

COURSE CATALOG

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GRADUATION REQUIREMENTS

Students must earn a minimum of 18 credits for graduation:

LANGUAGE ARTS (Grades 9, 10, 11 & 12) **4.0 Credits**

MATHEMATICS 4.0 Credits

- 1.0 Credit Algebra 1(or equivalent)
- 1.0 Credit Geometry
- 1.0 Credit Algebra 2 (or equivalent) Prerequisites Algebra I, Geometry
- 1.0 Credit Financial Math, Math related CTE or other Math related Course.
 - *Pre-Algebra may be taken in the 9th Grade for Credit

SCIENCE 3.0 Credits

- 1.0 Credit Physical Science or Chemistry or Physics
- 1.0 Credit Biology/Life Science
- 1.0 Credit Elective Science or approved Computer Science program or formal Career and Technical Education (CTE) program or curriculum.

SOCIAL STUDIES 3.0 Credits

- 1.0 Credit World History
- 1.0 Credit US History
- 0.5 Credit Economics or Financial Literacy
- 0.5 Credit Civics or Government

WORLD LANGUAGE 2.0 Credits

- 2.0 Credits World Language or
- 1.0 Credit World Language and 1.0 credit CTE or
- 1.0 Credit World Language and 1 credit of Visual Performing Arts in addition to required VPA

PHYSICAL EDUCATION/HEALTH

- 0.5 Credit Health
- 0.5 Credit Personal Fitness

VISUAL, PERFORMING AND/OR APPLIED ARTS 1.0 Credit

TOTAL 18 Credits

*Students may take more than 18 credits as long as they have not yet met the requirements for graduation.

1.0 Credit

Unless otherwise indicated in an Individualized Education Program (IEP), a Section 504 Plan, or similar program of services, as a requirement for graduation, a high school student must participate in all state, federal and District academic testing programs in which the student is eligible to participate and which the School District is required to administer. Any deviation from this requirement must be approved by the Superintendent or his/her designee. Any student enrolled in a testing window must take that test to graduate unless he/she has a waiver. Students will not be allowed to continue in their courses until they have completed the test.

STANDARDIZED TESTING:

- MME (Michigan Merit Exam)
- PSAT9/PSAT10 offered in the spring to 9th and 10th grade students respectively
- PSAT/NMSQT offered in the fall to 11th grade students to prepare for the SAT
- SAT (Scholastic Assessment Test) http://www.collegeboard.com

DISTRICT TESTING:

- NWEA Screener upon enrollment
- NWEA MAP

LANGUAGE ARTS

Students must have 4 Credits of English Language Arts to meet the State of Michigan graduation requirements:

Essential English

Counts as English Credit 2 Semesters

With a focus on reading skill development, Essential English integrates the study of writing and literature through the examination of a variety of genres. Students identify the elements of composition in the reading selections to understand their function and effect on the reader. Practice is provided in narrative and expository writing. Topics include comparison and contrast, persuasion, and cause and effect essays, as well as descriptive and figurative language. Lessons are supplemented with vocabulary development, grammar, and syntax exercises, along with an introduction to verbal phrases and research tools.

English IA/B

2 semesters

A balance of fiction and nonfiction texts are used throughout the course, and each unit is designed around a thematic concept to provide cohesiveness to the skills-based lessons and activities that make up the unit. The course intertwines the development of reading skills with the development of writing, speaking, and listening, and language skills. The course features a variety of interactions, videos, and new student resources, such as worksheets and guided notes. This course also includes Augmented Reality activities in partnership with Boulevard Arts. The AR activities in this course are designed to immerse students in their English Language Arts learning while providing access to famous works of art for cross-curricular learning purposes.

English IIA/B

2 semesters

This course focuses on using personal experiences, opinions, and interests as a foundation for developing effective writing skills. Skills acquired in English are reinforced and refined. Literary models demonstrate paragraph unity and more sophisticated word choice. A research paper is required for completion of course. Topics include grammar, sentence and paragraph structure, organizing compositions, and the research paper.

English IIIA/B

2 semesters

This course explores the relation between American history and literature from the colonial period through the realism and naturalism eras. The course explores the relation between American history and literature from the modernist period through the contemporary era, and presents learners with relevant cultural and political history. Readings are scaffolded with pre-reading information, interactions, and activities to actively engage learners in the content. The lessons in both semesters focus on developing grammar, vocabulary, speech, and writing skills.

English IVA/B

2 semesters

<u>Semester A</u>: In keeping with the model established in English III, these courses emphasize the study of literature in the context of specific historical periods, beginning with the Anglo-Saxon and medieval periods in Britain. Each lesson includes tutorials and embedded lesson activities that provide for a more engaging and effective learning experience. Semester B covers the romantic, Victorian, and modern eras. End of unit tests ensure mastery of the concepts taught in each unit, and exemptive pretests allow students to focus on content that they have yet to master.

