linear equations in one and two variables. This course features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

CR Algebra 1 Part 2 (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Algebra I Part 1B (failing grade)

In this prescriptive course, students will review introductory algebra; measurement; graphing data; linear equations; systems of linear equations; polynomials; factoring of polynomials; factoring of quadratic functions; rational expressions; and radical expressions. CR Algebra IB features many opportunities for students to hone their computational skills by working through practice problem sets before moving on to formal assessment.

CR American Government (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: American Government (failing grade)

In this prescriptive course, students will go through an in-depth study of the history, structure, and guiding principles of American government. The first unit will review the origins of government in general and American government in particular—from the earliest models for democracy to the founding documents that created a federalist system of government in the U.S. Several units will help students explore the roles and responsibilities of each branch of government as well as the impact that the Constitution has had and continues to have on the way government works and on the lives of individual Americans.

CR Biology (Semester 1 & 2) Grade Level 9-12

Credits: 1.0

Pre-Reqs: Biology (failing grade)

In this prescriptive course, students will learn about the three major themes of the cell, the molecular basis of heredity, and the interdependence of organisms. Students who take this class will have a deeper appreciation for the complexities of living organisms. Students work through and complete several self-check activities and quizzes for practice and participate in self-reflection. In each unit, students complete the unit exam. Teacher feedback is provided throughout the course.

CR Earth Science (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Earth Science (failing grade)

In this prescriptive course, students will learn about the structure and composition of the universe, features of the solar system, the rock cycle, and tectonic activity. The course wraps up with a discussion of human society and its interconnectedness with the Earth's environment, how science and technology work together, and the technological design process in earth science applications.

CR English 9 (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: English 9 (failing grade)

In this prescriptive course, students will explore thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking, and listening, and language study, which includes word knowledge and grammar skills. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

CR English 10(Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: English 10 (failing grade)

In this prescriptive course, students will explore thematically related lessons in five domains: analyzing literature, analyzing informational text, writing, speaking, and listening, and language study, which includes word knowledge and grammar skills. The skills that students practice for this course are like the skills in English 9 but require more independence and depth of thought.

CR English 11(Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: English 11 (failing grade)

In this prescriptive course, students will explore foundation works of literature and other historical documents written between 1600 and 1900. They'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking, and listening, and language study, which includes word knowledge and grammar skills. Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era.

CR English 12(Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: English 12 (failing grade)

In this prescriptive course, students examine major works of literature organized into thematic units. Each unit contains poetry, short stories, and a novel that revolves around the theme for the unit. Themes include the self, relationships, alienation, choice, and death. As students read these works, they will reflect on these important themes by writing in multiple modes and creating cross-disciplinary projects.

CR Geometry (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Geometry (failing grade)

In this prescriptive course, students will learn about what makes Geometry so engaging and the relationship of figures and measures to each other, and how these relationships can predict results in the world around us.

CR Physical Science (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: Physical Science (failing grade)

In this prescriptive course, students will be introduced to Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

CR United States History (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: United States History (failing grade)

In this prescriptive course, students will investigate the people, events and ideas that have shaped the United States from the end of the Civil War through today. Students are asked to analyze and evaluate

decisions made by political, business, and military leaders. Emphasis is placed on connections between events of the past and present. This course also gives students the opportunity to investigate primary sources and conduct research to apply their learning.

CR World History (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

Pre-Reqs: World History (failing grade)

In this prescriptive course, students will learn about history on the world stage in this yearlong course. Starting with the Roman Empire and the Middle Ages, students will investigate the foundations of modern society. They will then dive into the advancements of science and thought during the Age of Enlightenment. As students navigate through the 19th century, they will learn about the transformation from an agricultural to an industrial world and the many changes that resulted from that shift. Students then learn about the interconnectedness of nationalism and colonialism and the resulting world wars. The course ends with students learning about development in our modern world and the implications that historical events have on us today.

LIFE SKILLS

Functional English (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for literacy and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional Language Arts (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for language arts and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional Learning (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for functional learning and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate

students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional Math (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for mathematics and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional Science (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for science and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional Social Studies (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for social studies and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.

Functional STEM (LS) A & B (Semester 1 & 2) Grade Level: 9-12

Credits: 1.0

In this course, the student will participate in synchronous and asynchronous learning important for Science, Technology, Engineering, and Mathematics (STEM) and involvement in the community. This course uses alternate eligible content utilizing the PSSA anchors and eligible content as its framework. This modified course is designed to accommodate students with significant disabilities and must be prescribed in the student's Individualized Education Plan (IEP) prior to course enrollment. This course is appropriate for students who are eligible for PASA.