

Course List

Class

Description

American Literature

Mr. Graves - 10th

Study “The Road Not Taken” in Robert Frost’s Ann Arbor home. Read the “I Have a Dream Speech” on the Rosa Parks bus. Study “The Narrative of Fredrick Douglass” in real slave quarters. These are the opportunities students have in 10th grade American Literature at Henry Ford Academy. The course begins with a study of What is an American?, through studying the Immigrant legacy of the United States, as well as the future of this hot topic. Next, students look at the religious roots of America through texts such as “The Crucible” and a study of the relationship between church and state. Students study the nature of race in America, reading various novels related to the topic and studying groups who have struggled for equality in the US: Native Americans, Women, and African Americans. Students look at what it takes to be “free” in America and those who fought for our freedom. Finally, students study the concept of the “American Dream” and its myths and realities. All of these studies are coupled with essay writing, grammar study, vocabulary study, intensive novel studies and discussions, and creative projects, such as: building a museum exhibit, performing in a poetry jam, re-enacting a trial, and presenting a final research-based PowerPoint presentation.

Art Exploration

Mr. Sipos - 10, 11, 12th

This 10 week course introduces students to the art world. Every HFA student must take this required elective so it is designed so that every student can achieve a final grade of an “A.” Basic drawing skills like linear line drawings and perspective are covered. In addition, beginning design and painting projects are covered.

Auto Design I

Mr. Sipos - 10, 11, 12th

This 10 week art course will focus on the basic design principles of automotive design. Students enrolling in this class should have some sort of interest in cars and or design. This is a drawing intensive course, students are responsible for completing anywhere from 3 to 10 drawings per class period. Pre req: Art Exploration and have an interest in cars and or design.

Auto Design II

Mr. Sipos - 10, 11, 12th

This 10 week course will focus on the advanced techniques of automotive design. This is a drawing intensive course and not for the weak at effort. This class will draw autos from numerous angles and render in full color with numerous media. Students who plan on enrolling in this class should have a strong interest in automobiles and design. Students should also be willing to purchase art supplies for this course. Pre req: Auto Design I and Art Exploration (Drawing I would help as well, is strongly suggested)

Bioethics

Dr. Leclerc - 10, 11, 12th

Students conduct research on current science topics including cloning, genetically modified foods, stem cell research, fetal tissue transplantation, and in-vitro fertilization, and discuss their effects on society. The students present and defend a point of view to others in the class by way of skits, debates, and position papers to show their understanding of these topics. Competing viewpoints are analyzed and discussed by the entire class.

Body Systems

Dr. Leclerc - 10, 11, 12th

Students are introduced to select body systems, how they function, and how disease affects these systems. Students work in cooperative groups as well as individually on various models and projects to illustrate how the organs function. Hands-on dissection of a fetal pig brings to "life" the various body systems and how they interact.

Business Computer Applications

Mrs. Cherian- 9th

Students in this ten-week course will be introduced to the basic concepts of Microsoft Word, Power Point, Outlook, Excel, and basic keyboarding. While increasing their basic computer skills, they will also gain a better understanding of using the Internet as a learning/research tool.

Cartoon and Caricature Illustration

Mr. Sipos - 10, 11, 12th

This 10 week course has students exploring the world of caricature drawing and cartoon creation. Students are involved with 3 units; Caricature Illustration, Cartooning, and Comic Book Creation. This class is drawing intensive so students should have an interest in art and should be experienced in drawing. Pre req: Art Exploration and Drawing I

College 101

Mrs. Marbury- 11th

A junior-level elective designed to help students maximize their final years of high school, choose and apply to colleges, and survive freshman year.

Contemporary Issues in Life and Literature – Senior English

Mr. Lebert- 12th

Students will use the study of contemporary issues through various forms of literature (such as novels, plays, short stories, poems, movies, and articles) to improve the skills necessary for success in post-secondary schools. Students will compose various projects, including: a case study, a problem solution essay and a position paper, as well as engaging in scholarly debates, a mock trial of MacBeth and various Literature Discussion Groups. We will also investigate various Literary Theories and apply them to the class reading.

