



The Harley School

UPPER SCHOOL
CURRICULUM GUIDE

2019-20

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Course titles and descriptions included in this guide are representative of our yearly offerings, which may be adjusted to meet student interest or institutional needs.



The Harley School Mission

We are a diverse, inclusive school. We provide a balanced education that prepares our students to meet the challenges of tomorrow and lead lives of great purpose.

1. We inspire academic excellence.
2. We foster joy in learning in both the arts and sciences.
3. We promote physical and mental fitness.
4. We show how to care for the world and other people.
5. We empower our students to become confident, lifelong learners.

Adopted by the Board of Trustees, May 2015.

Characteristics of a Harley Graduate

A lifelong learner who is:

- inquisitive, passionate, and tenacious
- creative, original, and a risk-taker
- a critical thinker and problem-solver
- a clear and forceful writer and speaker
- appreciative of and experienced in the arts
- self-aware and self-directed
- successful in a rigorous college-prep environment

A civic person who is:

- a pluralist (globally aware, tolerant, appreciative of difference)
- able to dissent respectfully; an active participant in the democratic process
- both collaborative and independent
- a respectful steward of community and environment
- aware of what it means to take care of another human being
(a compassionate and empathic person)

An individual who:

- savors and appreciates life
- is healthy (physically, socially, and emotionally)
- values fairness and honesty, who is ethical and courageous
- is forward-thinking and adaptable
- takes personal responsibility

Graduation Requirements

Harley students must earn a total of 24 credits over four years, and must take a minimum of six subjects each trimester. Minimum requirements include:

- Four years of English
- Three years of history (please see departmental descriptions for detailed guidelines)
- Three years of the laboratory sciences: biology, chemistry, and physics
- Three years of French, Spanish or Latin
- Three years of mathematics in the Upper School
- Rights and Responsibilities (Grade 9)
- Writing 9 or the full-year Writer's Workshop
- Health 10
- Seven trimesters of the arts (visual arts, drama, and music):
 - Art 9
 - Music ensemble in Grade 9
 - Visual art elective in Grade 10
 - Four electives, all of which should not be from the same discipline
- Four years of physical education (including participation in at least one team sport per year in Grades 9 and 10)
- Community service—20-hour guideline each year
- Summer reading—each year
- 60-Hour Senior Internship or Capstone Project

Seniors:

Among the six required courses per trimester, at least four must be year-long classes. Among the six, one AP science course and AP Studio Art can count as two courses each, and any combination of three AP courses will count as four courses.

Seniors can choose between two options to fulfill their final graduation requirement:

Capstone Program

Seniors who choose to carry out a Capstone project complete a year-long, in-depth study on a topic of their choosing and extend, critique, and apply knowledge gained in their study. The project concludes with a public presentation.

Senior Internship Program

Seniors who opt to participate in the Senior Internship Program learn valuable networking skills leading up to the three-week period at the end of the school year, during which they venture off-campus to experience the rigors and rewards of the working world as an unpaid intern at a business or organization, or to volunteer at a non-profit agency. The objective of the Senior Internship Program is to provide students with hands-on experience in fields they want to explore, as well as a chance to contribute to the community.

Community Service

Harley places a high value on civic engagement and service to the community. Throughout the year, students keep a log of their volunteer hours at school or in the community. A yearly commitment to at least 20 hours of community service is recommended to all students. An award is given to students who provide a model of service, volunteering 100 hours or more over the course of the school year. This award is noted on students' transcripts.

Community Expectations for Students

The Harley School expects all students to work to their highest capabilities, to join as fully as possible in the opportunities of the School, and to become independent learners and responsible citizens of the community. Our program necessitates that students have strong motivation and abilities in order to succeed in a challenging academic environment.

The Harley faculty aims to support all of our students in becoming progressively independent as learners. From Lower to Middle to Upper School, we prepare Harley graduates to be both intellectually self-reliant and collaborative as problem solvers.

We are prepared to offer accommodations for students with specific learning differences who are able to compensate in ways that allow them to meet our grade-level or course requirements. We work in close partnership with our families toward these ends. However, Harley does not have the resources available to serve students with diagnosed learning differences who are unable to meet the demanding reading, writing, analytical, and behavioral requirements of our academic program. For this reason, Harley reserves the right to determine whether the needs of the student can be met in our educational program. For more details regarding accommodations and modifications at each division level, contact the appropriate Division Head.

When student behavior is disrespectful or disruptive, Harley will take appropriate disciplinary or educational steps and may require counseling or other therapeutic support.

When a student is unable to meet the School's academic or behavioral expectations, the School reserves the right to separate from the student.

Supplemental Support Program (SSP)

The Supplemental Support Program (SSP) is a fee-based program designed to assist capable students when learning in School presents special challenges. Our small team of learning specialists helps students in SSP (1) recognize and understand the specific difficulties they have with learning, (2) identify strategies that work for them and assume responsibility for implementing these strategies, and (3) take the lead in advocating for their own needs.

We address the individual needs of learners in developmentally appropriate ways that vary by academic division. The Lower School support program offers more individualization and addresses the development of basic skills and emerging competencies in a variety of settings. Starting in Grade 5, the program supports students in meeting the demanding curricular requirements of the Middle and Upper Schools, but it does not provide remediation of significant deficiencies in basic skills.

AP Courses & Exams

Harley offers an average of 20 Advanced Placement (AP) courses to Upper School students per year. An AP course not only gives students the knowledge and skills to help them succeed in college, but scoring well on an AP exam can earn students college credit and exemption from some introductory courses. The Harley Upper School faculty regards the AP exam to be an integral part of an AP course, and therefore requires students in such classes to take the exam. If a student does not take the exam, the AP designation will be removed from the transcript and prospective colleges will be notified. The deadline for finalizing AP status is prior to the first mid-trimester marking period.

Academic Independent Study Program

Students are offered opportunities to pursue particular subjects in-depth or develop their understanding of topics not offered in the present curriculum. Students propose programs of study, including objectives, resources, times, credit requested, and method of evaluation. Students solicit a project advisor from the faculty, or in some cases, from people outside the School. The Upper School Head, appropriate department chairs and students' academic advisers review proposals and suggest modifications if necessary. Students contemplating an Independent Study must be able to handle individual responsibilities and long-term projects; if students are unable to manage their academic course loads while pursuing Independent Studies, the projects may have to be suspended. In recent years, students have chosen to focus on French literature, astronomy, architectural design, Watergate, and the Far East. Students should have primary skills in the area of their study to enable them to work independently. Independent Studies are not tutorials. Course credit is given for successful completion.

English

Through the close reading and interpretation of carefully selected works of literature, the English Department strives to nurture and develop students' critical thinking and expressive writing skills. The Department encourages students to develop sensitivity to language and style, as well as confidence in the use of a variety of analytical strategies that will serve them well in many different academic contexts.

The English Department selects texts from the major works of English and American authors, as well as significant works of world literature in translation. Works are chosen to reflect the broad concerns appropriate for the developmental stages of the students. A variety of genres is represented; students can expect to read, analyze, and enjoy novels, short stories, memoirs, poetry, drama, and essays, among other types of literary work.

All students, particularly in Grades 9 and 10, work with grammar and vocabulary in class and through their writing. Students are required to practice and refine their writing skills through a variety of creative, narrative, persuasive, and expository assignments. Students are encouraged to revise their work in order to sharpen the clarity, precision, and grace of their self-expression. In class, students practice informal writing techniques designed to help them develop and gain confidence in their ideas. Through writing and discussion, students test and refine their thoughts about the material, and are often asked to write reflections upon their own learning. Classes are primarily discussion-based, and students are encouraged to explore questions of language, meaning, and interpretation in a non-competitive, collaborative environment.

English 9 – Literary Genres

This class (re)introduces students to all major genres of literature by looking at a wide range of texts, from novels to graphic novels to poetry to Shakespearean drama to epic poetry to short stories to memoirs. Alongside analyzing the formal aspects of literature, students will grapple with humanistic questions about what it means to develop who you are within particular communities that arise from the selected works of literature. Reading such texts as Anaya's *Bless Me, Ultima*, Kidd's *The Secret Life of Bees*, Yang's *American Born Chinese*, Shakespeare's *Romeo and Juliet*, Homer's *Odyssey* and McBride's *The Color of Water*, students will consider, discuss and analyze how geography, politics, family traditions, race and social class influence one's personality and actions.

Students will make meaning of these texts and the potential power of language through critical class discussions, reflective writing, producing creative, critical and persuasive essays, preparing presentations and contrasting literature with film adaptations. In addition to this important work, students will further enhance their critical thinking and writing skills, through work with vocabulary, reviewing grammar in their own writing and participating in regular peer review and self-reflection activities.

Writing 9

This course, offered in trimester-long installments across freshman year, aims to improve students' writing. Students progress through a series of increasingly demanding assignments—from writing sentences to composing stories—designed to eradicate bad grammatical habits and increase sensitivity to style. Students also learn how to give and receive criticism, regularly sharing their work with one another. Ideas on writing come from class members themselves, from the teacher, and from the works of professional writers. The skills required for good fiction writing are indispensable to effective writing of any kind—this is the guiding principle of Writing 9.

English 10 – Border Crossings

This course explores the how literature reflects and shapes our conceptions of identity, community and history. Students will explore novels, plays, poetry and short stories that challenge reductive definitions of race, gender, nationality and class. We will, at the same time, give close attention to how these various literary forms generate meaning.

Representative texts include: Atwood's *Alias Grace*, Shakespeare's *As You Like It*, Sophocles' *Theban Plays*, Friel's *Translations*, and Roy's *The God of Small Things*. Students construct meaning through close readings of text, active participation in discussions and conferences, writing short critical papers and essays, preparing presentations and experiencing selected films. To that end, students have the opportunity to enhance their grammar, vocabulary, and critical thinking skills, appreciating literature as an extraordinary conversation of the heart and a vital connection to daily living.

