# Course Catalog <br> High School 2023-2024 

## English Language Arts

## Rhetoric in Literature (1cr)

This course is designed to analyze texts from a variety of written and spoken genres for their use of rhetorical devices and genre-specific literary elements. This will be coupled with vocabulary and style instruction to support language usage. In this course, the purposes and processes of writing will be emphasized and reflected upon, so students acquire foundational skills in academic writing and discourse.

## British Literature (1cr)

Students will receive an overview of British literature beginning with early Anglo-Saxon to the mid Nineteenth Century. Literary study will be infused with historical applications for a better understanding of the social and historical context of the readings, while recognizing the contemporary relevance of classical literary themes. The study of grammar and the mechanics of writing will continue with a focus on reviewing both the content and structure of particular genres, including the elements of research and formatting. Students will gain extensive practice in writing styles for a variety of purposes, audiences, and lengths, with a focus on proofreading, editing, and rewriting. Students will begin their introduction into literary criticism and textual analysis.

## American Literature (1cr)

Students will receive an overview of American literature that examines the Colonial period, the Transcendental movement, and the Realism and Regional movements. Literary study will be infused with historical applications for a better understanding of the social and historical context of the readings, while recognizing the contemporary relevance of classical literary themes. The study of grammar and the mechanics of writing will continue with a focus on reviewing both content and structure of particular genres, including the elements of research and formatting. Students will gain extensive practice in writing styles for a variety of purposes, audiences, and lengths, with a focus on proofreading, editing, and rewriting. Students will refine their practice of literary criticism and textual analysis, and will incorporate and utilize external sources gathered from research to support and expand the texts that they examine.

## Modern Literature (1cr)

Students will receive an overview of the Modernism movement in literature, from the perspective of a variety of authors and periods. Literary study will be infused with historical applications for a better understanding of the social and historical context of the readings. The refinement of grammar and the mechanics of writing will continue with a strong focus on reviewing both content and structure of particular genres, including the elements of research and formatting. Students will gain extensive practice in writing styles for a variety of purposes, audiences, and lengths, with a focus on proofreading, editing, and rewriting. Students will gain extensive practice to refine their application of literary criticism and textual analysis, relying on individual analysis and external sources gathered from research to support and expand the texts that they examine.

## Senior Thesis (.5cr)

Students will utilize their cumulative skills in the process of researching, crafting and presenting a Senior Thesis project from concept to completion. This project serves as a capstone of their education at Livingston Classical Academy. In addition, students will gain the skills for college and career readiness by managing their time effectively and learning to work proactively and independently. Students will be supported in their exploration of college and career readiness pathways, and are encouraged to establish and foster connections related to their career interests as they prepare to enter adulthood.

## Mathematics

## Algebra I (1cr)

This course includes an introduction to algebra, working with real numbers, solving equations and problems, polynomials, and fractions. We will use appropriate examples, class activities, and diagrams to understand the concepts and apply them to introduce functions, systems of linear equations, inequalities, rational and irrational numbers, and quadratic functions.

## Geometry (1cr)

This course will focus on classifying shapes and students will apply their knowledge of algebra to solve geometric problems. They will determine if shapes are similar or congruent. Students will perform constructions to create or duplicate certain shapes. They will use theorems and postulates to prove given criteria. Students will learn about area, volume and surface area. They will study triangles, circles, and quadrilaterals in great depth. Students will have
opportunities throughout the year to work on their problem solving skills through word problems.

## Algebra II (1cr)

We will use appropriate examples, class activities, and diagrams to understand the concepts such as Basic Concepts of Algebra, Inequalities and Proof, Linear Equations and Functions, Products and Factors of Polynomials, Rational Expressions, Irrational and Complex Numbers, Quadratic Equations and Functions. These concepts will be applied to Variation and Polynomial Equation, Analytic Geometry, Exponential and Logarithmic Functions, Sequences and Series, and trigonometry.

## Trigonometry/ Precalculus (1cr)

This course entails graphing functions such as linear, quadratic, polynomial, rational, exponential, and logarithmic. Analytic Trigonometric will be used to analyze and apply trigonometric functions, coordinates, vectors and analytic geometry.