Crime Scene Investigation

Ms. Leveille - 10, 11, 12th

This class will cover a large amount of material including: processing crime scenes, obtaining and studying physical evidence, DNA recovery, fingerprinting, firearms, document analysis and other necessary information to crime scene and suspect identification. Students will have the opportunity to concentrate on a minimum of 5 different subspecialties such as fingerprinting, impression evidence, entomology, anthropology, firearms and ballistics, chemistry, trace evidence and serology. Excellent books, discussions, lectures, experiments, and crime scene studies will guide us through the material. There will be a practical crime scene final at the end of this class.

Current Events

Ms. Lewis- 10, 11, 12th

This course will examine current events/issues in the United States and around the world from a sociological and economic stance. It also will explore the news media and the ways in which it communicates information about these events to people. We will use and analyze: periodicals, television, the Internet, political cartoons and film. We will also study elements of geography to gain a stronger sense of where these events are occurring and how they impact their region and the world.

Drawing I

Mr. Sipos - 10, 11, 12th

This 10-week drawing class will challenge all art students no matter their talent or experience levels. This course is a pre-requisite to many other art courses. This class will cover numerous drawing techniques, media and subject matter. Students will draw from “still-lives,” photos and the imagination. Pre req: Art Exploration

Ecology of the Oxbow

Dr. Leclerc - 10, 11, 12th

Ecology of the Oxbow is a hands-on course focusing on understanding the relationship between organisms and their environment, and the protection and management of that environment as well as its use as a resource. Projects include constructing and maintaining a model ecosystem, examining the effects of pollution on the environment, building a model water treatment plant, and participating in the Rouge River clean up. Data collection, analysis and interpretation are used to monitor the health of the river. Student performance is based on homework, writing assignments, laboratory and group activities. The Oxbow, located on The Henry Ford grounds, is used for monitoring as well as our outdoor classroom.

Economics and Civics

Mr. Flannery - 9th

Economics and Civics is a class devoted to the study of the Free Enterprise System and the Foundation of American Democratic Ideals. The course uses English, mathematics, and other social sciences to apply economics and civics concepts to real life situations. You will explore the need and relevance for Economics and Civics in our lives.

Fashion Design

Mr. Sipos - 10, 11, 12th

This 10 week art course will focus on the basic design principles of Fashion design. The main focus of this class is drawing the human figure in various fashion-like poses. Students enrolling in this class should have some sort of interest in Fashion and or design. This is a drawing intensive course, students are responsible for completing anywhere from 3 to 10 drawings per class period. Pre req: Art Exploration and have an interest in fashion and or design, drawing 1 would help as well.

Ford PAS "From Concept to Consumer: Building a Foundation in Problem-Solving"

Ms. Leveille - 10th

This course introduces students to various aspects of manufacturing, such as product design, product development, production planning, manufacturing processes, and quality assurance. Students learn about the historical context in which manufacturing occurs by investigating the evolution of everyday objects in relation to social and technological change. Students also attempt to solve a variety of problems similar to the problems people must solve in the various departments of manufacturing organizations. By the end of this module, students will know what it takes for a product to make its way from concept to consumer.

Ford PAS

Ms. Marbury - 10th

In this module students learn about the businesses and industries in their region, the range of positions companies may offer, and the changing nature of the workplace. They will gain information through interviews, classroom speakers, a workplace visit, and other resources. Throughout the module, students develop technology skills, working with databases, creating and delivering presentations, and doing Internet research. By the end of this module, students will have a better understanding of careers they may want to pursue, places they may want to work or intern, and the ways that people and companies adapt to change.

German I

Ms. Berger - 10, 11th

In this course, students will learn the basics of reading, writing, speaking, and listening in German. Students will learn to communicate their basic needs and talk about everyday topics, such as their family, school life, and hobbies. By the end of this course, students should be able to discuss specific topics with a German speaker who is accustomed to speaking with German language learners.

