



LOTUS

SCHOOL FOR EXCELLENCE

Middle and High School
Program of Studies
2024-25
(updated 5/23/2024)

The 2024-25 Program of Studies showcases the academic offerings of Lotus School for Excellence in middle and high school. Students and their families can review the courses by department, choosing the classes that best suit their academic needs and interests. Students can choose courses for the 2024-25 school year by completing [this form](#).

The format for each course is as follows:

- Name of the course
- Grades the course is available
- The level of the course (Regular, Honors, or AP)
- How many credits the course awards (in which high school transcript category)
- The course description
- Any prerequisites or corequisites that must be met to take the course

Courses by department

[Art](#)

[CLDE](#)

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[World Language](#)

Art Department

Studio Art 1

Grades: 6-8

Level: Regular

Credit: 1.0

Students learn the elements and principles of art through the use of different types of art materials and methods of making artwork. Drawing, painting, pastels, scratchboards and other materials. Students learn about contemporary artists, art history, and different styles of art. Students learn vocabulary specific to the arts as well as how to analyze and write about artwork.

Required supplies: One spiral sketchbook with 50+ blank pages.

Prerequisites: None

Graphic Design

Grades 6-8

Level: Regular

Credit: 1.0 (Fine Arts)

Students will learn to use digital media techniques to create visual art. Students will be introduced to Concept Art, Character Design, Walk Cycles, 2D/3D Animation and other various topics. Students will learn Animation Layout and Production Design which will give them a better look into the digital art industry. Students who take this class should have an interest in and or are willing to try new programs and digital drawing materials.

Prerequisites: none

Visual Art

Grades: 9-12

Level: Regular

Credit: 1.0 (Fine Arts)

Students will learn about and use different types of art materials and methods to make artwork. Drawing, painting, pastels, scratchboards and other materials. Students will also learn about artists, art history, and different styles of art. Students who take this class should have an interest in art and be willing to try new methods and put in effort to complete their best work. Students will be required to write about their artwork. Students are assessed on their learning, their ability to follow expectations, and their effort, not their skills.

Required supplies: One spiral sketchbook with 50+ blank pages.

Prerequisites: none

Ceramics

Grades 10-12

Level: Regular

Credit: 1.0 (Fine Arts)

In this first level course students gain a working knowledge of clay and glazes. Hand-building techniques of pinch, coil, slab and paddle will be developed. Students will be introduced to various glazing techniques and surface embellishments.

Prerequisites: Successful completion of Visual Art and/or teacher recommendation.

Advanced Ceramics

Grades 10-12

Level: Regular

Credit: 1.0 (Fine Arts)

Students design functional ceramic pieces expressing their own creative vision. Students continue their investigation of handbuilding techniques taught in Ceramics I and practice a more in-depth exploration of throwing on the potter's wheel. Alternate glazing and decorative surface techniques will be explored.

Prerequisites: Successful completion of Ceramics I and/or teacher recommendation.

Digital Art

Grades 9-12

Level: Regular

Credit: 1.0 (Fine Arts)

Students will learn to use digital media techniques to create visual art. Students will be introduced to Concept Art, Character Design, Walk Cycles, 2D/3D Animation and other various topics. Students will learn Animation Layout and Production Design which will give them a better look into the digital art industry. Students who take this class should have an interest in and or are willing to try new programs and digital drawing materials.

Prerequisites: none

CLDE Department

ELD 101

Grades: 6-12

Level : Regular

Credit: 1.0 (World Language)

The English Language Development (ELD) 101 course is designed for English Language Learners (ELLs) at the beginner level. It offers culturally and linguistically diverse students the opportunity to develop their English proficiency through speaking, listening, reading, and writing in the English language.

Prerequisites: This course is designed for students who have tested below a 155 on their ACCESS testing or have tested at an A1 level or below on the Lotus General English Proficiency Test.

ELD 201

Grades: 6-12

Level: Regular

Credit: 1.0 (World Language)

The English Language Development (ELD) 201 course is designed for English Language Learners (ELLs) at the intermediate level. It offers culturally and linguistically diverse

students the opportunity to develop their English proficiency through speaking, listening, reading, and writing in the English language.

Prerequisites: This course is designed for students who have tested below a 245 on their ACCESS testing or tested at a B1 level or below on the Lotus General English Proficiency Test.

ELD 301

Grades: 6-12

Level: Regular

Credit: 1.0 (World Language)

The English Language Development (ELD) 301 course is designed for English Language Learners (ELLs) at the advanced level. It offers culturally and linguistically diverse students the opportunity to develop their English proficiency through speaking, listening, reading, and writing in the English language.

Prerequisites: This course is designed for students who have tested below a 320 on their ACCESS testing or tested at a C1 level or below on the Lotus General English Proficiency Test.

English Department

Language Arts 6

Grade: 6

Level: Regular or Honors

Credit: 1.0

This year-long course will expose students to a variety of grade level texts in nonfiction and fiction. Students will master comprehension fiction skills such as theme, plot, character development etc. Students will develop critical thinking skills by analyzing an author's purpose by reading a variety of nonfiction. Students will develop the basics of writing mechanics and grammar.

