### BE THE SPARK. SHARE THE LIGHT.



# 2023/2024 Academic Course Guide



Lawrence Academy Groton, Massachusetts

# Lawrence Academy recognizes you for who you are and inspires you to take responsibility for who you want to become.

#### By calling on the school

To champion excellence in academics and the arts, in athletics, and in residential life; To offer innovative programs that personalize learning;

To provide students with discerning mentors who support self-discovery and risk-taking;

#### By calling on each other

To consider a plurality of perspectives patiently and with curiosity;

To engage in respectful dialogue and advance the independent thinking and success of others;

To take action for the common good;

### By calling on yourself

To develop your voice and use it creatively, constructively, and with confidence; To reflect upon, understand, and learn from failure as well as success; To cultivate a personal stake in lifelong learning and make honorable, informed choices;

### You will learn with others to think for yourself.

## Lawrence Academy Diploma Requirements

| English  | Complete a year of English for every year at Lawrence Academy.  |
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| Math   | Complete Algebra II and Trigonometry.   |
| Science  | Incoming 9th grade students: Complete physics, chemistry, and<br>biology. Students entering after the 9th grade: Complete<br>chemistry and biology.   |
| History  | Incoming 9th grade students: Complete three years, one of which<br>must be U.S. History. Students entering after the 9th grade:<br>Complete two years, one of which must be U.S. History.   |
| Foreign Language   | Complete two consecutive levels of any one language (Chinese,<br>French, Spanish, or Latin), regardless of the level at which the<br>student begins their ninth grade year. Non-native English speakers<br>may not use courses taken in their native language to satisfy their<br>foreign language requirement. |
| Art  | Incoming 9th grade students: Complete two years of art, one of<br>which must be Artistic Expression. Students entering after the<br>9th grade: Complete the equivalent of one term of art for each<br>year attending Lawrence Academy (i.e., a term course each year<br>they are enrolled).                     |
| Winterim   | Complete a two-week Winterim for every year at Lawrence<br>Academy.   |
| Community Service  | Complete six hours of community service for every year at<br>Lawrence Academy.  |
| A minimum course load is generally five courses. Ninth graders are enrolled in six year-long courses, while sophomores, juniors, and seniors will take five or six courses. Academic Office approval is required to take |   |

fewer than five year-long courses or more than six classes in one term.

## 2023/2024 Academic Course Offerings

# English

Students are required to take at least one English course during every term of every year they are enrolled at Lawrence Academy. Ninth, 10th, and 11th graders take year-long, comprehensive courses covering grammar, usage, syntax, literary genres, and the process of composition. Students with an A- average or higher at the end of their 10th and 11th grade years may be recommended for honors courses. Twelfth graders not recommended for honors will be placed in Senior English Seminar. Eleventh and 12th graders may request to take an independent study course in English only in addition to, not in place of, a regularly scheduled English course, and only with department permission.

#### The Journey • 200

This year-long course focuses on developing students' understanding of themselves as readers and writers by asking them to read literature in four genres — novel, graphic novel, poetry, and memoir — and to create interpretations that pay close attention to the text, using evidence to support their reasoning and draw inferences and conclusions. Students express their ideas by speaking and listening in seminars, as well as by writing analytical essays, personal essays, poetry, and stories. A preliminary study of formal matters in writing, such as vocabulary, grammar, usage, mechanics, and style, is included. The coursework revolves around a metacognitive approach in which students are encouraged to know and understand themselves as learners and to think for themselves in their study of such texts as *American Born Chinese, Little Fires Everywhere, Station Eleven, Educated, and Born a Crime.* 

#### The Individual and Society • 203

In this year-long course, students are not told what to think but are asked to make determinations for themselves. This course develops students' academic skills in reading, writing, speaking, listening, and thinking. Students read in the four genres, studying such texts as *Antigone* and *The Bean Trees.* They also write papers; participate in seminars, projects, and presentations; and focus on literary terms and devices, as well as vocabulary-building and the mechanics of good writing, reinforcing their self-awareness of learning strengths and weaknesses. The course also looks beyond the self to the world in which we live, revolving around the theme of the individual and society throughout the ages and around the globe.

#### English Composition • 205

In this year-long course, students focus on demonstrating their self-awareness by increasingly making choices about what they read and write as they develop their analytical reading, thinking, and writing skills through their study of short fiction, poetry, and novels such as *The Things They Carried* and *The Great Gatsby*. Because the English curriculum emphasizes original thinking in all classes, students also choose what ideas they want to pursue in their written and spoken expression. An emphasis on writing analytical expository essays continues all year, with opportunities to write short fiction, poetry, and personal essays. Considerable emphasis is placed on class participation in discussions and formal seminars, and on re-writing and editing using proper English grammar. One hallmark of the course is public speaking, including a Spoken Word Poetry Slam and the Judith French Poetry Recitation Competition.

#### Honors English Composition • 206

Prerequisite: Students must submit a portfolio and be recommended to this course by their English teacher, have an A- average or higher for their writing, and be deemed capable of the demands of honors work, pace, depth, and volume.

In this year-long course, students explore analytical writing as a form which goes beyond the five-paragraph essay. By reading works of various length, from a span of time periods, and which address a variety of topics, students are given the opportunity to experiment with writing critiques, defenses, op-eds, and comparative analysis as a way of demonstrating their understanding of the texts and exercising their own creative voices as thinkers and writers. Literary theory provides additional framing and scaffolding for texts and assignments. Students are expected to initiate and sustain discussions, manage texts thoughtfully and thoroughly, and practice the skill of organizing their time to complete significant independent work. Students can anticipate reading 6 novels as well as poetry, interviews, articles, and other texts that support their investigation of meaning in literature.

#### Senior English Seminar • 240

In this year-long course, students practice reading, writing, listening, speaking, thinking, and organizing, as well as curiosity, resilience, empathy, and integrity. Over the course of the year, they develop a working understanding of their own individualized learning processes within those skills and the ways in which those skills overlap and inform one another in their academic lives. Independent initiative and inquiry are hallmarks of this course.

#### Honors Literature • 211

Prerequisite: Students must be recommended to this course by their English teacher, have an A- average or higher in their junior year English class or a B+ average or higher in an honors-level course, and be deemed capable of the demands of honors work, pace, depth, and volume.

This year-long course looks at the most fundamental, but also the most difficult, questions about literature: what is literature, exactly? How does literature help us understand the wider world, and how can literature be an inflection point for change? Students will read literature to engage, understand, and critically analyze the literary genres of the short story, poetry, the novel, and drama and begin to engage with the more advanced cognitive aspects of literature. Literary theory provides the lens through which students will examine what texts from a wide variety of time periods and genres can tells us about the interplay of ideas and discourses operating in the time and place in which the text was written. Students will also have the opportunity to contribute to a literary discourse of their choice by curating their own reading list and developing their own writing project during the spring term.

#### Honors Writing • 210

Prerequisite: Students must be recommended to this course by their English teacher, have an A- average or higher in their junior year English class or a B+ average or higher in an honors-level course, and be deemed capable of the demands of honors work, pace, depth, and volume.

This course explores the possibilities of the student's writing imagination with an emphasis on rigor, resonance, relevance, routine, and relationships. The course introduces students to the basic tools of poetry, fiction, and non-fiction, and involves daily writing, reading, and analysis. Students participate in workshops, presentations, and discussions, as well as in the writing process. All revisions, comments in workshops and peer reviews, reading responses, and self-reflections receive formative feedback, which serves as support for their final produced work in each unit of study. Submission of these polished drafts receives additional extensive written feedback and a grade. As the year's course of study builds and spirals, students are allowed increasing variety of choice in their approach to expressing their ideas in what will become their own highly individualized writing process.

## Math

Lawrence Academy students must complete Algebra II and Trigonometry to graduate. All new students will take a math placement test to determine at which level they'll begin their studies.

At Lawrence Academy, Integrated Algebra and Geometry I and Integrated Algebra and Geometry II use a Mastery Classroom format: Students work collaboratively with teachers and other students toward mastering the skills and content of the course. Students access content using screencasts, helpful links from the online textbook, problem sets, and projects, while teachers work with the students to set goals, discuss concepts, solve problems, and create and review personal portfolios of mathematical work. Mastery is assessed at the completion of each section through a Mastery Check, on which students must earn an 80 percent or higher to move forward; a grade below 80 percent requires the student to do more work with the teacher to improve their knowledge and take another Mastery Check. After completing all sections in a chapter, students will complete a unit test.

#### Integrated Algebra and Geometry I • 418

This year-long course takes place in a Mastery Classroom that incorporates the work traditionally associated with Algebra I with a variety of geometric applications. The topics from algebra include operations on real numbers; linear functions, graphs, and equations; systems of linear equations and linear inequalities; polynomial algebra; factoring; and exponent rules. Geometric applications taught include properties and areas of polygons; angle relationships; triangle similarity; ratio and proportion; triangle and quadrilateral properties.

