The Harley School

UPPER SCHOOL

CURRICULUM GUIDE

2021-22

Upper School Curriculum Guide

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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 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 counts as two courses each, and any combination of three AP courses counts as four courses.

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

- **Capstone Program**
  Seniors who choose to carry out a Capstone project complete a year or half 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 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 is removed from the transcript and prospective colleges are 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 advisors 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, graphic novels, drama, and essays, among other types of literary work.

All students, particularly in Grades 9, 10, and 11, 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. All students are encouraged to revise their work in order to sharpen the clarity, precision, and grace of their self-expression. In class, they practice a number of 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 they 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

Full year, 1 credit

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 grapple with humanistic questions about what it means to develop oneself within particular communities that arise in the selected works of literature. Reading such texts as Woodson's *Brown Girl Dreaming*, Speigelman's *Maus*, Yang's *American Born Chinese*, Shakespeare's *Romeo and Juliet*, Homer's *Odyssey* and McBride's *The Color of Water*, students consider, discuss and analyze how geography, politics, family traditions, race and social class influence one's personality and actions.

Students 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 further enhance their critical thinking and writing skills through working with vocabulary, reviewing grammar in their own writing and participating in regular peer review and self-reflection activities.

Writing 9

One trimester, .33 credit

This required Grade 9 course 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

Full year, 1 credit

This course explores how literature reflects and shapes our conceptions of identity, community and history. Students explore novels, plays, poetry and short stories that challenge reductive definitions of race, gender, nationality and class, while giving 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 Play*s, 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

Full year, 1 credit

In their junior year, students read a selection of works by 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 explore these questions and more through such works as Charles Portis's *True Grit*, Toni Morrison's *Jazz*, Twain's *Pudd'nhead Wilson*, Hemingway's *The Sun Also Rises*, and Fitzgerald's *The Great Gatsby*. Also included are selections from Thoreau's *Walden* and Frederick Douglass's narrative of his life in slavery, as well as poems by Walt Whitman, Emily Dickinson, Edgar Allan Poe, and Langston Hughes. Students supplement 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 ends with some remarkable meditations on the nature of self and existence. Additionally, students continue to develop their language skills and fluency as speakers and 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

English 12 - Full year, 1 credit

AP English Literature - Full year, 1 credit

During senior year, students may take either English 12 or, with approval from the department, AP Literature and Composition. Each trimester features a thematically-focused range of genres taught in a seminar-style setting. 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. Some of the representative works covered include novels such as Kate Chopin's *The Awakening*, Louise

Erdrich's *The Night Watchman*, Toni Morrison's *Song of Solomon,* and Jesmyn Ward's *Sing, Unburied, Sing*. Memoirs include Maya Angelou's *I Know Why the Caged Bird Sings* and Maxine Hong Kingston's *The Woman Warrior*. Students read a number of plays, including Eugene O'Neill's *Long Day's Journey into Night*, David Auburn's *Proof*, Lorraine Hansberry's *Raisin in the Sun*, and Tom Stoppard's *Arcadia,* among others; seniors also read either *King Lear, The Tempest, Henry V,* or *The Merchant of Venice*, by William Shakespeare. A number of short stories, essays, and selected poetry are also covered. At the conclusion of the course, AP students take the College Board's Advance Placement exam in English Literature and Composition.

English Electives

Writer's Workshop

Full year, 1 credit

This course gives students a chance to develop their writing skills 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

One trimester, .33 credit

This class presents a structured 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

One trimester, .33 credit

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.

Rhetoric

One trimester, .33 credit

What is rhetoric? In essence, it is the art of effective speaking or writing, especially the use of figurative devices and other compositional techniques to persuade an audience to accept a particular argument, call to action, or a specific point of view. In ancient Greece, it was the essence of political speech and the centerpiece of public discourse. No less a philosopher than Plato warned against the mind-altering power of rhetoric in the hands of a skilled orator, noting that such speech can "act upon the mind like a drug upon the body." In this course, students gain an appreciation of the power of rhetoric by studying its history through the close-reading and analysis of famous speeches. They develop an understanding of the rhetorical situation, including the purpose, audience, topic, genre, writer, and context of any given speech, as well as a knowledge of the specific devices that make such speeches powerful. Following these models, students learn to incorporate rhetorical techniques into their own writing and speaking, as they become adept at identifying how rhetoric is used today in advertising, movies, documentaries, politics, business, law, and many aspects of digital culture and communication.

History

The History Department is committed to students' development of historical literacy, along with critical and analytical skills. While most history curricula emphasize "coverage," usually at the expense of depth, the department strives to expose students to both breadth and depth in the subject. Students learn to use historical materials, texts, documents, and primary and secondary sources, while honing their reading, outlining, research, and note-taking skills. Through this, they gain experience and proficiency in writing concise, critical, and analytical essays.