## Statistics (1cr)

The Nature of Statistics is explored in this course. Organizing Data, Descriptive Measures, Probability Concepts, and Discrete Random Variables will be taught. The Normal Distribution will be analyzed and applied to The Sampling Distribution of the Sample Mean, Confidence Intervals for One Population Mean, Hypothesis Tests for One Population Mean, Inferences for Two Population Means, and Inferences for Population Standard Deviations.

## History

## World Civilization I (1cr)

In this class we will be learning about the history of the world Eras 1-4, from the beginning of man through the classical age. The course will begin with a review of the tools and mental constructs used by historians and geographers to study the world and its history. Throughout each historical era of study, we will focus on the geography, government, economy, and culture of each civilization, as well as the impact these civilizations had on the world.

## World Civilization II (1cr)

In this class we will be learning about the history of the world Eras 4-6, from the fall of the Roman Empire through the age of global revolutions. The course will begin with a review of the tools and mental constructs used by historians and geographers to study the world and its history. Throughout each historical era of study, we will focus on the geography, government, economy, and culture of each civilization, as well as the impact these civilizations had on the world.

## Logic (.5cr)

This class is an introductory study of traditional logic. Traditional logic traces its roots back to the methodology laid down by Aristotle and a revival of the discipline in the Middle Ages. Traditional logic is the study of classical syllogism. "Logic in general is the science of right thinking."-Jacques Maritain. In this course you will learn methods and processes to guide you into correct reasoning skills which can be applied extensively during your life as a productive citizen. I will not teach you what to think but teach you how to think.

## Introduction to Philosophy (.5cr)

This class is an overview survey of philosophy. Students will get a snapshot look at the following branches of philosophy: metaphysics, epistemology, aesthetics, politics, and ethics. Students will learn the history of philosophy by reading the novel, Sophie's World by Jostein Gaarder and then supplementing topics connected to each philosopher mentioned using primary source documents and excerpts.

## American History (1cr)

This course examines the narrative of American history from pre-Columbus to the end of the 19th century. You will seek to understand and analyze the political, religious, social, and economic developments that have shaped the United States, paying attention to the principles on which the nation was founded.

## Government (.5cr)

Eleventh grade students will study the great American experiment, a representative democracy that is anchored by foundational principles of inalienable rights and political power resting with its people. The objective of this course is to prepare you to become participating, informed citizens by providing you with knowledge of national, state, and local governments. You should acquire an understanding of America's foundational principles, the structure of government as defined by the U.S. Constitution, and the rights and responsibilities of citizenship.

## Economics (.5cr)

This one-semester course will build economic literacy in students. The overarching problem of scarcity, unlimited human wants pursuing limited resources, is a focal point of the course. Students will develop an understanding of basic economic concepts and apply them to national and international economic systems. Students will also study how interactions of buyers and sellers impact prices and supplies as well as the role of trade-offs and incentives in consumer and business decisions. Students will use their economic knowledge to make informed decisions as consumers and to participate as citizens in deciding matters of economic policy. Students will develop a global perspective in an economically interdependent world.

## Modern World History (lcr)

This course focuses on Modern World History, which will cover events from the 17th century to the present day. The course will begin with a review of the tools and mental constructs used by historians and geographers to study the world and its history. We will then examine various themes and events in history (democratic and industrial revolutions, world wars, social movements etc.) and identify their impacts on people and places in the world.

## Science

## Biology (1cr)

Biology is the study of living organisms, starting from basic scientific concepts such as chemistry and physics to the laws governing life and all living things. The course starts with the basic elements of life at a cellular level, and flows into topics involving larger multicellular organisms, ecology, evolution, and genetics.

## Chemistry (lcr)

In this course we will build a conceptual understanding of chemistry. Learning is much more effective when it occurs through understanding rather than memorization. Topics will include: Mathematical Concepts, Measurements, the Particulate Nature of Matter, the Mole and Avogadro's Number, the Kinetic Nature of Matter, the Electrical Nature of Matter, Physical Properties and Physical Changes, Chemical Properties and Chemical Changes, Concentrations of Solutions, Acids and Bases. Students will learn to apply the scientific method and engineering process to answer questions and solve problems.

## Physics (1cr)

In this course we will build a conceptual understanding of the rules of nature. Topics will include: Mechanics, Properties of Matter, Heat, Sound, Electricity and Magnetism, Light and Atomic and Nuclear Physics. Students will learn to apply the scientific method and engineering process to answer questions and solve problems.