English 11 – American Literature: Freedom & the Quest for Self

During junior year, students read a selection of classic works by well-known American authors in order to trace themes of moral self-awareness and the creation of identity. How do we discover who we are as authentic individuals in the face of all the social pressures of modern life? What influences us the most, nature or society? Is the American Dream concerned mostly with freedom and equal opportunity or is it about material gain and creature comforts? Students will explore these questions through such works as Hawthorne's *The Scarlet Letter*, Twain's *The Adventures of Huckleberry Finn*, Hemingway's *The Sun Also Rises*, Fitzgerald's *The Great Gatsby*, and Morrison's *Home*. Also included are selections from Thoreau's *Walden* and Frederick Douglass's narrative of his life in slavery, as well as Whitman's *Leaves of Grass* and the poems of Emily Dickinson. Students will begin their quest to understand some of the mythic conflicts — moral, racial, political, and psychological—that underlie these classic works of American literature with a study of Shakespeare's *Hamlet*, a play that begins with the visitation of a ghost and results in some remarkable meditations on the nature of self and

existence. Additionally, students will continue to develop their language skills and fluency as writers through vocabulary work and a variety of writing assignments that include creative pieces as well as descriptive, persuasive, and expository essays.

English 12 & AP English Literature – Special Topics in Literature

During senior year, students are grouped into sections that rotate through three English teachers. Each trimester features a thematically-focused range of genres taught in a seminar-style setting. The subject of these seminars reflects each teacher’s individual passion for a particular topic. Examples include “Memoir: Truth and Storytelling,” “Visions of Utopia,” “Leading Ladies,” “History and Fiction,” “Questionable Motives,” and “Good and Evil.” Students continue to write personal and expository essays requiring a close analysis of text.

They also work toward writing at greater length about more sophisticated ideas in language that is increasingly flexible and rich, though no less clear. Representative works are: Chopin, *The Awakening*; Hardy, *Tess of the D’Urbervilles*; Conrad, *Heart of Darkness*; Faulkner, *The Sound and the Fury*; Potok, *My Name is Asher Lev*; Hong Kingston, *The Woman Warrior*; Joyce, “The Dead”; Morrison, *Song of Solomon*; O’Neill, *Long Day’s Journey into Night*; Perkins, “Yellow Wall Paper”; Poe “William Wilson”; Madox, *The Good Soldier*; Atwood, *The Handmaid’s Tale*; Auburn, *Proof*; Shakespeare, *King Lear*, *The Tempest*, *Henry V*, *The Merchant of Venice*; Hansberry, *Raisin in the Sun*; Stoppard, *Arcadia*; Williams, *A Streetcar Named Desire*; Wilson, *Fences*; and selected poetry. Students may opt to take English 12 for Advanced Placement credit; those who do so must take the AP English Literature exam in May. AP enrollment requires the approval of the department.

English Electives

International English

International English focuses on developing students’ command of written and spoken English. In addition to studying the fundamentals of grammar, syntax, pronunciation, diction and vocabulary, students practice using idioms and other expressions of conversational English. Students also conduct thorough analyses of theme, character and narrative perspective in literature. The goal of the course is to help students acquire greater facility with reading, writing and speaking.

Writer’s Workshop

This year-long course in writing aims to give students a chance to develop their writing through the study and practice of a number of literary forms, including the short story, the essay, the newspaper (or magazine) article, and the stage play. Daily assignments aim to strengthen

students' command of grammatical and stylistic elements in their prose. The main goal of Writer's Workshop is to help young writers find their voices through a demanding process of writing and revision.

Writing Fiction

This class presents an organized approach to writing short stories. During the first two weeks of the course, students work on "story seeds," putting together a group of informal writing responses that can serve as the basis for ideas for more finished drafts. Over the course of the trimester, students write two longer stories (at least 4–5 pages). This work is shared with the class, and everyone has the opportunity to give and receive constructive criticism. Towards the end of the course, writers revise their pieces, developing original work into more finished narratives. Throughout the trimester, class members do short writing exercises both in and outside of class that help address issues such as characterization, plot, setting, and theme. In addition, students read selected short stories that serve as the basis for discussions about various writing techniques.

Writing Poetry

In every class, students read a variety of poems in order to gain a better understanding of how poets have used language to express themselves. Class members work on written exercises that generate new ideas for poems and increase awareness of poetic craftsmanship. Students consider the sound and rhythm of words as well as the sense, and they work on turning their own experiences and observations into poetry. Because class is conducted as a workshop, students are frequently asked to share their work with the group. All participants read and comment on other students' writing with the goal of helping their classmates improve. At the end of the course, students submit portfolios that contain all informal writing responses, as well as the drafts of finished poems.

Writing Plays

This writing workshop provides a structured approach to playwriting. Students learn to tell stories through action and dialogue, and focus on scene structure, characterization, and the development of a unique set of voices. For this class, students read several short plays that provide models for their own work, and they complete a variety of in-class writing exercises that help develop their storytelling skills. They share their work and read it out loud together in order to test out how the ideas and dialogue sound. In the end, every student creates a 10-minute scene that may be presented in a staged reading or performance.

History

The History Department is committed to the development of historical literacy, critical, and analytical skills. While most history curricula emphasize “coverage,” usually at the expense of depth, we seek to engender both breadth and depth in our students. Students learn to use historical materials, texts, documents, and primary and secondary sources. In addition, we teach reading, outlining, research, and note-taking skills. Students gain experience and proficiency in writing concise, critical, and analytical essays.

Gr.	Requirements: Option A	Requirements: Option B
9	World Religions World Political & Economic Systems World Wars	World Religions World Political & Economic Systems World Wars
10	Industrial America Cold War to Terrorism Global Human Rights	Industrial America Cold War to Terrorism Global Human Rights
11	Modern Global Studies The Middle East Dissent in US History	Students may take a full-year Advanced Placement (AP) course with approval from the department.
12	Electives	Students must take a second AP course or the Grade 11 sequence listed under Option A

Grade 9 – A Focus on World Systems

The Grade 9 sequence includes three courses: World Religions, World Political & Economic Systems and World Wars. Students work with each faculty member in the department for one trimester. This series of courses builds an understanding of the major forces and themes that have shaped the human experience: ways of governing and organizing society, contact between cultures, religious beliefs and ways of thinking about our place in the world, the uses of technology and developments in science and philosophy, as well as how conflict and war have changed our planet. Students will learn about history not only by

looking at big patterns and events, but also by focusing on what it was actually like to have been alive in times past. The courses build core skills in advanced reading comprehension, critical thinking, researching, and constructing sound written and verbal arguments.

Grade 10 – The Advent of the Modern World

Students take the following sequence of courses: Industrial America, Cold War to Terrorism and Global Human Rights. Students work with each faculty member in the department for one trimester. In this series of courses, students engage with some of the major movements and events that have shaped our modern world. We start with the impact of industrialization on nations, transition to superpower conflicts, and end with an intense study of human rights around the world. Students are also expected to write a major research paper each trimester and debate the historical significance of these issues in class.

Grade 11 – Modern History

Students take the following sequence of courses: Modern Global Studies, The Middle East, and Dissent in U.S. History. Students work with each faculty member in the department for one trimester. In this series of courses, students closely examine the forces that are shaping modern events. The emphasis of this series of courses is on the major conflicts influencing the world today, giving historical context to current events.

AP European History

This course is a college-level survey of European history from the Black Death in the 14th century through the fall of communism in the 20th century. Students will learn about the political, economic, intellectual, social, and cultural history of Europe. A central goal of the course will be to teach students to work with primary historical documents and to recognize bias and point-of-view in historical sources. Students also practice making historical arguments that are both sophisticated and well-substantiated by evidence. At the conclusion of the course, students will take the College Board's Advanced Placement exam in European History.

AP U.S. History

This course is a survey of American history from the period of colonization to the present. Students rely on multiple sources in addition to the textbook. The class learns to use and evaluate primary sources. The course emphasizes the writing process through frequent writing assignments, and through developing the ability to analyze and interpret history from different perspectives, attitudes, and angles. At the conclusion of the course, students will take the College Board's Advanced Placement exam in U.S. History.

AP U.S. Government & Politics

This course is designed to give students a critical perspective on politics in the United States. It involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. Students will also look at various institutions, groups, beliefs, and ideas that make up the American political landscape. The major units of study include the constitutional underpinnings of our government, political beliefs and behaviors, political parties and interest groups, institutions of national government, public policy, and finally, civil rights and civil liberties.

Trimester History Electives

- *available to sophomores, juniors and seniors unless otherwise noted*
- *one trimester, 1/3 credit each*

American Modern Popular Culture

Open to grades 9-12

This course examines the history of late 19th and 20th century America and Americans by looking at their popular culture. We compare examples of pulp fiction, TV shows, movies, recipes, and music from different eras of United States history. Students will test recipes from the first popular cookbook, the Fannie Farmer cookbook, and compare the dishes to the American cuisine of the 1950s and today. Students will compare different genres of American television shows throughout the 20th century, such as “Leave it to Beaver,” “The Cosby Show,” “The Wonder Years” and “Modern Family.” They will also compare a Dashiell Hammett novel to a modern detective novel. It is an interesting, interactive and student-centered look at “America’s century.”

Global Studies

Part of Grade 11 history sequence; also may be taken as an elective

This course focuses on the analysis of events, ideas, and historical phenomena that appear across various national boundaries and cultures. These global phenomena are by definition transnational, since they occur beyond the limitations of national boundaries or control. Global phenomena are economic, political, social, cultural, religious, ideological, environmental, biological, or involve new technology and means of communication. With this in mind, we begin the trimester with a study of the 1986 Sandoz Chemical Spill in Switzerland. This transnational pollution event led to an examination of a number of other industrial accidents, including Bhopal in India, Chernobyl in Russia, the Exxon Valdez accident in Alaska, the BP Oil Spill, the Great Pacific Gyre Garbage Patch, e-waste in Guiyu, China, the nuclear meltdown of the Fukushima plant in Japan, and the Kuwaiti oil field fires. Students also explore changes in assumptions about how the world works since the terrorist attacks of September 11, 2001. This unit looked at the different views represented in the writings of Samuel Huntington, Thomas Friedman, Condoleezza Rice, Robert Kaplan, Stanley Hoffman and Joseph

Nye. In the second half of the trimester, students apply their theories about globalization to a number of different topics, including a study of North Korea and Russian intervention in the Ukraine.

Dissent in U.S. History

Part of Grade 11 history sequence; also may be taken as an elective

This course focuses on the issues in American history where a dissenting opinion has confronted an orthodox opinion and forced change to occur. Some issues explored in class change from year to year, depending on students' interests, but since America was founded on an act of dissent, the course always begins with study of the Revolutionary War Era. Students also examine the abolition, Civil Rights, women's rights, and the LGBTQ+ rights movements. Students explore social injustice and the efforts made to counteract it; the methods used by those who attempt to foment change; and the reasons for the resistance to change. The purpose of the course is to open students to the idea that America's history is fluid, and they have the power to change it. After all, Alice Paul was just a woman who believed in suffrage; the Black American students in Greensboro were just college students who took a stand against segregation; and Harvey Milk was just a man who overcame his own insecurities to become a symbol of defiance and bravery. If they can cause change in society, anyone can.