Grade	Required Courses *One trimester each*	Additional Offerings	
		AP Courses *Require departmental approval*	**Electives** *One trimester*
9	World Religions World Wars World Political & Economic Systems		American Modern Popular Culture Philosophy & Ethics Women's Studies
10	Industrial America Law & the Legal System Global Human Rights	AP US History AP World History	
11	Modern Global Studies The Middle East Dissent in US History	AP US History AP World History AP US Government AP European History	
12	No required courses	AP US History AP World History AP US Government AP European History	

Grade 9 Sequence – A Focus on World Systems

Full year, 1 credit

The Grade 9 sequence includes three courses: World Religions, World Wars, and World Political & Economic Systems. 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 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 Sequence – The Advent of the Modern World

Full year, 1 credit

Students take the following sequence of courses: Industrial America, Law & the Legal System, 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, starting with the impact of industrialization in America, transitioning to the inner workings of the American legal system, and ending with an intense study of human rights around the world. Students are expected to write a major research paper each trimester and debate the historical significance of these issues in class.

Grade 11 Sequence – Modern History

Full year, 1 credit

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 Courses

AP U.S. History

Full year, 1 credit

In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. At the conclusion of the course, students take the College Board's Advanced Placement exam in AP U.S. History.

AP World History: Modern

Full year, 1 credit

This is an introductory college-level course that focuses on world history from 1200 to the present. Students cultivate their understanding of world history by developing the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course provides six themes that students explore throughout the year in order to make

connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. At the conclusion of the course, students take the College Board's Advanced Placement exam in AP World History: Modern.

AP U.S. Government & Politics

Full year, 1 credit

This college-level 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 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. At the conclusion of the course, students take the College Board's Advanced Placement exam in AP U.S. Government & Politics.

AP European History

Full year, 1 credit

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 learn about the political, economic, intellectual, social, and cultural history of Europe. A central goal of the course is 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 take the College Board's Advanced Placement exam in European History.

History Electives

American Modern Popular Culture

One trimester, .33 credit

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 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 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 also compare

a Dashiel Hammett novel to a modern detective novel. It is an interesting, interactive and student-centered look at “America’s century.”

Philosophy & Ethics

One trimester, .33 credit

Open to Grades 10-12 only

This course is an introduction to philosophy. It begins with the development of philosophical thought in ancient times by reading and discussing thinkers such as Confucius, Socrates, Plato, and the Buddha. This will serve as a starting point for investigating some of the major branches of philosophical thought - metaphysics, logic, epistemology, ethics - and the questions they ask and try to answer. As we study these branches of philosophical thought students will explore concepts such as the meaning of life, the nature of reality, how we acquire knowledge, the existence of God, and morality. As the course progresses, students will be exposed to works and ideas of modern philosophers such as Immanuel Kant, Rene Descartes, John Stuart Mill, Søren Kierkegaard, Jean-Paul Sartre, Albert Camus, and Friedrich Nietzsche. The class will require students to complete selected readings from various philosophers, engage in frequent class discussions, deliver presentations, and express their views through written responses.

Women’s Studies

One trimester, .33 credit

Open to Grades 11-12 only

In Women’s Studies, students examine the historical and contemporary conditions of women and their struggle to gain full equality. The course covers the waves of feminism in America and Britain and introduces students to a number of the key women and ideas that shaped those efforts. Additional topics covered include: the social construction of gender, patriarchy, the “male gaze”, the pay gap, access to birth control and abortion, the legal status of women, the fight for the Equal Rights Amendment, violence against women, and global feminism.

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 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

Spanish I

Full year, 1 credit

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 exercises. By the end of the course, students are able to use basic grammar and vocabulary to engage in simple interactions, such as making plans and invitations, negotiating, discussing and describing topics related to their personal life and environment, and expressing their preferences. Students also engage in comparisons between Spanish-speaking cultures and their own culture. The course uses the textbook *Descubre I* (Vista Higher Learning).

Spanish II

Full year, 1 credit

This course is for continuing students who have successfully completed Spanish I or have had at least one full year of instruction in Spanish. This course continues to build confidence with the Spanish language through oral, written, listening, and reading exercises. By the end of the course, students are able to use basic grammar and vocabulary to explain past events, give instructions, and talk about physical and mental health, technology, and the home. Students are also able to engage in comparisons between Spanish-speaking cultures and their own culture. The text is *Descubre II* (Vista Higher Learning).

Spanish III

Full year, 1 credit

This course is for continuing students who have successfully completed Spanish II or have had at least two full years of instruction in Spanish. This course focuses on more complex grammar structures and vocabulary, strengthening oral, written, listening, and reading comprehension. By the end of the course, students are able to express beliefs and opinions about issues such as the environment and health, give advice and directions, talk about future plans, express agreement and disagreement, and express what they would like to do. Students will also engage in comparisons between Spanish-speaking cultures and their own culture. The text is *Descubre II* (Vista Higher Learning).