<u>Semester B</u>: This semester is designed to strengthen students' ability to read and write in the workplace. Writing for business purposes is a main focus of the course. Students will learn how to communicate effectively through email and instant messaging, as well as format specific types of business messages and workplace documents. The role of digital media, visuals, and graphics in workplace communication will be explored. The importance of professionalism, ethics, and other positive skills are also emphasized in the course. Additionally, guidance is provided to help students through the process of searching, applying, and interviewing for a job.

MATHEMATICS

Students must have 4 credits of math to meet the State of Michigan graduation requirements:

Students will be required:

- Algebra I − 2 semesters
- Geometry 2 semesters
- Algebra II 2 semesters
- 2 Additional Semesters of Math These credits may come from eligible CTE courses

Pre-Algebra A/B

May count as 9th Grade Math Credit 2 Semesters

This course builds on material learned in earlier grades, including fractions, decimals, and percentages and introduces students to concepts they will continue to use throughout their study of mathematics. Among these are surface area, volume, and probability. Real-world applications facilitate understanding, and students are provided multiple opportunities to master these skills through practice problems within lessons, homework drills, and graded assignments.

Algebra IA/B

Required 2 Semesters

In addition to the emphasis on standard alignment, the lessons in this course are designed to be short in length offering focused exploration of topics to make concepts more digestible for students.

Practice questions are included with each lesson, including technology-enhanced items and explanations to assist students in their understanding of the concepts. Features to support student mastery include worksheets for practice and guided notes to help students record key takeaways as they move through the tutorial. The course is also built around student engagement, with interactive lessons and videos that work through examples and model problem-solving skills.

Geometry A/B

Required 2 Semesters

A comprehensive examination of geometric concepts, each lesson provides thorough explanations and builds on prior lessons. Step-by-step instruction and multiple opportunities for self-check practice develop skills and confidence in students as they progress through the course. The course features animations, which allow students to manipulate angles or create shapes, such as triangles, engage students in learning and enhance mastery. Labs extend comprehension by giving students hands-on experiences.

Algebra IIA/B

Pre-Requisites: Algebra I, Geometry

Required 2 Semesters

This course advances students' ability to think algebraically, taking their earlier work with linear, exponential, and quadratic equations and expanding on it with polynomials and more advanced equation types. Students will work with rational, radical, logarithmic, inverse, and piecewise functions. They will also extend their studies to include systems of equations and inequalities, trigonometry, complex numbers, and statistics. The course emphasizes using these algebraic concepts to solve problems and help people in many walks of life. The course employs many tools to teach students these concepts, including interactive graphing, videos that walk through problems, and many practice items.

Financial Math A/B

2 Semesters

Prerequisite: Algebra II

May be substituted with a Math related CTE or other Math related Course.

This course is designed to instruct students in algebraic thinking while also preparing them to navigate a number of financial applications. Students will explore how algebraic knowledge is connected to many financial situations, including investing, using credit, paying taxes, and shopping for insurance. In studying these topics, students will learn about the linear, exponential, and quadratic relationships that apply to financial applications. In addition, the course will help prepare students to tackle the wide variety of financial decisions they will face in life, from setting up their first budget to planning for retirement.

SCIENCE

Students must have 3 Credits of science to meet the State of Michigan graduation requirements:

Students will be required:

- Biology (or a qualifying life science from a previous educational institution).
- 1 Credit in Physical Science or Chemistry or Physics
- The 3rd Credit in science can be elected from the choices below (if not previously taken). Students may choose to take 1 Semester of any of the courses combined with 1 Semester of another
- Students preparing to go into a science, engineering, math or medical field are strongly advised to take a 4th Credit of science from those listed below (if not previously taken).

Biology

Required 2 Semesters

Biology is a course designed to strengthen your knowledge of basic biology. This course looks at factors that affect living things. Students will use the scientific method to investigate a biology question. The course will teach students about the basics of life while also challenging them to complete labs, record findings, and walk through the scientific process from start to finish. The course requires some virtual labs as well as real-life science experience with nature studies, dissections, and microscopic slide kits.

Physical Science

Required Prerequisite – Biology 2 Semesters

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with middle school physical science. Content topics include structure and properties of matter, chemical reactions, forces and motion, force fields, energy, and waves.

Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student in this course is devoted to true lab experiences

Chemistry

Prerequisites – Biology or Physical Science 2 Semesters

Chemistry is the study of matter and how it changes. This course looks at matter's composition, properties, and transformations. Students will explore the structure and properties of matter; analyze and construct the periodic table of elements; compare elements discuss the chemical bonding; predict the outcome of chemical reactions based on the reactants involved; calculate the theoretical quantities of substances involved in a chemical reaction; analyze chemical reactions that involve aqueous solutions, acids and bases, and gases; how gases respond to changes in pressure, volume, temperature, and quantity through the ideal gas law; calculate changes in temperature caused by physical and chemical processes and analyze reactions in terms of bond energies; how atoms are changed by the unique processes of radioactive decay, nuclear fusion, and nuclear fission.

Physics

Prerequisites – Physical Science or Biology 2 Semesters

Physics is the scientific study of matter, energy, and their most fundamental physical interactions, including attractions, repulsions, and collisions. Students will learn about the "basics" of physics: how to describe and analyze motion, how forces interact with matter, and how to further describe these interactions with the aid of the concepts of energy and momentum; specialized topics, thermodynamics, the physics of heat; use your physical understanding of motion, forces and energy and apply that knowledge to some important, specialized topics in physics: the behavior of waves, applications of wave theory to light and optics, the interaction of electrical and magnetic forces, and the special "non-Newtonian" properties of energy and matter described by quantum theory.

Earth Science

Prerequisites – Biology and Chemistry or Physics or High School Integrated Physical Science 2 Semesters

Earth and space science is the study of the structure of our planet and Earth's role in the solar system and universe. This branch of science relies on observations, historical data, and physical evidence to describe the natural processes that occur around us and in distant space. Students will learn about course methods and tools that scientists use to study Earth and space science.

Environmental Science

Prerequisites – Biology and Chemistry or Physics or High School Integrated Physical Science 2 Semesters

Environmental Science incorporates biology, chemistry, physics, physical geology and introduces students to key concepts, principles, and theories within environmental science. Investigations are used in this course to explain and understand the behavior of nature in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications.

Forensics

Prerequisites – Biology and Chemistry or Physics or High School Integrated Physical Science 1 Semester

In Introduction to Forensic Science, students will learn about the importance and limitations of forensic science and explore different career options in this field; how to process a crime scene, collect and preserve evidence, and analyze biological evidence such as fingerprints, blood spatter, and DNA; determine the time and cause of death in homicides and analyze ballistic evidence and human remains at a crime scene; forensic investigative methods used in arson, computer crimes, financial crimes, and forgeries.

SOCIAL STUDIES

Students must have 3 Credits of social studies to meet the State of Michigan graduation requirements:

Students will be required:

- 1 Credit United States History
- 1 Credit World History
- 1 Semester Government
- 1 Semester Economics

World History

Required 2 Semesters

This course is a survey of world history. Beginning with the study of early human societies and the invention of agriculture, this course takes the students on a journey through time, from ancient societies up through the modern era. This course employs many interactive features like maps and images with clickable hotspots that students can explore to get more information about things such as regions, cities, and geographical features on a map and artistic techniques and features in famous works of art.

United States History

Required 2 semesters

This course not only introduces students to early U.S. History, but it also provides them with an essential understanding of how to read, understand, and interpret history. For example, the first unit, The Historical Process, teaches reading and writing about history; gathering and interpreting historical sources; and analyzing historical information. While covering historical events from the founding events and principles of the United States through contemporary events, the course also promotes a cross-disciplinary understanding that promotes a holistic perspective of U.S. History.

Government

Required
1 semester

The interactive, problem-centered, and inquiry-based units in U.S. Government emphasize the acquisition, mastery, and processing of information. It includes the study of the foundations of American government and American political culture, with units 2 and 3 covering the U.S. constitution, including its roots in Greek and English law, and the various institutions that impact American politics.

Economics

Required 1 semester

This course covers basic economic problems such as scarcity, choice, and effective use of resources. It also covers topics on a larger scale, such as market structures and international trade. It particularly focuses on the US economy and analyzes the role of the government and the Federal Reserve System.

ENGLISH LANGUAGE LEARNERS

ELL Foundations: Newcomer

The Newcomer course in the ELL Foundations library is made up of 23 lessons that facilitate the introduction of basic vocabulary and sentence structure necessary for beginning English language learners. In the course, students will encounter activities that support all four modalities of language acquisition: listening, speaking, reading and writing.

ELL Foundations: Level 1

The level 1 course consists of 32 lessons built using multi-genre, multicultural reading selections with Lexile measures. As students work through the lessons, they continue to build their vocabularies, hone their English reading skills, and sharpen their control of English syntax and grammar. In the course, students will encounter activities that support all four modalities of language acquisition: listening, speaking, reading and writing.