#### Integrated Algebra and Geometry II • 419

#### Prerequisite: Integrated Algebra and Geometry I

This year-long course is a Mastery Classroom that allows for greater continuity of learning and understanding algebra and geometry. Topics from geometry include congruent triangles, and circle properties, both involving proof work. Geogebra is used extensively to investigate concepts and properties. The algebra of Integrated Algebra and Geometry I is reviewed and expanded upon. Areas of study include linear functions, absolute value functions and translations, quadratic algebra, and quadratic functions with graphical transformations. Applications to real problems are presented in both algebra and geometric contexts.

#### Honors Integrated Algebra and Geometry II • 423

#### Prerequisite: Integrated Algebra and Geometry I; must meet honors criteria and receive department's recommendation.

This year-long course follows the same syllabus as Integrated Algebra and Geometry II, but it covers the topics in more depth. This honors-level course will also cover triangle trigonometry, literal equations, complex numbers, and matrices.

#### Algebra II and Trigonometry • 424

#### Prerequisite: Integrated Algebra and Geometry II

This year-long course is devoted to the study of functions. The topics studied include functions and translation rules; higher-order polynomials and their theorems; rational functions and equations; exponential and logarithmic functions; and right triangle and circular trigonometry. Each function family is studied algebraically, numerically, and graphically. Algebra II and Trigonometry is the most technology-intensive of the required courses. Each unit of study includes analysis of real data.

#### Honors Algebra II and Trigonometry • 425

Prerequisite: Honors Integrated Algebra and Geometry II with a year-long grade of B or higher, or Integrated Algebra and Geometry II with a year-long grade of A- or higher, and completion of independent summer work. Must meet honors criteria and receive department's recommendation.

This year-long course does not follow the same syllabus as the Algebra II and Trigonometry; rather, it is a functions-based course that will cover quadratic, polynomial, exponential, logarithmic, and trigonometric functions in depth. While students in the course work with applications, the focus is on theory and proof of function properties. Students enrolled in this course will also study polynomial theorems, log properties, trigonometric identities, and solving complex trigonometric equations.

#### Precalculus • 485

#### Prerequisite: Algebra II/Trigonometry

This yearlong course is designed to study precalculus topics such as conics, sequences and series, matrices, and additional topics include an introductory level of combinatorics and probability, through conditional probability.

#### Advanced Precalculus • 487

#### Prerequisite: Algebra II/Trigonometry with a year-long grade of B+ or higher and the department's recommendation.

This yearlong course is designed to study in depth advanced precalculus topics such as trigonometric identities, sequences, series, limit, and additional topics include combinatorics and probability, through conditional probability, and expected value.

#### Honors Precalculus • 427

Prerequisite: Honors Algebra II and Trigonometry with year-long grade of B or higher, or Algebra II and Trigonometry with a year-long grade of A-, and the completion of independent summer work. Must meet honors criteria and receive department's recommendation

This year-long course covers in depth more advanced precalculus topics such as polar coordinates, parametric equations, complex numbers, conic sections, and vectors. The winter term covers the finite topics of set theory, combinatorics, and

probability; the spring term covers sequences and series to the infinite, mathematical induction, limits, and an introduction to the derivative.

#### Calculus • 449

#### Prerequisite: Advanced Precalculus with a year-long grade of B+ or higher and the department's recommendation.

This year-long course presents the topics of both differential and integral calculus, including the four major concepts of calculus — limits, derivatives, definite integrals, and indefinite integrals — as well as indefinite integration and the fundamental theorem of calculus. There is also a strong emphasis placed on graphing techniques. These topics make students use all of the material mastered in prerequisite courses, and a review of necessary algebraic techniques is incorporated into the evaluation of limits, the rules of derivatives, and the study of optimization and related rates problems.

#### Honors Calculus • 461

## Prerequisite: Honors Pre-Calculus with a year-long grade of B or higher. Must meet honors criteria and receive department's recommendation.

This year-long course presents the topics of both differential and integral calculus — rates of change, limits, and derivative and graphing techniques; related rates, max./min. problems and other applications; and proofs of major theorems — which will require students to use all of the material mastered in prerequisite courses.

#### Honors Multivariable Calculus • 490

#### Prerequisite: Honors Calculus

Honors Multivariable Calculus takes the concepts learned in single variable calculus and extends them to multiple dimensions. Topics covered include vector algebra; applications of the dot and cross product; equations of lines, planes, and surfaces in space; continuity, differentiation, and integration of vector-valued functions; application of vector-valued functions such as curvature, arc length, speed, velocity, and acceleration; continuity, limits, and derivatives of multivariable functions, tangent planes and normal lines of surfaces; applying double and triple integrals to multivariable functions to find area, volume, surface area. Additional topics as time permits include vector fields; finding curl and divergence of vector fields.

#### Statistics • 470

#### Prerequisite: Algebra II/Trig and the department's recommendation.

Statistics is a year-long, activity-based course that introduces students to the fundamental concepts and techniques employed when working with data. The course exposes students to four broad conceptual themes: exploring data, collecting data, probability, and testing hypotheses using statistical inference. The TI-84 graphing calculator will be an important tool for modeling and analyzing data sets.

#### Honors Statistics • 428

## Prerequisite: Completion of Algebra II/Trig. with a year-long grade of B+ or higher. Must meet honors criteria and receive department's recommendation

Honors Statistics is a year-long course that encompasses an exploration and understanding of data in the real world. The first half of the course focuses on describing and gathering data, experimental design, and the concept of randomness and probability. The second half of the course investigates inferential statistics with an emphasis on sampling distributions, confidence intervals, and hypothesis testing and the application of these concepts in today's world. The course will incorporate the data analysis capabilities of a TI-84 graphing calculator as well as computer software applications throughout the course.

#### Computer Science • 488

#### Prerequisite: Completion of or enrollment in Precalculus and instructor permission

This upper-level course is an introduction to computer science and computer programming using the programming language Java. This is course takes a project-based approach to learning how to program. This means that each week students are expected to complete a programming assignment while integrating the latest concepts that they have learned in class. At first, students are introduced to the fundamental concepts of object-oriented programming. At the same time, they learn how to develop computational thinking techniques in order to develop their problem-solving abilities. Students go on to learn advanced object-oriented programming concepts while learning how to design strategies and methodologies in order to write good computer programs. All the while, students slowly learn how to incorporate advanced data structures into their programs.

## Science

Students entering Lawrence Academy in the ninth grade must complete physics, chemistry, and biology in order to graduate. Students entering after the ninth grade must have completed chemistry and biology.

#### Physics • 517

#### Required of all ninth graders.

This year-long course gives students exposure to the basic laws of physics, which will be explored in the laboratory and discussed in the classroom; in addition, some computer labs and simulations will be used throughout the course. Students will set up and solve problems and use basic mathematical skills to model ideas and manipulate formulae. Subject areas to be covered include kinematics, force, work, energy, electricity, waves, and sound.

#### Chemistry • 503

#### Corequisite: Integrated Algebra and Geometry I

In this year-long course, students examine a number of the basic principles of chemistry through a largely conceptual lens. Topics will include basic dimensional analysis, atomic structure, the periodic table of the elements, ionic bonding and chemical reactions, basic stoichiometry and acids and bases. Laboratory work develops and reinforces students' understanding of concepts with observable phenomena and encourages problem-solving and analytical thinking. This course conveys the excitement, challenges, and importance of understanding chemistry in order to function as a wholly literate citizen in modern society.

#### Advanced Chemistry • 524

#### Prerequisite: Integrated Algebra and Geometry I

In this year-long course, students examine a number of basic principles of chemistry, including dimensional analysis, atomic structure, the periodic table of elements, chemical bonding and reactions, stoichiometry, solutions, acids and bases, organic chemistry, and biochemistry. Laboratory work develops and reinforces students' understanding of concepts with observable phenomena and encourages problem-solving and analytical thinking. This course conveys the excitement, challenges, and importance of understanding chemistry in order to function as a wholly literate citizen in modern society.

#### Honors Chemistry • 504

## Prerequisite: Integrated Algebra and Geometry II or successful completion of math skills assessment, an A- average in a previous general science course, and the department's recommendation.

This year-long chemistry course is offered for students with previous records of high achievement in science and math and who are likely to pursue advanced work in the sciences. The topics covered in this class will be more numerous than those covered in Chemistry, and students will learn these topics in greater detail and depth. The pace of this course will be accelerated, and students will be asked to construct their own understandings of chemical concepts. Laboratory work will be a major part of this course in order to help students develop strong problem-solving and analytical thinking skills.