Spanish IV

Full year, 1 credit

This course is for continuing students who have successfully completed Spanish III or have had at least three full years of instruction in Spanish. Students refine their reading, writing, speaking, and listening skills in context by discussing art from the Spanish-speaking world and reading progressively more challenging texts 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* (McGraw HIll).

Spanish V

Full year, 1 credit

This course is designed for students who have successfully completed Spanish IV or have had at least four full years of instruction in Spanish and wish to continue the study of the language apart from the AP level. Students strengthen their communication skills in Spanish and their cultural competency through conversation and written and audiovisual texts. The text is *Revista* (Vista Higher Learning).

AP Spanish Language & Culture

Full year, 1 credit

The Advanced Placement course in Spanish Language & Culture is offered to students who have attained intermediate-level proficiency in the language. This course emphasizes communication by applying language skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course strives to not overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. This course engages students in an exploration of culture in both contemporary and historical contexts. The AP Spanish Language & Culture course is approximately equivalent to an upper-intermediate college or university course in Spanish language and culture. The text is *Abriendo Paso: Temas y Lecturas* (Díaz and Nadel). At the conclusion of the course, students take the College Board's Advanced Placement exam in Spanish Language & Culture.

French

French II

Full year, 1 credit

French II is a course designed for students who have completed French I in Grade 8, or have had one full year of instruction in French. Students continue exploration of French culture, new grammar

concepts (verb conjugations, verb tenses, etc.), vocabulary, writing, and conversation, as they expand on skills learned the previous year. The text is *Imaginez* (Cherie Mitschke).

French III

Full year, 1 credit

French III is a course designed for students who have completed French II, or have had two full years of instruction in French. 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 as the main text, with thematic and literary documents interspersed.

French IV

Full year, 1 credit

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

French V

Full year, 1 credit

French V is a course designed for students who have completed French IV, or have had four full years of instruction in 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, vocabulary, and conversation by viewing and discussing French cinema. The textbook used in this class is *Cinema for French Conversation* (Anne-Christine Rice).

AP French Language & Culture

Full year, 1 credit

Students apply spoken French in various contexts and develop a French vocabulary sufficiently ample for reading newspaper and magazine articles, literary texts, and other nontechnical 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, Sheldon Griffin). At the conclusion of the course, students will take the College Board's Advanced Placement exam in French Language & Culture.

Latin

Latin I

Full year, 1 credit

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 syntactic 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

Full year, 1 credit

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

Full year, 1 credit

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

Full year, 1 credit

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,* (Bolchazy-Carducci).

AP Latin

Full year, 1 credit

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, and read aloud the lines specified for study in the current AP Latin course description. The curriculum includes discussion of selected English readings from the two literary works*,* 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 Comentarii, figures of speech and rhetorical devices, and review of specific grammar terminology. At the conclusion of the course, students take the College Board's Advanced Placement exam in Latin.

Language Electives

Introduction to Arabic

One trimester, .33 credit

Students learn and master the Arabic alphabet, gain the ability to write and read basic Arabic script, and begin to learn basic conversation in this beautiful and challenging language.

American Sign Language

One trimester, .33 credit

The course is designed to introduce the basics of American Sign Language (ASL). It 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.

Science

The Upper School Science Department provides a balanced and comprehensive science education that prepares students to engage 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, AP Environmental Science, 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.

The advanced science options allow qualified students to study biology, chemistry, environmental science 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.

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

Biology

General Biology

Full year, 1 credit

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, cellular energetics, genetics, and modern DNA technology. Additional minor units often include ecology and human impacts, anatomy and physiology, 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 and relate their findings to the major themes of the course.

Honors Biology

Full year, 1 credit

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, cellular energetics, and genetics and modern DNA technologies. Additional minor units often include ecology and human impacts, anatomy and physiology, 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 and relate their findings to the major themes of the course. Students develop and test their own hypotheses in several exercises. While covering the same basic curriculum as the General Biology course, the Honors course delves into the molecular and chemical details in greater depth, and the laboratory exercises demand greater math proficiency. The course is especially appropriate for students interested in taking AP Chemistry as sophomores.

AP Biology

Full year, 1.33 credits

Through this strenuous college-level course, students develop an understanding of the unifying constructs in biology. There are four major themes that recur throughout the course:

1) The process of evolution drives the diversity and unity of life.
2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
3) Living systems store, retrieve, transmit, and respond to information essential to life processes.
4) Biological systems interact, and these systems and their interactions possess complex properties.

Students meet for two periods each day. They complete all laboratory activities included in the AP Biology Lab Manual, plus investigate other topics such as buffering capacity, bioinformatics, PCR, CRISPR, and predator/prey relationships. The three major goals of AP Biology are for students to develop a conceptual framework for modern biology, to gain experience and competency in a laboratory setting, and to foster an appreciation for the relevance of biological processes in the modern world. To that end, students also stay abreast of recent developments in the current scientific literature as they pertain to the themes of this course. The text for the course is Campbell, *Biology in Focus* (Urry, et al.). At the conclusion of the course, students will take the College Board's Advanced Placement exam in Biology.