German II

Ms. Berger - 10, 11th

In this course, students will expand upon the basics that they learned in first year German. They will learn to use varied sentence structure and vocabulary to more accurately express their needs, wants, and opinions. By the end of this course, students should be able to discuss a more varied range of specific topics with a native speaker of German. Also, this course prepares students for the coursework required as part of the German exchange program.

Global Economics

Mr. Flannery - 11-12th

Global Economics is a class devoted to the study of economic systems around the world and how nations interact in the world market place. Students will be exposed to real life interactions in the global market place, microeconomic and macroeconomic concepts, geography, personal finance and globalization.

Global Issues

Ms. Shibanova - 11th

We are not alone! We live in a world of individuals, communities, and countries which are increasingly connected both in cooperation and in conflict. We will look at how these groups of people interact, the international issues which arise from that contact and competition, and the ways in which we could and should respond to the challenges of living in a global society.

History of World Religions

Ms. Shibanova - 10, 11, 12th

This is a 10-week history elective that will examine religions around the world. We will look at how religions have developed over time and the role religion plays in our world today. Possible topics will include: traditions, holidays, gender, methods of prayer, religious leaders, geography, politics, philosophy, and current events. In this class, we will never judge the value of different faiths and we will never say that one religion is better than the other. Rather, we will explore the history of world religions as a cultural study. No student will be forced to share any personal information about his/her own religious beliefs unless he/she wishes to do so.

Illustration, Commercial art, Design

Mr. Sipos - 10, 11, 12th

This 10-week course will challenge art students to create a wide range of art work. From personal logos and fonts to story-boards and design layouts, art students will be thrust into the world of a free-lance artist. Students who sign up for this class should be interested in art as a possible career choice. Pre req: Art Exploration and Drawing I

Integrated Math 2

Mrs. Kuhowski - 10th

The primary focus is on geometry. Units covered: coordinate geometry, quadrilaterals, logic & proofs, quadratic functions, right triangle trigonometry, 2-d area & volume, circles.

Integrated Science 4

Dr. Leclerc - 12th

Integrated Science IV is an in-depth project-based class. Students re-familiarize themselves with the scientific method and, with the assistance of the US Forest Service, identify an area of interest, read and rewrite scientific papers from that area into non-technical language, then conduct and analyze their own experiments utilizing the Oxbow. Their experiments and results are then published in a nationally distributed journal for other high school students to investigate. Concurrent with this research, students research the distinguishing characteristics between humans and other animals, learn about the scientific methods used to divulge our past, and ways the body has evolved to maintain a stable environment.

Integrated Science 2

Ms. Leveille - 10th

Tenth Grade Integrated Science is a unique blend of Biology, Earth Science and Environmental Science in which we explore cells, evolution, ecology, biodiversity, weather and recycling just to name a few. This course investigates microscopic as well as larger life forms (such as you!) and their interactions with each other and the environments in which they live.

Journalism

Mr. Lebert - 10, 11, 12th

This course involves the writing, design and public relations skills necessary for publication work and places emphasis on the preparation, publication and distribution of the school newspaper. Since this course may be repeated, future classes may contain students at three different levels. First year students will concentrate more on academic assignments. Second and third year students will concentrate more on production assignments; however, they will have academic assignments.

Junior Workshop

Mr. Graves - 11th

Junior Workshop is the first phase of the Senior Mastery Process. In this 10-week, technology rich course, students explore their personal strengths, explore various career pathways, and begin to experience the world of work and employment. Junior Workshop prepares students for their Senior Practicum, in which students are employed in an off-campus career internship. Junior Workshop students begin by exploring their personal strengths and weaknesses, identifying their particular “brain style,” and piecing together the positive things they have done in their lives. Using the Michigan Occupational Instructional System (MOIS), students then begin to see what types or careers and jobs would best suit them. Students narrow down their lists to two target careers, begin to develop realistic academic timelines, and draft their first resumes. Finally, students participate in Mock Interviews. Professionals from The Henry Ford, Ford Motor Company, and various other institutions, sit on panels and interview students in a real, high-pressure interview situation. All student-work and findings are compiled in a Final Portfolio which serves as a record of this critical starting point in HFA’s Senior Mastery Process.

