

High School Course Descriptions 2023-2024

Art 1, 2	Students will investigate history through an artistic practice, informed by research into the ever changing technologies and perspectives of Art. In tandem with that research, students will practice several Art techniques from history; such as sculpture, image transfer, performance art, digital image creation, drawing, color theory, and painting technique.
	Students will build/grow an artistic knowledge of Ceramics, Color theory, Design, and Aesthetics. Along with fine art techniques including: photographic reproduction, curation, the potter's wheel, and painting. Students will hone their artistic skills through daily art practice.
Biology	This course introduces students to several key concepts in biology. This course covers the topics specified in the Next Generation Science Standards through in-depth explorations into the real-world applications of biology. Throughout the year, students will study cells, genetics, ecology, anatomy and physiology and evolution. Students will become well-versed in applying the scientific process to their work. Students will solidify understanding through performing projects and labs.
Biology (H)	This is an honors biology course. This course will reinforce biological standards/concepts from class projects. Students will build a solid foundation of biological knowledge (cell biology, genetics, ecology, physiology and epidemiology) to prepare for the rigors of college.
Physics	The introductory physics course is designed to provide 9th-grade students with a fundamental and conceptual understanding of the basic principles that govern the physical world around them. Through a combination of theoretical concepts and hands-on experiments, students will explore the laws of motion, energy, and matter. The course aims to develop critical thinking skills and the ability to apply scientific



	reasoning to real-world phenomena. This course includes teaching methods that encompass interactive lectures, group discussion, laboratory experiments, and hands-on activities. The main concepts that will be covered are motion and force, energy, waves and sound, light and options, electricity and magnetism, and an introduction to modern physics.
Calculus	The basic objects of study in calculus are functions. In this course, functions are presented and analyzed from several points of view: as symbolic formulae, as graphs, as numerical data. Of primary concern is the connection and application of calculus to real life problems occurring in physics, chemistry, engineering, economics and finance. Similarly, the three main concepts of calculus (limits, derivatives, and integrals) are studied from these vantage points. All of these approaches to understanding are essential. Learning mathematics involves both achieving a deep understanding of concepts and learning new skills. As a consequence this course emphasizes broad concepts and widely applicable methods as well as facility with manipulation and computational competence. Technology is used regularly by the teacher and students to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation and to assist in interpreting results.
Chemistry	This is an introductory course in the foundations of chemistry. This course covers the topics specified in the Next Generation Science Standards through in-depth explorations into the real-world applications of chemistry. Emphasis is on the development of critical thinking skills and problem solving. This course is project oriented, providing a hands-on environment for students to explore various chemistry principles and concepts.
Digital Art & Mixed Media	Students in this course will prepare original artwork combining traditional art, digital art, and



integrated art concepts. Instruction will be delivered in the following areas: Elements of art and principles of design, mechanical and computer design methods, finishing of art products, historical and cultural development of art and the design industry. This course will teach students how to organize ideas, create meaning in their original work, and work ideas into new and useful creations. Students will learn the art and science behind audio recording and engineering, as well as the fundamentals of graphic design and color.

English 1

In English 1, students will prepare for college by advancing their writing, research, reading, and formal presentation skills. In order to accomplish this, students will learn how to write formal 4, 5 and 6 paragraph essays. The types of essays written will include literary analysis of character and theme, compare and contrast essays, autobiographical essays, and research papers. In addition students will learn how to conduct meaningful research and correctly cite sources they used to collect the information according to the MLA Handbook. Students will expand their vocabulary and advance their knowledge of literary devices by reading various novels, short stories, poetry, and various non-fiction texts and articles.

English 2

English 2 continues the literary, written, and oral skill development from English I. Throughout the year, students and teachers alike will discuss, debate, research, and evaluate how the past 500 years have affected and shaped American policies and global issues today. As a symbiotic team, we will relate the humanities of the past: art, music, philosophy, literature, and historical events, to our current society and personas. This will be achieved through projects, readings, research, and writing. Students will read a variety of world literature, including fiction and non-fiction pieces as well as poetry, stories, and media writings. Drawing upon these sources, students will continue to develop their writing by focusing on coherent essay structures, such as literary analysis, expository compositions, and



	persuasive arguments. Also, students will continue to develop oral speaking skills and effective argumentation. In this manner students will develop a greater global understanding, cultural literacy, and self awareness.
English 3	English 3 continues the literary, written, and oral skill development from English 2. Through in depth study of historical text, classic and contemporary American Literature, from the perspective of victors, villains, and victims-domestic and international, students will gain insight from the past and speculate outcomes for the future. The English objective is to provide students with experience reading, writing and analyzing a broad range of literature such as plays, prose, poetry, short stories, and novels. In addition, students will further hone essay writing skills, vocabulary, and reasoning practice to not only supplement their SAT/ACT preparation but prepare them for college-level course work.
English 3 (H)	Through the lenses of historical text, classic and contemporary American Literature; students will learn about various literary elements and encounter a wide variety of literary forms. Students will apply and further develop critical analysis, reading and writing skills. By the end of the course, students will be more critical readers and stronger writers.
English 4	English 4 continues the literary, written, and oral skill development from English 3. This course is meant to prepare students for the rigors of college-level writing, comprehension and textual analysis. The students will complete a variety of writing activities, including narrative, expository, analytical, persuasive, and informational writing, which demonstrates research, organization, drafting, and revising strategies. They will respond orally and in writing to literature of all genres. In addition to written work, they will participate in project based activities, exhibitions and portfolio assessments.