#### Biology • 501

#### Prerequisite: Chemistry.

This year-long course is designed to help students understand the human body and the living world: Students will explore the diversity of life, cell theory, evolution, genetics, ecology, and human biology. The lab experience will be a critical component of this course and is designed to offer hands-on activities that challenge students to think and act like scientists. Making careful observations and recording data are stressed; in addition, students will be required to design and carry out their own original experiments and write formal lab reports. A background in chemistry will provide the foundation for a greater understanding of all areas of biology, including genetics, cell structure and function, physiology, and ecology.

#### Honors Biology • 502

Prerequisite: Chemistry, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation.

This year-long course is offered as the biology component in the honors science sequence; the chemistry prerequisite enables the course to take a more biochemical and molecular approach to the science of biology. The topics covered in this class will be similar to those covered in Biology, but students will learn them in greater detail and depth. Writing and thinking skills are a significant part of students' evaluations, and much of the laboratory work involves open-ended experiences followed by formal lab reports.

#### Public Health • 528

#### Prerequisites: Must have completed or be currently enrolled in Advanced Chemistry or Honors Chemistry

The health and wellbeing of our world has never been more paramount since the rise of COVID-19 as a global pandemic. Public health has shifted from a meaningful field of science to one of essential knowledge that all members of our community must examine and understand for themselves. From investigating the rise of disease spread to understanding the complex nature of health research, students will explore the impact of how different populations experience health concerns. The primary topics of study will be infectious disease pathology, global health interventions, environmental and occupational safety, and public health policy. Each area of research will be studied under the lens and context of the social determinants of health. The health and safety of communities spans far wider than the recent pandemic. Projects and research will be the focus of the course along with interpreting and analyzing scientific data.

#### Forensics • 527

#### Prerequisite: Must have completed or be currently enrolled in Chemistry

This course will focus on the sciences behind crime scene investigations. Through laboratory practice, case studies and mock crime scenes, students will use biology, chemistry, and physics to process and analyze evidence. This course involves intensive lab work and teamwork in an inquiry-based format. Forensics will focus on forensic biology and human evidence including trace evidence, fingerprints, hair, fabric, tool marks, tire prints, DNA, and blood spatter analysis.

#### **Environmental Science** • 509

#### Prerequisite: Chemistry and Biology

This year-long course will take a project-based approach to environmental science. Students will spend considerable time in the lab and in the field, collecting and analyzing data to better understand environmental problems, and they will be expected to use scientific methodology to evaluate multiple solutions to those environmental problems. Topics investigated will include ecology, climate change, pollution, and other current issues. Students should expect frequent reading assignments and to participate actively in discussions of current topics in the field of environmental science.

#### Honors Environmental Science • 510

### Prerequisite: Chemistry, Biology, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation

Students in this year-long, college-level, interdisciplinary science course will use scientific principles, content, and methodologies to study the interrelationships of the natural world and learn to identify and analyze environmental problems. Critical-thinking skills will be applied to evaluate the risks associated with these problems and examine alternative solutions for resolution and prevention of such problems. Students will be expected to do substantial independent learning throughout the year, and the course will culminate with an independent research project.

#### Marine Science • 508

#### Prerequisite: Chemistry and Biology

This year-long course begins with the study of oceanography, the physical nature, and the movement of the ocean. From waves and currents to tides and tsunamis, students will learn how our ocean has significant and lasting effects on our shores, our weather, and our livelihoods. The study of marine biology — including creatures ranging in size from microscopic plankton to humpback whales and giant squid — will be explored, and students will gain insight into the diversity, ecology, and adaptations of marine organisms, and into the habitats of the oceans. At the end of the year, students will research the current issues in the marine sciences, such as climate change, fishery sustainability, and ocean acidification, and choose a specific area for further explorations. The course will be taught through laboratory experiments and live observations, activities, projects, discussions, and fieldwork.

#### Honors Marine Science • 521

### Prerequisite: Chemistry and Biology, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation.

This rigorous, year-long course begins with the study of oceanography, the physical nature, and the movement of the ocean. Students will use online mapping programs and real-time data portals to model ocean bathymetry, currents, and temperatures and predict patterns such global circulation and El Nino events. In our study of marine biology students will learn about the diversity of life in the ocean, from plankton, invertebrates and larger animals. We will focus on current issues facing the world's oceans and finish the year with an in-depth independent research project in marine science. Projects will culminate in various forms such as interviews with scientists, field visits, peer-reviewed research articles, or advocacy campaigns through a variety of media. As a required aspect of this course, students will present their work to the community. The course will be taught through laboratory experiments and live observations of our classroom aquarium specimens, activities, projects, discussions, and possibly some fieldwork.

#### Anatomy and Physiology • 505

#### Prerequisite: Chemistry and Biology

This year-long course focuses on the anatomy and physiology of the human body, from the microscopic up to the macroscopic level. Through laboratory exercises centered on human organ structure and function, dissections of fresh and preserved mammalian specimens, and the study of diagrams and models, students will learn how the human body is assembled and operates. In this inquiry-based course, students will design their own experiment; research diseases, treatments, and current breakthroughs; examine case studies; and discuss modern-day controversies that arise from the study of medicine and the human body.

#### Honors Anatomy and Physiology • 523

## Prerequisite: Chemistry and Biology, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation.

This year-long, very accelerated course focuses on the anatomy and physiology of the human body, from the microscopic up to the macroscopic level. Students will be required to think independently as well as collaboratively. Through laboratory exercises centered on human organ structure and function, dissections of fresh and preserved mammalian specimens, and the study of diagrams and models, students will learn how the human body is assembled and operates. In this inquiry-based course, students will design their own experiments; research diseases, treatments, and current breakthroughs; examine case studies; and discuss modern-day controversies that arise from the study of medicine and the human body.

#### Advanced Physics • 506

#### Prerequisite: Chemistry and Algebra II/Trigonometry

This year-long course is offered to 11th and 12th graders looking for exposure to the basic laws of physics, which will be explored in the laboratory and discussed in the classroom; in addition, computer labs will be used throughout the course. Subject areas to be covered include kinematics, force, work, energy, electricity, waves, and sound. Students will set up and solve problems using algebra and trigonometry, and considerable time will be given to in-depth simulations to allow students to delve into some of these concepts more deeply.

#### Honors Physics • 507

Prerequisite: Chemistry, Algebra II/Trigonometry, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation

Honors physics is offered to those students who have a previous record of high achievement in math and science and who wish to experience a more in-depth study of physics. Topics in motion and mechanics will be explored in greater detail and with the use of advanced mathematical problem-solving, and electromagnetism will be introduced. Experimental methods with focus on advanced techniques in data acquisition and analysis.

#### Honors Experimental Chemistry • 526

Prerequisite: Algebra II/Trigonometry, Advanced or Honors Chemistry, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation.

In this year long course students will have the opportunity to build on their foundational knowledge of chemistry and explore more advanced topics in the areas of thermodynamics, kinetics, electrochemistry, and organic chemistry. The course will have a heavy experimental focus with an advanced and in-depth lab component. Students who sign up for this course should be interested in pursuing science and furthering their skills in analytical thinking, scientific reasoning, data/error analysis, and techniques in experimental chemistry.

#### Honors Research in Astronomy • 529

Prerequisite: Open to 11th and 12th grade students. Chemistry, Algebra II/Trigonometry, an A- average in a previous general science course or a B average in a previous honors science course, and the department's recommendation.

This demanding year-long course in astronomy introduces students to research techniques in contemporary astronomy. Basic astronomical concepts are covered on an as-needed basis, with a strong emphasis on student independence. As a class, we will learn to read original scientific papers, perform data reduction, access astronomical archives, and analyze and manipulate data. Students will learn basic Python programming and the use of Jupyter notebooks.

## History

Students who enter Lawrence Academy in the ninth grade must complete three years' worth of history courses, one of which must be U.S. History. Students who enter in 10th, 11th, or 12th grade must complete two years of history courses, one of which must be U.S. History.

#### Global Cultures: Then and Now • 612

#### Required of all ninth graders.

This year-long, skills-based course serves as the introduction to the history curriculum at Lawrence Academy. Students will read and understand a wide variety of primary source materials so as to explore a number of cultural topics from past and present; communication, close reading, analytical writing, and critical reasoning skills are emphasized. Students will learn the characteristics of various cultures from around the world and understand what behaviors and needs are essential for a culture to exist and prosper. Additionally, students will develop an appreciation for how cultures express themselves in unique and diverse ways and address the challenges that may threaten their survival. The course will also highlight the interaction between cultures: How do cultures and various societies cooperate and learn from one another, and why might those cultures conflict? The course has a research component as well, as it is emphasized throughout the history curriculum at Lawrence Academy.