Math in Motion

Mrs. Kuhowski - 10th

Creation of scale model drawings, floor plans & elevations, creating of a 3-d polyhedrons, string designs and scale, using tangrams to create patterns, creating quilt squares, creating 3-d polyhedrons, string designs and drawings.

Painting

Mr. Sipos - 10, 11, 12th

This 10 week course will focus on painting. Students will paint from “still-lives,” photos and art history. Students will work with oil pastels, water color, tempera and acrylic paints. Students should have some drawing experience and an interest in art before they enroll in this class. Pre req: Drawing I and Art Exploration

Personal Finance

Ms. Cherian - 10, 11, 12th

Personal Finance is a course designed to provide students with the skills to manage their finances in college and beyond. Students will learn to set financial goals and create a budget, manage debt, save and invest, and how to manage credit. Students will gain an understanding of the process involved in purchasing a home or car, how their credit scores are affected by their financial decisions, and how to modify their spending habits based on changing circumstances.

Practicum

Mrs. Kesavan - 12th

The Practicum Experience at Henry Ford Academy is a supervised work-based learning experience in which students are placed with an Adult Partner. With the guidance of the Adult Partner, the Practicum Director, and meaningful learning activities, students will research specific questions about issues that are intriguing and challenging. Students must complete 75 hours of fieldwork over a 10-week period in order to fulfill the Senior Practicum requirements, including a minimum of 30 hours of direct contact with their Adult Partner. Since the Practicum is considered an extension of classroom learning, students are not compensated during the duration of the experience. Students are responsible for their own transportation. Also, because of the fact that it is considered an extension of classroom learning, liability is not an issue. The

Purpose of Practicum The primary purpose of the Senior Practicum is to provide students with an opportunity to learn through experience in an environment where they make valuable connections between learning in the classroom and learning beyond the school. The goal is to enable them to become self-initiating learners by developing their own learning plans, choosing research projects that are interesting and challenging to them, and outlining a procedure to successfully implement them. Students choose their research project based on a career interest or personal passion.

This experience will assist students in developing an awareness of the skills and attitudes required to function as productive, contributing members of the community. It will enable students to be involved in real-life problem solving, in which they are regarded as valuable and unique individuals whose ideas, opinions, and suggestions are respected and considered seriously. Lastly, the Senior Practicum will expand the students' awareness of their goals, abilities and interests, relative to their future endeavors.

Precalculus

Mrs. Zevchak - 11, 12th

Precalculus is designed for students preparing to take college Calculus. The primary objectives are to: help students understand the fundamental concepts of algebra, trigonometry, and analytic geometry; foreshadow important ideas of calculus; and show how algebra and trigonometry can be used to model real-life problems. Twelve basic functions are emphasized throughout the course as a major theme and focus: identity, quadratic, cubic, reciprocal, square root, exponential, natural logarithm, sine, cosine, absolute value, greatest integer and logistic functions. There are ten units: functions and graphs; polynomial, rational and power functions; exponential, logistic, and logarithmic functions; trigonometric functions; analytic geometry; vectors, parametric equations, and polar equations; systems and matrices; analytic geometry in two and three dimensions; discrete mathematics; limits, derivatives, and integrals.

Research Methods

Mrs. Felton - 10th

Students will research a topic and following the 20-steps of writing a research paper.

Sculpture

Mr. Sipos - 10, 11, 12th

This 10 week 3-D art course will focus on designing, forming and building art. Many non traditional 3-d media will be used and explored. Students should have some drawing skills and a creative knack for building things. Foam core sculptures, mosaics and paper jewelry are just a few of the projects that will be assigned. Pre req: Art Exploration

Senior English

Mr. Lebert - 12th

In Senior English, we perfect the Language Arts skills necessary for success in higher education using contemporary issues to focus our study.