Prerequisite: None

Language Arts 7

Grade: 7

Level: Regular or Honors

Credit: 1.0

This year-long course will build upon the skills developed in 6th grade by reading a variety of grade level texts in nonfiction and fiction. Students will master comprehension fiction skills such as theme, plot, character development etc. Students will develop critical thinking skills

by analyzing an author's purpose by reading a variety of nonfiction. Students will develop the basics of writing mechanics and grammar.

Prerequisite: 6th grade Iready scores at or above grade level. Behavioral recommendations from the 6th grade teacher. Identified as gifted or talented or other markers as designated by Infinite Campus or other measurements. (If in honors the previous year, demonstration of academic success within the honors class) Recommendation by current teacher after a semester of data.

Language Arts 8

Grade: 8

Level: Regular or Honors

Credit: 1.0

This year-long course will build upon the skills developed in 7th by reading a variety of grade level texts in nonfiction and fiction. Students will master comprehension fiction skills such as theme, plot, character development etc. Students will develop critical thinking skills by analyzing an author's purpose by reading a variety of nonfiction. Students will develop the basics of writing mechanics and grammar.

Prerequisite: 7th grade Iready scores at or above grade level. Behavioral recommendations from the 7th grade teacher. Identified as gifted or talented or other markers as designated by Infinite Campus or other measurements. (If in honors the previous year, demonstration of academic success within the honors class) Recommendation by current teacher after a semester of data.

English Language Arts I

Grade: 9

Level: Regular or Honors

Credit: 1.0 (Language Arts)

This course will focus especially upon a study of heroes and protagonists in literature and in culture at large. Through this curriculum, students are introduced to a study of archetypes and allusions which serve as a foundation for their full career as English students in high school and in life. They will develop their skills in literary character analysis and in symbolic analysis. Students will advance their skills in writing multi-paragraph compositions and essays, in grammar, and in vocabulary. Emphasis especially will be expected placed on the recursive nature of the writing process, as students will be expected to turn in multiple drafts of a paragraph or composition, as well as complete a 2-3 page research paper.

Prerequisite: Regular: Successful completion of Language Arts 8; Honors: Successful completion of Language Arts 8 Honors or a "B" in Language Arts 8.

English Language Arts II

Grade: 10

Level: Regular or Honors

Credit: 1.0 (Language Arts)

This course focuses on reading comprehension, literary analysis, oral presentations, and writing. The objectives of this course include developing students' understanding of the history and cultural progress of our humanity through literature. Students will analyze, discuss and write about literary passages via academic methods and concepts used in literary study. Students will demonstrate maturity in their writing, mastery of technology and command of diction through a variety of presentations, projects and essays. Students will also complete a polished 3-4 page research paper after drafting and writing it for several weeks.

Prerequisite: Regular: Successful completion of ELA I; Honors: Successful completion of ELA I Honors or a "B" in ELA I.

American Literature

Grade: 11-12

Level: Regular or Honors

Credit: 0.5 (Language Arts)

This year-long course emphasizes skills and strategies for independent reading of, analyzing, and writing about works of American literature, with a focus on how that literature reflects social, political, and moral issues in the United States. This class will touch on texts from the Romanticism Time Period, as well as Modernism Time Period.. Students will also craft an original 4-5 page research paper after several weeks of drafting and workshopping.

Prerequisite: Regular: Successful completion of ELA II; Honors: Successful completion of ELA II Honors or a "B" in ELA II.

English Department Electives

MS Creative Writing

Grades: 7-8

Level: Regular

Credit: 0.5

Creative Writing is an elective, student-centered course designed for students who enjoy writing but who may not have extensive experience in creative writing. Through frequent writing exercises and in-class workshops, students will be encouraged to explore and develop their own voice, create effective imagery, build believable characterization, set up dynamic dialogue, and practice many other essential narrative techniques. In addition to fiction

writing, students will also practice poetry writing, narrative writing, and creative nonfiction. Self-critique, group evaluation, and individual feedback from the teacher will help students expand on their writing skills.

Prerequisite: Students must have shown proficiency in required ELA courses in years prior. I-ready scores will be taken into consideration as well.

MS Journalism

Level: Regular

Grades: 7-8

Credit: 0.5

Course Description: This course is designed for students interested in exploring the wide variety of writing styles within both print and broadcast journalism. The course introduces students to basic news writing, as well as many other types of journalistic writing, including feature writing, opinion writing, review writing, sports reporting, and humor writing. Students will also learn the fundamentals of page layout and design. To develop their critical thinking skills, students are asked to analyze contemporary writers in the print and broadcast media. In preparing their own stories, students develop their interviewing, research, organizational, and computer skills.

Prerequisite: Students must have earned a “B” or higher in previous English class.

Advanced Placement English Language and Composition

Level: AP

Grade: 11

Credit: 1.0 (Language Arts)

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text—from a range of disciplines and historical periods.

Prerequisite: 90% or better in their previous English course. ELA II teacher recommendation.