#### Conflict and Change in Society • 600

#### Required of all 10th graders.

This year-long course builds on the skills instructed and cultural topics covered in Global Cultures: Then and Now. As sophomores, students will learn and discuss a number of themes and ideas associated with world history. Using both Western and non-Western topics in a dynamic, interactive, and student-centered approach, students will continue to focus on and develop their academic skills by using content that emphasizes primary source material from key moments and events in world history. Topics include the role of the individual within a society or state, how and why states are formed, and why states cooperate and conflict with one another. Students explore imperialism and colonialism, causes of revolution, genocide, theories of governance, and various forms of government. Additionally, students will look at forms of protest, the rise of Islam, and issues challenging our collection of states around the globe. Research is also an important component to this course, as students continue to do the work of historians at Lawrence Academy.

#### U.S. History • 601

#### Prerequisite: Conflict and Change in Society.

This year-long course consists of a series of problems (e.g., the American Revolution, the Civil War, the Great Depression, and the Civil Rights Movement) that, taken together, are an introduction to American history. Students are encouraged to think as historians do, using a variety of sources to answer questions, construct interpretations, and find meaning in historical events; they will also undertake a major research project. Simulations, primary source readings, analytical writing, and research skills will be emphasized in the course.

#### Honors U.S. History • 606

#### Prerequisite: Junior standing and the department's recommendation.

Honors U.S. History resembles U.S. History in its problem-based approach. In this year-long course, students will use a variety of sources — mainly primary documents, but also secondary sources, period literature, and films — to examine significant events in our past (e.g., the American Revolution, the Civil War and Reconstruction Era, and the Civil Rights Movement) and confront the important issues in American history. An emphasis will be placed upon analytical writing, but students will also be expected to contribute to class discussions on a daily basis, complete regular reading assignments, and write a substantial research paper. Not only will Honors U.S. History move at an accelerated pace, but students will be required to look deeply and critically into the sources in order to gain a sophisticated understanding of the American experience.

#### Gender in America: An Exploration of Media, Psychology and Popular Culture • 607

#### Open to 11th and 12th graders.

Humans are social animals, and this year-long course will look at human behavior through the lens of sociology and psychology. In this course, students will examine social constructions of our society with its rules, norms, and institutions. The fall term will focus on an introduction to the evolution of media and gender issues. Students will explore media stereotypes in advertising, film, and television; masculinity and femininity; and media literacy. We will try to answer questions such as: How does the media influence who we become? Who controls the message? Who controls the media? In the winter, through the lens of social psychology, students will try to understand "why we do, what we do": Why do people behave differently within the various groups to which they belong, how do these groups influence our behavior, and what role do gender constructs and the media play in shaping our behavior. The spring term will be focused on deconstructing feminism and toxic masculinity, exploring the constructs around gender roles in adolescents and understanding the many facets of today's hook up culture and its relationship to popular culture. This class will have an emphasis on discussion, analyzing primary sources, journal observations, papers, projects, and experiments..

#### History and Film: The World in Crisis • 615

#### Open to 11th and 12th graders.

World War I, The rise of Hitler and World War II, and the Cold War were a period of violence and danger, which consumed most of the 20th Century. In this yearlong course, we will make use of documentary and commercial film in studying this period. While there will be considerable reading and writing, we will use such films as *1917*, *The Triumph of the Will, Dunkirk, Night and Fog, Enemy at the Gates, Downfall, Atomic Café, 13 Days, We Were Soldiers, The Lives of Others*, etc. to help understand the history and how these big events affect ordinary people.

#### Human Geography • 632

#### Open to 11th and 12th graders.

The many ways in which human societies create, alter, and interact with their cultural and physical environments is the main focus of those studying geography. With that in mind, the purpose of this year-long course is to introduce students to a wide range of topics studied in the expanding field of geography. Students will explore a number of important themes and will often investigate in-depth case studies that show how geography and culture shape the political, social, and economic realities of the world around them. Students will learn to recognize how natural and man-made landscapes reflect and determine human habits, activities, and relationships. The purpose of this class is to help students draw on these insights, combine them with new ideas, and structure them in such a way that they may further develop a coherent perspective on the contemporary and changing world.

#### Honors Senior History: Nukes and Commies • 602

#### Prerequisite: U.S. History and the department's recommendation.

How did the United States get to the point of conspiring to give Fidel Castro an incurable skin fungus or assassinate him with an exploding seashell? Why have brainwashing, overkill, failsafe, hotline, McCarthyism, MAD, ICBM, SALT, and *Dr. Strangelove* become part of our vocabulary? The goal of this year-long course is to make today's news understandable through a study of America's relationship with the rest of the world since World War II. Special attention will be given to the competition — known as the Cold War — between the U.S. and various communist nations. Students in this course will examine communism in theory and in practice in Russia, China, and Cuba, as well as the special role of nuclear weapons and strategic thought in the Cold War. There will be an extensive examination of topics such as the origins of the Cold War (1945–1952), the Cuban Missile Crisis, and the Vietnam War, and students will study how the Cold War affected popular culture by watching and discussing films such as *Invasion of the Body Snatchers, The Manchurian Candidate*, and *Dr. Strangelove*. To better understand the period following the Cold War, students will be called on to learn about Iraq, Iran, Afghanistan, and the United States' relationship with Russia. There will be frequent writing assignments and a demanding schedule of readings, taken from a variety of sources, and critical thinking skills, logic, and argument will be stressed.

#### Honors Terrorism, Extremism, and Radicalism • 605

#### Prerequisite: U.S. History and the department's recommendation.

The Sept. 11, 2001, terrorist attacks ushered in a new era of American foreign and domestic policy with regard to keeping citizens safe from terrorism at home and abroad. Combatting terror and terrorism moved front and center for every local and national government in the world as radical and extreme groups and individuals, based on a wide array of demographic and political criteria, sponsored significant numbers of terrorist events around the globe. The use of terror by groups and individuals around the world is on the rise, not in decline, but why do these groups resort to this type of violence? Where do they receive their motivation and calling? How do they carry out these missions and choose their targets? Can we predict who might be a "lone wolf" terrorist, and how do individuals become radicalized? This year-long honors course will combine readings, discussions, case studies, and simulations to investigate the current landscape of terror at home and abroad. Students will understand terror, why groups and individuals resort to terror, and how they can carry out these activities.

## Foreign Language

Lawrence Academy students are required to complete two consecutive levels of any one foreign language throughout their time at LA, regardless of the level at which they begin. A placement test is required for all students continuing to study a language, but is not needed if the student will be studying the language for the first time.

### Chinese

#### Chinese I • 390

This year-long course provides an introduction to the study of Chinese (Mandarin). The aim of the course is to teach students to pronounce and write Pinyin and its intonations, and to understand, read, and write Chinese characters, with a focus on communicative competence and useful conversations. The course also introduces students to cultural and geographic information about the Chinese-speaking world. The language laboratory is an important learning tool throughout the course.

#### Chinese II • 391

#### Prerequisite: Chinese I

This year-long course aims to further develop the skills established in Chinese I. Basic material is reviewed and expanded upon, enabling students to advance their knowledge of Chinese grammar in the cultural context of daily life in China. Speaking and listening skills continue to be stressed, and writing in Chinese characters is now mandatory. Chinese word processing enables students to read and express themselves in the language.

#### Chinese III • 392

#### Prerequisite: Chinese II

This year-long course expands and refines students' foundations in Chinese language and culture. New grammar, vocabulary, and characters are introduced, then extensively practiced in class using a wide variety of instructional techniques and material. Continued word processing in Chinese provides students with a useful tool to express themselves with greater ease when preparing written assignments. The development of stronger listening and speaking skills remains a priority.

#### Honors Chinese III • 394

#### Prerequisite: An A- in Chinese II and the department's recommendation.

Chinese III and Honors Chinese III students are in the same classroom, and Honors Chinese III follows a similar curriculum to Chinese III; however, the year-long course moves at a more accelerated pace. Honors Chinese III students are responsible for more cultural and historical readings and greater content than their Chinese III counterparts, and they must also complete longer assignments, write detailed essays, and answer more questions on each test and quiz. Students in Honors Chinese III are held to a high standard in their class participation and critical thinking.

#### Chinese IV • 393

#### Prerequisite: Chinese III

In this year-long, accelerated course, linguistically strong students are encouraged to hone their reading, writing, word processing, listening, and speaking skills in Chinese. Writing assignments involving both handwriting and typing are given frequently in order to help students communicate constructively and creatively. Previously learned concepts and textbook materials are significantly expanded upon through introductory expository speaking that begins the process of mastering new grammar patterns and creative ways of describing realistic situations, people, character, locations, etc. Varied aspects of Chinese culture and history are used as topics for reading and class discussion.