English 4 (H)	This honors course is meant to provide students with a critical reading, analysis and writing experience comparable to that of college-level English courses. Students will encounter many literary themes and topics throughout the year. As part of their learning, students will complete a variety of writing activities, including narrative, expository, analytical, persuasive, and informational writing, which demonstrates research, organization, drafting, and revising strategies. All students will analyze literature of all genres and respond to it critically through oral and written mediums.
Environmental Science	Environmental Science is a project-based course that explores the intricate relationship between humans and the environment. Throughout the course, students will engage in hands-on learning experiences and utilize a wood shop to build projects that demonstrate their understanding of environmental concepts. They will learn woodworking techniques, utilize tools and materials, and create functional and aesthetically pleasing projects that align with environmentally friendly principles.
Environmental Science (H)	Environmental Science Honors is an advanced-level course that builds upon the foundation of Environmental Science. The course is arranged in a menu of possible activities and projects, where, guided by their teacher, students will propose a course of study that goes beyond the classroom to add context and nuance to their learning. Examples include trips, college courses, public events, various media, and more. This course will include an option for students to prepare for the AP Environmental Science exam. They will engage in rigorous coursework, practice exam questions, and develop effective study strategies to excel in the AP exam.
Math 1	Students will be exposed to Statistics, Algebra I and concepts of Geometry and integrated into the curriculum. The focus of the first semester is



proportional reasoning. This focus will allow review of fractions, decimals, percents to basic trigonometric functions. The second semester's focus will be deductive reasoning. Students will discover concepts through hands-on activities and projects. Throughout the semester, students will apply and demonstrate their knowledge in real-world situations.

Math 2

The focus of Math 2 is the continued development of the students' ability to think critically about challenging and complex math problems using projects and discovery learning techniques as well as more traditional teaching methodologies. During the year students will develop their understanding of numbers and all types of numerical relationships. Students will deepen their grasp of fundamental mathematical concepts so that they can derive formulas and generalize equations. Students will also be expected to strengthen their problem solving skills by working with real world math problems and by thinking and writing about their problem solving process. In addition, students will become proficient with manipulating and graphing all manner of equations from more basic linear and quadratic equations to exponential. logarithmic, and trigonometric equations. In addition to the course content, this course will also help prepare students for the rigors of college by holding them to high professional academic and standards throughout the year.

Math 3

The focus of Math 3 is the continued development of the students' ability to think critically about challenging and complex math problems using projects and discovery learning techniques as well as more traditional teaching methodologies. During the year students will develop their understanding of numbers and all types of numerical relationships. Students will deepen their grasp of fundamental mathematical concepts so that they can derive formulas and generalize equations. Students will also be expected to strengthen their problem solving skills by working with real world math problems



	and by thinking and writing about their problem solving process. In addition, students will become proficient with manipulating and graphing all manner of equations from more basic linear and quadratic equations to exponential, logarithmic, and trigonometric equations. In addition to the course content, this course will also help prepare students for the rigors of college by holding them to high academic and professional standards throughout the year.
Math 3 (H)	The focus of Math 3 honors course is the continued development of the students' ability to think critically about challenging and complex Math problems using projects and discovery learning techniques as well as more traditional teaching methodologies. During the year students will develop their understanding of numbers and all types of numerical relationships. I expect students to deepen their grasp of fundamental mathematical concepts so that they can derive formulas and generalize equations. Students will also be expected to strengthen their problem solving skills by working with real world math problems and by thinking and writing about their problem solving process. In addition, students will become proficient with manipulating and graphing all manner of equations from more basic linear and quadratic equations to exponential, logarithmic, and trigonometric equations. Students in pre-calculus will also cover arithmetic and geometric series and touch on matrices and limits. In addition to the content, this course will also help prepare students for the rigors of college by holding them to high academic and professional standards throughout the year.
Math 4	In this class students strengthen their algebra and geometry skills by applying algebraic methods and geometry to various application problems arising in physics, finance, economics, surveying and construction. Students begin the year by solidifying algebraic skills and apply those skills by spending significant time learning calculus concepts and methods. In this