The Middle East

Part of Grade 11 history sequence; also may be taken as an elective

This course examines the history of the Middle East with an eye to illuminating current conflicts in the area and evaluating the prospects for peace. Some of the topics covered include the origins of the split between Sunnis and Shiites, the formation of the modern states of the Middle East after the fall of the Ottoman Empire, and the creation of the state of Israel. A central theme of the course is the examination of how a region that for so many centuries had been "ahead" of the West in learning, technology, and tolerance has become a center of conflict in the modern world. Students will work with both historical and contemporary sources.

Gender Studies

Open to Grades 11 and 12

In Gender Studies, students examine and debate the gender roles that are implicitly and explicitly laid out in our society. Students analyze the male and female stereotypes portrayed in advertising, music videos, magazines, and movies. They also learn about the social origins of gender identity and examine the role of parents, schools, and peers in teaching what is deemed to be appropriate behavior for each gender. Attention is given to the biological aspects of gender identity, including the role of hormones, and of brain differences in gender identities. Additional topics covered include: the plight of boys in our schools, girls and body image, the current state of feminism, and gay, lesbian, bisexual, and trans gender issues.

Philosophy & Ethics

Open to Grades 11 and 12

This course begins with a survey of modern philosophy that starts with René Descartes and ends with the post modern ideas of Jacques Derrida. Students read selections from Immanuel Kant, John Stuart Mill, Søren Kierkegaard, Jean-Paul Sartre, Albert Camus, and Friedrich Nietzsche. The emphasis here is on explaining the classic problems in epistemology, metaphysics and ethics. Students choose topics from a variety of subject areas that are debated in class. These issues might include questions involving religion and the existence of god, pleasure as the highest value, whether morality is relative or absolute, arguments about truly altruistic actions, or whether computers will ever achieve consciousness, as well as an exploration of how we acquire knowledge (empiricism vs. rationalism).

U.S. Political Process

This one trimester course, required of students who do not take AP U.S. Government and Politics, is designed to familiarize students with the principles of American government. Students read the Constitution, sections of a government textbook, newspaper articles, and position papers on issues of importance. Students also examine and discuss a number of social and economic issues. Finally, students complete several group-based projects and participate in classroom debates.

Language

The Language Department strongly encourages students to take four years of a language in the Upper School to ensure depth of coverage and oral proficiency, though the graduation requirement is three successful years of the same language: French, Spanish, or Latin. In some cases, the department may consent to other options, including the study of two different languages for two years each, for a total of four years of language in the Upper School. In special and rare circumstances, it may allow a student exemption from the foreign language requirement.

The department strives for student mastery in speaking, listening, reading, and writing. Within the required years, students will also gain cultural awareness of the countries and peoples represented by the languages they study. The department makes use of audiovisual and computer programs for foreign language teaching.

Spanish I

This course is designed for students entering the Upper School with little to no experience with the Spanish language. The course is designed to build confidence with the Spanish language through oral, written, listening, and reading comprehension. All basic grammar topics and vocabulary are taught and reviewed through *Descubre I* (Vista Higher Learning).

Spanish II

This course is for continuing students who have had at least one full year of instruction in Spanish. With an emphasis on oral proficiency, students continue to learn basic grammatical concepts and enhance their vocabulary through extensive practice with a variety of aural-oral and written exercises set in meaningful situational contexts. The text is *Descubre II* (Vista Higher Learning).

Spanish III

This course reviews the basic grammatical concepts taught in Spanish II and expands to more complex structures such as compound verb tenses, the future and conditional, and the subjunctive mood. The emphasis continues to be on oral proficiency with greater emphasis on writing and cultural studies of the Spanish-speaking world in order to develop awareness, understanding, and appreciation of other cultures. The text is *Descubre II* (Vista Higher Learning).

Spanish IV

Spanish IV is conducted entirely in Spanish. Students refine their speaking, listening, reading, and writing skills by discussing art from the Spanish-speaking world and reading progressively more challenging literary pieces that develop cultural and historical awareness of Spanish-speaking countries. Students discuss stories, current events, and everyday topics to deepen their conversational proficiency. The text is *Galería de arte y vida*.

Spanish V

This course is designed for students who have completed the study of Spanish IV and wish to continue the study of the language apart from the AP level. Students use the book *Revista* to review and build on grammar comprehension, vocabulary, and knowledge and awareness of Spanish-speaking cultures through the reading of literature and conversation.

AP Spanish Language & Culture

The Advanced Placement course in Spanish Language and Culture is offered to students who perform at a high level in Spanish IV and attain reasonable proficiency in listening comprehension, speaking, reading, and writing. The course is designed to prepare students for the AP examination and develop language skills so students can express themselves with reasonable fluency. The AP Spanish texts are *Abriendo Paso: Temas y Lecturas* (Díaz and Nadel), and *Advanced Placement Spanish: Preparing for the Language and Culture Exam* (Jose M. Díaz).

French II

French II is a course designed for students who have completed French I or who have had one prior year of French. Students continue to learn about French culture, new grammar concepts, vocabulary, and conversation as they expand on what they learned the previous year. The text is *Imaginez* (Cherie Mitschke).

French III

French III is a review of the basic grammar topics taught in French I and II with an introduction to more complex grammar points and vocabulary. *Imaginez* (Cherie Mitschke) continues to be the main text, with thematic and literary documents interspersed.

French IV

This course is designed for students who have completed French III or who have had three prior years of French. Students work toward fluency in French through oral presentations and discussions of both history and literature. The text, *Trésors du Temps* (Yvone Lenard), is used to teach French history, grammar, and literature.

French V

French V is a course designed for students who have completed French IV (or who have had four years prior of French), and are interested in continuing the study of French apart from the Advanced Placement level. Students continue to learn about French culture, new grammatical concepts (verb conjugations, verb tenses, etc.), vocabulary, and conversation by viewing French cinema. The textbook used in this class is *Cinema for French Conversation* (Anne-Christine Rice).

AP French Language & Culture

Students apply their spoken French in various contexts and develop a French vocabulary sufficiently ample for reading newspaper and magazine articles, literary texts, and other non-technical writings without dependence on a dictionary. Students learn to express themselves in French coherently, resourcefully, and with reasonable fluency, both in speech and in writing. The texts used include *Allons au-delà* (Richard Ladd), *Advanced Placement French: Preparing for the Language and Culture Exam* (Richard Ladd), and *APprenons* (Zwanziger, Goings, Rench, Seldon Griffin).

Latin I

Utilizing a combination of the reading-based and grammar-translation approaches, Latin I covers the essential elements of grammar, including all cases and declensions, verb conjugations and other important verbal forms and syntactical structures. The curriculum includes

the study of derivatives and various aspects of Roman culture, daily life, history, and mythology relevant to the Latin readings. The text is *Latin for the New Millennium, Level 1* (Bolchazy-Carducci).

Latin II

An elementary Latin course intended for students continuing from Latin I, Latin II presents further essential Latin vocabulary, grammar, and syntax. Students read adapted Latin passages and translate brief selections from original Latin works, studying such authors as Vergil, Livy, Horace, Ovid, Seneca, Pliny the Younger, and Tacitus. English derivatives, aspects of Roman culture, daily life, history and mythology relevant to the Latin readings are also discussed. The text is *Latin for the New Millennium, Level 1* (Bolchazy-Carducci).

Latin III

This grammar intensive intermediate Latin course is intended for students advancing from Latin II and covers essential vocabulary, verbal forms, grammatical constructions, and syntax. Students examine post-Roman Latin literature, reading adaptations of passages written during the Middle Ages and Renaissance. They continue to explore the world of Classical Latin through unadapted passages from Cornelius Nepos's *Life of Atticus*. The curriculum includes the study of derivatives and classical mythology, history, daily life and cultural topics relevant to the Latin readings. The text is *Latin for the New Millennium, Level 2* (Bolchazy-Carducci).

Latin IV

A reading-based, intermediate Latin course, Latin IV is intended for students continuing from Latin III. This survey literature course offers students the opportunity for in-depth critical examination of selected readings from Caesar, Catullus, Cicero, Vergil, Horace, and Ovid. Students translate literally, read critically, analyze, interpret, scan the verse (where applicable), and read aloud each of the assigned readings.

The curriculum also includes substantial discussion of relevant Roman cultural, social, and political history, study of stylistic devices/figures of speech, peculiarities of poetic expression, and thorough review of all fundamental grammar. The text is *Latin for the New Millennium, Level 3* (Bolchazy-Carducci).

AP Latin

This course offers students the opportunity for in-depth critical examination of Vergil's *Aeneid* and Caesar's *De Bello Gallico*. Students translate literally, read critically, analyze, interpret, scan the verse (where applicable), and read aloud the lines specified for study in the current AP Latin course description. The curriculum includes discussion of selected English readings from

Vergil's *Aeneid* and Caesar's *De Bello Gallico*, regular reading of sight passages, discussion of Roman cultural, social, political and literary material relevant to the assigned readings, characteristics and literary conventions of the Epic and Comentariorum, figures of speech and rhetorical devices, and review of specific grammar terminology.

Language Electives

Introduction to Classical Greek

One trimester

A modern course in Classical Greek that emphasizes reading in Greek, with the goal of translating passages from a variety of authors including Aristophanes, Herodotus, Plato, and Homer. Grammar and word roots are also discussed. The text used are *Reading Greek: Text and Vocabulary* and *Reading Greek: Grammar and Exercises* by Joint Association of Classics Teachers. This course is not offered every year, but is available to interested students.

American Sign Language

One trimester

The course is designed to introduce the basics of American Sign Language (ASL). The course begins with exercises in visual communication (mime and gestures), and moves on to sign vocabulary and fingerspelling. The emphasis is on successful communication. Students are introduced to important cultural aspects of deafness and the deaf community. Guests from the deaf community in Rochester will be invited to expand students' understanding of deafness.

Science

The Upper School Science Department provides a balanced and comprehensive science education that prepares students to be engaged in an ever-changing scientific and technological world. We inspire students to see themselves as scientists and to use scientific thinking to make informed decisions and solve problems.

Upper School students are required to complete three years of laboratory sciences in the three major disciplines: biology, chemistry and physics.

