



2024-2025  
Program of Studies

# George Stevens Academy

## Our Mission

*Our mission says who we are and what we do.*

George Stevens Academy is a town academy on the coast of Maine. Founded in 1852, we are the high school for nearly all students from the seven towns in our rural community. We also enroll private-pay day and boarding students from around the world. Our students' interests, talents, and aspirations reflect the diversity of the communities from which they come.

GSA provides a comprehensive and challenging education for all students, for those who will build futures in surrounding communities and for those who will make lives elsewhere in the world. Our many academic and experiential programs foster a love of knowledge, inspire creativity, instill self-confidence, encourage good character, and prepare each graduate for a purposeful life in a changing world. (Approved by the Board of Trustees on April 25, 2019)

## Our Vision

*Our vision sets out our broad goals for the future. We are well on our way to accomplishing some of these, others will take longer, but all are attainable with community support.*

- We will be a vibrant learning community that proudly reflects the diversity of students from our surrounding towns, as well as those from elsewhere in the world, enabling them to thrive now and in the future.
- We will provide all GSA students with an education that helps them pursue whatever jobs and career paths they choose, so that when they succeed, they and their communities will be the better for it.
- We recognize that a GSA education is not just a matter of cultivating intellectual and creative strengths but also requires caring for students' physical and emotional needs. Everything we do will be stamped with this conviction.
- We will be seen as a community resource, in the belief that schools and their communities make each other stronger. We will expand school-community partnerships and real-world learning opportunities that engage students and community members in shared activities and projects for the benefit of both.
- We will have a safe, attractive, functional, and cost-efficient facility that supports our current programming well and has the flexibility to adapt to changing needs in the future.
- We will be financially sustainable, with the resources we need to maintain GSA's facilities and provide for every GSA student's needs. We will grow our endowment, meet more ambitious annual GSA Fund goals, and benefit from the support of sending towns that recognize the indispensable value of a strong high school in their community.

January 2024

Dear George Stevens Academy students and parents,

Students are the heart of a school, and the curriculum is the heart of what students and teachers do together at school. The Program of Studies describes the curriculum GSA has developed to prepare students for many aspects of life after high school.

There are many different goals for a curriculum. Sometimes we learn because it satisfies our curiosity, or is self-fulfilling, or expands who we are. Sometimes we learn because it prepares us for later education, or for a career, or to be good citizens of our community. All of these aspects of learning are found within the curriculum at GSA.

Our curriculum has both breadth and depth. There is a set of common knowledge and experience that all students, and all people, should have. All students should know something about, among other things, American literature, the creative arts, biology, mathematics, and world history, so all students take courses in these areas. But students are also individuals, and we make sure that our curriculum allows for individuality and depth of study; students can follow their unique interests by pursuing multiple courses in an area of expertise or broaden their experience by sampling from our wide array of electives.

GSA offers many ways for students to individualize some of their learning beyond the curriculum listed in the Program of Studies: Alternative Courses, Independent Study (ISIP), AP4ME, Career Internships, and college and online course opportunities through GSA. Students can find out more about these opportunities through their advisor, who will be their guide through their years at GSA.

Best regards,

A handwritten signature in black ink that reads "David Stearns". The signature is written in a cursive style with a long, sweeping underline.

David Stearns  
Dean of Curriculum and Instruction

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## GRADUATION REQUIREMENTS

Students are encouraged to challenge themselves by taking an ambitious course of study to prepare themselves well for their futures. Faculty advisors and the Dean of Curriculum and Instruction are available to help students plan their schedules.

The GSA diploma is conferred upon students who have satisfactorily met the requirements described below. Participation in the graduation ceremony is reserved for students who have met all graduation requirements at the time of graduation.

### *Minimum Credit & Distribution Requirements*

- 4 credits of English (must include Senior English or AP Language and Composition)
- 3 credits of mathematics (must include two credits of algebra or higher level analytic math courses plus one credit of geometry)
- 3 credits of science
- 3 credits of social science (must include US History)
- 1 credit of physical education
- 1 credit of visual and performing arts
- ½ credit of health
- ½ credit of ISIP
- 7 credits of electives (6¾ for Class of 2025)

Total: Class of 2025: 22.75 credits, 40 hours of community service  
 Class of 2026 (and following): 23 credits, 60 hours of community service

### *Minimum Course Load*

All students are required to carry a minimum of six (6) courses each semester.

### *Honors Course Policies*

Honors courses challenge students to pursue a subject more deeply, and more rigorously. Honors course enrollment policies are as follows:

- New students will discuss the appropriateness of taking an honors course with the admissions office as they register for classes.
- A student enrolled in an honors course at GSA must achieve a final grade of 80 or better in order to enroll in the next level honors course in that department unless an alternative non-honors course is unavailable.
- A student who earns a final grade of 90 or better in a standard-level course, or who has an average of 87 for the course AND a 90 for the second semester, may enroll in the honors level in the next appropriate course in that department.

### *Courses Requiring the Approval of the Dean of Curriculum and Instruction*

The Dean of Curriculum and Instruction must approve in advance Alternative Courses and courses taken for credit outside George Stevens Academy.