#### Honors Chinese IV • 396

#### Prerequisite: An A- in Chinese III or a B in Honors Chinese III, and the department's recommendation.

Honors Chinese IV follows a similar curriculum to Chinese IV; however, students in this year-long course should demonstrate stronger conversational skills and more aptitude for the study of Chinese grammar. Additional grammar topics are introduced to further expand students' knowledge. Students will be assigned more readings and required to have a deeper understanding of the content than their Chinese IV counterparts; they must also write, speak, and lead discussions more often in class, and answer more questions on each test. Students in Honors Chinese IV are held to a high standard in their proficiency, interpretive, inter

#### Chinese V • 395

#### Prerequisite: Chinese IV

This year-long course is conducted almost exclusively in Chinese; students are expected and encouraged to express themselves without relying on English. The course relies heavily on authentic materials to supplement textbook content and is designed for students with sufficient Mandarin-speaking proficiency who understand and speak without major grammatical errors about daily life situations and simple sociocultural topics. It aims to further strengthen students' tonal control, expressional intonation, grammatical accuracy, and overall competence in interpersonal, interpretive, and presentational speaking. Assignments require a greater degree of creativity, initiative, and organization that is considerably more complex than those of a standard fifth-year class.

### French

#### French I • 301

This year-long course introduces students to the study of French though an immersive setting and a focus on proficiency. The aim of the course is to teach students to speak, understand, read, and write the language, with a focus on communicative competence; the course also introduces students to cultural and geographic information about the French-speaking world. Through task-based learning of thematic units, students are exposed to real-life situations and learn to navigate them appropriately. Students are assessed using a combination of The American Council on the Teaching of Foreign Languages (ACTFL) and the Common European Framework of Reference (CECR) standards.

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#### French II • 302

#### Prerequisite: French I

This year-long course expands upon the material of French I. Students will significantly broaden their vocabulary and ability to communicate in various scenarios, and will continue to learn in an immersive setting with a focus on proficiency. At this novice/intermediate level, grammatical structure is analyzed more specifically, though the emphasis remains on inductive learning and the development of oral proficiency. This course stimulates cultural awareness and the development of writing skills. Students further develop their skills using a combination of ACTFL and CECR standards.

#### French III • 303

#### Prerequisite: French II

In this year-long course, students consolidate and expand on complex points of French grammar while developing their reading ability through a variety of cultural readings, informal dialogues, and short stories. Emphasis is placed on oral and written communication while continuing the immersive environment necessary for learning. Students also further develop their skills using a combination of ACTFL and CECR standards.

#### Honors French III • 308

#### Prerequisite: An average of B+/A- in French II and the department's recommendation.

Students in this year-long course consolidate and expand on complex points of French grammar while developing their reading ability through a variety of cultural readings, informal dialogues, and short stories. Emphasis is placed on oral and written communication while continuing the immersive environment necessary for learning. Students also further develop their skills using a combination of ACTFL and CECR standards. Honors French III students are assessed using higher levels of proficiency and are required to produce work of a higher standard than their French III counterparts; they are also held to a higher standard in their class participation, critical thinking, and communicative ability.

#### French IV • 304

#### Prerequisite: French III

This year-long course is taught in an immersive environment and focuses on the non-European francophone world. Students begin with an initial review of essential grammatical topics to bridge from an intermediate-high level of language skills toward a solid advanced-low level of skills. Students then dive into exploring trends in popular Francophone culture: During an exploration of various musical, cinematic, and digital media, students will analyze the material for textual, historical, and cultural significance and value. Students strive to converse and express opinions exclusively in French and grow their vocabulary understanding through thematic study and task-based learning, and oral and written communication skills are held to a higher standard of accuracy in order to perfect their output. Students further develop their skills using a combination of ACTFL and CECR standards.

#### Honors French IV • 309

#### Prerequisite: An A- in French III or a B in Honors French III, and the department's recommendation.

This year-long course is taught in the same classroom as French IV: an immersive environment focused on the non-European francophone world. Honors French IV students communicate exclusively in the target language and are expected to enter the course with at least an intermediate-high proficiency level; students are also expected to be motivated to take learning into their own hands. During an exploration of various musical, cinematic, and digital media from the vast francophone world, students will analyze the material for textual, historical, and cultural significance and value. Honors French IV students are held to higher standards than their French IV counterparts and should expect to complete more detailed and thorough work; students should expect extra assignments and differentiated tasks aimed at pushing their skills further than those of the non-honors students. Students further develop their skills using a combination of ACTFL and CECR standards and are assessed in the intermediate-high to advance-low skill range.

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#### French V • 305

#### Prerequisite: French IV

This year-long course explores the French-speaking world through exposure to and analysis of current events as seen through the lens of French media. Students use their language skills to communicate exclusively in the target language, and grammatical topics aimed to refine expression in French are introduced throughout the course. Demonstrated skill in prerequisite courses is necessary for students to enter this course prepared to learn at the advanced proficiency level, as students are expected to be motivated to take learning into their own hands. From seminars to student-lead analysis of course content, the goal of the coursework is to advance expression in and understanding of authentic French through exposure to news, current publications, and recently released literature and film. Through deepening their understanding of current French culture, analyzing relevant historical events, and comparing the French experience with their own, students will leave this course with a strong understanding of the French society and its role in the global experience. Students further develop their skills using a combination of ACTFL and CECR standards.

#### Honors French V • 306

Prerequisite: An A- in French IV or a B in Honors French IV, and the department's recommendation.

This year-long course explores the French-speaking world through exposure to and analysis of current events as seen through the lens of French media. Students communicate exclusively in the target language and are expected to enter the course at an advanced-mid proficiency level or higher and be motivated to take learning into their own hands: From seminars to student-lead analysis of course content, the goal of the coursework is to advance expression in and understanding of authentic French through exposure to news, current publications, and recently released literature and film. Honors French V students are held to higher standards than their French V counterparts and should expect to complete more detailed and thorough work; students should expect extra assignments and differentiated tasks aimed at pushing their skills further than those of the non-honors students. Through deepening their understanding of current French culture, analyzing relevant historical events, and comparing the French experience with their own, students will leave this course with a strong understanding of the French society and its role in the global experience. Students further develop their skills using a combination of ACTFL and CECR standards.

### Latin

#### Latin I • 311

Students in this year-long course are introduced to the basic vocabulary, forms, grammar, and syntax needed to read and understand Latin. There is a great deal of practice in sight-reading as the students become more proficient, while, through the study of Latin derivatives, they strengthen their English vocabulary. An appreciation for and understanding of the Roman people and their many contributions to the world in which we live will be a concomitant goal throughout the year.

#### Latin II • 312

#### Prerequisite: Latin I

Students in this year-long course will continue their extensive study of vocabulary, forms, and syntax while perfecting their Latin reading skills. These Latin readings, as well as accompanying cultural notes, will provide further insight into Roman customs and institutions.

#### Latin III • 315

#### Prerequisite: Latin II

Having completed all of the essential grammar in Latin II, students in this year-long course will, for the first time, consistently read great Latin authors. Grammar review is integrated into the analyses of the texts being read: Typically, students will be asked to look over lines of a piece of text for grammatical constructions and vocabulary that they do not recognize, then proceed to translation after grammar and vocabulary are made clear. Typical readings in this course are the philosophical essays of Cicero in the fall term; myths from Ovid's Metamorphoses in the winter term; and Catullus' poems in the spring term.

#### Honors Latin III • 314

#### Prerequisite: A grade of B+ in Latin II and the department's recommendation.

Having completed all of the essential grammar in Latin II, students in this year-long course will, for the first time, consistently read great Latin authors. Grammar review is integrated into the analysis of the texts being read: Typically, students will be asked to look over lines of a piece of text for grammatical constructions and vocabulary that they do not recognize, then proceed to translation after grammar and vocabulary are made clear. Typical readings in this course are the philosophical essays of Cicero in the fall term; myths from Ovid's Metamorphoses in the winter term; and Catullus' poems in the spring term.

#### Latin IV • 310

#### Prerequisite: Latin III

Students in this year-long course spend the fall and winter terms focusing on one of the most important works in Western literature, Vergil's Aeneid. Students work to improve both their sight translation and poetry analysis skills, and learn about modern scholars' interpretations of this epic. The spring term is devoted to translating a new author, ranging from Lucretius to Propertius to Tacitus, so that students may experience a variety of authors from different genres. Students will develop strong analytical and communicative skills, which will allow them to succeed in any college-level course.

