

Course Catalog



MSON Course Catalog 2022-2023

The Malone Schools Online Network (MSON) provides motivated upper level students at participating Malone Schools with a variety of academically challenging courses that enhance each member school's existing curriculum. These interactive seminars bring students together from across the country with dedicated teachers in real time. MSON joins the best of independent school education with the latest video conferencing technology to chart new territory in online learning.

Students enroll in MSON classes through their schools, which make course requests to MSON by April 15th. Interested students should reach out to their MSON Academic Liaisons for more information and to understand the processes at their schools. MSON works with member schools to seat students in courses based on the requests of each school, course space constraints, and program goals.

Participating Schools 2022-2023

Augusta Preparatory School (GA)

Brownell Talbot School (NB)

Canterbury School (IN)

Casady School (OK)

Chadwick School (CA)

Charlotte Latin School (NC)

Columbus Academy (OH)

Derryfield School (NH)

Fort Worth Country Day School (TX)

Hopkins School (CT)

Indian Springs School (AL)

Manlius Pebble Hill School (NY)

Newark Academy (NJ)

Maret School (DC)

Mounds Park Academy (MN) The Park School (MD) The Prairie School (WI) Porter-Gaud School (SC) Roeper School (MI) St. Andrew's Episcopal School (MS) Severn School (MD) Stanford Online High School (CA) Trinity Preparatory School (FL) University School in Nashville (TN) Waynflete School (ME) Wichita Collegiate School (KS) Wilmington Friends School (DE) Winchester Thurston School (PA)

JUMP TO CLASS SCHEDULE 2022-2023

Year Long Courses

ANCIENT GREEK I ARABIC I ARABIC II CHINESE SEMINAR DATA STRUCTURES AND DESIGN PATTERNS GERMAN I INTRODUCTION TO SPANISH-LANGUAGE LITERARY ANALYSIS MULTIVARIABLE CALCULUS

Fall Courses

ADVANCED ECONOMICS I **ADVANCED MICROECONOMICS** AMERICAN DEMOCRACY ON FIRE: WHAT DOES THE FUTURE HOLD? **BOB DYLAN'S AMERICA** CANCER **CREATIVE WRITING IN THE DIGITAL AGE DIVERSITY IN A GLOBAL COMPARATIVE PERSPECTIVE** ESTABLISHING EQUALITY: THE HISTORY OF FEMINISMS AND GENDER **ETYMOLOGY OF SCIENTIFIC TERMS GENETICS AND GENOMICS GLOBAL VOICES OF OPPRESSION: LITERATURE OF SOCIAL JUSTICE** INTRODUCTION TO ORGANIC CHEMISTRY LINEAR ALGEBRA MAKING ETHICAL MEDICAL CHOICES IN A DIVERSE WORLD **NEUROLOGICAL SCIENCE POSITIVE PSYCHOLOGY** THE SCIENCE AND ETHICS OF SPORTS PERFORMANCE: GENETICS, BIOCHEMISTRY, AND SOCIOLOGY

TENEMENTS TO TOWNHOUSES: STORIES OF URBAN NEW YORK

THINK GLOBAL, DEBATE LOCAL

TURBULENT TIMES: HISTORY OF THE FIRST AMENDMENT AND DISSENT DURING AMERICAN WARS WATCHING THE WATCHMEN: THE ROLE OF DETECTIVE NARRATIVES IN A CARCERAL CULTURE

Spring Courses

ADVANCED APPLIED MATH THROUGH FINANCE

ADVANCED ECONOMICS II

ADVANCED LATIN LITERATURE

ADVANCED TOPICS IN CHEMISTRY

CSI: MSON - FORENSIC SCIENCE

ENSURING EQUITY: GENDER, FEMINISM, AND MEDIA IN 21ST CENTURY AMERICAN CULTURE

ENVIRONMENTAL BIOETHICS—EXPLORING THE CHALLENGES OF LOCAL AND GLOBAL CHOICES

THE FICTION OF JAMES JOYCE

THE HISTORY OF MODERN GERMANY: WORLD WAR I TO THE PRESENT

INTRODUCTION TO COMPUTER SCIENCE

"IT IS BETTER TO SPEAK:" ONE HUNDRED YEARS OF WOMEN WRITING FOR CHANGE

A MATHEMATICAL MODELING APPROACH TO SOCIAL JUSTICE

MODERN PHYSICS: EINSTEIN'S RELATIVITY AND THE EVOLUTION OF THE QUANTUM MODEL

A NATION DIVIDED: THE LITERATURE OF CIVIL RIGHTS IN THE MODERN US

PHILOSOPHY IN POP CULTURE

POSITIVE PSYCHOLOGY

VECTOR CALCULUS

ADVANCED LATIN LITERATURE (SPRING)

Tuesday/Friday, 2:30-3:30 pm EST

Target Grade Level: 11-12; advanced grade 10 students with permission of instructor Prerequisite: AP Latin or equivalent Instructor: Dr. David Seward, Winchester Thurston School, Pittsburgh, PA

This course focuses on The Brothers, a play by Terence, who is considered by many to be the first writer of the African diaspora. He was brought to Rome as a slave around 190 B.C. and left it perhaps twenty-five years later as one of the most successful playwrights Rome had ever known. Terence's Latin is challenging because of its archaic and colloquial nature, but his clarity and wisdom have been admired down the centuries by writers of many different kinds, including Julius Caesar, John Adams, and Maya Angelou to name only three. The Brothers is a rollicking farce with plot twists and irony that give evidence of the great influence Terence has had on comedic writing down to the present day. Students will read the play in the original Latin, using an edition prepared by the instructor, and complete a thorough review of Latin grammar over the course of the trimester.

ANCIENT GREEK I (YEAR)

Monday/Wednesday, 3:35-4:35 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Briana Titus, Casady School, Oklahoma City, OK

This is a beginning course for students who have not studied ancient Greek before. Students proceed through a study of grammar and vocabulary to the reading and writing of sentences and short narratives in the language of Athens of the fifth century B.C.E. Selected topics in Greek history and art are also considered.

ARABIC I (YEAR)

Section A Monday/Thursday, 12:15-1:15 pm EST Section B Tuesday/Thursday, 3:35-4:35 pm EST

Target Grade Level: 9-12 (Juniors receive priority) Prerequisite: None **Notes:** First of a two-year sequence **Instructors:** Farha Abu Baker, Hopkins School, New Haven, CT Kaveh Niazi, Stanford Online High School, Stanford, CA

This first-year course of a two-year sequence is an introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students will learn to read and write the Arabic alphabet and will develop beginning proficiency in the language. Through frequent oral and written drills, students will develop their basic communication skills.