For more details about academic policies, consult the Student-Parent Handbook.

## COURSE SELECTION AND POST-GRADUATE PLANNING

As you think about what courses to choose each year, it may be helpful to know what colleges expect when students apply for admission. GSA's curriculum is designed to prepare students for a very broad range of colleges, from the most selective four-year institutions to two-year community colleges and programs that offer specialized training for particular careers. Following is a general guide to the recommendations of colleges in each category, but each student's situation is unique, so it is important to have a personalized conversation with our college and career counselor regarding your aspirations and course planning. Keep in mind that these guidelines represent the basic academic requirements for colleges in each category. Students should also take courses in the arts and technology, and participate in a variety of extracurricular activities, such as sports, theater, community service, or student government.

### *Most selective colleges*

These schools include the Ivy League schools, liberal arts colleges such as Bowdoin, Colby, Colgate, Middlebury, Smith, and Williams, and public universities such as the University of Virginia, University of North Carolina, and the flagship schools of the University of California system, such as UCLA and UC Berkeley. Applicants should pursue the most challenging courses in every subject area, including:

- 4 credits of English, including AP English Lit and AP Language and Composition;
- 4 credits of math, preferably including an AP course;
- 3-4 credits of social studies, including AP US History;
- 3-4 credits of science, including honors or AP Biology, chemistry, and physics;
- 3-4 credits of the same foreign language at the honors level.

### *Very selective colleges*

Colleges in this group include such popular schools as Boston University, Skidmore College, Connecticut College, University of Rochester, and the University of Massachusetts-Amherst. Successful applicants pursue a challenging program of honors or AP courses in most subjects, including:

- 4 credits of English, including AP English Lit and AP Language and Composition;
- 4 credits of math, including precalculus;
- 3-4 credits of social studies, including at least one honors or AP course;
- 3-4 credits of science, including honors courses in biology and chemistry;
- 3 credits of the same foreign language, preferably at the honors level.

### *Selective colleges/Less selective colleges*

Colleges in the selective group include Maine Maritime Academy, the University of Vermont, Worcester Polytechnic Institute, Clark University, and Wheaton College. Less selective colleges include the University of Maine, Husson University, and University of New England. Students hoping to attend schools in either category should take the following, including honors or AP courses in some subjects:

- 4 credits of English;
- 3 credits of math, including two years of algebra and one of geometry;

- 3 credits of social studies;
- 2-3 credits of science, including biology and chemistry;
- 2-3 credits of the same foreign language.

#### *Community colleges or certificate programs*

Community colleges offer a broad range of two-year programs leading to an associate's degree or a certificate in a specific skill or profession. They typically require the following:

- 4 credits of English;
- 3 credits of math, including two years of algebra and one of geometry;
- 3 credits of social studies;
- 3 credits of science, preferably including biology and chemistry;
- 2 credits of the same foreign language.

#### *Entering the workforce or the military*

Some GSA students choose not to apply to college as seniors, instead seeking other opportunities. Those students should usually follow a program in their first years of high school that will prepare them for some post-secondary education, in case that is the choice they do make, either directly after graduation, or later. So these students should plan their courses around the requirements of selective colleges or community colleges or certificate programs.

Additionally, however, they should consider taking many of the elective courses at GSA that directly prepare students for adult life or the workforce. Depending on the students' plans, these include:

- Social Studies: Economics, Street Law, Psychology
- Math: Personal Finance, Advanced Math Topics
- Science: The Maine Environment, Forensics, Anatomy and Physiology
- Physical Education: EEOL (Outdoor Leadership), Advanced Fitness
- Visual and Performing Arts: Photography, Earthworks, Culinary Arts
- Technology: Drafting, Architectural Design, Woodworking, Advanced Engines, Design and Engineering Technology, Robotics, Digital Fabrication, Welding

#### *Career Counseling*

Students who wish to pursue professions that don't require a college degree—those who want to become boatbuilders or chefs, for instance, or police officers, skilled welders, carpenters, engine mechanics, hair stylists, postal clerks, retail supervisors, food service professionals, and so on—are provided the same personalized guidance as they research and apply for appropriate training programs and job opportunities. GSA's annual Independent Study and Internship Program (ISIP) gives all juniors and seniors the option to shadow working professionals in an area of personal interest, and often helps them chart the path to their own future careers. Students who plan to work after graduation can get help with writing a resumé and preparing for job interviews, and should they decide sometime after graduation to apply to college, the same array of services is available to them as GSA alumni.