## Anatomy and Physiology (1cr)

Anatomy and Physiology is the study of structure and function in the human body. Students will learn about the structural organization of the human body and the physiological systems that support life. Furthermore, students will learn how mechanisms within the body support homeostasis, which can be described as the optimal set of internal conditions that support life.

## Latin

## Latin I (lcr)

In this course, students will learn the fundamentals of the Latin language. Students will also cover the place of Latin in linguistic history, Latin pronunciation and recitation, as well as topics in Roman culture and history. Students will focus on the basics of noun and verb construction and translation for the first portion of the year, and will move on to more advanced topics of Latin grammar for the latter part of the school year, including the use of personal pronouns, more advanced noun formations and the perfect verb system, use of numerals, and the relative pronoun.

## Latin II (1cr)

In this course, students will learn intermediate aspects of the Latin language. Students will also review the place of Latin in linguistic history, continue practicing Latin pronunciation and recitation, as well as explore new topics in Roman culture and history. Students will review and refresh their Latin knowledge during the first portion of the year, and will move on to more advanced topics afterwards, including passive voice verb formation and translation, the construction and use of participles, the ablative absolute, indirect speech, and comparative and superlative adjective formation.

## Latin III (lcr)

In this course, students will learn advanced aspects of the Latin language. Students will review and refresh their Latin knowledge during the first portion of the year, and will move on to advanced topics afterwards, including verbal nouns, noun result clauses, and a miscellany of final Latin grammar topics centered around the subjunctive mood. In the second half of the course, students will also become familiar with the fundamentals of Latin poetry, including meter, scansion, and literary devices.

## Latin IV (1cr)

In this course, students will apply their advanced knowledge of Latin to the reading of real Latin texts, beyond the edited excerpts of previous courses. Students will review and refresh their Latin knowledge during the first portion of the year with modern practice texts based in Greek and Roman culture, as well as adapted Latin texts. Afterwards, students will progress to unedited texts, reading excerpts of seminal Latin literature from authors such as Caesar, Vergil, Catullus, Ovid, and more.

## Advanced Latin (1cr)

In this course, students will apply their advanced knowledge of Latin to the reading of real Latin texts, beyond those texts read in Latin 4. Students will have the opportunity in this course to continue exploring the world of Latin literature with longer unedited texts based on student interest, drawing from both poetry and prose, and authors including Caesar, Cicero, Vergil, Ovid, and more.

## Greco Roman Epic Literature (1cr)

In this course, students will read the Greek epics of Homer, the Iliad and Odyssey in translation, as well as Vergil's Aeneid. Students will also use their accumulated Latin knowledge, vocabulary, and skills to read Roman commentaries on the ancient epics, and large excerpts of both the Aeneid and Ovid's Metamorphoses and fragments of Ennius' Annales. They will be exposed to the mechanics of Latin poetry, especially epic poetry, with a focus on style choices and meter. Students will also learn about the historical, cultural, and literary context behind their readings and make connections between the epics cross-culturally.

## Co curriculars

## Art Studio (.5cr)

This is an introductory level studio art course, designed for students with all artistic ability levels and skills. Students will explore various materials, techniques, concepts, and processes essential to understanding the visual arts and the role of the artist, work on individual projects and studio studies to develop basic drawing and painting skills, learn design concepts, and further develop hand-eye coordination and fine-motor skills. The art assignments are designed to enhance and nourish such skills as creative problem solving and critical thinking, while developing the student's individual style. Students will demonstrate their ability to respond, to analyze, and to interpret their own artwork and the work of others through discussions and critiques. In addition, the class will provide an in depth study of art history and basic art concepts. Students will examine a variety of aspects of art history including themes and purposes of art; styles of art; the elements of art; and design principles.

## Advanced Art (.5cr)

This is an advanced studio art course, designed for students with advanced artistic ability levels and skills. Students must have taken the introduction to art or have an outstanding portfolio to enter the class. Students will explore various materials, techniques, concepts, and processes essential to understanding the visual arts and the role of the artist, work on individual projects and studio studies to develop basic drawing and painting skills, learn design concepts, and further develop hand-eye coordination and fine-motor skills. The art assignments are designed to enhance and nourish such skills as creative problem solving and critical thinking, while developing the student's individual style. Students will demonstrate their ability to respond, to analyze, and to interpret their own artwork and the work of others through discussions and critiques. In addition, the class will provide an in depth study of art history and basic art concepts. Students will examine a variety of aspects of art history including themes and purposes of art; styles of art; the elements of art; and design principles.