ARABIC II (YEAR) Tuesday/Friday, 12:15-1:15 pm EST

Target Grade Level: 10-12 Prerequisite: Arabic I Notes: Second of a two-year sequence Instructor: Farha Abu Baker, Hopkins School, New Haven, CT

This course is a continuation of the introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students will learn to read and write the Arabic alphabet and will develop beginning proficiency in the language. Through frequent oral and written drills, students will develop their basic communication skills.

CHINESE Seminar (YEAR)

Tuesday/Friday, 1:20-2:20 pm EST

Target Grade Level: 11-12 Prerequisite: Chinese 4 or Honors Level. Placement test required. Instructor: Grace Pei, St. Andrew's Episcopal School, Ridgeland, MS

This intermediate level Chinese course is conducted entirely in Chinese. The main topics/themes to be covered will be based around the nature of contemporary society and current affairs, such as stories, films, dialogue, and documentaries using multimedia materials ranging from the internet, videos to traditional textbooks. Students will write essays/papers, critique filmes, and participate in oral discussion and debates. While this course does not follow the AP Chinese Language and Culture curriculum, AP level topics will be involved.

GERMAN I (YEAR) New Course

Tuesday/Thursday, 3:35-4:35 pm EST

Target Grade Level: 9-12 Prerequisite: None Instructor: Valerie Prado, St. Andrew's Episcopal School, Jackson, MS

Taught by a native German, this course focuses on the introductory study of German. Students will be introduced and exposed to the German language and culture. In this course, students will learn basic grammar, vocabulary, and conversational German. Students will have the opportunity to practice listening, reading, writing, and speaking through weekly meetings, projects, and homework. Studied material will also help broaden the knowledge of the culture and provide insight into daily life in German-speaking countries. At the end of this course, students will be equipped with basic communication skills.

INTRODUCTION TO SPANISH-LANGUAGE LITERARY ANALYSIS (YEAR) New Course

Wednesday/Friday, 12:15-1:15 pm EST

Target Grade Level: 11-12 Prerequisite: Spanish 4 Equivalent or higher Instructor: Weslie Wald, Indian Springs School, Indian Springs Village, AL

This course exists to allow students with at least 4 years' exposure to Spanish to dive deeper into the study of the language by exploring literature and literary analysis in Spanish. Selections will cover various historical and geographical contexts, writing styles and genres, and cultural connections. All readings, films, and class discussions and assignments will be conducted in Spanish, therefore equipping students with the content knowledge, skills, and confidence necessary to continue to communicate at a mid- or high-intermediate level of proficiency in Spanish (or higher) and to continually reflect on how language both shapes and reflects culture.

ADVANCED ECONOMICS I (Fall) *New Course* ADVANCED ECONOMICS II (Spring) *New Course*

Alternating Year Offering Wednesday/Friday, 10:00-11:00 am EST

Target Grade Level: 11-12 Prerequisite: Completion or concurrent enrollment in Precalculus Instructor: Julien Meyer, Severn School, Severna Park, MD

Advanced Economics I covers microeconomics, decision making at the individual consumer, producer and market levels. Topics will include scarcity, supply and demand, elasticity, international trade and the theory of the firm. The role of the government, both distortive and restorative, in the areas of regulation, public goods, market failures and the environment, will be debated.

Advanced Economics II will start by finishing up microeconomic topics such as income inequality and resource markets. Then the course will switch to macroeconomics, the study of an economic system as a whole. Topics will include economic performance measures, price-level determination (inflation and deflation), the financial sector, monetary and fiscal policies, economic growth, productivity, unemployment, and the balance of payments. In both courses, students will manipulate economic models and "think like an economist." While the courses do not follow the AP curriculum, students will be positioned to take the Microeconomics and/or Macroeconomic AP exams if they wish.

While preference will be given to students who wish to take both Advanced Economics I and II, students may enroll in Advanced Economics II for the second semester on a space available basis if they have already taken a microeconomics course from MSON or otherwise.

ADVANCED MICROECONOMICS (FALL 2023)

Alternating Year Offering Wednesday/Friday, 10:00-11:00 am EST

Target Grade Level: 11-12

Prerequisite: Completion or concurrent enrollment in Precalculus Instructor: Julien Meyer, Severn School, Severna Park, MD

Advanced Microeconomics is a semester course that covers decisions at the individual consumer, producer and market level. Topics include scarcity, supply and demand, elasticity, international trade and the theory of the firm. The role of the government, both distortive and restorative, in the areas of regulation, public goods, market failures and the environment, will be debated. Students will manipulate economic models and "think like an economist." While the course does not follow the AP curriculum, students will be positioned, with extra work on their own, to take the AP exam if they wish.

AMERICAN DEMOCRACY ON FIRE: WHAT DOES THE FUTURE HOLD? (FALL) New Course

Monday/Wednesday, 1:20-2:20 pm EST

Target Grade Level: 11-12 or by permission of instructor **Prerequisite:** None **Instructor:** Lowell Libby and Geoff Wagg, Waynflete School, Portland, ME

Considering the urgency with which the problems we face as a nation and a global community must be addressed - climate change, social and economic inequities, mass global migration, the pandemic, and many others - perhaps the most troubling is the paralyzing partisan divide that has gripped the nation. With the 2022 midterm election fast approaching and the national debate still focused on how best to manage a now years old public health crisis and even the validity of elections themselves, many all along the political spectrum are wondering, Is the great American experiment in democracy failing after nearly 250 years?

Students in this class will fan out across the country as a research team charged with investigating that very question and proposing what should be done to strengthen the world's oldest democracy. More specifically, students will:

- Study how the American government was designed to function and how it has responded to crises in the past;
- Reflect on and share their own political viewpoints;
- Collect a diverse array of perspectives on current events through interviews and media commentary;
- As a research team, analyze and assess the current state of the American democracy and identify what can be done to strengthen it so that it may fulfill the American promise of "liberty and justice for all."
- Learn the skills of how to dialogue across difference

If you are interested in taking an in-depth look at history in the making, this class is for you.