Due to the amount of independent work that this course requires, it is recommended that students complete Honors Chemistry and Honors Physics with at least a B+, AP Chemistry and AP Physics with at least a B, or have the instructor's permission to enroll.

Chemistry

General Chemistry

Full year, 1 credit

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 firsthand 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). 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

Full year, 1 credit

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 mathematics 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, 1.33 credits

This college-level course is a rigorous preparation for the AP exam. Students meet for two periods 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: A Molecular Approach* (Nivaldo J. Tro). 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. At the conclusion of the course, students take the College Board's Advanced Placement exam in Chemistry.

The prerequisite for AP Chemistry is a strong performance in an advanced mathematics or science class, and recommendations from both mathematics and science instructors.

Physics

General Physics

Full year, 1 credit

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 investigate a wide variety of topics involving waves and periodic phenomena. Classes explore the different ways of creating and using electricity, along with energy conservation, optics and modern physics.

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

Honors Physics

Full year, 1 credit

Honors Physics is a rigorous course at the high school level which presumes knowledge of algebra and basic trigonometry. Most Harley students who take this course 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 must be prepared for remedial work. Students utilize spreadsheet computations, and 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 investigate a wide variety of topics involving waves and periodic phenomena. Classes explore the different ways of creating and using electricity along with energy conservation, optics and modern physics.

AP Physics 1

Full year, 1.33 credits

The AP Physics 1 course is a rigorous introduction to college-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 simultaneously 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 College Board's Advanced Placement exam in Physics.

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.

Environmental Science

Environmental Science

Full year, 1 credit

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

This course places special emphasis on laboratory work, field studies and projects, with less emphasis on traditional tests. Students learn techniques to test environmental samples for various chemical, physical and biological parameters and what the results indicate about the ecological systems. One major field study involves a detailed investigation of the ecology of a nearby stream to assess its overall health. The final unit of the course focuses on global environmental problems, such as climate change, and the emerging green technologies and approaches for how our society will address such large-scale challenges.

AP Environmental Science

Full year, 1.33 credits

AP Environmental Science is the equivalent of a college-level introductory environmental science course. It is designed to provide students with scientific principles, concepts and methodologies to understand the interrelationships of the natural world. Students identify and analyze environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or mitigating them. Labs, projects and field investigations are a key component of this course and there are a number of field trips scheduled throughout the year.

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. The final unit of the course focuses on emerging sustainable and green technologies, and how our society will address global environmental issues, such as climate change. At the conclusion of the course, students take the College Board's Advanced Placement exam in Environmental Science.

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. Beginning with the Functions, Statistics, Trigonometry (FST) course, 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
Algebra 1 Geometry Algebra 2 Functions, Statistics and Trigonometry Pre-Calculus AP Calculus AB AP Calculus BC+	Introduction to Computer Science Topics in Discrete Mathematics AP Statistics AP Computer Science

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 following 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, 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 (they must score a final exam mark of B- or higher). 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 coursework 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.

Core Mathematics Sequence

Algebra 1

Full year, 1 credit

Algebra 1 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

Full year, 1 credit

The 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

Full year, 1 credit

Algebra 2 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

Full year, 1 credit

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

Full year, 1 credit

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 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

Full year, 1.33 credits

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. At the conclusion of the course, students take the College Board's Advanced Placement exam in Calculus AB. The text is *Calculus: A Complete Course* (Finney, Demana, Waits, and Kennedy).

AP Calculus BC & Beyond

Full year, 1.33 credits

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. At the conclusion of the course, students take the College Board's Advanced Placement exam in Calculus BC & Beyond. The text is Calculus: A Complete Course (Finney, Demana, Waits, and Kennedy).

Mathematics Electives

Introduction to Computer Science

One trimester, .33 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,* by Barnes and Kolling.

AP Computer Science

Full year, 1 credit

This elective course for juniors and seniors provides a comprehensive introduction to three areas in computing: programming methodology, algorithms, and data structures. Students strengthen their understanding of these concepts by writing programs in Java. At the conclusion of the course, students will take the College Board's Advanced Placement exam in Computer Science. Instructor permission is required to enroll in this course. The text is *Java Software Solutions for AP Computer Science* (Lewis, Loftus, and Cocking). AP Computer Science is offered in alternate years with AP Statistics.

AP Statistics

Full year, 1 credit

Statistics is concerned with the collection and analysis of data to study patterns and variations. In this elective 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 individually and in groups, students learn various techniques to develop models for, draw conclusions about, and make predictions from data. Students may enroll in the course in junior or senior year (The mathematics course Functions, Statistics, and Trigonometry is a prerequisite), though it does not count toward fulfilling the three-year sequence of courses required for graduation. At the conclusion of the course, students take the College Board's Advanced Placement exam in Statistics. The text is *The Practice of Statistics* (Yates, Moore, Starnes). AP Statistics is offered in alternate years with AP Computer Science.