#### Honors Latin IV • 316

#### Prerequisite: A grade of B+ in Latin III or a B in Honors Latin III, and the department's recommendation.

Students in this year-long course spends the fall and winter terms focusing on one of the most important works in Western literature, Vergil's Aeneid. Students work to improve both their sight translation and poetry analysis skills, and learn about modern scholars' interpretations of this epic. The spring term is devoted to translating a new author, ranging from Lucretius to Propertius to Tacitus, so that students may experience a variety of authors from different genres. Honors students are required to present and develop essays frequently on a variety of topics, ranging from their own translations to scholarly research and publications on the Latin texts studied in class. Students will develop strong analytical and communicative skills, which will allow them to succeed in any college-level course.

#### Honors Latin V • 320

Students in Honors Latin V will have the opportunity to study a particular theme or topic throughout the course of the academic year. These themes or topics are determined by both the students and the faculty member and may change from term to term. Students at Lawrence Academy have studied topics ranging from the Epicurean philosophy of Lucretius to the Stoic philosophy of Seneca and Marcus Aurelius, the causes of the collapse of the Western Roman Empire, the translation of modern literature into Latin, among many others. A major project is required at the end of each term to demonstrate each student's understanding of the material.

### Spanish

#### Spanish I • 331

This year-long course offers an introduction to the study of Spanish, with an emphasis on the active and practical use of the language for communication. Students learn vocabulary and grammatical structures through oral and listening activities as well as written exercises, and Spanish and Latin American geography and culture are integral parts of this course. The language laboratory, along with other technological resources, plays an important part in the Spanish I curriculum.

#### Spanish II • 332

#### Prerequisite: Spanish I

An emphasis on speaking and writing continues in the second year of Spanish study. In this year-long course, the focus remains on communicative skills in Spanish, supplemented by practical applications of grammar principles. Students' comprehension levels are tested through active oral, aural, written, reading, and cultural exercises; Spanish is spoken throughout the course, but English may be used to explain some points of grammar. By the end of the year, students should be able to handle most situations that require basic communication in the language. Spanish and Latin American culture are also an integral part of the course, and the language laboratory is frequently used to enhance students' skills.

#### Spanish III • 333

#### Prerequisite: Spanish II

This year-long course emphasizes a review and expansion of grammar topics, as well as the refining of written and oral skills. Correct application of complex grammar structures is practiced through reading and writing articles and texts dealing with Hispanic literature, art, and culture. The class is conducted in Spanish to the greatest extent possible, and students have ample opportunities to use the language and improve fluency. The language laboratory is also used for further development of language skills and cultural appreciation.

#### Honors Spanish III • 338

#### Prerequisite: An A- in Spanish II and the department's recommendation.

This year-long course follows a similar curriculum to Spanish III; however, it does so at a more accelerated pace. Honors Spanish III students are responsible for more cultural and historical readings and greater content than their Spanish III counterparts; they must also complete longer assignments and practice more in-depth writing, and will be expected to know an extensive amount of material for all assessments. Students in Honors Spanish III are held to a higher standard in their class participation and critical thinking as well.

#### Spanish IV • 334

#### Prerequisite: Spanish III

This year-long course is conducted entirely in Spanish by both the teacher and the students. Students are expected to practice their interpersonal skills in Spanish through full participation in all activities and by making a commitment to speaking Spanish and actively listening in the classroom. The course aims to further develop students' proficiency across the three modes of communication from The American Council on the Teaching of Foreign Languages (ACTFL) standards — interpretive, interpretsonal, and presentational — through a variety of drills, presentations, debates, discussions, projects, and grammar reviews. The course begins with a thorough review of previous grammar topics and moves to more advanced concepts, such as the subjunctive mood, both present and past. Students read a variety of authentic selections to advance reading comprehension and analysis skills, explore historical time periods and culture, and compare literary pieces and their style throughout the Hispanic world.

#### Honors Spanish IV • 344

#### Prerequisite: An A- in Spanish III or a B in Honors Spanish III, and the department's recommendation.

Candidates for Honors Spanish IV should demonstrate strong interpersonal skills and be eager to communicate exclusively in the target language using rich, advanced vocabulary and linguistic structures. One of the primary goals of this year-long course is to improve students' proficiency across the three modes of communication from The American Council on the Teaching of Foreign Languages (ACTFL) standards: interpretive, interpersonal, and presentational. Therefore, it is imperative that students entering the course be willing to participate frequently in class discussions, debates, and conversations entirely in Spanish; in addition, students should demonstrate a strong aptitude for the study of Spanish grammar. The course begins with a thorough review of previous grammar topics and moves quickly into an in-depth study of the subjunctive mood (both present and past tense). At the same time, the course seeks to develop reading and writing skills while simultaneously exposing students to a variety of cultural experiences and lessons to explore historical time periods and culture.

#### Spanish V • 335

#### Prerequisite: Spanish IV and the department's recommendation.

This year-long course is conducted entirely in Spanish, with the goal of advancing proficiency in all skill areas through extensive practice in listening, speaking, reading, and writing. Material is presented in thematic units of study; literature, film, and art figure prominently and mix throughout the year. Further study of advanced grammar topics is undertaken, and an emphasis is placed on practical applications of grammatical structures.

#### Honors Spanish V • 336

#### Prerequisite: A grade of B or higher in Honors Spanish IV and the department's recommendation.

In this year-long course, all communication is in Spanish, both inside and outside of the classroom, and students will be pushed to attain a high level of both speaking proficiency and reading comprehension. Readings will include short stories and poetry, and a novel; authors may include Isabel Allende, Julio Cortazar, Laura Esquivel, Gabriel Garcia Marquez, Ana Maria Matute, and Pablo Neruda. Students will participate in seminars to discuss the readings, and they will write analytical essays on the literature they have read. Conversations with native speakers will be common in order to boost fluency.

#### Honors Spanish VI • 337

#### Prerequisites: A grade of B or higher in Honors Spanish V and the department's recommendation.

This rigorous, year-long course requires a passion for Spanish and a willingness to take intellectual and creative risks; it is a fully immersive course aimed at attaining a high level of both oral and written fluency. There will be a distinct focus on reading, discussing, and writing analytical essays on Hispanic literature. Students will read many different genres and create their own stories based on the literature they read. The Hispanic authors studied may include Isabel Allende, Julio Cortazar, Laura Esquivel, Gabriel Garcia Marquez, Ana Maria Matute, and Pablo Neruda.

## Arts

Students entering Lawrence Academy in the ninth grade must complete two years of art, one of which must be Artistic Expression. Students entering LA after the ninth grade must complete a term-length art course for each year they are enrolled.

### Year-Long Courses

#### Artistic Expression • 101

#### Required of all ninth graders.

In this year-long course, students will develop a respect for the creative space of the classroom and experience the process of making art in a variety of forms. In an environment safe for taking risks, students will learn to use the creative process to articulate their individual perspectives through visual and performing arts. They will playfully and spontaneously explore elements of design and expression to develop their individual artistic "voice." Students will observe artwork carefully, making inferences about intention and purpose, growing comfortable with responding critically to the work of others and to having their own work critiqued. Students will explore the use of their individual and collective voices. Ninth graders will leave this course prepared for meaningful and disciplined study in any of the visual and performing arts they may study in the coming years.

#### Honors Dance I • 122

#### Prerequisite: Instructor's permission.

This year-long course is designed for students looking for a sustained and rigorous immersion into dance. It consists of a threepronged approach: skills, choreography, and performance. While we will touch upon all three elements during each term, the emphasis early on will be the improvement of physical technique; the second point of emphasis will be choreography, which itself may be divided into two components — material invention and compositional structure — and the third point of emphasis will be performance skills. Adding foundation to all three aspects of the course will be research into the history and theoretical philosophy of dance as a human endeavor.

#### Honors Dance II • 123

#### Prerequisite: Honors Dance I and instructor's permission.

This year-long course will only be offered to students who excel in Honors Dance I. The curriculum will largely consist of the same components and emphases, with the following additions: an expectation of increased ability to focus and concentrate; increased complexity in compositional structure; and greater leadership and consciousness of the subject matter and issues with which today's artists are grappling.

#### Honors Digital Media • 017

#### Prerequisite: A previous course in photography or film and instructor's permission.

This year-long course will focus on still photography in the fall, with skill-building projects, field trips, and critiques. During the winter term, the emphasis will be on sequential photography, film, and/or digital illustration. In the spring, students will concentrate on projects of a more independent nature.

#### Honors Lawrence Academy Singers • 031

#### Prerequisite: Junior or senior standing and instructor's permission.

This year-long course is offered to juniors or seniors who have sung in LA Singers for at least three trimesters and have passed a musical proficiency test. In addition to participating as a full member of the chorus by preparing repertoire and studying methods in sight singing, vocal technique, ensemble building, and expression, Honors LA Singers students serve as leaders in a variety of ways based on interest and experience, including running sectionals, conducting the choir, composing or arranging for the choir, researching and analyzing the repertoire, and assisting the conductor. The ensemble prepares concerts for the end of each trimester and repertoire for various events on and off campus throughout the year.