Advanced Placement English Literature and Composition

Level: AP

Grade: 12

Credit: 1.0 (Language Arts)

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

Prerequisite: 90% or better in their previous English course. Junior year English teacher recommendation.

Advanced Placement Seminar

Level: AP

Grades: 11-12

Credit: 1.0 (Language Arts)

In this class, students will develop and practice their skills in research, collaboration, and communication that they'll need in any academic discipline. Students will investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team. The AP Seminar assessment has three parts: two performance tasks—which you'll complete over the course of the year and submit online for scoring through the AP Digital Portfolio—and the end-of-course AP Exam. All measure your proficiency in the course skills, and all contribute to your final AP score on a scale of 1–5.

Prerequisite: Earning an "A" in ELA II or American Literature Regular or a "B" in ELA II or American Literature Honors. Teacher recommendation.

Advanced Placement Research

Level: AP

Grade: 12

Credit: 1.0 (Language Arts)

In this class, students will build on what they learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students will design, plan, and conduct a year-long research based investigation to address a research question. Unlike most AP courses, here is no end-of-year written exam for AP Research. Instead, students will be assessed on performance tasks they complete that are based on their year-long research project: an academic paper (which students submit online for scoring through the AP Digital Portfolio), a presentation, and an oral defense of their research. These components all contribute to the final AP score on a scale of 1–5.

Prerequisite: Successful completion of AP Seminar. AP Seminar teacher recommendation.

HS Creative Writing

Grades: 10-12

Level: Regular

Credit: 0.5 (Language Arts)

Creative Writing is an elective, student-centered course designed for students who enjoy writing but who may not have extensive experience in creative writing. Through frequent writing exercises and in-class workshops, students will be encouraged to explore and develop their own voice, create effective imagery, build believable characterization, set up dynamic dialogue, and practice many other essential narrative techniques. In addition to fiction writing, students will also practice poetry writing, narrative writing, and creative nonfiction. Self-critique, group evaluation, and individual feedback from the teacher will help students expand on their writing skills.

Prerequisite: Students must have shown proficiency in required ELA courses in years prior. I-ready scores will be taken into consideration as well.

HS Journalism

Level: Regular

Grades: 9-12

Credit: 0.5 (Language Arts)

Course Description: This course is designed for students interested in exploring the wide variety of writing styles within both print and broadcast journalism. The course introduces students to basic news writing, as well as many other types of journalistic writing, including feature writing, opinion writing, review writing, sports reporting, and humor writing. Students will also learn the fundamentals of page layout and design. To develop their critical thinking skills, students are asked to analyze contemporary writers in the print and broadcast media. In preparing their own stories, students develop their interviewing, research, organizational, and computer skills.

Prerequisite: Students must have earned a “B” or higher in previous English class.

British Literature

Level: Regular

Grades: 11-12

Credit: 0.5 (Language Arts)

Examining what generations of readers and critics have heralded as the “best” works of British literature—and we’ll be focusing specifically on what people wrote and read during times of great social and political upheaval. You will be invited into the romance and adventure of novels, short stories, and plays while also considering their cultural, historical,

and political effects. We will study writers like William Shakespeare, Charles Dickens, and Jane Austen as well as authors with whom you may be less familiar. We'll read "serious" literature alongside popular genres like gothic and early crime fiction. We will also examine major developments in British poetry, while critically examining what good poetry is and does. Throughout this class you will be asked to consider: what makes a piece of literature good, beautiful, or meaningful? Who decides? This is a course that will teach you not just to read and interpret the British literary canon, but how to understand the legacy of those stories—how the best works of British literature continue to shape our world and ourselves. Students will also craft an original 3-4 page research paper after several weeks of drafting and workshopping.

Prerequisite: None

Contemporary American Literature

Level: Regular

Grades: 11-12

Credit: 0.5 (Language Arts)

This semester course explores the responses of poets, playwrights, and authors to the social, cultural, and political climate of post-World War II America. Students are introduced to a variety of novels, short stories, poems, and plays that reflect the affluent and alienated 1950s, the turbulent social changes of the 1960s and 1970s, the materialism of the 1980s, and the revolutions of today's technological and global era. Students consider the role of history in contemporary American literature and develop the reading, writing, research, and analytical skills necessary in literary study. Students completing this course will understand how literature is a mirror of our society and a vehicle through which to study and respond to the historical, social, cultural, and political contexts of our world. Students will also craft an original 3-4 page research paper after several weeks of drafting and workshopping.

Prerequisites: None

Math Department

6th Grade Math

Grade: 6

Level: Regular and Honors

Credit: 1.0

This course covers foundational skills in Ratios and Proportions, Number Sense, Expressions and Equations, Geometry and Statistics. Students will practice with real world applications in various skills ranging from decimal operations to data analysis.

Prerequisites:

Regular: Multiplication table memorized

Honors: Multiplication table memorized and 80% or higher on pre-test.

7th Grade Math

Grade: 7

Level: Regular

Credit: 1.0

7th grade math is a continuation of 6th grade math. Students will explore skills related to ratios and proportions, number sense and operations, equations and expressions, geometry, as well as basic statistics and probability.