Topics in Discrete Mathematics

Full year, 1 credit

This senior elective course explores the world beyond the classroom walls through a mathematical lens with a focus on discrete mathematics topics. Major units include probability and statistics, financial literacy, and coding. Units have included investigation of the intersection of mathematics and voting, communicating quantitative literacy with infographics, and the application of mathematical concepts to

projects in the Harley Makerspace. Assessments are generally project-based, and the culmination of the course is a mathematics capstone project.

Social Sciences

Introduction to Anthropology

One trimester, .33 credit

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

Full year, 1 credit

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 Psychology

Full year, 1 credit

AP Psychology students attend the Psychology course described above, but proceed at a pace that requires additional independent study. At the conclusion of the course, students take the College Board’s Advanced Placement exam in Psychology.

The Commons

Opened in 2014, The Commons was deliberately designed to support educational commitments that The Harley School 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.

Rights & Responsibilities

One trimester, .33 credit

Rights & Responsibilities is a 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. 3) — civic engagement, familiarity with the democratic process, the ability to dissent respectfully, a respectful steward of community and environment, etc. The class 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, and independent student work, including a culminating “Advocacy Project” designed and implemented by each student with faculty and community support.

Commons Electives

Hospice

Full year, 1 credit

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 by local hospice nurses

include *Lighting the Path* by Deb Sigrist and *Blessing Our Goodbyes* by Kathie Quinlan. 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

One trimester, .33 credit

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

One trimester each, .33 credit

Food and Farm 101 provides students with experiential learning opportunities in Harley's growing spaces and the Commons Makerspace. A different version of this project-based course is offered each trimester and the defining activities vary with each season as follows below. Each course includes relevant readings and reflection activities in addition to hands-on work.

Fall: Gathering the Harvest

This course explores the end of the growing season. Activities include harvest and usage of the produce grown in the Microfarm, seed-saving, and preparing the farm for the winter.

Winter: Environmental Justice & Advocacy

This course takes a closer look at issues of sustainability as they relate to environmental justice and activism. Topics include climate change, land access, indigenous environmental history, environmental racism, and more.

Spring: Starting the Growing Season

In this course, students are in charge of kicking off the year in the garden, from starting seedlings in the greenhouse to preparing beds in the garden.

Food & Farm 201

One trimester, .33 credit

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.

Food and Farm Intensive

Full year, 1 credit

This year-long class gives students the opportunity to take a deep dive into the Harley growing spaces. Among other seasonal, ongoing activities, students take on leadership roles within growing spaces of their choosing, and are in charge of designing and developing projects to further their functionality.

Culinary Arts

One trimester, .33 credit

The Culinary Arts class uses the Commons Teaching Kitchen as its primary classroom and focuses on learning about cuisine from as many angles as can fit into a 12-week experience. Classes are a mixture of discussion, readings, demonstration, and hands-on practice. While hands-on cooking projects and demonstrations are a large component of the class, students also explore the *why* of cooking as much as the *how*: the science behind the methods and techniques commonly used in the kitchen. Students look at the complexities of food labelling, ingredients, additives, and terms, with the goal of empowering them to be well-versed in their understanding of healthy and sustainable options. Students also dig into some of the intricacies behind our relationship with food, both individually and as a culture. Students will gain a basic understanding of and engage in regular discourse about integrating sustainable practices into their relationship with food, on both a personal scale as well as within the framework of the larger food system.

Introduction to Beekeeping

One trimester, .33 credit

Introduction to Beekeeping provides an in-depth overview of beekeeping practices, science, and history, as well as concepts around protecting and enhancing populations of pollinators in everyday and agricultural landscapes. Students perform hands-on work with the Harley beehives and pollinator garden, as well as develop projects to deepen the connection between pollinators and the Harley community. In addition to learning the basics of small-scale beekeeping, a major theme of this course focuses on the critical importance of pollinators to our ecosystem and food supply and the connection to bigger picture issues of sustainability, biodiversity, and conservancy. Class content includes lessons, field observations, hands-on work with the hives and in growing spaces, design projects, and presentations by guest speakers.

Sustainable Food Systems

One trimester, .33 credit

What does sustainability mean in the context of our food system? Students in this course 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

One trimester, .33 credit

Design & 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 utilized 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

One trimester, .33 credit

Design & Innovation 201 is a deep-dive version of its prerequisite class, Design & 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.

Apps & Arduinos

One trimester, .33 credit

Apps & Arduinos is an entry-level design class created to expose students to the basic elements of the design process (Empathize, Define, Ideate, Prototype, Test) and support them through a series of increasingly difficult design challenges. Through this hands-on class, students work to develop and create solutions to various environmental and social design challenges.

FabLab

One trimester, .33 credit

FabLab is a design class created to expose students to elements of the design process (Empathize, Define, Ideate, Prototype, Test) and combine those elements with the 21-century tools in the workshop. Through this hands-on, shop-based class, students work to develop and understand the process of creation and production using CAD software and the FabLab tools (the CNC and laser cutter).