Senior Math

Mrs. Zevchak - 11, 12th

Senior Math is designed for students preparing for college algebra. Symbolic manipulation skills (simplifying expressions, solving equations, graphing, etc) are refined and extended. Real-world applications are integrated into the course. Topics studied include: systems of linear equations and inequalities; quadratic functions; polynomial and rational functions; inverse, exponential, and logarithmic functions; trigonometry; and series and sequences.

Senior Workshop

Ms. Graybill - 12th

Senior Workshop is the final class of the Senior Mastery Process, preparing for and culminating in the creation of the final paper and defense.

Spanish

Mr. Casillas- 9th

Stories of Innovation

Ms. Graybill - 9th

In just the first week of Language Arts 9, students peruse the original doodles and sketches of Henry Ford and Thomas Edison. From the beginning, students ponder the course's essential questions: What is the process of invention and innovation? What does Success really mean? Why do we sometimes need to think out side of the box? What are the risks and responsibilities of being a true leader? Through the lens of these questions, students study classic literature such as *Lord of the Flies (Golding)*, *The Pearl (Steinbeck)*, *Romeo and Juliet (Shakespeare)*, and *The Odyssey (Homer)*. *In addition to these classics, students read and discuss more contemporary young adult novels of their own choosing (Literature Circles). Along with this "book club" component, students are asked to write various works, including a personal narrative, a PowerPoint presentation, a compare and contrast essay, various thesis-driven essays, and a final research essay. The Henry Ford Museum and Greenfield Village are fused into the curriculum, including various guided tours, guest speakers, use of the Benson-Ford library, and access to the Anderson Theatre. The Language Arts curriculum also focuses on skills in public speaking, collaborative work, project-based learning, grammar skills, and test taking skills. Through the course, students should develop a sense of personal responsibility, hone time management skills, and utilize Socratic discussion skills.*

Topics in Algebra & Geometry

Mrs. Kuhowski - 9th

This course is equivalent to the entire 10th grade math course and presented in only 10 weeks. 9th grade advanced students are selected to take this course. Completion of the course with an overall grade of 80% or better allows the students to advance to the 11th grade math course in the 10th grade.

U.S. History

Ms. Lewis - 10th

U.S. History is a survey course that explores the time in the United States after 1877 and continues through the 20th century. Students interpret, critically analyze and explore the country's past in order to better understand the present. Students also learn and utilize skills historians use to investigate old documents, photos and artifacts.

Village Economics

Mr. Flannery - 10-11th

Village Economics is a course designed to provide students with hands on experience that will enhance the understanding of American History and the innovations that have lead the United States into the Twenty-first century. Students will perform actual daily routines of people living in the United States from the 1700's to 1950 using innovations that were pertinent to daily life.

Web Design

Mr. DeSana - 12th

Web Design is a skill-base course with real-world applications. As a student, you will learn necessary coding, graphic art, and design skills needed to produce a professional web page. The languages you will be studying are HTML, DHTML, CSS, and some Java Script. You will work on your own and with groups to produce a whole collection of web sites. The final project is a personal portfolio that you are encouraged to actually put on the web as an asset to job and college applications.

World and Beyond

Dr. Leclerc - 10, 11th

World and Beyond consists of 5 weeks of Earth Science and 5 weeks of Astronomy. The Astronomy portion explores the outer reaches of our solar system, the galaxy, and the universe. Students learn how scientists determined that our universe is expanding and use mathematical equations to determine distances to distant objects such as stars. They also build a solar viewer to measure the size of the sun, investigate the planets making up our solar system, and learn why we see the moon in different phases.

Yearbook

Mr. Lebert - 10, 11, 12th

Learning basic publishing, journalism, photography and design, this class contributes to the annual school yearbook.