Regular: Successful completion of 6th Grade Math

Pre-Algebra

Grades: 7-9

Level: Regular and Honors

Credit: 1.0 (Mathematics)

This course offers students the mathematical concepts needed to build a solid foundation for High School mathematics. Students will develop the pre-requisite skills necessary to be successful in their first year High School Algebra course. Concepts included are: 1) Number sense, Properties, and Operations, 2) Patterns, Functions, and Algebraic Structures, 3) Analysis, Statistics, and Probability, 4) Shape, Dimension, and Geometric Relationships.

Prerequisites:

Regular: Successful completion of 7th grade math OR 80% or higher on the 6th grade math final.

Honors: Successful completion of 6th grade math Honors.

Algebra 1

Grades: 8-10

Level: Regular and Honors

Credit: 1.0 (Mathematics)

Algebra 1 introduces students to variables, algebraic expressions, equations, inequalities, functions, and all their multiple representations. In this class, students will develop the ability to explore and solve real-world application problems, demonstrate the appropriate use of graphing calculators, and communicate mathematical ideas clearly. This course lays the foundation for mathematical literacy that will help students be successful in every subsequent course in mathematics.

Prerequisites:

Regular: Successful completion of PreAlgebra/ 8th Grade Math OR 80% or higher on pre-algebra final.

Honors: If moving up from pre-algebra honors, a 70% or higher on the pre-algebra final. If moving up from regular pre-algebra, an 80% or higher on the pre-algebra final OR teacher recommendation.

Geometry

Grades: 9-11

Level: Regular and Honors

Credit: 1.0 (Mathematics)

Geometry course in high school offers students the opportunity to enhance their mathematical thinking, problem-solving skills, and logical reasoning abilities, which are valuable in various academic and real-world

Prerequisites:

Regular: Successful completion of Algebra 1.

Honors: If moving up from Algebra 1 honors, a 70% or higher on the algebra 1 final. If moving up from regular algebra 1, an 80% or higher on the pre-algebra final OR teacher recommendation.

Algebra 2

Grades: 10-12

Level: Regular & Honors

Credit: 1.0 (Mathematics)

Students will continue building their Algebra foundation that they received in Algebra 1. Students will explore rational equations/inequalities, as well as linear, polynomial, radical, and quadratic equations. They will also be introduced to the Complex Number system and exponential/logarithmic functions.

Prerequisites: Successful completion of Algebra 1 AND successful completion of Geometry or be enrolled in Geometry.

Math Department Electives

Precalculus

Grades: 11-12

Level: Regular

Credit: 1.0 (Mathematics)

Pre-Calculus blends together the previous study of Algebra, Geometry, and Mathematical Functions into a preparatory course for Calculus. The course focuses on mastery of critical

skills and exposure to new skills necessary for success in subsequent math courses. Throughout the course, Common Core standards are taught and reinforced as the student learns how to apply the concepts in real life situations.
Prerequisites: Regular: Final grade of B or higher in Algebra 2 or C or higher in Algebra 2 Honors.

Precalculus (Concurrent Enrollment)

Grades: 11-12

Level: Honors

Credit: 0.5 (Mathematics)

Pre-Calculus blends together the previous study of Algebra, Geometry, and Mathematical Functions into a preparatory course for Calculus. The course focuses on mastery of critical skills and exposure to new skills necessary for success in subsequent math courses.

Throughout the course, Common Core standards are taught and reinforced as the student learns how to apply the concepts in real life situations.

Prerequisites: Successful completion of Algebra 2 Honors. Note: in order to get college credit, students must earn a course-specific score on a placement test and earn at least a “C” in the course.

Calculus I (Concurrent Enrollment)

Grades: 11-12

Level: Honors

Credit: 0.5 (Mathematics)

This course is recommended for students who wish to continue their study of mathematics or science beyond high school. This course includes a study of tangents, limits, continuity, average and instantaneous rates of change, and differentiation of algebraic functions with applications.

Prerequisite: Successful completion of Precalculus. Note: in order to get college credit, students must earn a course-specific score on a placement test and earn at least a “C” in the course.

Consumer Math

Grade: 12

Level: Regular

Credit: 1.0 (Mathematics)

Students in Consumer Math will learn the basics of managing money using a variety of math skills to compute weekly/annual wages, overtime hours, figuring tips, rounding money, as

well as comparing gross pay to net pay. They will also examine checking/savings accounts, taxes, loans, and investments as they relate to financial planning.

Prerequisites: Successful completion of three high school math courses.

Physical Education / Health Department

Middle School Physical Education

Grades: 6-8

Level: Regular

Credit: 1.0

A variety of activities are incorporated into the physical education program. Activities vary from creative movement to lifetime sports. The age level of the individuals is a factor determining what activity is to be provided, but the outcome at any level should be the same. All students have the need and right to enjoy the benefits of physical activity. Through a creative and well-rounded physical education program, students will benefit. Activities taught in the PE portion of this course include Soccer, Track, Football, Volleyball, Basketball, Team Handball, Floor Hockey, Badminton, Tennis, Softball, Yoga, Team Building activities, Current Event activities, and games. This list is subject to change. Every unit will involve specific warm ups, conditioning, testing, drills, cool down stretches, and training that will be specific to that sport.