BOB DYLAN'S AMERICA (FALL, 2023)

Alternating Year Offering Monday/Wednesday, 4:40–5:40 pm EST

Target Grade Level: 11-12

Prerequisite: Previous or concurrent enrollment in American Literature and American History **Instructor:** Dean Masullo, University School of Nashville, Nashville, TN

Arguably the most influential, important, and closely scrutinized American artist of the past six decades, Bob Dylan is as difficult to define as the nation that produced him. Connecting his work to contemporary theories of cultural memory, this course looks at the ways in which Dylan, both in his music and his cultivation of various public personae, maps the contours of the national imagination and explores the prevailing attitudes of class, race, gender, and place in American culture.

Proceeding chronologically and using Dylan's masterworks and subsequent official "bootleg" recordings as touchstones, students will consider a variety of texts, including poetry, fiction, and cultural history; biography and autobiography; and popular and documentary film, including Greil Marcus' The Old, Weird America: The World of Bob Dylan's Basement Tapes (2001), Murray Lerner's Festival (1967), D. A. Pennebaker's Don't Look Back (1967), and Martin Scorsese's No Direction Home (2005) and Rolling Thunder Review: A Bob Dylan Story (2015). Access to a music streaming service such as Spotify or Apple Music is required; access to video streaming services such as Netflix and Amazon Prime is strongly recommended.

CREATIVE WRITING IN THE DIGITAL AGE (FALL 2023)

Alternating Year Offering Monday/Thursday, 10:00–11:00 am EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Julia Maxey, Severn School, Severna Park, MD

Storytelling is as important today as it was hundreds of years ago. What has changed, in many cases, is the media through which writers tell their stories. Today's literary artists take advantage of digital tools to spread their messages and tell their stories in new ways that combine narrative and contemporary form. Students will begin with the traditional forms of poetry, short prose, and literary non-fiction and then go beyond those forms to explore how contemporary tools can enhance expression. We will study master writers in each of the traditional forms and be inspired by their examples. Then, we will look at how communication in the 21st century has provided us with even more ways to share our thoughts and to be creative. Possible explorations include hyperlinked narratives, social media as inspiration and tool, animated text, audio, videos, and all manner of non-linear narrative. The class will ask an essential question: what happens when communication becomes wider and has an instant audience? The class routine, based around writing, reading, and discussion, will include weekly critiques of student work and required writing, including in some non-traditional, contemporary formats.

DIVERSITY IN A GLOBAL COMPARATIVE PERSPECTIVE (FALL)

Tuesday/Thursday, 3:35–4:35 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Dr. John Aden, Ph.D., Canterbury School, Ft. Wayne, IN

This course examines the ways our Human Family has sought to create, marshal, contest, and maintain identities through Culture and relations of power. These identities can be appreciated through "lenses of analysis." The course critically engages the traditional "Big Three" lenses of analysis: Race, Class, and Gender, understanding that Culture serves as an important backdrop against which these identities emerge. Once students appreciate the important ways the Social Sciences have engaged with, written about, and debated these three core modes of analysis, the course expands to incorporate other, equally rich, lenses: age, ableism, intellectual diversity, geographic diversity, cognitive and neurological diversity, and the business case for Diversity, as well as how to study synergistically intertwined phenomena. Film and Critical Film Studies, as well as the role Colonialism has played in the major conflicts of the last 500 years, each serve to enrich student understandings of diversity.

ENVIRONMENTAL BIOETHICS—EXPLORING THE CHALLENGES OF LOCAL AND GLOBAL CHOICES (SPRING)

Tuesday/Friday, 3:35–4:35 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Ellen Johnson, Wilmington Friends School, Wilmington, DE

This course will focus on such cases as environmental sustainability, global energy and food resources, gathered from sources in literature, journalism, and film. The academic study of ethics examines how people make the decisions. Curricula will build on a foundation of theoretical moral theories, more specifically, how one makes decisions when faced with complex, often controversial, issues. No prior knowledge of philosophy is assumed, however, authentic assessment of students' initial facility with logical analysis will ensure that all students are challenged to grow and deepen their theoretical and practical understandings of the subject.

ENSURING EQUITY: GENDER, FEMINISM, AND MEDIA IN 21ST CENTURY AMERICAN CULTURE (SPRING)

Tuesday/Thursday, 12:15-1:15 pm EST

Target Grade Level: 11-12

Prerequisite: American History a plus, but not required; "Establishing Equality" is strongly suggested, but not required.

Instructor: Dr. Diane Hotten-Somers, Derryfield School, Manchester, NH

At the 2014 VMAs, Beyoncé performed in front of a 20-foot lit sign that read "FEMINIST," and her performance ignited a flame for intersectional equity that has burned brightly ever since. In this course, not only will we consider if, as the title states, the experience and meaning of gender and feminism in contemporary American culture has ensured equity for diverse groups of women, but we will also ask a series of questions to understand these experiences: What aspects of American culture shape the experience of being a woman today? Have the 3rd and 4th waves of feminisms ensured equity for all Americans who identify as female? How does the media both represent and define current American womanhood? And, how and why is it that a pop culture icon like Beyoncé reignited the flame of feminism in 2014? By reading texts from many disciplines and perspectives (i.e. film, music, sociological theory, fiction, feminist, gender/trans, and cultural studies – to name a few) we will look closely at the real, current issues that American women have experienced and that define them today as well as examine how these experiences are represented in the media to consider the intersectionality between media, gender definitions, and American women's lived experiences. And while a strict definition of "contemporary" means the here and now, we will take a broader approach to contemporary by looking at American women and women's issues from the past 30 years, making our starting point the beginning of third wave feminism and then coming up to the present. In the end, this course will help us all as a learning community to question, explore, and draw conclusions about the multiple aspects of American culture that give shape and meaning to American women from diverse backgrounds and identities, ultimately asking: have we ensured equity for all genders in contemporary American culture?

ESTABLISHING EQUALITY: THE HISTORY OF FEMINISMS AND GENDER, 1792-1992 (FALL)

Tuesday/Thursday, 12:15-1:15 pm EST

Target Grade Level: 11-12 Prerequisite: American History a plus, but not required. Instructor: Dr. Diane Hotten-Somers, Derryfield School, Manchester, NH

On January 20, 2021, just over 100 years since women won the right to vote, Ms. Kamala Harris was sworn in as the first female Vice President of the United States of America. What socio-cultural developments occurred to create this historic moment for women? In this course, we will answer this question by focusing on the development of U.S. feminism and feminist theory, the lives and work of American women, and the significance and meaning of 'sex' and 'gender' at different periods in American history, using the publication date of the first feminist treatise, Mary Wollstonecraft's A Vindication of the Rights of Woman, 1792, as our starting point and ending with the beginning of 3rd wave feminism in 1992. We will explore the intersection of gender with race, ethnicity, sexuality, class, and able-bodiedness by reading essays from scholars of cultural studies, biology, history, philosophy, political theory, literature, and psychology, as well as viewing films and artwork. Central questions that this course will consider include: Is 'feminism' something to believe in or something to do? What is the difference between sex and gender? And, how does gender affect your understanding of who you are as a person? Through the study of historical accounts, theoretical articles, and artistic representations, this course foregrounds gender as a lens through which we can understand our society and ourselves in new and useful ways.