ELL English A/B

With a focus on reading and writing, students will integrate the study of literature and writing through the examination of a variety of genres. They will identify the elements of composition in the reading selections to better understand their function and effect on the reader. Through practice, students will develop a deeper understanding about the types of sentences, punctuation marks and grammar rules such as subject verb agreement and tenses; they will also learn about different parts of speech and their correct usage; examine the concept of parallel structure in sentences as well as identify and correct run-on sentences. They will also learn about developing paragraphs and essays.

HEALTH AND PHYSICAL EDUCATION

Students must have 1 semester of health and 1 semester of physical education to meet the State of Michigan graduation requirements:

Health

Required 1 semester

This course is based on a rigorously researched scope and sequence that covers the essential concepts of health. Students are provided with a variety of health concepts and demonstrate their understanding of those concepts through problem solving. The five units explore a wide variety of topics that include nutrition and fitness, disease and injury, development and sexuality, substance abuse, and mental and community health.

Physical Education

Required
1 semester

This course's three units include Getting Active, Improving Performance, and Lifestyle. Unit activities elevate students' self-awareness of their health and well-being while examining topics such as diet and mental health and exploring websites and other resources. In addition to being effective as a stand-alone course, the components can be easily integrated into other health and wellness courses.

WORLD LANGUAGES

Options for students to meet the State of Michigan graduation requirements:

- 2 Credits (4 semesters) of a world language
- 1 Credit of a world language and 1 Credit of Career and Technical Education credit
- 1 Credit of world language and 1 Credit of a Visual, Performing and Applied Arts credit that is in addition to the required VPA

Spanish I and II

- Required See options above
- 4 semesters

Students are introduced to common daily life situations in a graduated sequence. They will learn to communicate in Spanish about familiar topics like family, food, clothing, and daily life through activities in which they will practice reading, writing, listening, speaking, grammar, and vocabulary.

Visual, Performing and Applied Arts

Students must have 1 credit to meet the State of Michigan graduation requirements:

Options for students to meet the State of Michigan graduation requirements:

Students may take 1 semester of any 2 electives or a full year of 1 elective. See all course options in the list of Electives.

ELECTIVES

The following electives may be used as substitute credit for various core subject requirements to meet the State of Michigan graduation requirements

- Career and Technical Education May be used for World Language, VPA Credit and in some instances Math and Science
- VPA May be used for World Language and VPA credit

Creative Writing

Elective (Art Credit)
1 semester

This course is designed to get students to pursue creative writing as a vocation or as a hobby by exposing them to different genres and techniques of creative writing and the key elements in each genre. Great creative writing does not come merely by reading about the craft—one also needs ideas; a process for planning, drafting and revising; and the opportunity to experiment with different forms and genres. The lesson tutorials in this course familiarizes students with the basic structure and elements of different types or genres of writing. The course is based on (CTE) standards designed to help students prepare for entry into a wide range of careers in creative writing fields.

Robotics

Counts as Science, Math, VPA or World Language 2 Semesters

This two-semester course is focused on the concepts related to robots and how to construct a robot. Students will learn about the history and applications of robotics. Students will learn about the job opportunities and employability skills in the field of robotics. Students will also learn about the basic concepts of six simple machines, electricity, electronic circuits, Boolean algebra, magnetics, and their applicability to robotics. Students will apply safety procedures and construct a simple robot. Students will also learn about project management and the engineering design process. Students will learn about the programming languages used in robotics. Students will create a simple robotic arm. Students will also construct a robot using programming. Students will learn about ethics and laws related to robotics. Students will also learn how to test and maintain a robot. Online discussions and unit activities require students to develop and apply critical thinking skills, while the included games appeal to a variety of learning styles and keep students engaged.

Introduction to Visual Arts

Counts as VPA or World Language 1 Semester

This course is intended for you to familiarize yourself with different types of visual arts. This course has 16 lessons and 5 Course Activities. Each lesson contains one or more Lesson Activities. In Introduction to Visual Arts, you will trace the history of art and describe various art forms. You will identify the elements of art and examine the principles of design. You will analyze the parameters in evaluating and critiquing art. You will examine copyright laws and discuss the ethical use of art. Your teacher will grade your work on the Course Activities, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Course Activities (submitted to the teacher) and the Lesson Activities (self-checked) are major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson and an end-of-semester test. These tests are a combination of simple multiple-choice questions and technology-enhanced (TE) questions.

Art History and Appreciation

Counts as VPA or World Language 1 Semester

Art has played a significant role in every major civilization throughout the history of man. The emergence of different art forms often reflects the values that a civilization deems important: religion, labor, love, political change, or even commerce. Since artwork and cultural values are so closely related, studying art is a compelling way to learn about the people who produced it.