



# LIVINGSTON CLASSICAL ACADEMY

## Course Catalog 2021-2022

### English Language Arts

#### *Classical Literature (1cr)*

In this course, students will receive an introduction to the foundational works of Greek and Roman literature, along with a study of classical genres and literary forms. Literary study will be infused with historical applications for a better understanding of the context of the readings, while recognizing the contemporary impact of the classical literary structures and themes. Students will strengthen and build upon their foundation of grammar, as well as the style and mechanics of academic writing, by formally examining the content and structure of the classical forms for the purpose of literary analysis. Students will also continue to refine their speaking and listening skills within the context of the Socratic model

#### *Composition (1cr)*

This course is structured to provide students with formal instruction in genre analysis and writing. It will provide intensive study and practice in writing within the four styles: descriptive, narrative, persuasive, and informative. While good writers are unique, good writing shares common features: an ability to adapt one's writing to make it suitable for the genre's purpose and intended audience. Through analyzing and comparing various examples within the styles, students will develop a comprehensive grasp of the textual features, sentence mechanics, and word choices specific to each genre. In their attempt to write a variety of genres, students will produce well-developed ideas, using appropriate language and tone, with proper acknowledgment of sources of information.

#### *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 Research/ Senior Thesis (1cr)*

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 learning how to craft a college admissions essay and an effective cover letter. Students will be supported in their exploration of college and career readiness pathways.

## **Mathematics**

### *PreAlgebra (1cr)*

This course will focus on student fluency in completing calculations with decimals, fractions and integers. Students will learn about ratios and proportions including their relationship to percents. They will be introduced to Algebraic expressions and equations. Students will learn to classify shapes and apply their knowledge of algebra to solve simple geometric problems. They will learn how to solve and graph linear equations and inequalities. Students will have opportunities throughout the year to work on their problem solving skills through word problems.

### *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.

### *HS Math (1cr)*

This course is designed to build foundational math skills for students with rudimentary math gaps. Students will develop math skills by reading, writing, and solving basic math equations. This does not count towards MDE MMC math requirements.

### *Trigonometry/ Pre calculus (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.

### *Senior Math Experience (0cr)*

This course is delivered to allow students to earn their senior math credit. This is implemented during the second semester. Students will finish their semester one senior math class if they received an incomplete.

### *Dual Credit (DC) Calculus (1cr)*

This course is jointly delivered with Washtenaw Community College (WCC). Students can earn college credit while taking this class. A computer is provided at school and students work independently online to complete coursework through WCC.

## **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 (1cr)*

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.

### *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.

### *Chemistry (1cr)*

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.

## **Latin**

### *Latin I (1cr)*

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 (1cr)*

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. Most of the second half of the course will be devoted to readings from mythology, including discussing the background of the myths, the place of Greek myth in Roman culture and literary tradition, and preparing students for reading unedited Latin texts.

### *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. Afterwards, students will become comfortable with reading Latin texts by reading excerpts of seminal Latin literature before moving on to reading full, unedited Latin texts from authors such as Caesar, Vergil, Catullus, Ovid, and more.

## **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.

### *Physical Education (.5cr)*

Beginning physical education introduces students to different aspects of team-oriented and individual physical activities that foster life-long fitness and good health. The students will learn team building skills, game strategies, fundamentals, equipment manipulation, and the rules of several physical activities.

### *Band (.5cr)*

This course introduces students to playing different instruments, music theory and history. Students will work on playing as a group and blending within the band. Students will work on music reading skills while learning their chosen instrument. Significant attention is paid to developing students' musical skills instrumentally and vocally. Students will grow as individual musicians as well as growing within the band.

### *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.

### *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.

### *Certificate of Completion (.5cr)*

Special Education students on track to earn a certificate of completion have the opportunity to learn life skills such as Occupational Skills, Personal Care, Essential Math, Daily Living/Household Skills and Community.

<i><b>Ideal LCA Course of Study</b></i>				
<b>8th Gr</b>	<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>
Algebra I	Geometry	Algebra II	Trig/Pre-calc	Statistics or Calculus DC
	Classical Literature	British Literature	American Literature	Modern Literature
	Composition	Logic/Intro to Philosophy	Government/Economics	Research/Senior Thesis
	World Civ I	World Civ II	American History	20th Century History
	Biology	Anatomy & Physiology	Chemistry	Physics
Latin 2	Latin II	Latin III	Latin IV	Latin V
	Art/Music/PE/Health	Art/Music/PE/Health	Art/Music/PE/Health	Art/Music/PE/Health