ETYMOLOGY OF SCIENTIFIC TERMS (FALL)

Tuesday/Friday, 2:30–3:30 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: David Seward, Winchester Thurston School, Pittsburgh, PA

The purpose of the course is, to quote the textbook, "By teaching ... the root elements of medical terminology – the prefixes, suffixes, and combining forms of Greek and Latin ... not only to teach students modern medical terminology, but to give them the ability to decipher the evolving language of medicine throughout their careers." This is in many ways a language course and deals with elements that are used to create terms to meet the specific needs of medical scientists. As material is introduced, students will complete practice exercises during each class meeting, as well as complete approximately one quiz per week. Outside of class, students are expected to analyze and define fifty terms each week. Additional material deals with complex etymologies, the history of our understanding of certain aspects of medical science, and relevant material from Greek and Latin texts.

THE FICTION OF JAMES JOYCE (SPRING)

Monday/Wednesday, 3:35–4:35 pm EST

Target Grade Level: 11-12

Prerequisite: Recommended past or concurrent enrollment in either AP Language & Composition or AP Literature & Composition or the equivalent **Teacher:** Aaron Lehman, Porter-Gaud, Charleston SC

James Joyce created the most beautiful literature of the Twentieth Century, prose that has thrilled and at times confounded readers for generations. Simply put, Ulysses, his 1922 masterpiece, changed the landscape for the novel as a whole. This course will unpack the mystery and loveliness of two Joyce novels, A Portrait of the Artist as a Young Man and Ulysses, giving students the close- reading tools to appreciate and make sense of Joyce's particular literary power, to scale the edifice of Ulysses to see it for what it truly is: a marvel of stylistic achievement, a testament to the ways in which language shapes us as we shape it, and, at its core, a gorgeous love story and an exploration of the everyday heroism that we often overlook. In particular, we will explore how Joyce tried to render the authentic human experience through language: how Joyce wanted literature to look and feel more like life than like "art," how he wanted literature to mirror the texture of the actual thinking and feeling mind. To that end, while the course will give students an intensive look at arguably the greatest literary mind since Shakespeare, it will also have us—teacher and student alike—consider what it means to inhabit fully our hearts, minds, and selves in the modern world.

GLOBAL VOICES OF OPPRESSION: LITERATURE FOR SOCIAL JUSTICE (FALL)

Wednesday/Friday, 3:35-4:35 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Linda Rodriguez, St. Andrew's Episcopal School, Jackson, MS

This semester seminar is designed as a survey of literature that focuses on expressions of oppression. From protest to processing, persecuted populations have created many mechanisms to give voice to their suffering. Books, memoirs, songs, short stories, and documentaries will all be used to discover the power of personal experience. Additionally, the class will explore the ways in which oppressed voices have been instruments in forcing positive social change throughout the 20th century.

THE HISTORY OF MODERN GERMANY: WORLD WAR I TO THE PRESENT (SPRING)

Tuesday/Friday, 8:30-9:30 am EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Emily Philpott, St. Andrew's Episcopal School, Jackson, MS

Germany has played a major role in the events of the past century and continues to be at the forefront of many global issues. However, often students only hear about it in the context of the holocaust and World War II. Germany played a significant role in World War I, and during the interwar period, the failures of the Weimar Republic and the Great Depression led to the rise of Hitler and the Nazi Party. At the end of World War II, a divided Germany became the center of the Cold War that lasted until reunification in 1990. Today, Germany is at the center of many contemporary issues, such as immigration, environmental sustainability, and remembrance culture. In this course, students will investigate the last 100 years of history through a lens of Germany. Students will hear from experts and eyewitnesses while developing a better understanding of the world as they encounter different perspectives.

Weekly course topics include:

- Germany and World War II
- The Weimar Republic and the Rise of Fascism
- The Holocaust
- The Berlin Wall and the Division of Europe
- Life in the GDR .
- Two Germanys Become One
- Germany's Multi-Party Political System
- Germany and the European Union
- Made in Germany: The Apprenticeship Program
- Germany and Immigration
- Exploring Remembrance Culture in Germany
- Germany and the Sustainable Development Goals: A Model of Sustainable Progress
- Black Lives Matter: The Movement in the German Context

"IT IS BETTER TO SPEAK:" ONE HUNDRED YEARS OF WOMEN WRITING FOR CHANGE (SPRING)

Monday/Wednesday, 1:20-2:20 pm EST

Target Grade Level: 11-12 (occasional 10th, at the recommendation of home school administrator) Prerequisite: None Instructor: Ann Wheeler, University School of Nashville, Nashville, TN

In her poem "A Litany for Survival," Audre Lorde writes, "when we speak we are afraid / our words will not be heard / nor welcomed / but when we are silent / we are still afraid / so it is better to speak." In this course, we will read the words of women writing over the last century to highlight the injustices experienced by women in their societies and to envision a world in which women could find a more equitable place. Recognizing the intersectional nature of women's experience, we will be sure to read work by women from different backgrounds, paying attention to the way that factors such as sexual orientation, economic class, ethnic identity or religious affiliation may distinguish one woman's experience from another's. We will begin with foundational nonfiction texts such as Virginia Woolf's A Room of One's Own and Alice Walker's "In Search of Our Mother's Gardens," then move on to fiction, poetry and plays by writers such as Zora Neale Hurston, Tsitsi Dangaremba, Isak Dinesen, Gwendolyn Brooks, Adrienne Rich, Audre Lord, Muriel Rukeyser, Margaret Atwood, Joy Harjo, Carol Ann Duffy, Caryl Churchill, Maxine Hong Kingston, Gish Jen and Octavia Butler.

In response to their reading, students will have the opportunity to write not only expository essays analyzing the texts that we read, but also personal essays founded in their own experiences. Interested students may also choose to explore the possibilities of creative expression by writing their own poems or short stories.