#### Honors Performance Studies • 110

#### Prerequisite: Basic proficiency on an instrument and permission of the instructor.

Performance Studies is a class for instrumentalists and focuses on the student as a solo and collaborative performer. The course includes playing in small combos in any style, working independently with a private instructor, and performing regularly in class. The objective is to help instrumentalists gain the tools to become more well informed, confident, self-aware, and expressive performing artists. As a class we will also practice the skills of giving useful, critical feedback. In addition to full participation in the course, Honors members may prepare a Junior or Senior Recital and take on leadership roles in the combos.

#### Honors Theatre Ensemble • 025

#### Prerequisite: Junior or senior standing and instructor's permission.

This year-long course will build on fundamental skills learned in previous theatre courses or productions and will give students an opportunity for more in-depth study. Students will focus on developing their acting and directing skills as well as techniques for devising original work; they will be asked to collaboratively develop and perform material in an ensemble, as well as to analyze and interpret theatrical literature from the point of view of the director, actor, and designer. By exploring new ways of telling stories and communicating ideas theatrically, and by guiding their peers as directors, students will deepen the search for their own artistic voice. In the spring trimester, students will adapt, write, or select a one-act play that they will direct in a fully realized production.

#### Honors Theatre Ensemble II • 139

#### Prerequisite: Honors Theatre Ensemble

This year-long course will allow students who have taken Honors Theatre Ensemble to deepen their skills as actors, directors, and producers of theatrical work. Students enrolled in the course will serve as leaders in the class, assisting with the selection of theatrical texts, leading scene analysis, directing scenes, and partnering with other students to adapt, write, or select a one-act play for direction as a fully realized production.

#### Honors Visual Art I • 131

#### Prerequisite: Junior or senior standing and instructor's permission.

This year-long course is designed for highly motivated visual art students. It will give students the guidance and instruction they need to create portfolios of their own work, both for the college admission process and for their own artistic development. Students will be expected to experiment with new materials and techniques, as well as focus on one medium with the goal of producing a coherent body of work. While significant portions of the course will be dedicated to individual pursuits, the class will also participate in group assignments and formal critiques. Students will also work collaboratively with the other honors-level art classes throughout the year for a multidisciplinary arts experience.

#### Honors Visual Art II • 132

#### Prerequisite: Honors Visual Art I, senior standing, and instructor's permission.

This year-long course is designed for students who took Honors Visual Art I as juniors, and its emphasis is on students developing their artistic voices as they set their own goals and build their portfolios. Students are expected to work extensively within their principle medium but are also encouraged to continue to experiment with other media in order to broaden their ranges as visual artists. Instruction is individualized to each student as they work to achieve their goals and develop their artistic voices.

#### Independent Music Instruction (1/3 credit total)

#### Ninth graders may participate if their schedule allows.

Please note: Students will be charged the school's usual fee for lessons. Receiving course credit is dependent on the successful completion of all three terms; if the student drops this course prior to completion, no credit will be issued.

This year-long course offers students an individualized learning experience with a private instructor. During one lesson per week, students will develop technique and expression while exploring the repertoire for their instrument. Students are expected to practice a minimum of two hours per week, will be required to perform in two of the three recitals throughout the year, and are encouraged to participate in the vocal and instrumental ensembles.

### **Term Courses**

All term-length art courses are 1/3 credit, unless otherwise indicated, and open to all 10th, 11th, and 12th graders, unless otherwise indicated.

## **Performing Arts**

### Dance

#### Choreography I • 070

This term-length course is designed to introduce students to dance composition involving the invention of raw material and the structuring or crafting of that material into a piece of dance or physical theatre. Students invent movement utilizing thematic, psychological, and musical stimuli. They also further explore craft (or composition) and increase their understanding of dance "conventions" and physics: use of space, textural dynamics, speed, and the impact on the viewer. While this is not a dance technique class, it is a movement class, and students are expected to perform their own and others' choreographed material both in class and in a public setting.

#### Choreography II • 047

#### Prerequisite: Choreography I

This term-length course will follow Choreography I with a deeper immersion into convention, structural, and framework choices made by the director/choreographer. Students will also look at methods of movement invention and the process's connection to our psyche; additionally, they will begin to look at the concepts of elaboration and dramatic arc, beginning with movement and body language analysis.

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#### Introduction to Dance • 120

This term-length course focuses on the physical side of dance. Students will do exercises designed to increase flexibility, strength, and awareness of their bodies in movement. 19. We will move in a variety of physical styles to gain greater confidence with respect to the "delivery" or performance of material.

#### World of Dance I • 126

This term-length course is designed to introduce students to the complexity and profoundness of dance. We will look at dance from a historical perspective, exploring the anthropological, social, and religious roots of dance. We also will look at the legends and mythologies surrounding dance, trace their origins, and analyze their impact on our modern perceptions. This class will include both movements in the studio and readings on religion, psychology, and anthropology.

#### World of Dance II • 042

#### Prerequisite: World of Dance I

This term-length course will follow The World of Dance I with a deeper immersion into the symbolism and imagery of our shared human consciousness. Students will begin to see dance both as protolanguage and psychological expression essential to a fuller understanding of ourselves as individuals and groups.

### Music

#### Lawrence Academy Singers • Fall, Winter, Spring

Note: Lawrence Academy Singers is open to students at all grade levels; may be taken by term or for the full year; and may be repeated as often as desired. Students may also participate for no credit, provided they are free during the block when the class meets.

LA Singers is a chorus for credit, and students do not need prior experience to sing in the chorus. Students will learn and create choral music in styles that span the depth and breadth of music history; also incorporated will be methods in sight singing and vocal technique, and the emphasis will be on ensemble building, expression, and serving the greater good. The ensemble will prepare concerts for the end of each trimester and repertoire for various events on and off campus throughout the year.

#### Music I: Introduction to Music • 018

This term-length course introduces students to the world of music. By using the fundamentals of music theory and music history, students will become more active listeners and observers. Students will apply these skills by learning basic ukulele, guitar, and piano, and by composing and performing at various levels. This class is intended both for students who wish to continue their study of music and for students who are interested in trying something for the first time.

#### Music I: Piano Class • 028

This term-length course is intended for beginner piano players with little to no experience reading music. Students will learn to read pitch and rhythm notation, to play the piano with both hands, to read and play chords, and to play in an ensemble. Homework will primarily consist of practicing piano, for which students will have access to the practice rooms.

#### Music II: Musicianship • 023

#### Prerequisite: Any Music I course or the Director of Music's approval.

Music II: Musicianship picks up where all Music I courses leave off: at the beginning of tonal harmony. Students in this term-length course will compose and analyze music that uses basic tonal harmony in major and minor keys without modulation. A solid foundation in identifying notes on the staff, reading rhythmic notation, understanding accidentals, and basic proficiency on the piano is expected.

#### Music II: Songwriting • 010

#### Prerequisite: Any Music I course or the Director of Music's approval.

This term-length course focuses on the art of songwriting, combining the elements of creative self-expression, lyric writing, notation and lead-sheet, technical proficiency, and collaboration. Live and digital musicians are welcome, as students will create a portfolio of work in varying styles.

#### Music III: Advanced Musicianship • 024

#### Prerequisite: Any Music II course or the Director of Music's approval.

This term-length course continues from all Music II courses, beginning with modulation techniques; similar to Music II, a solid foundation in identifying notes on the staff, reading rhythmic notation, understanding tonal harmony, and basic proficiency on the piano is expected. Students will compose and analyze music that uses tonal harmony in major and minor keys with modulation and tonicization; students may also explore the theme and variation technique of composition, write fugues and other counterpoint forms, and interpret their analyses and compositions for performance.

#### Performance Studies (Fall, Winter, Spring)

#### Prerequisite: Basic proficiency on an instrument and permission of the instructor.

Performance Studies is a class for instrumentalists and focuses on the student as a solo and collaborative performer. The course includes playing in small combos in any style, working independently with a private instructor, and performing regularly in class. The objective is to help instrumentalists gain the tools to become more well informed, confident, self-aware, and expressive performing artists. As a class we will also practice the skills of giving useful, critical feedback.

### Theatre

#### Acting I • 096

This term-length course begins with basic exercises to hone the actors' tools, beginning with focus, energy, and imagination. As we dive more deeply into the craft of the performer, we learn the importance of goal or intention, obstacles, and playing of tactics. Students examine classic and modern dramatic texts from the point of view of the actor, bringing the words on the page to life in exciting and dynamic ways and experimenting with a variety of performance styles. Continued skill development in voice, movement, and improvisation builds a stronger foundation of tools for the actor.