- The typical sequence consists of Biology in Grade 9, Chemistry in Grade 10, and Physics in Grade 11.
- AP Biology and Environmental Science are electives in Grade 12.
- AP Chemistry and AP Physics 1 are offered as advanced options in grades 10 and 11, and as electives in grade 12.
- Physics C: Mechanics (calculus-based) is sometimes offered for qualified students as an independent study option in Grade 12.

- As it is currently structured, Environmental Science does not contain sufficient laboratory content to satisfy the “laboratory science” requirement.

The advanced science options allow qualified students to study biology, chemistry or physics in greater depth. Prerequisites and other requirements for enrolling in these courses are outlined in the AP science course descriptions.

All core science courses have a strong laboratory component and utilize hands-on approaches to learning. Students practice preparing for experiments, collecting data, making careful observations, and writing accurate, coherent laboratory reports.

Gr.	Regular Sequence	Advanced Options
9	Biology	Honors Biology
10	Chemistry	Honors Chemistry AP Chemistry
11	Physics	Honors Physics AP Physics 1
12	Environmental Science (optional)	AP Biology AP Chemistry AP Environmental Science Physics C : Mechanics

General Biology

Biology is the study of life. This course explores the fundamental characteristics of living organisms and how organisms interact with their environment. The main objectives of the course are for students to learn basic biological concepts, develop scientific process skills, and use these tools to develop scientific questions which students explore through experimentation. The major units emphasized in the course include: basic biochemistry, cellular structure and function, anatomy and physiology, genetics and modern DNA technology, ecology and human impacts, and evolution. Common themes of life, emphasized throughout the course, are: the relation of structure to function, the interdependence of organisms and their environment, the ability to obtain and transform energy and materials, and the storage, use, and transfer of information. Laboratory exercises enable students to develop scientific process and inquiry skills. Students develop and test their own hypotheses in several exercises. Students gain experience using spreadsheets to analyze and graph experimental data. Some of the topics students investigate in laboratory exercises are: cell membrane transport, enzyme activity, cellular respiration, gel electrophoresis, and population dynamics.

Honors Biology

The Honors Biology course explores the fundamental characteristics of living organisms and how organisms interact with their environment. Students learn basic biological concepts, develop scientific process skills, and use these tools to develop scientific questions which students explore through experimentation. The major units emphasized in the course include: biochemistry, cellular structure and function, anatomy and physiology, genetics and modern DNA technology, and evolution. Common themes of life, emphasized throughout the course, are: the relation of structure to function, the interdependence of organisms and their environment, the ability to obtain and transform energy and materials, and the storage, use, and transfer of information. Laboratory exercises enable students to develop scientific process and inquiry skills. Students develop and test their own hypotheses in several exercises. Some of the topics students will investigate in laboratory exercises are: cell membrane transport, enzyme activity, cellular respiration, gene annotation, and gel electrophoresis. While covering the same basic curriculum as the regular biology course, the Honors course delves into the molecular details and chemistry concepts as they apply to biology. The laboratory exercises demand greater math proficiency and many of the labs incorporate sensors and probes. The course is especially appropriate for students interested in taking AP Chemistry as sophomores.

AP Biology

Full year course, 11/3 credit

Through this strenuous college-level course, students develop an understanding of the unifying constructs in biology. Eight major themes recur throughout the course: energy transfer, continuity and change, relationship of structure to function, regulation, interdependence of nature, evolution, science as a process, and the relationship between technology and society. The laboratory component exceeds the requirements of the College Board Program. Students will complete all of the labs included in the AP Biology Lab Manual, plus students will do additional labs such as gram staining of bacteria, bioinformatics, a series of DNA fingerprinting labs, and a genetic transformation lab. The two major goals of AP Biology are for students to develop a conceptual framework for modern biology and to gain experience and appreciation for using science as a process. The text for the course is *Campbell, Biology in Focus* (Urry, et al.). As a prerequisite for AP Biology, students must complete Chemistry or Physics with at least a B, or AP Chemistry or AP Physics with at least a C, or have the instructor's permission. This course meets for a double period every day.

General Chemistry

Chemistry is the study of the properties, composition, and structure of compounds and elements, and the changes that occur in these substances. Students investigate, through first-hand experiences in the laboratory and through instructor demonstration and discussion, key relationships between matter and energy. Topics studied include atomic theory, conservation laws, kinetic theory, periodicity, enthalpy, solutions, acid/base theory, molecular architecture, and organic chemistry. Writing formal laboratory reports requires the student to articulate relationships between experimentation and theory. In the General Chemistry course, the approach is conceptual and mathematical methods are developed using inquiry activities and structured calculation worksheets. The text used for this course is Pearson, *Chemistry* (2012). The laboratory experiments, which are the backbone of the course, are selected from various sources, and are often conducted using computers and peripheral sensors.

Honors Chemistry

Chemistry is the study of the properties, composition, and structure of compounds and elements, and the changes that occur in these substances. Students investigate, through first-hand experiences in the laboratory and through instructor demonstration and discussion, key relationships between matter and energy. Topics studied include atomic theory, conservation laws, kinetic theory, periodicity, enthalpy, solutions, acid/base theory, Redox reactions, molecular architecture, rates of reactions, and organic chemistry. The course moves at a faster pace than the General Chemistry course and uses more involved quantitative methods and math skills. Writing formal laboratory reports requires the student to articulate relationships between experimentation and theory. The text used for this course is *Basic Chemistry, 2nd Edition* (Timberlake & Timberlake). The laboratory experiments, which are the backbone of the course, are selected from various sources, and are often conducted using computers and peripheral sensors.

AP Chemistry

Full year course, 11/3 credit

This college level course is a rigorous preparation for the AP exam. The students meet for a double period each day and spend extensive time in the laboratory investigating chemical concepts first-hand. Students study atomic theory, stoichiometry of compounds and reactions, gases, liquids, solids, solutions, periodicity, bonding, kinetics, equilibrium, thermochemistry, electrochemistry, and an introduction to organic chemistry. The text used is *Chemistry* (Raymond Chang). The laboratory component consists of the recommended College Board experiments, supplemented by exercises and activities which introduce basic lab skills. Data analysis using computer methods is emphasized. The prerequisite for AP Chemistry is a strong performance in an advanced math class, and recommendations from math and science instructors are required. After the AP exam in May, sophomores and juniors prepare for the SAT Subject Test by studying nuclear and organic chemistry in depth.

General Physics

The General Physics begins with the mechanics of motion, progresses with Newton's Laws and proceeds to the conservation laws for energy and momentum. After a thorough introduction to Newtonian mechanics, students experience a wide variety of topics involving waves and periodic phenomena. We explore the different ways of creating and using electricity along with energy conservation. We explore optics and modern physics too.

Students should be able to solve simple algebraic equations, and a prior introduction to the basic trigonometric functions is assumed. However, support and reinforcement for these prior skills is built into the class. In some cases we will use graphical and more visual methods in place of abstract algebraic solutions. Since not all students access the curriculum in precisely the same way, instruction includes a variety of approaches.

Honors Physics

Honors Physics is a rigorous course at the high school level which presumes knowledge of algebra and basic trigonometry. Most Harley students are co-enrolled in Functions, Statistics and Trigonometry (FST). Students who have not already completed Algebra 2 will first encounter quadratic equations and the quadratic formula in physics, and hence they must be prepared for a little remedial work. Students will utilize spreadsheet computations, graphing and data fitting to a significant extent, especially in conjunction with laboratory work. Throughout the course students pursue a theoretical and mathematical understanding of natural phenomena alongside a hands-on and visual experience of the same. Solutions to the equations of motion are tested by launching projectiles through hoops and landing them in small cups. Force laws are determined by taking measurements and fitting data, and those results are used to make testable predictions.

Honors Physics begins with the mechanics of motion, progresses with Newton's Laws and proceeds to the conservation laws for energy and momentum. After a thorough introduction to Newtonian mechanics, students experience a wide variety of topics involving waves and periodic phenomena. We explore the different ways of creating and using electricity along with energy conservation. We explore optics and modern physics too.

AP Physics 1

Full year course, 11/3 credit

The AP Physics 1 course is a rigorous introduction to collegiate-level science. This is a non-calculus course which thoroughly challenges students' understanding of algebra, geometry and trigonometry with special techniques introduced to address the close relationship of physics to calculus. It is expected that students are currently enrolled in Pre-Calculus.

In AP Physics 1 labs, students must create most of their own procedures, decide on measurements to make, and justify their analyses with a detailed discussion of errors. An essential

component of this course is to make, critique, and refine arguments. In support of this objective the laboratory reports are completed in a pseudo-journal format, submitted for peer review, and modified prior to submission for a final grade. Dramatic gains in the writing process along with practical word-processing and spreadsheet skills will yield results well beyond the scope of this course.

Subjects include an introduction to Newtonian Physics including linear, circular and rotational motion of point and extended bodies. Students progress to a rigorous description of motion to dynamics and conservation laws. Gravitation and planetary motion are explored. Simple harmonic motion is thoroughly studied along with some aspects of wave motion. After a discussion of electric charge, Coulomb's Law and direct-current circuits, students are ready for the AP Physics 1 exam.

With class objectives completed in early May, students then pursue a broader array of topics including electromagnetism, optics and modern physics at a more rapid pace. Students are required to engage in real-world physics beyond the course curriculum. Students interested in taking the SAT Subject Test in Physics are well-poised to do so.

Environmental Science

The course gives students an understanding of the structure and behavior of ecosystems, how human activities impact these systems at various levels, and how society is developing sustainable solutions to address these problems. The first half of the course focuses on Earth's systems which provide a foundation for in-depth studies of human population growth, air and water pollution, climate change, energy use, resource depletion, and species and habitat conservation.

The course places special emphasis on laboratory work, field studies, and projects—including monitoring of water quality in Allens Creek. Students develop and practice laboratory and field techniques to analyze soil, water, stream ecology, population dynamics, and primary productivity. Students also learn about the impacts of legal, economic and political systems on environmental issues, and analyze the environmental impacts from a local development project of their choosing. The final course unit focuses on sustainability and emerging green technologies, with exploration of the green features of the Commons and how society will address global environmental issues.

AP Environmental Science

Full year course, 11/3 credit

AP Environmental Science is the equivalent of a college level one-semester introductory environmental science class. The course is designed to provide students with scientific principles, methodologies, and concepts to understand the interrelationships of the natural world, to identify and analyze environmental problems, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or mitigating them.