MAKING ETHICAL MEDICAL CHOICES IN A DIVERSE WORLD (FALL)

Wednesday/Friday, 3:35-4:35 pm EST

Target Grade Level: 11-12 (occasional 10th, at the recommendation of home school administrator) **Prerequisite:** None **Instructors:** Ellen Johnson, Wilmington Friends School, Wilmington, DE Joyce Lazier, Canterbury School, Ft. Wayne, IN

The objective of this course is to provide students with the tools and experience necessary to better make difficult, ethical decisions. In order to achieve this, we will study and evaluate critically several different ethical theories including Utilitarianism, Virtue Ethics, and Deontology. Which framework students choose to use as their guide is up to them, but by the end of this course they should be able to defend their choices and ethical decisions clearly. The course strives to develop a cross conversation between two academic disciplines - philosophy (ethics) and biology (medical research, molecular genetics).

This is a collaborative teaching effort between Joyce Lazier (background in philosophy and ethics) and Ellen Johnson (background in biology and genetics), and an evolution of two previously existing courses. Both teachers will be present for all classes, focusing on the growth that comes from a shared discourse.

A NATION DIVIDED: THE LITERATURE OF CIVIL RIGHTS IN THE MODERN US (SPRING)

Wednesday/Friday, 3:35-4:35 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Linda Rodriguez, St. Andrew's Episcopal School, Jackson, MS

The story of equality in America is a tale of achingly slow but steady progress. From the Civil War to the present day, the path toward equal rights has never been direct or secure. This semester course is designed as an interdisciplinary exploration of the quest for civil rights throughout the 19th and 20th centuries as it relates to African Americans, women, Native Americans, Asian Americans, migrant workers and the LGBTQ community. Special focus will be given to the indelible role that the deep South played in the struggle. Students will work with various texts including Supreme Court Cases, memoir, essays, poetry, short fiction, and primary source documents. Additionally, students will design and implement their own oral history projects as a culmination to the class.

PHILOSOPHY IN POP CULTURE (SPRING)

Wednesday/Friday, 1:20- 2:20 pm EST

Target Grade Level: 11-12

Prerequisite: None, but some familiarity/experience with logic helpful Notes: Netflix subscription required

Instructor: Joyce Lazier, Canterbury School, Ft. Wayne, IN

Have you ever had a realistic dream that you were sure was true and then woke up confused? How do you know that you are not in the Matrix? What is real and what is not? This course will investigate the nature of existence. It will combine classic philosophic works, like Descartes, with contemporary movies like The Matrix and Inception, to contemplate what it is to exist and what the meaning of life is or should be.

POSITIVE PSYCHOLOGY (FALL AND SPRING)

Tuesday/Thursday, 11:05 am-12:05 pm EST

Target Grade Level: 10-12 Prerequisite: None Notes: Course has limited enrollment Instructor: Stephanie Hogan, Waynflete School, Portland, ME

This course begins by providing a historical context of Positive Psychology within broader psychological research and helps explain why the field is of particular importance to those in a high school or college setting. Students will be introduced to the primary components and related functions of the brain in order to understand the biological foundation of our emotional experiences. Current research will be used to develop a broader sense of what Positive Psychology is and is not, and how it can be applied to students' own lives. This course will require substantial reading (sometimes on par with 100 level college courses) and writing. Students will be asked to reflect regularly on their individual experiences in order to integrate course material into their daily lives. One of the key learning outcomes is to have each participant lean into their growth edges and find their path en route to a place of flourishing.

TENEMENTS TO TOWNHOUSES: STORIES OF URBAN NEW YORK (FALL) *New Course*

Monday/Wednesday, 12:15-1:15 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Dr. Sidra Smith, Severn School, Severna Park, MD

In this interdisciplinary course, using two New York City neighborhoods as case studies, students will investigate how U.S. urban neighborhoods form and change over time. In the early 20th century the Lower East Side of New York City was an overcrowded neighborhood with low rents; it was also known then as an epicenter of Jewish immigrant culture. Between the 1920s and the 1960s the Harlem neighborhood of New York City was an enclave for Black people and a center of African American culture. Flash forward to 2022: both neighborhoods have undergone significant re-development, and both neighborhoods are racially and ethnically diverse. What drew the immigrants and migrants to the Lower East Side and Harlem initially? What was daily life like for inhabitants in the 1900s? What attracts new residents in the 2020s? To answer these questions we will consider migration patterns, housing rental market/real estate, and urban policy from the mid-1900s to the present.

We begin our study with an introduction to the Lower East Side and Harlem. During the term, students will read, view and analyze a variety of texts – fiction, letters, maps, photographs, film clips, blogs – focused on these NYC neighborhoods. In addition to writing response papers and interpreting data, students will conduct research to complete and present a multimodal (visual, aural, literary, etc.) project that showcases a distinctive neighborhood in a city of their choice.

THINK GLOBAL, DEBATE LOCAL (FALL)

Tuesday/Thursday, 4:40 – 5:40 pm EST

Target Grade Level: 10-12 Prerequisite: None Instructor: Dan Jacobs, Roeper School, Bloomfield Hills, MI

Water justice. Gentrification. Housing. Education. Race Relations. Public Safety. Environmental Issues. Is it wrong to shut off water service to households that are delinquent on their water bills? Is access to affordable housing a human right? Should environmental issues take priority over the needs of businesses? Do we have an obligation to help asylum seekers? People all around the world struggle with these and other challenges. In Think Global, Debate Local, we use issues in our own neighborhoods to take deep dives into the facts and philosophies underlying the challenges, values, and perspectives that shape our world on scales ranging from the personal to the global.

The overarching goal of this course is for students to teach each other about important topics in their own neighborhoods, towns, states, and regions, and to use debate as a tool to examine the perspectives surrounding those topics. Other goals include achieving a better understanding of complex issues by taking on and arguing for the viewpoints of various stakeholders; discovering ways to shift from an adversarial to a cooperative relationship when disagreements arise; and understanding the ways different values can be used as filters through which a given issue can be viewed. Please note that this course is geared toward beginning debaters with an emphasis on basic argumentation, not competition, although more experienced debaters are welcome.