#### Acting II • 099

#### Prerequisite: Acting I

This term-length course will allow students who have taken Acting I to further their study of acting through more methodical character development and script analysis. Acting II will ask students to dive into more complex texts and characters and become leaders by example for beginning actors. Acting II students will work independently to study acting theory and ideology and will focus their work on improving action, given circumstances, relaxation, and concentration.

#### Improvisation I • 091

This unpredictable, incredibly fun, and challenging term-length course asks students to focus on listening, responding honestly, and making strong and truthful actor choices. Students develop a foundation of acting techniques and work to solve problems collaboratively during spontaneous performances; improvisation is also applied to the creation and rehearsal of scripted material. Activities include theatre games, storytelling, character development, and scene building. The ultimate goal of the work is to hone the students' abilities to be truly alive, playful, and paying attention to the moment they are in, so the value of this work is clearly wide-ranging.

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#### Improvisation II • 092

#### Prerequisite: Improvisation I

This term-length course will allow students who have taken Improvisation I to further their study of this elusive and challenging discipline while continuing to hone the skills of listening, responding truthfully, and making strong actor choices.

Improvisation II will ask students to dive into more extended narrative situations and become leaders by example for beginning improvisers. The ultimate goal of the work, as in Improvisation I, is to hone students' abilities to be truly alive and playful, paying attention to partners and to the moment they are in, so the value of the work is clearly wide-ranging.

#### The Art of Communication • 138

This term elective prioritizes strengthening communication skills, including the ability to speak publicly and convey complex ideas, captivate an audience, and improve active listening skills. Today's leaders must have the ability to communicate with clarity, purpose, and authenticity. Using improvisation and storytelling techniques, students will strengthen their formal and informal speech communication skills by examining self, subject, audience, space, and time. Students will also sharpen their listening skills as they offer daily critique, emphasizing the effectiveness of body, face, and voice.

## Visual Arts

### **Digital Arts**

#### Digital Illustration • 137

This term-length course will explore ways to use drawing, collage, and photography to create art in the digital space. Projects will include GIFs, webcomics, and modified photography as students explore the versatile, ever-evolving world of digital design. They will use tools such as Adobe Illustrator to create graphic art meant to be viewed and shared in online environments.

#### Digital Photography I • 093

This is a one term course designed to help you understand the fine art of photography. You will be using a 35mm DSLR supplied by the school to shoot technical, but always aesthetic, projects. Using your computer and the software Lightroom, you will learn to edit your work to be print ready. Field trips to local areas are included to keep subject matter dynamic. The course culminates in a student show.

#### Digital Photography II • 095

#### Prerequisite: Digital Photography I.

This term-length course is designed for students who wish to continue in photography and combines local field trips for photo-taking, camera techniques, editing, studio work, and critiques. Building on skills learned in previous classes, students will engage in projects of a more technical and aesthetically challenging nature. The course culminates with an art show.

#### Digital Photography II: Creating a Book • 094

#### Prerequisite: Digital Photography I or instructor's permission.

Using digital photography, students will spend this term-length course learning the aesthetic and technical aspects of photography. Students will be encouraged to express a personal style and explore areas of special interest. The ultimate goal of this course is the creation of a book that contains cohesive thematic content as well as the demonstration of an individual expressive style; design, layout, editing, and software usage will be important skills in creating this personal artifact.

#### Photographing People • 093

#### Prerequisite: Digital Photography 1.

This is a term-length course designed to have students appreciate the beauty of mankind. As every face is different, so is the way in which it can be photographed. Attention will be given to the psychology of the portrait, as well as historical aspects of the portrait. From close-ups, to silhouettes, to the figure in the landscape, the range of styles in people photography will be explored. Students will be using a 35mm DSLR, and the editing tool Lightroom, both supplied by the school.

#### Film I • 090

This term-length course is a fast-paced introduction to digital filmmaking and Adobe editing software. Students will produce many short movies in small groups to explore a variety of techniques and begin critiquing their work with a careful eye. They will learn to work together to build a better understanding of the tools available to modern filmmakers.

#### Film II • 089

#### Prerequisite: Film I or instructor's permission.

This course will dive deeper into the filmmaking process. Students will plan, shoot, and edit a single project over the course of the term.

### **Studio** Arts

#### Animation • 009

This term-length course is an introduction to the animation process, and will put an emphasis on observing motion carefully and using sequential imagery to communicate ideas. Students will work together to create a variety of short projects: They will begin with basic flipbook and stop-motion techniques and move toward using software to animate drawings digitally. Students will observe and critique each other's work with the goal of better understanding both the challenges and possibilities of setting artwork in motion.

#### Ceramics I • 105

This term-length course will introduce students to the world of clay: hand-building, wheel-throwing, and glazing techniques will all be explored as students learn how to express themselves through this ancient and versatile medium. Both traditional vessel-making and contemporary sculptural methods will be used. Peer critiques and individualized attention from the teacher help students develop both technical skills and creative voice.

#### Ceramics II • 103

#### Prerequisite: Ceramics I

This term-length course is for students who wish to continue building on the skills they learned in Ceramics I. More advanced hand-building and wheel-throwing techniques will be covered, and students will be encouraged to work independently as they strive to develop style and meaning within their work.

#### Collaborative Art • 072

The Collaborative Art course focuses on the intersection of creativity, teamwork, and collaboration through art. This studio-based class offers students an opportunity to work together on various collaborative art projects such as murals, sculptures, and installations, while also developing their artistic abilities. Students will learn valuable skills such as brainstorming techniques, project planning, communication strategies, and synthesizing ideas. Throughout the course, students will work in groups to create collaborative pieces, exploring new ideas and techniques while receiving peer feedback and critique to help them develop their skills further. Through this process, students will learn how to support each other and develop skills that will serve them well in both artistic and non-artistic contexts.

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#### Design and Build • 098

This term-long course will take students through the process of developing an idea into a full-size prototype. Both aesthetic and practical concerns will be addressed through a range of traditional and unconventional building materials. Early assignments will be structured to build skills and the second half of the term will be devoted to an independently developed project. Peer critiques and individualized attention from the teacher help students develop both technical skills and creative voice

#### Drawing I • 102

The goal of this term-length course is twofold: First, this course will introduce students to the techniques necessary to represent the world around them through observational drawing; second, students will use those skills to express themselves creatively and artistically and to begin to establish an individual style and voice. Students use graphite, charcoal, ink, pastels, and colored pencils, among other media, as they explore elements of art such as line, light and shadow, and composition. Peer critiques and individualized attention from the teacher help students develop both technical skills and their creative voices.

#### Drawing II • 100

#### Prerequisite: Drawing I

This term-length course will explore a variety of practices to get students outside their comfort areas of drawing and expose them to a variety of techniques and materials, helping each student to develop their individual voice. Students will work on larger-scale drawing to expand their visions; throughout the term, each student will have an independent theme or focus from which to create a series of drawings and generate a body of work. The group will engage in critiques of their work and written reflections of their thinking and expression.

#### Multimedia • 040

In this term-length course, students will explore the connection between what they want to say and the media they choose to convey their artistic ideas. They will receive instruction in printmaking, collage, drawing, and 3D assemblage; incorporating design principles, students will use alternate surfaces, as well as media associated with the technological age, to create expressive works. The historical and social perspectives of these artistic processes and how they relate to our present day will be examined. Students will maintain a sketchbook/journal, and they will participate in peer critiques.

#### Painting I • 104

This term-length course introduces students to the many ways they can express themselves through the medium of paint. While some time is spent learning color theory and painting techniques through class exercises and assignments, the majority of the course focuses on the creation of unique, individual art. Some of the genres available for exploration and experimentation are still-life, portraiture, working from images, and abstractions. Peer critiques and individualized attention from the teacher help students develop both technical skills and their creative voices.

#### Painting II • 108

#### Prerequisite: Painting I

This term-length course is designed to continue to refine the color-mixing technique and begin to develop each individual student's unique style of painting. By the end of the term, each student will develop a body of work, which will include multiple pieces showing the evolution of their understanding of color, light, and shadow. Students will also write a comprehensive artist statement about the work they produce, and will have their work displayed at the end-of-term art exhibit.

#### Printmaking • 177

This term-long course covers a range of printmaking techniques, including mono-printing, linoleum block printing, and screen printing. Students will explore the artistic potential of printmaking as they learn how to express themselves through the materials used and the printing process itself. Peer critiques and individualized attention from the teacher help students develop both technical skills and creative voice.

## Independent Learning Opportunities

#### Independent Study • Fall, Winter, Spring

Students may undertake an independent study in lieu of a regular course, provided that course is not a graduation requirement and that a course with the same topic as the independent study is not already offered. See the *Student Handbook* for more information, and the application procedure.







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