As an interdisciplinary field, environmental science deals with a variety of topics from different fields of scientific study. The subjects include: earth systems and resources, ecology, population dynamics, pollution and toxicology, energy resources and consumption, global change, and sustainability. Students also learn about the impacts of legal, economic and political systems on environmental issues, and analyze the environmental impacts from a local development project. The final unit of the course focuses on sustainability and emerging green technologies, and how our society will address global environmental issues.

Laboratory and field investigations are a key component of this course, with a number of field trips throughout the year. Material is introduced in a lecture format, with labs, fieldwork and hands-on activities emphasized as the method to convey scientific concepts. All students enrolled in the course are required to take the AP exam in May.

Mathematics

The sequence of courses follows a logical progression from elementary courses in algebra and geometry to more advanced courses in the analysis of functions, statistics, trigonometry, discrete mathematics, and precalculus. Throughout these courses, conceptual understanding and computational skills are stressed. Students solve both routine and challenging problems, improve their accuracy and precision, and continue to strengthen their mathematical foundations. Underlying structures are emphasized and students learn to recognize patterns so that they may use familiar concepts in new ways.

Students are exposed to an increasingly wide scope of material, including significant amounts of statistics and discrete mathematics, and they relate this material to the outside world through a variety of applications. In addition, students become familiar with, though not dependent upon, the use of graphing calculators to explore concepts, support their thinking, or find solutions. From the Functions, Statistics, Trigonometry (FST) course on, students must have a Texas Instruments TI-Nspire graphing calculator. Mastery is achieved through a wide range of materials emphasizing problem solving, reading of mathematics texts, and constant reinforcement of understanding by ongoing review. These are all goals consistent

with the National Council of Teachers of Mathematics standards for teaching mathematics in the twenty-first century.

Accelerated mathematics courses are available for students who have demonstrated a solid grasp of fundamentals and a facility with new material.

To graduate, students are required to take three years of mathematics classes in the Upper School sequence. The sequence of courses is as follows:

Core Sequence	Electives
<p style="text-align: center;">Algebra 1 Geometry Algebra 2 Functions, Statistics and Trigonometry Pre-Calculus AP Calculus AB AP Calculus BC+</p>	<p style="text-align: center;">Introduction to Computer Science Topics in Applied Mathematics AP Statistics AP Computer Science</p>

Departmental policy regarding students who do not earn a “C” or higher for the year

In the mathematics sequence, one’s ability to succeed in a given course is affected greatly by whether or not the material in the previous course was mastered. Hence, students must earn a “C” or better in order to move up to the next level in the sequence. There are three options for students who do not earn a “C”:

1. Repeat the course the next year. This option is preferred because it gives students maximum time and opportunity to master the subject to ensure the best possible chance for success in future mathematics courses.
2. Take a class over the summer at a high school or college, and then take a new final exam at Harley before the start of the following academic year. If students choose this option, they must score a final exam mark of B- or higher.
3. Arrange and document 40 hours of paid tutoring in the course, then take a new final exam at Harley (the same minimum grade applies as in the second option above.)

If students choose one of the last two options, they must contact the Mathematics Department at the beginning of the summer to ensure that the work planned is an acceptable substitute for repeating the course the following year at Harley.

Policy on acceleration (“skipping”) in courses in the Mathematics sequence

The Mathematics Department discourages students from accelerating by completing course-work independently to “skip” a course in the mathematics sequence. Such action can lead to gaps in students’ understanding or shakiness in mastery of the material, flaws that are rarely, if ever, remedied later. At the same time, we recognize that in cases of exceptional ability, students might be able to accelerate their progress and master the material usually covered in a year-long class independently. To do this students must:

- be recommended by their current mathematics teacher and the approval of the head of the Mathematics Department
- have earned full-year and final exam grades of “A” or “A-” in the honors section of the course that immediately precedes the one to be covered in accelerated fashion
- take a class at a high school or college that covers the full material of the course that the student intends to omit; or arrange and document a minimum of 40 hours of paid tutoring in the subject. In either case, the student should consult with the Mathematics Department before undertaking such a program, to ensure that the work planned is an acceptable substitute for the course at Harley.
- take an examination administered by Harley before the start of the following academic year. The student must score at least a “B+” on the honors examination to be able to omit this course from the sequence
- enroll in the honors section of the next course in the sequence

Algebra 1

This course is the foundation for Upper School mathematics courses. It is the bridge from the concrete to the abstract study of mathematics. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. The text is *Algebra 1* (Smith, Charles, et al.).

Geometry

This geometry course balances theory and application while challenging students to write original proofs and solve non-routine problems. Students study formal and indirect proofs, logic, plane and solid geometry, constructions, transformations, and introductory trigonometry. The text is *Geometry* (Jurgensen, Brown, and Jurgensen).

Algebra 2

This course stresses concepts and applications of algebra—from straight lines and simple polynomial equations to exponents, logarithms, complex numbers, conic sections, matrices, and elementary trigonometry. Basic algebra skills are reviewed and new skills and concepts are reinforced regularly throughout the year. The text is *Algebra 2* (Smith, Charles, et al.).

Functions, Statistics, and Trigonometry

Students study descriptive and inferential statistics, combinatorics, probability, and continue work with exponential, logarithmic, and trigonometric functions. Algebraic and statistical concepts are integrated throughout, with particular attention paid to transformations of functions, graphs and statistical data. The text is *Functions, Statistics, and Trigonometry* (Rubenstein, et al.).

Precalculus

Precalculus topics include a review of algebra followed by a study of the advanced properties of linear, polynomial, exponential, logarithmic, and trigonometric functions, parametric equations, conics, polar equations, and discrete algebra. The course ends with an introduction to differential and integral calculus. The text includes a rich array of interesting applications. Students are required to solve problems algebraically, numerically, graphically, and verbally. The text is *Precalculus with Limits* (Larson and Hostetler).

AP Calculus AB

Students briefly recapitulate the major topics in precalculus with the analysis of functions at an advanced level. They follow this with a study of differential and integral calculus of functions of a single variable, and its application to a variety of areas. Students who enroll in this course are expected to take the AP Calculus AB exam. The text is *Calculus: A Complete Course* (Finney, Demana, Waits, and Kennedy).

AP Calculus BC and Beyond

Students review the major topics covered in AP Calculus AB, with exploration of additional topics such as: the calculus of parametric, polar, and vector-valued functions; infinite series, including Taylor and Maclaurin series; and elementary differential equations. Multivariable calculus is also introduced if time permits. Students who enroll in this course are expected to take the AP Calculus BC exam. The text is *Calculus: A Complete Course* (Finney, Demana, Waits, and Kennedy).

Introduction to Computer Science

One trimester course, 1/3 credit

This elective introduces objects and classes using Java. Classes are hands-on, with most class time spent programming. BlueJ is the interactive development environment (IDE) used. This course is recommended for students planning to take AP Computer Science, and is offered every second year, alternatively with AP Computer Science. The text is *Objects First with Java, 3rd edition*, by Barnes and Kolling.

AP Computer Science

Alternates yearly with AP Statistics

This is a full-year elective course for juniors and seniors that provides a comprehensive introduction to three important areas in computing: programming methodology, algorithms, and data structures. Students strengthen their understanding of these concepts by writing programs in JAVA. Permission of the instructor is required to enroll in this course. The text is *Java Software Solutions for AP Computer Science* (Lewis, Loftus, and Cocking).

AP Statistics

Alternates yearly with AP Computer Science

Statistics is concerned with the collection and analysis of data to study patterns and variations. In this course, students explore a variety of techniques for collecting and interpreting data, drawing on a variety of ‘real-world’ examples and information from student projects. Working on case studies individually and in groups, students learn various techniques to develop models for, draw conclusions about, and make predictions from data. The course is designed to prepare students for the AP Statistics examination, and it is expected that all students take that exam. Students may enroll in the course in junior or senior year, though it does not count toward fulfilling the three-year sequence of courses required for graduation. The text is *The Practice of Statistics* (Yates, Moore, and Starnes).

Discrete Mathematics

This senior course provides a broad review of mathematical skills and operations while introducing students to the variety of mathematical applications to specific problems or situations. Topics are drawn from different areas of discrete mathematics, including voting and Arrow’s theorem, apportionment, personal finance, game theory, and management science. Time permitting, the course also addresses the mathematics of technology, elementary economics and statistics, and growth, symmetry, and patterns in nature. The text is COMAP, *For All Practical Purposes*.

Social Sciences

Introduction to Anthropology

Open to students in grades 10-12

This course provides a broad overview of the field of Anthropology—the holistic study of the human species—with a primary focus on cultural anthropology. The course first examines the breadth and depth of anthropological studies as represented in the cultural, linguistic, biological, evolutionary, and archeological sub-disciplines of the field. After considering the

concept of culture, the nature of observable “truth”, and the research method of fieldwork, the class uses readings, films, and videos to examine topics such as language, subsistence, economics, political anthropology, family and marriage, gender and sexuality, religion, globalization, race and ethnicity, health and medicine, performance, media anthropology, and environmental anthropology. Specific topics to be studied are based on student interest, and the course concludes with student research on a topic of their choice and a presentation of their findings.

Psychology

This course has two main objectives: to introduce the systematic, scientific study of the behavior and mental processes of humans and other animals, and to sharpen students’ skills in critical and creative thinking through daily discussion and debate. Students learn about the methods psychologists use as well as the facts, principles, and phenomena associated with the following topics: the history and science of psychology, consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology.

AP Macroeconomics

Half-year course, 1/2 credit

From the College Board: “AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.”

AP Microeconomics

Half-year course, 1/2 credit

From the College Board: “AP Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students’ familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.”

The Commons

Opened in the winter of 2013-14, The Commons was deliberately designed to support educational commitments that Harley holds dear, such as civic engagement, service learning, project-based and hands-on learning, mindfulness and empathy education, citizen science, democratic engagement, and student stewardship. The Commons offers Upper School students opportunities beyond the traditional classroom, whether in the workshop, maker space, teaching kitchen, greenhouse or meditative spaces.

Hospice

The Harley Hospice elective for seniors is a unique opportunity for students to engage in a direct and authentic way with questions of death and dying. While learning the basics of direct physical care in order to volunteer at hospice/comfort care homes, students also address the many emotional, psychological and spiritual aspects of death and grief. They share stories of loss, journal their reflections, and write pieces contemplating their own lives and deaths. Texts include *Lighting the Path* by Deb Sigrist and *Blessing Our Goodbyes* by Kathie Quinlan. Both authors are local hospice nurses, whom we are fortunate to have as guest presenters in class. Other class readings include Maggie Callanan's *Final Journeys*, Leo Tolstoy's *The Death of Ivan Ilych*, Mitch Albom's *Tuesdays with Morrie*, and Philip Simmons' *Learning to Fall*. Multiple poems are utilized, as is Bill Moyers' film series *On Our Own Terms*.