TURBULENT TIMES: HISTORY OF THE FIRST AMENDMENT AND DISSENT DURING AMERICAN WARS (FALL)

Tuesday/Friday, 8:30–9:30 am EST

Target Grade Level: 11-12 Prerequisite: AP US History or equivalent suggested Instructor: John French, Prairie School, Racine, WI

Benjamin Franklin once said that "They that can give up essential liberty to obtain a little temporary safety deserve neither safety nor liberty." An oft-cited quotation by champions of American civil liberties protections and anti-war activists, Franklin's passage illustrates how dilemmas regarding the balance between free speech and national security have tested and often perplexed American politicians, courts, and citizens since the inception of the country. During wars the government reserves the right to draft men into the armed services, confiscate the property of individual citizens, set prices, ration food and fuel, and drastically increase taxes. Viewing them through the prism of the nation's existential crisis, most citizens accept these compromises on their liberty. Ben Franklin, however, lived in a premodern world devoid of anthrax, drones, Internet communication, and long-range nuclear weapons. The Founding Fathers could not have foreseen the awesome power nor puissant pressure of commanders-in-chief who, obligated to protect the lives of millions, regularly criticize dissenters. And thus, lines must be drawn between civil liberties and national security - but where?

Through reading, discussing, and critically analyzing primary and secondary sources from each American war (from the Revolutionary War through the War on Terror), students will emerge with a better understanding of American wars, their dissenters, and the meaning of freedom under its most intense stress tests.

WATCHING THE WATCHMEN: THE ROLE OF DETECTIVE NARRATIVES IN A CARCERAL CULTURE (FALL)

Monday/Wednesday, 11:05 am-12:05 pm EST

Target Grade Level: 11-12 Prerequisite: None Instructor: Jason Zencka, Manlius Pebble Hill School, Syracuse, NY

Writing about the hard-boiled detective novel he helped to invent, Raymond Chandler wrote, "Down these mean streets a man must go who is not himself mean..." This course investigates the cynicism and grittiness of detectives in relation to issues like national incarceration rates, violence against women, and criminal justice reform. Is our national fixation with hero detectives, warrior cops, and batmen wholesome escapism, or could the stories we tell about crime and justice do real harm? Students in this class will examine portrayals of crime and crime fighting in fiction and film as a way of interrogating our national culture's understanding of itself in relation to crime, community, and justice.

ADVANCED APPLIED MATH THROUGH FINANCE (SPRING 2024)

Alternating Year Offering Monday/Thursday, 10:00–11:00 am EST

Target Grade Level: 11-12 Prerequisite: Completion of Algebra II Instructor: Julien Meyer, Severn School, Severna Park, MD

This one-semester course will provide students a mathematical and conceptual framework with which to make important personal financial decisions using algebraic tools. Specifically, the class will investigate i) the time value of money (i.e., interest rates, compounding, saving and borrowing) using exponential functions; and ii) the characteristics and risk/reward tradeoff of different financial instruments/investments, such as stocks, bonds and mutual funds, using algebra, probability and statistics. Other financial algebra topics selected with student input may include financial accounting, depreciation methods and foreign currency exchange.

The course will stress use of the TI-83/84 calculator, Excel spreadsheets and iPad apps. Students should be comfortable with exponential growth models and, preferably, the concept of the number e for continuous compounding. They should be willing to exhibit an interest in mathematical reasoning and display a hefty dose of curiosity about the language and problem-solving nature of personal finance.

ADVANCED TOPICS IN CHEMISTRY (SPRING)

Monday/Thursday, 2:30–3:30 pm EST

Target Grade Level: 11-12 Prerequisite: Chemistry Instructor: Jocelyn Rodgers, Maret School, Washington, DC

This semester course explores aspects of chemistry that are often skimmed over or omitted in most chemistry courses—chemical applications and the history of chemistry. Real-world applications abound in areas such as nuclear, medical, atmospheric, industrial, food, water, and consumer product chemistry. We will begin with an exploration of energy sources such as nuclear power, solar power, and lithium ion batteries. We will then explore computing—both the properties of the elements that power the computers we use every day as well as computational techniques that have revolutionized the ability of scientists and students to visualize and understand chemical processes at a molecular level.

Throughout the semester, we also explore the history and life events of scientists who discovered the chemical elements and have impacted the history of the world through chemistry. In independent projects, students will explore the periodic table for daily applications and technologies, from cell phones to photovoltaic cells to medical treatments. This course will be heavy in applications and theory, with less of the traditional problem-solving found in other courses.

CANCER (FALL) *New Course*

Alternating Year Offering Monday/Wednesday, 3:35-4:35 pm EST

Target Grade Level: 11-12 Prerequisites: Biology Teacher: Katie Malanson, Canterbury School, Fort Wayne, IN

This course focuses on understanding cancer as a disease, and the challenges of diagnosing and treating it. The course has five units, each of which builds upon the others that come before it. The goal of each unit is to answer a key question about cancer, and what it means for our health. The first unit focuses on what cancer is and why everyone should care about it. The second unit focuses on 'normal' cell biology, including the cell cycle and cell cycle checkpoints. The third unit focuses on how normal cells acquire mutations that lead them to become cancerous. The fourth unit describes how cancer makes us sick by shutting down normal tissue, organ and body functions. And the final unit discusses the various approaches we currently use to treat cancer and current efforts to create new cancer treatments.

Course Objectives: Upon successful completion of this course, students will:

- Develop an understanding of cancer as a disease.
- Develop an understanding of the impact of cancer on the person.
- Have an understanding of the foundational concepts of cancer biology, including: what does it mean to be a 'normal' cell; how a normal cell becomes cancerous; how cancer makes us sick; how we treat cancer.
- Have a feel for the diverse and exciting research that is occurring in the field of oncology.
- Become a better consumer of science, by increasing critical thinking skills.



CSI: MSON – FORENSIC SCIENCE (SPRING)

Tuesday/Thursday, 1:20–2:20 pm EST

Target Grade Level: 11-12 Prerequisite: Completion or concurrent enrollment in Chemistry or Biology and Algebra II Notes: Lab kit required (sent by teacher) Instructor: Carrie Lopez, Trinity Preparatory Day School, Winter Park, FL

This course is designed for those interested in learning the discipline of forensic science and crime scene investigation. Students will be introduced to some of the specialized fields of forensic science and topics will include: Fingerprint Evidence, Handwriting Analysis, Forensic Anthropology, Forensic Entomology, Bloodstain Pattern Analysis, DNA Evidence, Death Investigation. This class includes a mixture of laboratory experiments, demonstrations, and speakers who are experts in the field.