Prerequisite: none

High School Physical Education

Grades: 9-12

Level: Regular

Credit: 1.0 (Physical Education)

A variety of activities are incorporated into the physical education program. Activities vary from creative movement to lifetime sports. The age level of the individuals is a factor determining what activity is to be provided, but the outcome at any level should be the same. All students have the need and right to enjoy the benefits of physical activity. Through a creative and well-rounded physical education program, students will benefit. Activities taught in the PE portion of this course include Soccer, Track, Football, Volleyball, Basketball, Team Handball, Floor Hockey, Badminton, Tennis, Softball, Yoga, Team Building activities, Current Event activities, and games. This list is subject to change. Every unit will involve specific warm ups, conditioning, testing, drills, cool down stretches, and training that will be specific to that sport.

Prerequisite: none

Postsecondary Readiness Department

SAT Preparation

Grade: 11

Level: Regular

Credit: 0.5 (Elective)

This semester-long course is designed to prepare high school students to take the SAT. Throughout the course, students will analyze the structure of the digital SAT test for both the Reading and Writing modules and Math modules. We will go into test taking strategies as well as content-specific skills that apply to the test.

Prerequisites: None

Career Development and College Preparation

Grades: 10-11

Level: Regular

Credit: 0.5 (Elective)

This course introduces the students to college and career prep. We will be using ICAP, Colorado Career Advising, and Scoir throughout the year to expose students to various career options as well as familiarize students with various post-secondary options whether it be education, the military, or entering the job force.

Prerequisite: none

Senior Seminar

Grade: 12

Level: Regular

Credit: 0.5 (Elective)

This first-semester course assists seniors with their college applications and essays, filling out the FAFSA, applying for scholarships, and exploring career options.

Prerequisite: none

Senior Launch

Grade: 12

Level: Regular

Credit: 0.5 (Elective)

This second-semester course for seniors culminates with an ICAP presentation featuring the student's plan for career and life after graduation.

Prerequisite: none

Internship / Work Study

Grade: 12

Level: Regular

Credit: 0.5 (Elective)

Seniors who work after school or who participate in an internship have the opportunity to earn credit by enrolling in this class. The instructor will serve as a guide for students as they identify, apply for, and interview for employment or intern positions at local companies.

Students will earn credit by participating in the activities, including a quarterly written reflection on their work experience, a quarterly site visit by the instructor, and an evaluation by their employer.

Prerequisite: none

Project Lead the Way Department**Digital Citizenship**

Grades: 6-8

Level: Regular

Credit: 1.0

This year-long class is composed of five units: Web Development, Film Making, Spreadsheets & Finance, Audio Engineering, and Game development.

Prerequisites: None

PLTW Gateway

Grade: 7-8

Level: Honors

Credit: 1.0

Through explorations of coding and robotics, flight and space, human body systems, and more, PLTW Gateway fuels students' passion for discovery. As they engage in hands-on, collaborative problem solving focused on real-world challenges, students use and stretch their imaginations in brand-new ways and connect their learning to life. All the while, students step into roles spanning the career landscape – a crucial experience during this transitional time in their lives.

Prerequisite: Successful completion of Digital Literacy

Introduction to Computer Science

Grades: 9-12

Level: Regular

Credit: 1.0 (Computer Technology)

With emphasis on computational thinking and collaboration, Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In Computer Science Essentials, students will start with visual, block-based programming and smoothly transition to text-based languages like Python®. They will apply computational thinking practices, enrich their vocabulary, and engage in collaborative projects, reflecting the methodologies of computing professionals. Ultimately, they'll develop products that tackle topics and challenges significant to them.

Prerequisites: None

PLTW Computer Science Principles

Grades: 10-12

Level: Honors or AP

Credit: 1.0 (Computer Technology)

Using Python® as a primary tool, students learn the fundamentals of coding, data processing, data security, and task automation, while learning to contribute to an inclusive, safe, and ethical computing culture. The course promotes computational thinking and coding fundamentals and introduces computational tools that foster creativity. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

****Students who take the AP Computer Science Principles exam at the end of the class will receive AP (5.5) credit instead of Honors (5.0).****

Prerequisites: A "B" or higher in Computer Science Essentials

PLTW Principles of Biomedical Science

Grades: 10-12

Level: Honors

Credit: 1.0 (Science)

This course serves to provide foundational knowledge and skills in fields such as biology, anatomy & physiology, genetics, microbiology, and epidemiology as well as engage students in how this content can be applied to real-world situations, cases, and problems. Through both individual and collaborative team activities, projects, and problems, students will tackle real-world challenges faced by biomedical professionals in the field. They will work with the same tools and equipment used in hospitals and labs as they engage in relevant hands-on work. Students will develop skill in technical documentation to represent and communicate experimental findings and solutions to problems. In addition, students will explore how connections to other disciplines such as computer science and engineering shape the future

of medicine and practice collaboration techniques that will help them connect with professionals across any field.