Students undergo extensive training to care holistically for the dying and their families. Students perform bedside care that helps keep the dying as physically comfortable as possible, while also providing emotional support and a compassionate bedside presence. There are a dozen two-bed hospice/comfort care homes in the area, and students are paired with a facility close to their own home. Once the initial training process and a four-hour "shadowing" volunteer shift are completed, Harley students are expected to schedule their own weekly shifts at their respective houses. The greatest value in this course is the development of meaningful relationships between students and the dying. *Note: Students planning to take this course should consider that it requires time and personal transportation to volunteer in the community.*

Introduction to Mindfulness

The Introduction to Mindfulness course introduces students to some of the basic philosophies and practices related to mindfulness. The course focuses heavily on practice, reflection, and learning to be fully present, aware of one's environment and actions, and not overly reactive to external stimuli.

Food & Farm 101

Food and Farm 101 provides students with experiential learning opportunities in Harley's growing spaces and the Commons Makerspace. The defining activities of this project-based course vary with each season, but focus on the basic operations of our growing spaces, including the greenhouse, microfarm, hightunnel, and rooftop garden. Students also have the opportunity to explore design concepts related to small-scale food production and education. This course will also include cooking basics with a farm-to-table theme, utilizing the Commons Teaching Kitchen.

Food & Farm 201

Building on lessons from its prerequisite course, Food and Farm 101, this course dives deeper into topics including soil science and plant chemistry, plant usages and production maximization, recipe development, and issues of food access and food justice. Students have the opportunity to develop their own projects designed around further engagement with the growing spaces and kitchen. Connecting the Food and Farm program with the broader Harley and greater Rochester communities is also a component of the course.

Sustainable Food Systems

What does sustainability mean in the context of our food system? Students in this course will develop an understanding of the framework of community food systems at the local level as well as the global climate of industrial agriculture. Students begin to think conceptually and practically about real-world food issues, discrepancies, and solutions, and explore the abilities of the individual and community to enact broader change in society within the context of food.

Design & Innovation 101

Design and Innovation Lab is an entry-level engineering and innovation class that exposes students to the basic elements of the design process (Empathize, Define, Ideate, Prototype, Test) and supports students through a series of increasingly difficult design challenges. Through this hands-on, shop-based class, students work with core engineering and design concepts, and collaborate to solve various problems. Materials and the related tools the students will utilize include cardboard, wood, metal, electronics, digital logic and programming, biology and plants, and more. Additionally, students learn the basic knowledge, skills and attitudes needed to operate a baseline set of tools in the shop safely and effectively.

Design & Innovation 201

Design and Innovation 201 is a deep-dive version of its prerequisite class, Design and Innovation 101. In this class students may work the entire semester on one design challenge. Students are asked to empathize, develop, design, and build a project that addresses an issue in our world.

Design & Engineering

Formerly Robotics Lab. A year-long course focusing on robotics, computer-aided design (CAD), and engineering. Student explore multiple challenges to real-world and fun applications for their learned skills. All students are encouraged to join the Robotics Club for extra-curricular activities and competitions.

Sustainable Systems Thinking

Sustainable Systems Thinking explores sustainability through traditional academic work, project-based learning, and expeditions into the broader community. The course begins with learning the history of sustainability and developing a class framework for sustainability that serves as a lens for examining course content. Students use the Commons as a hands-on lab to explore topics, and field trips to learn from sustainable development models in the community. Instruction includes reading and discussion, collecting and analyzing data, studying historical and current events, and reflection in multiple forms. Major sustainability topics include farming and food, solar and renewable energy, water, and the impacts of climate change.

Rights & Responsibilities

Rights and Responsibilities is a trimester-long, freshman seminar that engages students in discussions and activities that explore our individual and collective rights and responsibilities within the various communities to which we belong. Students use issues facing the Harley community, the Rochester community and the broader national and global communities as discussion points and examples, and explore our thoughts and opinions regarding rights and responsibilities, individual and collective success, and social and environmental justice.

This course has been developed as a way to meet some of the goals articulated in “Characteristics of a Harley Graduate” (p. 2)—civic engagement, familiarity with the democratic process, the ability to dissent respectfully, a respectful steward of community and environment, etc. Class meets in The Commons and is significantly influenced by The Commons’ focus on social and environmental sustainability.

The course includes guest lectures from local political figures and activists; shared teaching time among a range of Harley faculty; leadership opportunities within the Harley community, including the facilitation of Town Hall Meetings and necessary community work; and independent student work, including a culminating “Advocacy Project” designed and implemented by each student with faculty and community support.

Sustainable Community Engagement

Open to Grades 10-12

In this course students foster educational partnerships with locally based community non-profit organizations. This hands-on engagement is coupled with an in-class introduction to basic elements of sociological research methods, with specific attention to power and access through the lenses of race, gender, and socio-economics. The pedagogical aim is to empower students with the tools to create mutual, enduring, and transformative social partnerships.

Note: Students planning to take this course should consider that it requires time and personal transportation to volunteer in the community.

Visual Art

All art courses are one trimester (1/3 credit), with the exception of the Portfolio Preparation and AP courses, which are full-year courses (1 1/3 credits).

Art 9

Art 9 is a required one-trimester course which helps set a foundation for art courses to follow. These basic art experiences provide lessons and techniques in drawing, painting, and three-dimensional media, including wood and clay. The primary goal is for students to engage in projects with which they connect personally so that the artwork they make is both attractive and meaningful. Within this context, students are taught basic design principles including form, value, color and composition.

Art 10 Requirement

In Grade 10, students are required to take at least a single one-trimester visual art course of their choosing.

Drawing & Painting

This course is designed to provide the basics in drawing, watercolor and acrylic. The drawing curriculum begins with foundational skills: blind contour drawing (strengthening line quality and eye-hand coordination), negative space drawing (using shapes of spaces between objects to draw the objects), and crosshatching (building up the darks to make objects look three-dimensional). A variety of media are used, including charcoal, ink, marker, pencil. Students

are encouraged to draw from direct observation rather than photographs. Students then work on assigned problems related primarily to paint mixing and blending in order to create three-dimensional form. Students are introduced to the work of a number of modern and contemporary artists as inspiration for both realist and abstract work. Assignments throughout the course challenge students to experiment with color, texture and composition while developing personal expression and style.

Art Portfolio Preparation

This full-year course, taken in the sophomore or junior year, is the first in the AP Art sequence and meets daily for two periods. Serious art students begin intensive work to build their art portfolios. Over three trimesters, students build skills in design, color theory, and composition, using drawing and painting media. Problem-solving and personal expression are major themes throughout the year.

AP Studio Art—Drawing

This full-year course is the final year of the AP Art sequence and meets daily for two periods. The course follows the guidelines of the College Board AP recommendations for AP Drawing and AP Two-Dimensional Design. During the fall trimester, students prepare the “Breadth” section of their portfolio, in which they need to demonstrate knowledge of design principles, along with skill in a range of media, while expressing their own personal vision or voice. Beginning in the second trimester, they begin to develop a concentration of their own choosing. During AP exam time in early May, students assemble their portfolios, which are sent to be evaluated by a team of college and art school professors. Each portfolio consists of five original works that illustrate quality, twelve digital images that illustrate breadth of media and technique, and twelve images of work in the student’s area of concentration.

AP Studio Art 3D

This full-year course meets daily for two periods and follows the guidelines of the College Board AP recommendations for AP Three-Dimensional Design. “The 3-D Design portfolio involves decision-making about how to use the elements and principles of art as they relate to the integration of depth, space, volume, and surface, either actual or virtual. Students’ portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions.” During the fall trimester, students prepare the “Breadth” section of their portfolio, in which they need to demonstrate knowledge of design principles, along with skill in a range of media, while expressing their own personal vision or voice. Beginning in the second trimester, they develop a concentration of their own choosing. During AP exam time in early May, students upload their portfolios to the College Board site, consisting of multiple views of a minimum of 16 pieces. They are then evaluated by a team of college and art school professors.

AP Studio Art 2D

This course follows the guidelines of the College Board AP recommendations for AP 2D Design. The course works mainly with photography as this has been the most requested medium. AP Studio Art 2D is a year-long course with students working on at least one assignment every week. The course builds off of the Digital Photography class and instead of working on the basics, students begin exploring more advanced photography skills. Students work with digital and film cameras, creating large negatives to use in antiquated processes. Students also learn more advanced tools in Adobe Photoshop and spend time on more Photoshop-intensive projects. Throughout the year, students work on the “Breadth” section of their portfolios, consisting of 12 photos that show a wide range of work as well as a solid understanding of the elements and principles of art and design. Beginning in the winter trimester, students start their “Concentration” sections. This is a focus that students choose after submitting a proposal to the instructor. The students create new photos each week for critique, resulting in a cohesive body of work represented by 12 final photographs. Students also submit a “Quality” section consisting of five prints of their photographs.

AP Art History

From the College Board: “The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history.”

Computer Graphics

Computer Graphics acts as an introduction to the world of digital art. Students learn how to use Adobe Photoshop, InDesign, and Illustrator to create various assignments throughout the trimester. Students learn the elements and principles of art and design and use them throughout each project. Projects include book covers, posters, advertisements, logos, and vector images using a photograph as reference. Students participate in class critiques at the end of each project to discuss process and explore opportunities for improvement.

Digital Media

Digital Media serves as an introductory course to digital image making. Students learn using personal digital devices, scanners, and DSLRs for image capture as well as the basics of Adobe Photoshop. Students begin the trimester learning the basics of composition using scanners and Photoshop. Projects are initiated with instructor-provided examples, which aim to

provide students with a variety of approaches. Projects continue to build on students' technical skills, with a strong emphasis on idea development and articulation. Each project culminates in a class discussion. These discussions are opportunities for artists to develop their work and the peer group to build its visual vocabulary. Projects for this class include scannography, portraits, narrative, constructed spaces, and a self-directed final project.

Multimedia Journalism

Formerly Yearbook

Multimedia Journalism is a year-long course that allows students the opportunity to create and disseminate media using state of the art equipment and contemporary web design while investigating the constructs of a story. Students work on many facets of journalism including video, photography, writing, and web promotion. They utilize the many incredible stories, events, and developments in the Harley community as their source material as they create an online, archival document of the year.