DATA STRUCTURES AND DESIGN PATTERNS (YEAR)

Monday/Thursday, 4:40-5:40 pm EST

Target Grade Level: 11-12 Prerequisite: AP Computer Science A or equivalent experience with the Java programming language Notes: Laptop required Instructor: J.D. DeVaughn-Brown, Chadwick School, Palos Verdes, CA

This course is a yearlong course that will give advanced students the strong foundation needed to build complex applications using object-oriented principles and the skills needed to gain a top-level internship at a tech firm. This course covers the design and implementation of data structures including arrays, stacks, queues, linked lists, binary trees, heaps, balanced trees (e.g. AVL-trees) and graphs. The course will also serve as an introduction to software design patterns. Each pattern represents a best practice solution to a software problem in a specific context. The course covers the rationale and benefits of object-oriented software design patterns. Numerous problems will be studied to investigate the implementation of good design patterns. Students will receive assistance in crafting an effective resume and go through sample interview questions.

GENETICS AND GENOMICS (FALL)

Tuesday/Thursday, 11:05 am-12:05 pm EST

Target Grade Level: 11-12 Prerequisites: Chemistry and Biology; AP Biology strongly recommended Notes: Laptop required Instructor: Audrey Yeager, Manlius Pebble Hill School, Syracuse, NY

This course will emphasize classic Mendelian genetics, molecular genetics, and population and evolutionary genetics. The topics include structure and function of genes (and the genome), biological variation, and regulation of gene expression. Subsequently, the course will explore current genome analysis methods, and genome manipulation technologies such as CRISPR. We will also discuss the implication of our use of this information in society. Topics include recombinant DNA technology, mathematical models and statistical methods for data analysis. Papers from the current and classic literature will supplement lecture materials.

INTRODUCTION TO COMPUTER SCIENCE (SPRING) New Course

Tuesday/Thursday, 11:05-12:05 pm EST

Target Grade Level: 10-12 (Students must have maturity and time management to succeed in a project-based, independent course.)

Prerequisite: None

Notes: Students will need access to a laptop and other devices and equipment, up to about \$100. **Instructor:** Page Lennig, Waynflete School, Portland, ME

This project-based course will serve as an introduction to programming and computational thinking skills through problem solving in computer science. Using Python, students will learn the basic programming concepts of variables and assignments, boolean statements, loops and iteration, and functions and classes. Throughout the semester, students will break down a problem into pieces, build a sequence of steps to solve the problem, and translate those steps into a digital or technological solution.

Students will work independently as well as collaboratively in groups, give one another feedback, and discuss/debate ethical questions related to current topics in computer science and the world. For the final project, students will choose a real world issue and create a video game based on their interest. They will then leverage the power of games to elevate that issue and educate users about that issue. The course is suited for students who wish to gain exposure to computational methods, coding, and other tools of computer science and those who wish to take their skills in these areas to a new level and apply them.



INTRODUCTION TO ORGANIC CHEMISTRY (FALL)

Monday/Thursday, 2:30–3:30 pm EST

Target Grade Level: 11-12 Prerequisite: Chemistry Instructor: Jocelyn Rodgers, Maret School, Washington, DC

This semester course will provide useful background information in organic chemistry by covering topics not typically found in high school chemistry courses. The course will give insight into the importance of the chemistry of carbon compounds to our daily lives. Topics covered will include organic nomenclature, structural formulas, stereochemistry, bonding, reaction mechanisms, and chemical transformations of functional groups. Completion of the course should make students more confident in their chemical background when entering college biology or chemistry courses.

LINEAR ALGEBRA (FALL)

Wednesday/Friday, 12:15-1:15 pm EST

Target Grade Level: 11-12 Prerequisites: BC Calc or instructor approval Instructor: Jon Gray, Indian Springs School, Indian Springs Village, AL

A standard treatment of linear algebra as presented to university-level science and engineering majors. Course topics will include row-reduction, matrix equations, linear transformations, matrix operations, invertibility, subspaces of Euclidean space, dimension, rank, determinants (elementary product definition, expansion by minors, and row-reduction), vector spaces, null and column spaces, linear independence, bases, change of basis, eigen-theory, algebraic and geometric multiplicity, diagonalization, inner product, length, orthogonality, orthogonal sets, projections, the Gram-Schmidt process, QR-factorization, and the method least-squares. Basic programming in Python will be introduced and used to reinforce concepts and speed-up some of the more mundane computations characteristic of Linear Algebra. Regular problem sets will allow the students to practice and master the techniques introduced in class. Topic mastery will be exhibited through written and oral exams and group projects. Prior programming experience is not expected.

A MATHEMATICAL MODELING APPROACH TO SOCIAL JUSTICE (SPRING)

Tuesday/Thursday, 4:40–5:40 pm EST

Target Grade Level: 11-12 Prerequisite: Precalculus (prior or concurrent) Instructor: Jay Noland, Mounds Park Academy, St. Paul, MN

The main purpose of this course is an introduction to mathematical modeling through graphical, numerical, symbolic, and verbal techniques. We will focus on data from and explore social justice issues such as the Food Deserts, Gerrymandering, Climate Change, and others. We will use elementary functions (polynomial, exponential, logarithmic, etc.) to build models and address questions with the goal of developing scientific reasoning and problem-solving skills. Students will also use technology in a range of ways to effectively communicate their hypotheses and conclusions.

MODERN PHYSICS: EINSTEIN'S RELATIVITY AND THE EVOLUTION OF THE QUANTUM MODEL (SPRING)

Tuesday/Friday, 2:30–3:30 pm EST

Target Grade Level: 11-12 Prerequisites: Physics or AP Physics 1; Co-requisite: AP Calculus AB Instructor: Ben Taylor, Hopkins School, New Haven, CT

This is a mathematically rigorous course in which students study contemporary physics. The course begins with Einstein's theory of relativity, and then takes on a chronological exploration of the development of quantum mechanics. Time travel, quantum tunneling, and the acceptance of seemingly impossible dualities mark highlights of this course.



MULTIVARIABLE CALCULUS (YEAR)

Monday/Wednesday, 2:30-3:30 pm EST

Target Grade Level: 11-12 Prerequisite: BC Calculus Notes: Laptop required Instructor: TBD, Stanford Online High School, Stanford, CA

The mathematics of three dimensions is the emphasis of this college-level course. Multivariable Calculus will explore the geometry of three-dimensional space, including vector arithmetic. It will also explore three- dimensional surfaces, using the tools of derivatives and integrals expanded into multiple dimensions. A robust unit on differential equations will allow students to review the topics of single-variable calculus. The emphasis throughout the course will be on problem-solving and on real-world applications of the tools students learn in fields such as economics, astronomy, physics, engineering, and medicine.