Prerequisites: A “B” or higher in Biology

Science Department

Integrated Science 1

Grade: 6

Level: Regular and Honors

Credit: 1.0

Integrated Science 1 will cover 4 units pulling from Earth Science, Life Science and Physical Science topics including; Exploring Earth, Exploring Life, Understanding Matter, and Understanding Energy using the 5E model.

Prerequisites: none

Life Science

Grade: 7

Level: Regular

Credit: 1.0

Integrated Science 2 will cover 5 units pulling from Earth Science, Life Science and Physical Science topics including; Life: Structure and Function, Life: Changes and Interactions, Energy and Matter, Earth: A Dynamic Planet, Exploring the Universe using the 5E model.

Prerequisites: Successful completion of Integrated Science 1

Physical Science

Grade: 8

Level: Regular

Credit: 1.0

Integrated Science 3 will cover 6 units pulling from Earth Science, Life Science and Physical Science topics including; Motion and Energy, Interactions of Matter, Understanding the Universe, Earth and Geologic Changes, Exploring Ecology, Heredity and Human Body Systems using the 5E model.

Prerequisites: Successful completion of Integrated Science 2

Biology

Grade: 9

Level: Regular

Credit: 1.0 (Science)

In biology, students study a variety of life processes and learn how different organisms meet the challenges of living in their environment. Students learn to use laboratory equipment and materials to collect data and then use a variety of data analysis skills to interpret the data. Major biological concepts for student focus include ecology, matter and energy transfer, genetics and inheritance, homeostasis, as well as evolution.

Prerequisites: None

Chemistry

Grades: 10-11

Level: Regular or Honors

Credit: 1.0 (Science)

This course offers an in-depth study of chemistry concepts that include the states and structure of matter, chemical reactions, acids and bases, and thermochemistry. These concepts are developed through discussion, experimentation, and problem solving. Strong emphasis is placed on the integration of chemistry concepts through mathematical analysis.

Prerequisite: Concurrent enrollment in or successful completion of Algebra 2

Science Department Electives

Geology

Grade: 6-8

Level: Regular

Credit: 0.5

Study Earth, its materials, and the processes by which they are formed, move, and change over time. This elective covers rock cycle, geologic time scale, plate tectonics, dynamics of earth, and Earth's resources.

Prerequisites: None

PLTW Principles of Biomedical Science

See the course description in the Project Lead the Way Department section above.

PLTW Medical Interventions

See the course description in the Project Lead the Way Department section above.

Physics

Grades: 11-12

Level: Regular

Credit: 1.0 (Science)

This is an Algebra I based physics course, it covers the physics of mechanics and requires application of classical physics to both mathematical and conceptual problems. Major topics include kinematics in one and two dimensions, Newton's Laws, circular motion, work and energy, impulse and momentum, and rotational mechanics. This course may also include topics relating to simple harmonic motion and traveling and standing waves.

Prerequisites: Successful completion of Algebra 2

Advanced Placement Physics 1: Algebra-Based

Grades: 11-12

Level: AP

Credit: 1.0 (Science)

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, force interactions, change, and conservation.

Prerequisites: Successful completion of Geometry Honors and concurrent enrollment in Algebra 2 Honors

Advanced Placement Biology

Grades: 10-12

Level: AP

Credit: 1.0 (Science)

This course is designed to be the equivalent of an introductory college biology course. The course provides advanced studies with the intent of preparing for the College Board AP Exam. The subject matter attains a depth of understanding of fundamentals and competence in dealing with molecular and cellular biology, genetics and evolution, and organisms and populations with a suggested course outline provided by the College Board.

Prerequisite: A grade of an "A" in Biology or a "B" in Biology Honors. Students who have not yet completed a year of Chemistry must take it concurrently.

Environmental Science

Grades: 10-12

Level: Regular

Credit: 0.5 (Science)

Environmental science is a course dedicated to understanding the interactions between Earth's natural systems and the demands placed on them by the human population. This course examines the scientific principles behind natural phenomena and resource cycles, explores how we utilize these systems and our impact and potential solutions from the

resulting consequences of resource mismanagement and exploitation. Students will demonstrate an understanding of the nature of science and scientific reasoning and logic, as it applies to environmental science. Students will also demonstrate an understanding of the use of mathematical reasoning and processes in environmental issues, and analyze current environmental issues and apply best practices toward policy implementation.

Prerequisites: Successful completion of Biology

Advanced Placement Environmental Science

Grade: 11-12

Level: AP

Credit: 1.0 (Science)

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Final Exam is AP in Spring.

Prerequisites: Successful completion of Biology Honors or a “B” or higher in Biology.

Anatomy and Physiology

Grades: 11-12

Level: Regular

Credit: 0.5 (Science OR Health)

This course is designed to develop an understanding of the concepts of anatomy and physiology as it relates to the human body. Anatomy is the study of structures and shape of the body and body parts and their relationship to one another. Physiology is the study of how the body and its systems work, and their interconnections. Students will describe the major anatomical components of each human body system, describe briefly their anatomical locations and general structures, and explain their physiological functions. Further, students will describe the regulations of the human body and explain how body systems are integrated.