Marketing and Graphic Design

Marketing and Graphic Design is an introductory examination of the consumer experience and the methods and practices companies use to compete for our attention. The course looks at how cultural values, design standards, and types of media are used to appeal to demographics. Along with this conceptual study, students use software and multiple forms of media to create and advocate for their products. Throughout the course students work with Adobe Photoshop, Illustrator, and Premiere, and consider the powerful potential of the media-creating hub in their pockets—the phone. Students learn principles of art and design, packaging, and audience-based perspective. Projects include raising awareness for events, marketing products, analysis of corporate appeal, social media campaigns, and viral videos. Students debrief after class projects to further understand their successes and opportunities to improve.

Ceramics

Students learn to work with clay using a variety of techniques of hand-forming and wheel-throwing for both functional objects and sculpture. Experimentation with texture and other techniques of surface decoration are encouraged. The emphasis is on both craftsmanship and development of one's own ideas. Students examine form, function, and aesthetics of clay works in individual and class critiques.

Glassworking I

Glassworking I is an introduction to flameworking. Students learn to manipulate glass using a gas/oxygen torch. This survey begins with discussions about safety and equipment in the glass studio. In the beginning weeks of the course the focus is on creating beads, then moves to a variety of projects including marble-making and sculpture.

Glassworking II

In Glassworking II students work with the instructor individually, focusing on a few areas of frameworking that they are interested in. Advanced techniques in shaping, encasing, and bit work are demonstrated. Self-driven experimentation and investigation is how most of the class time is spent. This more intense study of glass processes is an excellent way to develop advanced skills.

Advanced Glass

Advanced glass focuses on glass-blowing. The advanced techniques of torch control, heating, turning, and inflating the glass are all demonstrated. Self-driven experimentation and investigation is how most of the class time is spent. This process is difficult and takes tremendous coordination and focus.

Kiln Glass

Students learn how to kiln-cast using the “lost wax process.” Lost wax kiln casting is a multipurpose method for making glass pieces in almost any shape desired. The process involves creating a refractory mold around a wax model. The wax is then removed or “lost” which creates a cavity. The molds are placed into a kiln and brought up to a temperature of 1525 degrees Fahrenheit. Glass is then casted into the cavity resulting in a finished glass piece.

Sculpture

Students address a number of three-dimensional problems, solving them using a variety of media: wood, paper, clay, fiber, plaster and concrete. Emphasis is on problem-solving, self-expression, and development of an understanding of the principles of three-dimensional design.

Jewelry-Making / Metals

Jewelry-Making is an introductory metals course. Students learn basic techniques in sawing, filing, sanding, creating texture, and soldering. Students make pieces such as pendants, cuff bracelets, chain bracelets or necklaces, found object jewelry, and rings. Students work in copper and brass, and occasionally scrap sterling silver. There is a focus on design, and students regularly have sketch critiques before building new work.

Music

All Music Department courses are one trimester (1/3 credit) unless otherwise noted. All Grade 9 students are required to participate in one of the school's core ensembles: Choir, Wind Ensemble, or Strings Orchestra. Trimester electives are scheduled on a year-to-year basis, based on student interest; some of these electives may not be offered every year.

String Orchestra

Full year course, 1/2 credit

This ensemble is for the experienced string player. This performance-based class is mainly open to classical string instruments. This class covers different styles of music, focusing on both small ensemble and solo performance. Students must practice outside of class. All positions are subject to the instructor's approval. Students in this course receive a letter grade and academic credit.

Wind Ensemble

Full year course, 1/2 credit

Wind Ensemble meets on alternate days and is open to all woodwind, brass and percussion instruments. Students of this course receive a letter grade and academic credit. Students perform a variety of repertoire arranged for the contemporary concert band or wind ensemble. Rehearsals focus on ensemble skills including advanced technique, tone, intonation, balance and blend. Students are expected to have at least three years of experience on their instrument, or perform at the equivalent level. Chamber music opportunities are also available to interested students as part of this course. This course is available for Honors credit with additional outside requirements.

Choir

Full year course, 1/2 credit

Choir is open to students in Grades 9 through 12. The choir rehearses on alternate days, studying and performing a diverse repertoire of choral music for mixed voices, including classical, contemporary, pop, folk, and jazz. Rehearsals emphasize proper vocal technique, sight-reading, ensemble blend and basic music theory. Students receive a letter grade and academic credit.

Treble Choir

Full year course, 1/2 credit

Treble Choir is open to students in grades nine through twelve who sing in a standard treble range. In this ensemble, student study and perform a diverse repertoire written and/or arranged specifically for treble voices, mostly concentrating on SSA pieces (Soprano I/Soprano II/Alto). Repertoire includes "classical," contemporary, pop, folk, and jazz. Rehearsals

emphasize proper vocal technique, sight reading, ensemble blend, and basic music theory/literacy. Students receive a letter grade and academic credit. The class meets three day per eight-day cycle.

Jazz Band

Full year course, 1/2 credit

This class is open to Grades 9 through 12. Students study and perform music from the standard jazz repertoire, the *Great American Songbook* (Hal Leonard, 2007), jazz fusion/rock music, as well as original music written for the band. Jazz theory is studied, plus various improvisational techniques. The Jazz Band usually consists of 10-15 members.

2:20 Band

Full year course, 1/2 credit

Open to Grades 9 through 12, the 2:20 Band is a small “combo”-sized group of 4-7 members. Students study and perform music from the *Great American Songbook* (Hal Leonard, 2007), jazz fusion/rock tunes, as well as original music. Jazz theory is studied, plus various improvisation techniques.

Trimester Music Electives

Introduction to Music Theory

Open to students in Grades 9 through 12, this course is designed to promote better understanding of music through the study of its basic building blocks. Topics include keys, scales, intervals, triads, seventh chords, rhythm, voice leading (three- and four-part chord writing), and musical analysis.

Introduction to Italian Opera

Beginning with a brief discussion of the early history of opera, students study the development of this genre as both a musical and social phenomenon. Operas covered in this course include *Giulio Cesare*, *Le Nozze di Figaro*, *Lucia di Lammermoor*, *Rigoletto*, *Otello*, and *Tosca*. The Italian Opera and Non-Italian Opera courses are non-consecutive, stand-alone courses; each is an independent but complementary course covering different sets of composers, periods, and sub-genres.

Introduction to Non-Italian Opera

Beginning with a brief discussion of the early history of opera, students study the development of this genre as both a musical and social phenomenon. Operas covered in this

course include *Cadmus et Hermione*, *Die Zauberflöte*, *Carmen*, *Das Rheingold*, *Eugene Onegin*, and *Salome*. The Italian Opera and Non-Italian Opera courses are designed to be non-consecutive, stand-alone courses; each is an independent but complementary course covering different sets of composers, periods, and sub-genres.

Introduction to American Musical Theater

Beginning with the success of Gilbert and Sullivan's *H.M.S. Pinafore* and a discussion of early vaudeville, this class examines the rise of musical theater as an American art form, as well as the artists who created it. Students study the development of American musical theater in its historical context. Musicals covered in this course include *Show Boat*, *Oklahoma!*, *Kiss Me Kate*, *Joseph and the Amazing Technicolor Dreamcoat*, and *Sweeney Todd*.

Introduction to Baroque and Classical Music

This course is a survey of Western music from the Baroque and Classical periods. The format is mainly lecture/discussion, supplemented by guided in-class listening to examples of the works of important composers of each period. Using the first volume of the *Norton Anthology of Western Music*, students study compositional styles, forms, and orchestrations of some of the great masters of composition in the Western tradition from 1600-1800. Although the basics of score-reading are reviewed at the beginning of the course, the ability to read music is recommended.

Romantic and Contemporary Music

This course is a survey of Western music from the Romantic and Contemporary periods. The format is mainly lecture/discussion, supplemented by guided in-class listening to examples of the works important composers of each period. Using the second volume of the *Norton Anthology of Western Music*, students study compositional styles, forms, and orchestrations of some of the great masters of composition in the Western tradition from the last 200 years. Although the basics of score reading are reviewed at the beginning of the course, the ability to read music and follow a musical score is recommended.

The Theremin: Origins of Electronic Music

The theremin is one the one earliest electronic instruments, and is played without actually being touched. In this course, students build a theremin from a kit, learn how it works, and experiment with playing it. Class discussions include the theremin's history and influence on early electronic music, as well as the other electronic instruments like the synthesizer and the telharmonium. Due to the nature of the course, class size is limited.

Guitar

This class provides instruction on basic guitar technique. Techniques used in classical as well as popular styles are examined. Students learn how to play single note melodies, chords, and the basics of blues improvisation. Music in standard notation as well as tablature notation will be studied. Beginners as well as intermediate players looking to further their skills are welcome to join. It is recommended that students have access to a guitar at home for regular practice.

Jazz History

This course provides an overview of the history of jazz, with emphasis on the recordings of the 1950s and 1960s, as well as the recordings of more recent years. The contributions of major soloists, bands, band leaders, and composers are addressed. The course utilizes audio and video clips, lecture, research projects, and an experiential component.

Audio Recording

This course covers music notation technology (Sibelius, Finale) and music recording technology (Garageband). Students work on a variety of projects that suit their needs and interests. NO vocal or instrumental ability necessary. Options for projects include songwriting, beat-making, audition music recording, and large ensemble recording (such as Harley concerts).

A Cappella Arranging

This course provides students with the basic tools of “collegiate-style” a cappella arranging. Students learn about song selection, form, transcription, voicing, and adaptation. Each student is expected to finish at least one full-length arrangement. Some understanding of basic music theory is recommended, but not required.

Drama

All drama courses are one trimester (1/3 credit)

Acting I / Scene Study

In this class, students learn the vocabulary and basic physical building blocks of working in theatre. Students work on a scene and two contrasting monologues, as well as read a play together. They have the opportunity to act in scenes from contemporary and classical dramatic literature. Using the twelve guideposts from *Audition* (Michael Shurtleff), emphasis is on physicality and diction. Central to this course is the exploration of relationships between characters and how they are communicated. Scene work includes in-depth character analyses, identifying objectives, obstacles, beats or units of action within their scenes, as well as preparing their scene to be shown in a staged performance. A student may take this class several times and the learning will be structured to deepen each time.

Children’s Theater

Students learn to utilize skills involved with creative dramatics and storytelling. Developing vocal range and physical presence for characters is emphasized. The class looks at storytelling and how to enhance the process through the use of props and costumes. Some improvisational skills are included in the “morphing” of fairy tales. The class performs for Lower School students.