Sustainable Systems Thinking

One trimester, .33 credit

Sustainable Systems Thinking explores sustainability through a balance of inquiry-based projects and academic research. 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 create solutions-based projects. Instruction includes reading and discussion, collecting and analyzing data, studying historical and current events, and reflection in multiple forms. The course culminates in a mini capstone project.

Entrepreneurship in Real Time

One trimester, .33 credit

Every student has talents, inspirations, and ideas. Creating a business, taking a risk, creating change and solving problems are motivations many students have in connection to their talents and inspirations. In this course, students explore the basics of entrepreneurship while applying these ideas to a project of interest. Students also work with the Harley Store to connect lessons to a real-world enterprise.

Sustainable Community Engagement

One trimester, .33 credit

Open to Grades 10-12

In this course students foster educational partnerships with locally based community nonprofit 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 Arts

Art 9

One trimester, .33 credit

Art 9 is a required course that sets a foundation for art courses to follow. These basic art experiences provide lessons and techniques in drawing, painting, and three-dimensional media, including mixed media 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 and creative problem solving skills.

Art 10 Requirement

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

Visual Arts Electives

Drawing & Painting

One trimester, .33 credit

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

Full year, 1.33 credit

Open to Grades 10-11

This course is a prerequisite to 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 Drawing

Full year, 1.33 credit

This course meets daily for two periods and follows the guidelines of the College Board AP recommendations for AP Drawing. During the fall trimester, students prepare the “Breadth” section of their portfolios, 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. 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 Photography (AP 2-D Art & Design)

Full year, 1 credit

This course follows the guidelines of the College Board AP recommendations for AP 2-D Design. AP Studio Art 2-D is a year-long course with a broad consideration of digital media, which includes video, photography, graphic design, and digital painting/drawing. Students begin working with the Adobe Suite to gain a comprehensive understanding of the software and find a focus for their work. The year builds on the exploration and new skills while students create and maintain a portfolio. 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. This course is housed in our state of the art Moore Brown Center for Creative Media where students have access to industry- leading equipment.

AP 3-D Art & Design

Full year, 1.33 credit

This course meets daily for two periods and follows the guidelines of the College Board AP recommendations for AP 3-D Design. “The AP 3-D Art and Design course framework presents an inquiry-based approach to learning about and making forms and structures in art and design. Students

are expected to conduct an in-depth, sustained investigation of materials, processes, concepts, and ideas in three dimensions" (Sample Syllabus, College Board). During the fall trimester, students prepare the "Breadth" section of their portfolios, 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, students develop a concentration of their own choosing. During AP exam time in early May, students upload their portfolios, consisting of multiple views of a minimum of 16 pieces, to the College Board site. They are then evaluated by a team of college and art school professors.

Introduction to Photography

One trimester, .33 credit

Introduction to Photography invites students to consider personal digital devices, scanners, and DSLRs for image capture. It also introduces the basics of Adobe Photoshop and Lightroom. Students begin the trimester learning the basics of composition using scanners, cell phones, DSLRs 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 scanography, portraits, narrative, constructed spaces, and a self-directed final project.

Digital Bookmaking

One trimester, .33 credit

Digital Bookmaking introduces InDesign, Photoshop, and different methods of digital capture so students may craft and publish an original book. The class culminates with the publication of their work both in the Kindle store and as an Amazon print-on-demand title. Ideas for work are student driven, and the instructor works with the students to help build on the successes of previous projects. 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.

Introduction to Filmmaking

One trimester, .33 credit

Introduction to Filmmaking explores the world of narrative filmmaking through video, stop-motion, and animation. Students in this class work with DSLRs, phones, and screen-capture to craft stories into time-based media. Students learn Premiere, Rush, Photoshop, and are introduced to concepts in Animate. Ideas for work are student driven, and the instructor works with the students to help build on the successes of previous projects. 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.

Introduction to Film History

One trimester, .33 credit

Introduction to Film History is an investigation into the ideas, concepts, and technology of narrative film with a focus on the United States. Global developments and influences are considered as well. This course opens up the language of film including *mise en scene,* lighting, sound, production roles, and marketing. Students review one film per week outside of class, and daily discussions are supported by examples of films that explore the focus for the week. Students leave this class with a new vocabulary for articulating the experience of cinema, confidence to argue their opinions, and a new understanding of the narrative structure.

Multimedia Journalism (formerly Yearbook)

Full year, 1 credit

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 & Graphic Design

One trimester, .33 credit

Marketing & 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

One trimester, .33 credit

Students learn to work with clay using a variety of hand-forming and wheel throwing techniques 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

One trimester, .33 credit

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

One trimester, .33 credit

In Glassworking II students work with the instructor individually, focusing on a few areas of specific interest in flameworking. 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

One trimester, .33 credit

Advanced glass is more of an independent study that focuses on glass-blowing or advanced sculpting techniques. The techniques of torch control, heating, turning, and inflating the glass are all demonstrated or researched. Self-driven experimentation is how most of the class time is spent.