## Drawing and Sketching (.5cr)

Students will develop basic drawing skills, including the ability to perceive and express visual relationships, organize a two-dimensional composition, and depict and manipulate form, space, and light. Students work from direct observation of still life, interior space, and landscape.

## Physical Education (.5cr)

Beginning physical education introduces students to all aspects of individual and team-oriented physical activities that foster life-long fitness and good health. The students will learn all five aspects of health-related fitness, fundamentals of several team sports and skills for an active lifestyle.

## Team Sports (.5cr)

Team Sports builds on the beginning Physical Education course by focusing on team-oriented sport activities. Various team sports will be explored in depth, including the skills, rules, scoring, and conditioning necessary for success.

## Wind Ensemble (1cr)

This course introduces students to playing an instrument of their choice, music theory and history. Students will work on playing as an ensemble while blending the different sounds together. Students will work on music reading skills while learning their chosen instrument. Significant attention is paid to developing students' musical skills instrumentally and aurally. Students will grow as individual musicians as well as growing within the ensemble.

## Choir (.5cr)

This course introduces students to singing in a choir, music theory and history. Students will work as a group and blend within the choir. Students will work on music reading skills. Significant attention is paid to developing students' musical skills vocally. Students will grow as individual musicians as well as growing within the choir.

## Creative Writing (.5cr)

This course is designed to analyze and apply the use of literary devices and textual elements within a variety of written and spoken genres, including short stories, poems, and dramas. In this course, the purposes and processes of writing will be practiced and reflected upon, so students acquire skills in expression and characterization relevant to composing a work of creative literature.

## Speech and Dramatic Interpretation (.5cr)

This course is designed to analyze and apply the use of interpretation, voice, and delivery, as well as textual elements such as literary and rhetorical devices found within spoken genres, including stories, songs, dramas, speeches, and poems. In this course the purposes and processes
of effective speaking will be evaluated, practiced and reflected upon, so students acquire skills and techniques relevant to speech and dramatic performance of literature.

## Journalism \& Yearbook (1cr)

Journalism \& Yearbook is an elective course that gives students marketable experience in print media publishing. This course engages students in multiple project-based goals, with real-world deadlines, marketing, interviewing, creation, and editing. Students will compose, construct, and edit all elements of computerized text layout, graphic art, and digital photography for publication in both the school's annual yearbook, and the monthly student-focused newsletter The Guardian Gazette. Students will also be exposed to the conventions of digital data maintenance, and the use of both publications as an archival tool. Students are strongly encouraged to commit time outside of the classroom to attend a variety of school events for the purpose of collecting content for yearbook coverage. Students are responsible for the proper care and handling of our digital cameras.

## Health (.5cr)

This course is provided by Michigan Virtual online schooling. Students are provided with a computer to engage in this self-paced online class. This course is designed with a focus on abstinence only (no contraceptives). In this course, students will learn to obtain, interpret, and apply health information and services in ways that protect and promote personal, family, and community health. Topics include nutrition and physical activity; alcohol, tobacco, and other drugs; safety; social and emotional health; personal health and wellness; HIV and other STIs prevention; and sexuality education. Health Education (Abstinence Only) is designed with a focus on abstinence only (not contraceptives) as a method of birth control.

## Service and Leadership (.5cr)

This course gives students the opportunity to explore the teaching profession through direct participation with a mentor teacher in either a grade level or content-focused area.

## Dual Enrollment (varies)

Students can earn college credit while in high school via this program. The courses are delivered through a Michigan college or university and the work is completed independently by the student. All courses must be approved by the principal and/or school counselor.

| LCA Course of Study Sample |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 8th Gr | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| Algebra I | Geometry | Algebra II | Trig/Pre-calc | Statistics or <br> Calculus DC |
|  | Rhetoric in <br> Literature | British <br> Literature | American <br> Literature | Modern Literature |
|  | World Civ I | Logic/Intro to <br> Philosophy | Government/ Civ II <br> Economics | American <br> History |
|  | Biology | Chemistry | Modern History |  |
|  | Latin I | Latin II | Greco Roman <br> Epic Lit |  <br> Latin III (opt.) |
|  | Health/PE | Co-Curricular | Co-Curricular | Co-Curricular |