Prerequisites: Successful completion of Biology

Social Studies Department

Western Hemisphere

Grade: 6

Level: Regular or Honors

Credit: 1.0

Introduces students to the beginnings of the human story in the Western Hemisphere and explores the legacy of civilization from the Americas. Students discover how geographic and economic factors of the past continue to influence the modern world.

Prerequisites: none

World History

Grade: 7

Level: Regular or Honors

Credit: 1.0

Students will be able to understand World History from the dawn of civilization to the settlement of India.

Prerequisites: Passing 6th grade, reading comprehension

U.S. History A (Beginning to Reconstruction)

Grade: 8

Level: Regular or Honors

Credit: 1.0

Students will be able to understand the basics of US history from Pre-Columbian era to Reconstruction. Students will be assessed by tests, projects, daily assignments and quizzes

Prerequisites: Passing 7th grade, reading comprehension

Human Geography

Grade: 9

Level: Regular or Honors

Credit: 1.0 (Social Science)

Learn about the interactions between people and the world around them.

Prerequisites: none

U.S. History B (Reconstruction to present)

Grade: 10

Level: Regular

Credit: 1.0 (U.S. History)

Students will be able to understand the basics of US history from the Pre-Columbian era to the present with an emphasis on the post-Reconstruction era. Students will be assessed by tests, essays, projects, daily assignments and quizzes.

Prerequisites: Successful completion of 9th grade Human Geography

U.S Government

Grade: 11-12

Level: Honors

Credit: 0.5 (Civics)

From the founding of the US Government, framing the Constitution, Bill of Rights, and rights of citizens.

Prerequisite: None

Social Studies Department Electives

World Geography

Grades: 6-8

Level: Regular

Credit: 0.5

Middle school world geography gives students a comprehensive look into the cultures, climates, and physical features of the planet's regions.

Prerequisites: none

World Mythology

Grades: 6-8

Level: Regular

Credit: 0.5

Students will study the mythology from the dawn of civilization to today's modern mythology of cinema.

Prerequisites: None

Psychology

Grades: 10-12

Level: Regular

Credit: 0.5 (Social Science)

A semester elective, psychology examines the reasons people behave as they do individually.

This course introduces students to the systematic and scientific study of human behavior.

Major areas of study include the theories, principles and history of psychology; the brain and nervous system; sensation and perception; learning; psychological disorder; and social psychology. Students also study the methods psychologists use in their science and practice.

Prerequisites: None

American Music History

Grades: 10-12

Level: Regular

Credit: 0.5 (Elective)

The origins of American music and its progression, from folk/blues to jazz, gospel, rhythm and blues, rock n' roll, soul, funk, disco, electronic, hip-hop, and popular music.

Prerequisites: None

Economics

Grades: 10-12

Level: Regular

Credit: 0.5 (Social Science)

We will focus on the basics of micro and macro economics, including supply and demand, fiscal and monetary policy, the business cycle, international trade, money and banking, and an introduction to the Federal Reserve.

Prerequisites: None

Advanced Placement U.S. History

Grade: 10

Level: AP

Credit: 1.0 (U.S. History)

AP U.S. History is an introductory college-level U.S. history course. Students cultivate their understanding of U.S. history from c. 1491 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

Prerequisites: Earned a "B" or higher in Human Geography.

Advanced Placement Psychology

Grades: 10-12

Level: AP

Credit: 1.0 (Social Science)

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology.

Throughout the course, students employ psychological research methods, including ethical

considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas. The AP Psychology course is designed to be the equivalent of the Introduction to Psychology course usually taken during the first year of college.

Prerequisites: Earned a “B” or higher in most recent Social Studies course.

Advanced Placement US Government

Grades: 12

Level: AP

Credit: 1.0 (Social Science)

This year-long elective Advanced Placement course provides high achieving 12th grade students with a learning experience equivalent to a college-level introductory course in U.S. government and politics. Following a College Board approved syllabus, the AP U.S.

Government course explores the political theory and everyday practice that direct the daily operations of the United States government and shape its public policies. Students in this course will focus on (1) knowing the important facts, concepts, terms and theories pertaining to U.S. government and politics; (2) understanding typical patterns of political processes and their consequences, including political behavior and ideology, the principles of government, and the structures of government; (3) analyzing and interpreting basic data relevant to U.S. government and politics. Success on the Advanced Placement exam and the development of inquiry skills are major goals for students in this course.

Prerequisites: Earned a “B” or higher in most recent Social Studies course and/or teacher recommendation.

World Language

French

Introduction to French

Grades: 6-8

Level: Regular

Credit: 1.0

This course introduces the students to basic French. Students will learn about the following basic topics, in addition to grammar and basic verb conjugation using the present tense.

They will also learn appropriate introductions, learn how to tell time, use numbers effectively and learn the names of different classroom objects. They will also talk about food and ordering food in an appropriate manner.