	way students begin to see how algebra skills and geometry concepts are used in the context of higher level mathematics. Technology is used regularly by the teacher and students to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation and to assist in interpreting results. The students will learn how to communicate about mathematics by a variety of means graphically, numerically, analytically and verbally.
Music 1, 2	This course will expose students to musical traditions from a variety of cultures. The first half of the course will touch on the basics of music theory such as scales, keys signatures, chords, rhythm, reading treble and bass clefs, and chord progressions while teaching students to play a new instrument. The emphasis will be on learning these concepts to apply them to real-time performance situations. The class finishes with a live performance in front of an audience.
Physics 1, 2	This is an introductory course in the fundamentals of physics. Emphasis is placed on developing a conceptual understanding of physics principles, practicing problem solving skills, and learning laboratory and research techniques. Mathematics is used to further reinforce physics applications and concepts and to enhance problem solving and reasoning skills.
Spanish 1	This is an introductory course in Spanish language. Students will be taught fundamental language concepts and vocabulary. Emphasis will be on listening, reading, speaking and writing to acquire beginning proficiency in the language.
Spanish 2	This course is meant to build upon the linguistic foundation created during Spanish 1. Students will be taught fundamental language concepts and vocabulary. Emphasis will be on listening, reading, speaking and writing to acquire intermediate beginner proficiency in the language.



Spanish 3	Spanish 3 strengthens student's abilities to read, write, listen and speak the Spanish language with confidence. While studying different countries and cultures we will explore the differences in varying Spanish speaking countries, such as language tones, traditions and customs. On a daily basis, students will read, write and listen to the language using different sources. They will learn to organize information and work directly with a partner and in groups.
Spanish 3 (H)	This is an intermediate/ intermediate advanced course in Spanish language. Building upon the linguistic foundations built in Spanish 1 and 2, students will increase their fluency and explore topics in Spanish literature. Through exercises in listening, reading, speaking and writing, students' Spanish skills will mature to the level where they can comfortably converse with native speakers and navigate basic settings and situations in Spanish-speaking countries.
US History	This course is designed to explore the domestic and international impact of U.S. history on our present day state of affairs. Classic and contemporary American Literature, from the perspective of victors, villains, and victims-domestic and international will help us gain insight and attempt predictions. This adventure will include excursions such as colonialism, independence, war, imperialism, immigration, race, ethnicity, culture and much more. This course will strive to understand the basis of U.S triumphs and failures while maintaining objectivity. Honest opinions, questions, and comments respectfully delivered are encouraged. The history objective is to provide students with an in depth educational experience that captures the developmental progression of the United States. The focus of the course is to foster critical thinking skills and development of subject knowledge that will prepare students for success in college level history courses and on the SAT II U.S. History Subject Exam.



US History (H)

This course teaches students about significant domestic and international events in America's history and how to critically assess the impact these events have on our present day state of affairs. Using primary and secondary sources from all ages, students will view episodes in U.S. History from a multitude of perspectives and thus gain a richer knowledge and appreciation of America's past. The aim of this course is to develop students into historians and scholars who objectively examine historical documents to gather information and evidence upon which they build theories and arguments that they then communicate to others in a variety of formats.

World Cultures & Geography

During this course, students will become a community of learners in order to help them improve as writers, readers, researchers, world historians, public speakers and overall scholars. They will achieve this by defining what it means to be an educated member of our global society, and by researching how World Cultures and influenced international Geography have thought, technology and society. Together, we will explore many aspects of literature, theater, art, film, history, politics, religion, technology, and world cultures. Students will document and support their learning through essays, speeches and a wide variety of projects. By studying past and present global issues, they will learn and develop the skills necessary to positively impact their future world.

World History

In World History, students study modern world history from an international perspective. Our studies include relevant world history, geography, politics, and economics. In addition, students review the development of our nation's democracy and the rights and responsibilities that accompany citizenship. Finally, students develop study skills, critical thinking skills, and participation skills that are essential for effective citizenship. A large part of what we do as historians will be conducting research and analyzing primary documents. Students will read



	a wide variety of texts and writing in a number of different formats and styles throughout the year.
Video Production	This course will be a hands-on introduction to the art of narrative filmmaking. Through a series of foundational projects and assignments, the students will become familiar with the ideas, materials and technical skills needed to make a film. Students will also learn and study filmmaking throughout history through the study of diverse filmmakers and film movements. Students will learn and practice how to give a movie pitch, use images in conjunction with sound, write a screenplay, and work collaboratively within the 7 stages of filmmaking that will culminate in 1 final short film at the end of the semester. Their final work will be released at the HTHMA film festival close to the end of the school year and distributed online.
Video Production (H)	In addition to what students in Video Production learn, students enrolled in the honors course will be required to combine the art of filmmaking with the responsibilities of running a high school news station. Students will embark on a creative journey that blends storytelling, journalism, and media production, all while gaining valuable hands-on experience in broadcast journalism and filmmaking techniques. Students will also gain some experience working in the field as professional videographers by producing a single video for a client, whether it be a person or organization of their choice.