Improvisation

Improvisational exercises have always served as building blocks for the work of an actor. These tools include listening, following creative impulses, collaboration and point of focus. The concept of “Yes, and…” is the fundamental notion, a concept that requires the actor to relinquish control but practice responsibility. The structure of the game is central. This class is an experiential learning environment where students learn by doing...and they laugh a lot. A student may take this class several times and the learning will be structured to deepen each time.

Directing

Students choose a piece of dramatic literature and breathe life into it. They go through all the steps—analyzing text, creating a vision, blocking, casting, working with actors, making changes, adding production values, and performance. While theatre is a collaborative art, the director is responsible for a unified vision. This requires a full understanding of the text and leadership abilities. Each student directs and is a cast member for other student directors.

Shakespeare

Students practice monologues and scene work, trying to discover through text analysis and physical movement the layers of truth involved in this great writing. Students are encouraged to compete in the annual Shakespeare competition held at Harley each winter. The winner of the competition goes on to a regional competition. We learn about iambic pentameter, theories of organic language and a technique called “dropping in.” The class often performs at an Upper School School assembly.

Mastering Monologues

Students choose, explore, rehearse and perform five monologues. The culminating project is a performance of all five for an audience.

Drama Productions

For students who hope to balance both a major performing arts commitment and interscholastic (HAC) athletic involvement after school, it is important to bear in mind that one must indeed strike a balance between the two. While faculty and coaches support students who seek to do both, it is very difficult to take a lead in both activities simultaneously, while also stay-

ing current with academics. If one is a leader in a performing arts activity, for example, it is reasonable to think one might take a lesser role in one's athletic involvement, and vice versa.

Fall Play

The Fall Play is an eight-week process of auditions, casting, workshops on voice and diction, read-throughs, table work, scene work, blocking, research, rehearsal, lighting, costuming, set-building, and finally, performances...truly, all the aspects and facets of a theatrical production. Students keep journals in which they track their process and write in their character's voice. Recent productions include *As You Like It*, *Triangle Factory Fire Project*, *Magic Fire*, and *The Front Page*. As these selections demonstrate, the Drama department does not shy away from challenging material! Participation in the Fall Production earns 1/3 credit and counts towards the school's graduation requirements in the arts.

Spring Musical

A ten-week process, the Spring Musical takes students through a read/sing-through, musical rehearsals, choreography, scene work, accent work, coordination with an orchestra pit, and several performances. Students also keep a journal, help with costumes, lights and props, and participate in striking the set. Past musicals include *Death Takes a Holiday*, *A New Brain*, *Women on the Verge of a Nervous Breakdown*, and *Tintypes*. Participation in the Spring Musical earns 1/3 credit and counts towards the school's graduation requirements in the arts.

Physical Education & Athletics

Physical Education (PE) is a graduation requirement for all students in Upper School. Students must earn credit during each fall, winter and spring interscholastic sports seasons. Credit can be earned by participating in:

- regular Physical Education classes
- an out-of-school instructional program (an Independent Study PE)
- the Harley Allendale Columbia (HAC) interscholastic athletic program.

Students in Grades 9 and 10 are required to participate on at least one interscholastic athletic team each year. HAC team participation is a graduation requirement.

Physical Education (PE)

Upper School Physical Education classes meet every Monday, Thursday and Friday during the Advisory period. Students enrolled in PE are expected to attend every class meeting. Absences due to conflicts must be approved by the PE staff prior to class. Units of study may include skill development and rule comprehension in the following activities and sports: football, soccer, speedball, golf, basketball, floor hockey, swimming, bowling, softball, track & field, Ultimate Frisbee and tennis.

Physical Education Independent Study

The PE Independent Study program is designed to accommodate students who wish to pursue an athletic activity or sport that Harley or HAC does not offer. Students are automatically enrolled in regular Harley Physical Education classes until they submit a PE Independent Study contract. Independent Study contracts must be submitted for each season in which one plans to engage in an outside activity in lieu of regular Physical Education classes. There is no “carry-over” of a contract from one season to the next.

Students engaged in a PE Independent Study program must participate in the selected activity at least two hours per week and their progress must be monitored by an adult or trained coach. Students must report their physical activities using Schoology at regular intervals set by the PE department as proof of participation. Parent approval is required prior to the acceptance of an independent study contract. A PE Independent Study course requires personal accountability and maturity. Due to the independent nature of the program, a large part of the grade (pass/fail) is based upon his/her accomplishment of the agreed objectives, and his/her communicating this information to the PE department in a timely fashion.

Grade 9 students are permitted to participate in one independent study program during the ninth grade year.

HAC Athletics

The Harley School and Allendale Columbia School have merged to form an athletic team alliance (HAC) that participates in the Finger Lakes League, Section V and the New York State Public High School Athletic Association for events and competition.

The HAC Athletics Department encourages students to participate on athletic teams and adheres to a “no-cut” policy. The interscholastic athletic program provides an opportunity for students to learn and experience those values inherent in team sports. For students who hope to balance both interscholastic (HAC) athletic involvement with a major performing arts commitment after school, it is important to bear in mind that one must indeed strike a balance between the two. While faculty and coaches support students who seek to do both, it is very difficult to take a lead in both activities simultaneously, while also staying current with academics. If one is a leader in a performing arts activity, for example, it is reasonable to think one might take a lesser role in one’s athletic involvement, and vice versa.

Each season, students in Grades 9 through 12 may elect to participate in one of the following activities listed below. HAC athletics for students in Grades 9 and 10 are a curricular activity and students are required to participate on at least one interscholastic athletic team each year to meet graduation requirements:

FALL	WINTER	SPRING
Boys' JV & V Soccer	Boys' JV & V Basketball	Boys' JV & V Baseball
Girls' JV & V Soccer	Girls' JV & V Basketball	Girls' JV & V Softball
Girls' JV & V Volleyball	Boys' V Swimming	Boys' JV & V Tennis
Girls' JV & V Tennis	Girls' V Swimming	Boys' V Track
Boys' V Cross Country	Boys' V Bowling	Girls' V Track
Girls' V Cross Country	Girls' V Bowling	
Co-ed JV & V Golf		

Changing PE Activities Prior to the End of a Trimester

Students choosing to fulfill the Physical Education requirement by participating in the HAC athletic program must immediately resume attending regular Physical Education classes if they are removed from their team's roster for any reason. Attendance at all remaining classes, combined with whatever time such students have invested in the athletic program prior to their removal from their team, will satisfy the Physical Education requirement for that Trimester.

Students choosing to fulfill the Physical Education requirement by participating in Independent Study program must also resume attending regular Physical Education classes if at any point it is determined that they will be unable to complete their chosen program. Such students will be required to attend all remaining regular Physical Education classes and to make up all missed classes, minus any time documented in their PE Independent Study reports.

College Counseling Program

The College Counseling Department’s approach is to match Harley students with their specific academic and extracurricular interests in college settings comfortable and appropriate for each individual. Toward this end, our work with students and families is tailored to meet the needs of each. At the heart of all we do is old-fashioned one-on-one discussion. We aim for students to continue to find “Joy in Learning” after they leave our campus.

Harley’s college counseling staff is a resource available to all Upper School students and families. Our formal introduction to the process begins in the sophomore year, when students take practice standardized tests. In October we administer the PSAT; in spring, tenth-graders take the Pre-ACT. Each spring, moreover, the entire sophomore class visits a nearby liberal arts campus—the sort of college to which many Harley students ultimately apply. Juniors revisit the PSAT in the fall, and in early winter, they are paired with a college counselor to begin

developing an individualized plan for standardized testing and researching specific colleges. The fall of senior year is application season, when twelfth-graders work closely with Harley counselors to finalize their lists of target schools and submit application materials.

Harley’s College Counseling Cycle

GRADE 10	<ul style="list-style-type: none"> • PSAT and Pre-ACT (fall/spring) • Class visit to a local liberal arts college (spring) • College Board Subject Tests (optional)
GRADE 11	<ul style="list-style-type: none"> • Class visits to nearby campuses such as University of Rochester and SUNY Geneseo • Visits with college representatives at Harley (fall) • PSAT/NMSQT (fall) • SAT and/or ACT testing (winter/spring) • Students paired with counselors for individualized planning (winter) • College Board Subject Tests (recommended, spring) • College campus visits (recommended during winter/spring)
GRADE 12	<ul style="list-style-type: none"> • Final standardized testing (fall) • Visits with college representatives at Harley (fall) • Application completion and submission (The Common Application and others) • Individual visits to campuses • Submit applications for financial aid (fall/winter)

Every year at Harley is a lively combination of tradition and improvisation, so any representative list of activities and events is subject to change. New student-led clubs are created each year with approval of Student Council and Upper School faculty.

Following is a catalog of some of the wide-ranging opportunities available to Upper School students.

Upper School Activities & Events

Every year at Harley is a lively combination of tradition and improvisation, so any representative list of activities and events is subject to change. New student-led clubs are created each year with approval of Student Council and Upper School faculty. Following is a catalog of some of the wide-ranging opportunities available to Upper School students.

Clubs and Committees

- Beyond Soup
- Bio Informatics
- Business & Investment Club
- Chess Club
- Diversity Roundtable
- Feminism Club
- Forensics (Speech & Debate)
- Gay Straight Alliance
- Global Youth Leadership Institute
- Grade 9/Primary B Partnership
- Garden Club
- HANDS (Hospice volunteers)
- Harley Health Club
- Shalom Club
- Key Club
- Math Team
- Robotics
- Ski Club
- SpongeBob Club
- Sustainability Committee
- Wolf Pack
- Union for Students of Color
- Young Conservatives Club

Student Government

- Student Council
- Class Representative
- Representative-at-Large

Trips

- Upper School Day Trip

Grade 9

- Orientation Overnight
- Marine Biology Trip, Cape Cod

Grade 10

- Outdoor Education
- College Visit Day

Grade 11

- New York City

Grade 12

- Aerial Adventures at Bristol Mountain

Summer Foreign Language Trips

- France (2011, 2015)
- Costa Rica (2016)
- Switzerland (2017)
- Peru (2018)

Events & Traditions

- Athletic Banquets
- Halloween Parade
- Homecoming Bonfire & Dance
- Holiday Pageant
- Candlelight
- Honors Assembly
- May Day
- Oak Tree Ceremony
- Prom
- S.H.F.T.E.W.

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