Kiln Glass

One trimester, .33 credit

Kiln glass is a technique-driven class. 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 cast into the cavity resulting in a finished glass piece. Students spend most of their class time carving and manipulating wax.

Sculpture

One trimester, .33 credit

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

One trimester, .33 credit

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.

Performing Arts

Music

All Grade 9 students are required to participate in one of the school’s core ensembles: Choir, Wind Ensemble, or String Orchestra. Advanced Chamber Orchestra or Band Fundamentals may also count for the Grade 9 ensemble credit, with instructor and/or departmental permission as indicated below. One-trimester electives are scheduled on a year-to-year basis, based on student interest; some electives may not be offered every year.

Core Ensembles

String Orchestra

Full year, .5 credit

This ensemble is for students with experience on classical string instruments. Students study and perform a variety of music written and arranged for orchestra or small string ensemble. The rehearsal focus is on ensemble skills and individual skill development, and students are expected to practice outside of class. Students in this course receive a letter grade and academic credit.

Advanced Chamber Orchestra

Full year, .5 credit

This ensemble provides an appropriately challenging ensemble experience for orchestra students who are performing at a NYSSMA Level 6, or who are taking private lessons and are striving to become a Level 6 performer, with the ability to focus on difficult repertoire and advanced ensemble skills. *All students taking this course need instructor approval*.

Advanced Chamber Orchestra students will learn and perform advanced chamber orchestra repertoire. Students will work independently outside of school on the assigned material, and use class time for experience-level-appropriate rehearsals. Musicianship and ensemble will be the main focus of practices. Students in this course receive a letter grade and academic credit.

Wind Ensemble

Full year, .5 credit

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

Band Fundamentals

Full year, .5 credit

Band Fundamentals meets on alternating days and focuses on the basics of instrumental technique for wind, brass and percussion players. This is an opportunity for students who are not yet ready to play at the Upper School Wind Ensemble level to further their instruction in a setting appropriate to their skills. Students will work independently and in small groups to develop solid tone and technique on their

instruments, and to develop their reading and listening skills as appropriate. *Students taking Band Fundamentals as their Ensemble 9 credit need departmental permission*. Students may also choose to take Band Fundamentals as an elective to further their skills on a secondary instrument. Students in this course receive a letter grade and academic credit.

Upper School Choir

Full year, .5 credit

Choir is open to all students in Grades 9 through 12, with no audition or previous experience required. Repertoire includes a wide variety of genres, including classical, contemporary, pop, folk, and jazz. Rehearsals emphasize proper vocal technique, sight reading, ensemble blend, and basic music theory/literacy. The class meets four days per eight-day cycle on alternating days. Students receive a letter grade and academic credit.

Treble Choir

Full year, .5 credit

Treble Choir is open to students in Grades 9 through 12 who sing in a standard treble range, with no audition or previous experience required. In this ensemble, students 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. The class meets three days per eight-day cycle on alternating days. Students receive a letter grade and academic credit.

Jazz Band

Full year, .5 credit

This class is open to Grades 9 through 12. Students study and perform music from the standard jazz repertoire, the Great American Songbook, 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.

Music Electives

Music Theory

One trimester, .33 credit

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.

Italian Opera

One trimester, .33 credit

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.

Non-Italian Opera

One trimester, .33 credit

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 diff erent sets of composers, periods, and sub-genres.

American Musical Theater

One trimester, .33 credit

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.*

Baroque and Classical Music

One trimester, .33 credit

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 and follow a musical score is recommended.

Romantic and Contemporary Music

One trimester, .33 credit

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 of 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

One trimester, .33 credit

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 and chords. 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

One trimester, .33 credit

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.

Drama

Drama Electives

Acting I / Scene Study

One trimester, .33 credit

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 analysis, 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

One trimester, .33 credit

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

One trimester, .33 credit

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. This class is also very useful for students who wish to become more comfortable speaking in public.

Directing

One trimester, .33 credit

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

One trimester, .33 credit

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 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. We will watch/read a play written by Shakespeare, but our point of view will be that of an actor who is charged with bringing the text to life.

Mastering Monologues

One trimester, .33 credit

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 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.

Fall Play

.33 credit

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 *Good Kids, Front Page,* and *All's Well that Ends Well.* More recently, and in keeping with the school's pandemic protocols, students presented a festival of ten-minute plays *al fresco* in the courtyard. As these selections demonstrate, the Drama department does not shy away from challenging material! The jobs of stage manager and assistant director also earn credit for this course. Participation in the Fall Production counts towards the school's graduation requirements in the arts.

Spring Musical

.33 credit

A ten-week process, the Spring Musical takes students through a read/sing-through, 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 *Onegin, A Year with Frog and Toad,* and *Tintypes.* More recently, and in keeping with the school's pandemic protocols, students presented a Harley musical retrospective in the courtyard. The jobs of stage manager and assistant director also earn credit for this course. Participation in the Spring Musical counts towards the school's graduation requirements in the arts.