Prerequisite: None

French 1

Grades: 9-11

Level: Regular

Credit: 1.0 (World Language)

This course will build on the foundation established in Introduction to French. Students will continue learning basic grammar topics and vocabulary. The students will also continue learning conjugation for regular and irregular verbs in the present tense. They will learn vocabulary related to hobbies, places, and news events and they will explore French and French-speaking African culture.

Prerequisite: None

Japanese

Introduction to Japanese

Grades: 6-8

Level: Regular

Credit: 1.0

This is a middle school course designed with an emphasis on culture more than language, and is to educate students on what is "Japanese" through cultural study including (but not limited to) art, festivals, rituals, religion, pastimes, history, stories/fables, and music. The course also functions as a primer for entry into Japanese I with "lite" versions of the language content from Japanese I (nouns, verbs, self introductions, meal time, taking leave, time, and noun existence).

Prerequisite: None

Japanese 1

Grades: 9-11

Level: Regular

Credit: 1.0 (World Language)

This course introduces high school students to Japanese language and culture, with emphasis on the four components of language (speaking, reading, writing, and listening). Students learn nouns, verb types (casual, polite) and tenses (positive and negative future/habitual, and past), self introductions, meal time, taking leave, time, locations, making plans, particles, and existence of nouns.

Prerequisite: None

Japanese 2

Grades: 10-12

Level: Regular

Credit: 1.0 (World Language)

This high school course builds on the foundation established in Japanese I. Students continue to learn culture to put language in meaningful context, but the emphasis is still on the four components of Japanese language (speaking, reading, writing, and listening). Students continue to learn nouns, verb types (casual, polite) and tenses (positive and negative progressive, invitations, commands, and requests for permission), likes/dislikes, meal time outside of home, adjectives, counters, hobbies, and conjunctions.

Prerequisites (course / grade / skills): Successful completion of Japanese 1

Japanese 3

Grades: 11-12

Level: Honors

Credit: 1.0 (World Language)

This third year high school course assumes students have command of concepts established in Japanese I and Japanese II. Students continue to learn culture applied to language in meaningful context, with emphasis still on the four components of Japanese language (speaking, reading, writing, and listening), but with more emphasis on translation of text (reading, writing). Students translate using knowledge of learned nouns, verb types (casual, polite) and tenses (positive and negative progressive, invitations, commands, and requests for permission), likes/dislikes, meal time outside of home, adjectives, counters, hobbies, and conjunctions. Students apply learned real-life Japanese to interpersonal penpal conversation.

Prerequisites (course / grade / skills): Successful completion of Japanese 2

Japanese Culture Through Digital Media

Grades: 9-12

Level: Regular

Credit: 1.0 (Elective)

This is a high school course designed with an emphasis on culture as conveyed through digital media (movies, TV shows, video games), and is to educate students on what is "Japanese" through cultural study. It may also include related proof through (but not limited to) art, festivals, rituals, religion, pastimes, history, stories/fables, and music. The course also functions as a possible primer for entry into Japanese I with more in-depth versions of overlapping culture content. Students compare and contrast culture in Japan and other countries through studies of brands, entertainment, sports, hobbies, and media.

Prerequisite: None

Spanish

Introduction to Spanish

Grades: 6-8

Level: Regular

Credit: 1.0

This course introduces the students to basic Spanish. Students will learn about the following basic topics, in addition to grammar and basic verb conjugation using the present tense.

They will also learn appropriate introductions, learn how to tell time, use numbers effectively and learn the names of different classroom objects. They will also talk about food and ordering food in an appropriate manner.

Prerequisite: None

Spanish 1

Grades: 9-11

Level: Regular

Credit: 1.0 (World Language)

This course will build on the foundation established in Introduction to Spanish. Students will continue learning basic grammar topics and vocabulary. The students will also continue learning conjugation for regular and irregular verbs in the present tense. They will learn vocabulary related to hobbies, places, and news events and they will explore Latin American and Spanish culture.

Prerequisite: None

Spanish 2

Grades: 10-12

Level: Regular

Credit: 1.0 (World Language)

This course builds on the knowledge and skills acquired in Spanish I. The grammar lessons will be more challenging and will need practice outside the classroom. The students will review the present tense, learn appropriate use of the progressive tenses, and learn the appropriate use of the preterit tense. They will also use the imperfect tense, make appropriate use of the subjunctive tense and use vocabulary related to their day to day lives such as shopping and driving effectively. Latin American and Spanish culture will be compared and contrasted with the student's home culture.

Prerequisite: Successful completion of Spanish 1

Advanced Placement Spanish Language and Culture

Grades: 11-12

Level: AP

Credit: 1.0 (World Language)

This is an advanced level class and will be rigorous; it will cover grammar, speaking, writing and reading extensively. Current events and cultural comparisons and analyses will take place on a regular basis. The AP exam that takes place each May will be our summative assessment for the course. This will require a great amount of studying outside of class; students always be prepared and ready to work.

Prerequisites: Earned a “B” or better in Spanish 2 and/or Native Spanish Speaker with proficient reading and writing skills