NEUROLOGICAL SCIENCE (FALL 2023) New Course

Alternating Year Offering

Target Grade Level: 11-12 Prerequisites: Biology Teacher: Katie Malanson, Canterbury School, Fort Wayne, IN

This course is designed to familiarize students with the biology of the brain. The course engages students by focusing on how our brains work and how the biology of our brain explains some of our everyday behaviors, as well as disorders and disease. The course will begin with an overview of basic anatomy and physiology of the nervous system, and progress to a discussion of the neural basis of complex behaviors. Throughout the course, we will discuss disorders that can arise when there are problems with the nervous system, including Alzheimer's disease, Multiple Sclerosis, pain phenomena, sleep disorders, and addiction. During the course, students will participate in activities to explore the brain structure and function, and case studies to practice the skills of scientific inquiry, including asking questions, designing experiments, predicting and interpreting results, and using data as evidence for an argument.

THE SCIENCE AND ETHICS OF SPORTS PERFORMANCE: GENETICS, BIOCHEMISTRY, AND SOCIOLOGY (FALL) *New Course*

Monday/Wednesday, 11:05 am-12:05 pm EST

Target Grade Level: 11-12 Prerequisite: Two years of high school science Instructor: George Flatau, University School of Nashville (TN)

The essence of competitive athletics revolves around trying to, as the Olympic creed states, perform "faster, higher, stronger," and athletes have been trying to do so as long as sports have existed. This course aims to examine that pursuit from a scientific perspective - what are the limits of human performance (both "clean" and doped), what role does genetics play, how does technology affect sports, what issues arise when we consider gender and competition - all are among the topics we will discuss.

The course will examine how society and sport have co-evolved, how science has played a key role in that development, and the resulting ethical, equitable, and safety issues that follow. Through readings, viewings, and discussions, through individual and group papers and presentations, we will grapple with often conflicting and complex ideas, grounded in scientific theory and practice, and come to a better understanding of how science and sports are related.

VECTOR CALCULUS (SPRING)

Wednesday/Friday, 12:15-1:15 pm EST

Target Grade Level: 11-12 Prerequisite: BC Calc (LinAlg preferred) Instructor: Jon Gray, Indian Springs School, Indian Springs Village, AL

An accelerated approach to vector calculus intended for future math, physics, and CS majors. Course topics include generalized vectors, functions of several variables and partial derivatives, the gradient, optimization including gradient descent, potential functions and conservative vector fields, line integrals, double and triple integrals, cylindrical and spherical coordinate systems, surface area, divergence and curl, Greens Theorem and Stokes Theorem, and general change of coordinates. Time-permitting, differential forms will be introduced.

CLASS SCHEDULE 2022-2023

LIVE DOCUMENT

Time (E.S.T)	Term	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30 - 9:30 AM	Fall		Turbulent Times: History of the First Amendment and Dissent during American Wars			Turbulent Times: History of the First Amendment and Dissent during American Wars
	Spring		The History of Modern Germany: World War I to the Present			The History of Modern Germany: World War I to the Present
10:00 - 11:00 AM	Fall			Advanced Economics I		Advanced Economics I
	Spring			Advanced Economics II		Advanced Economics II
11:05AM - 12:05 PM	Fall	Watching the Watchmen: The Role of Detective Narratives in a Carceral Culture	Genetics and Genomics	Watching the Watchmen: The Role of Detective Narratives in a Carceral Culture	Genetics and Genomics	
		The Science and Ethics of Sports Performance: Genetics, Biochemistry, and Sociology	Positive Psychology	The Science and Ethics of Sports Performance: Genetics, Biochemistry, and Sociology	Positive Psychology	
	Spring		Positive Psychology		Positive Psychology	
			Introduction to Computer Science		Introduction to Computer Science	
12:15 - 1:15 PM	Year	Arabic I: Section A	Arabic II		Arabic I: Section A	Arabic II
				Introduction to Spanish-Language Literary Analysis		Introduction to Spanish-Language Literary Analysis
	Fall	Tenements to Townhouses: Stories of Urban New York	Establishing Equality: The History of Feminisms and Gender	Tenements to Townhouses: Stories of Urban New York	Establishing Equality: The History of Feminisms and Gender	
				Linear Algebra		Linear Algebra
	Spring		Ensuring Equity: Gender, Feminism, and Media in 21st Century American Culture		Ensuring Equity: Gender, Feminism, and Media in 21st Century American Culture	
				Vector Calculus		Vector Calculus
1:20 - 2:20 PM	Year		Chinese Seminar			Chinese Seminar
	Fall	American Democracy on Fire: What Does the Future Hold?		American Democracy on Fire: What Does the Future Hold?		
				Philosophy in Pop Culture		Philosophy in Pop Culture
		"It is better to speak:" One Hundred Years of Women Writing for Change	CSI: MSON - Forensic Science	"It is better to speak:" One Hundred Years of Women Writing for Change	CSI: MSON - Forensic Science	

2:30 - 3:30 PM	Year	Multivariable Calculus		Multivariable Calculus		
	Fall	Intro to Organic Chemistry			Intro to Organic Chemistry	
			Etymology of Scientific Terms			Etymology of Scientific Terms
	Spring	Advanced Topics in Chemistry	Modern Physics: Einstein's Relativity and the Evolution of the Quantum Model		Advanced Topics in Chemistry	Modern Physics: Einstein's Relativity and the Evolution of the Quantum Model
			Advanced Latin Lit			Advanced Latin Lit
3:35 - 4:35 PM	Year	Ancient Greek I	Arabic I: Section B	Ancient Greek I	Arabic I: Section B	
			German I		German I	
	Fall			Global Voices of Oppression: Literature for Social Justice		Global Voices of Oppression: Literature for Social Justice
		Cancer		Cancer		
				Making Ethical Medical Choices in a Diverse World		Making Ethical Medical Choices in a Diverse World
			Diversity in a Global Perspective		Diversity in a Global Perspective	
	Spring	The Fiction of James Joyce	Environmental Bioethics - Exploring the Challenges of Local and Global Choices	The Fiction of James Joyce		Environmental Bioethics - Exploring the Challenges of Local and Global Choices
				A Nation Divided: The Literature of Civil Rights		A Nation Divided: The Literature of Civil Rights
4:40 - 5:40 PM	Year	Data Structures and Design Patterns			Data Structures and Design Patterns	
	Fall		Think Global, Debate Local		Think Global, Debate Local	
	Spring		A Mathematical Modeling Approach to Social Justice		A Mathematical Modeling Approach to Social Justice	