Physical Education

Full year, .5 credit

The PE Program

PE is a required, year-long course for all students in Grades 9-12 conducted through Schoology. The class requires students to:

- Complete a fitness assessment at the beginning of each trimester
- Complete short readings
- Complete quizzes to measure progress and achievement
- Provide proof of weekly activity

Physical Activity

Physical activity is the heart of the PE program. Students are expected to be active for at least two hours each week and to report time spent in activity through Schoology in addition to completing all other assignments.

Students engage in activities of their choosing on their own time. Examples of activities include:

- HAC sports (see section HAC Athletics for a listing of sports offerings)
- Exercising in the Peckham Wellness Center (open to students most days of the week)

- Other outside activities, such as dance lessons, travel soccer teams, martial arts classes, home workout, horseback riding, etc.
- A combination of many different activities

Course Topics

Each year-long course focuses on a different PE topic. Current course offerings include:

- Fitness and the Components of Fitness for Grade 9
- Team Sports for Grades 10-12

Additional courses will be added as they become available.

Grading

Students are graded pass/fail.

HAC Athletics

The Harley School and Allendale Columbia School 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		Girls' V Track
Girls' V Cross Country		
Co-ed JV & V Golf		

The College Counseling Program

As a College Counseling program we work with students to find the right matches. To that end, we meet with students to help them learn to identify, research, and choose the colleges that meet their needs, but we will not “give them” a list, nor do we serve as a “college placement” department.

We communicate with colleges about the Harley academic program. In the fall, representatives from colleges come to Harley to meet with juniors and seniors and with the Director of College Counseling to better understand what kind of students this school produces. The Harley School Profile (available online) also helps to communicate what our education provides. In addition, the counselors are responsible for writing the School Report, sometimes called the Counselor Recommendation.

We provide information. Using tools such as SCOIR and scattergrams (charts that plot Harley application history using grades and test scores), and institutional trends and data, we help students and families understand the competitive nature of college admissions and help to manage expectations. Students use our web-based programs, with our assistance, to help craft a balanced list of colleges.

We help students create a testing plan. While there are some general recommendations for standardized testing, testing plans are unique to each student. We will work with students to tailor a plan for the spring of the junior year and the fall of the senior year.

What We Expect from Students

Students should focus on their classes. Grades continue to be the most significant factor in college admissions decisions, and students must put their classes first.

Students should meet with their college counselor. Starting in January, students should sign up for a meeting with their assigned College Counselor. Prior to this meeting, students will complete a resume and questionnaire that requires some reflection on high school experiences and hopes for the future. In these early meetings, we will talk about the process, the student’s interests, and make suggestions about early research.

Students should visit colleges. March break is the best time to begin to visit a range of colleges. These “diagnostic visits” should take students to a big university, a small college, as well as both an urban and rural setting. Students will begin to get a sense of what they might like through these visits

and will better be able to refine their lists in the spring. Interviews are not recommended at this stage – just take the tour and see the campus.

Students should check and read emails. We cannot stress enough the importance of this responsibility!

What We Expect from Parents, Families, and Guardians

Appropriate Communication. Please feel free to contact us with questions, comments, and concerns. We do our best to respond to emailed questions within two business days, but our daily priority will remain working one-on-one with students.

Positive Support. Whether it is listening to your child, driving to colleges, or just offering a positive word, students need their parents at this time.

Read our email and attend our meetings. Please pay careful attention to our mailings and try to attend the meetings we schedule. Almost all of the most frequently-asked questions are addressed in advance.

Let go. Letting your child take the lead role may be the hardest part of the process. However, it is a wonderful opportunity to watch your child take his or her first step towards adulthood. We will be here to help – both students and parents – navigate this exciting process!

Upper School Activities & Events

Every year at Harley is a lively combination of tradition and improvisation, so any representative list of activities and events are 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

Acorn (student publication)
Astronomy Club
Beyond Soup
Bioinformatics Group
Biomimicry Club
Classic Literature Club
Creative Writing Club
ESports
Euchre Club
Fashion Club
Feminism Club
Forensics (Speech & Debate)
Games Club
Gay Straight Alliance
Horizons Tutoring Club
Jewish Club
Key Club
Math Team
Mental Wellness Club
Mineralogy Club
Productivity Club
Rooftop Garden Club
Ski Club
Spanish Conversation Club
Speech & Debate Team
Spongebob Club
Sustainability Club
Students of Color & Allies
Tri-M
Vocal Chords
Wolf Pack

Student Government

Upper School Student Council
Class Officers
Class Representative
Representative-at-Large

Trips

Fall Upper School Day Trip to Aerial Adventures at Bristol Mountain
Grade 9 Orientation Overnight
Grade 9 Marine Biology trip to Cape Cod
Grade 10 Outdoor Ed trip
Grade 11 New York City trip
Senior Trip

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. (Super Harley Fun Time Extravaganza Week)

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