## ENGLISH

**Graduation requirements:** four credits of English, including Senior English or AP English Language and Composition

**Core courses:**

|            |   |
|------------|---|
| 9th grade  | Introduction to Literature or Freshman English Foundations  |
| 10th grade | Sophomore English Honors; or Sophomore English plus a topics course; or Sophomore English Foundations |
| 11th grade | AP English Lit; or Junior English or Junior English Foundations plus a topics course                  |
| 12th grade | AP English Language and Composition or Senior English   |

**Topics courses:**

|                             |                    |                             |
|-----------------------------|--------------------|-----------------------------|
| The World of New Media      | Creative Writing   | Public Speaking             |
| The Utopian/Dystopian Genre | The Art of Theatre | The Utopian/Dystopian Genre |

Sophomores, juniors, and seniors may take an extra topics course as electives. Taking an extra topics course does not apply that credit toward English requirements in future years.

| Course # | Course Title                  | Grades  | Credits | Prerequisites      |
|----------|-------------------------------|---------|---------|--------------------|
| 110      | Introduction to Literature    | 9       | 1       |                    |
| 111      | Freshman English Foundations  | 9       | 1       |                    |
| 121      | Sophomore English             | 10      | 1/2     | 9th-grade English  |
| 122      | Sophomore English Foundations | 10      | 1       | 9th-grade English  |
| 125      | Sophomore English Honors      | 10      | 1       | 9th-grade English  |
| 129      | Junior English Foundations    | 11      | 1/2     | 10th-grade English |
| 131      | Junior English                | 11      | 1/2     | 10th-grade English |
| 135      | AP English Literature         | 11      | 1       | 10th-grade English |
| 136      | AP English Language and Comp  | 12      | 1       | 11th-grade English |
| 140      | Senior English                | 12      | 1       | 11th-grade English |
| 157      | The Art of Theatre            | 10 - 12 | 1/2     | 9th-grade English  |
| 158      | The World of New Media        | 10 - 12 | 1/2     | 9th-grade English  |
| 159      | The Utopian/ Dystopian Genre  | 10 - 12 | 1/2     | 9th-grade English  |
| 173      | Creative Writing              | 10 - 12 | 1/2     | 9th-grade English  |
| 175      | Public Speaking               | 10 - 12 | 1/2     | 9th-grade English  |



**110 INTRODUCTION TO LITERATURE, 9 (1 credit)**

This dynamic introductory course is delivered in two parts and develops reading, writing, thinking, speaking, and listening skills using drama and poetry, as well as fictional and nonfictional literary works. Writing assignments tend to be expository-analytical responses (paragraphs and essays) to text, but may also include other modes of writing such as journaling, generating original poetry, documentary film-making and various forms of creative expression. The oral component of this course is ongoing, developed through brief presentations, reading aloud, active participation in class discussions, and through mini-performances. Students also work on the fundamentals of grammar. No honors credit is given, but honors challenge assignments are offered and are recommended for any student considering registering for honors English as a sophomore.

**111 FRESHMAN ENGLISH FOUNDATIONS, 9 (1 credit)**

This course is strongly recommended for entering students who would benefit from remediation in reading and/or writing skills prior to admittance to standard English courses. Reading and writing instruction focuses on the development of skills such as reading for details, finding the main idea, using context clues, making inferences, building vocabulary, and learning sentence and essay structure. The primary goal for each student at course completion is a gain of two or more years in reading comprehension level. Readings are selected each year based on student reading levels, and, as possible, based on student interest.

**121 SOPHOMORE ENGLISH: Myths and Legends, 10 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

This is a reading-intensive course in which students sharpen their critical and analytical reading, writing, speaking, and thinking skills through an exploration of the epic tradition of heroes and villains, primarily in the Western world, as they appear in various genres (mystery, horror, sci-fi, fantasy, satire, etc.). Students will learn a variety of literary elements while discovering modern ties to ancient characters and the social changes that created them. At the core of the course is an exploration of what we as individuals in society do to show what we truly honor and fear. We also explore how the stories we tell and how we tell them shape and challenge our beliefs. Texts will vary from year to year but may include excerpts from or whole texts of *The Maze Runner*, *The Hunger Games*, *Harry Potter*, *Richard III*, *Beowulf*, *The Iliad*, the Greek myths, *The Graveyard Book*, *The Canterbury Tales*, *American Gods*, *The Hobbit*, *Anthem*, *Dracula*, *Suddenly the Cider Didn't Taste So Good*, and films such as *Cool Hand Luke* and *Inception*.

**122 SOPHOMORE ENGLISH FOUNDATIONS, 10 (1 credit)**

*Prerequisite: Freshman English Foundations*

This course is designed to provide targeted intervention in reading and writing skills. Reading instruction focuses on the continued development of skills such as reading for details, finding the main idea, using context clues, and making inferences. The course provides both individualized and group instruction in directed reading, paragraph and essay writing, vocabulary development, and basic grammar. Readings are selected each year based on student reading levels, and, as possible, based on student interest.

**125 SOPHOMORE ENGLISH HONORS: British Literature, 10 (1 credit)**

*Prerequisite: Introduction to Literature Honors or Introduction to Literature*

This is a reading- and writing-intensive course in which students sharpen their critical and analytical reading, writing, speaking, and thinking skills through an exploration primarily of classic British texts from the Saxon era to the late 20th Century. Although this honors course shares some texts and skill development activities with Sophomore English, the difficulty of the reading materials and topics covered, the amount of homework assigned, and the expectations as to the quality of that homework become significantly more challenging as the year continues. Throughout the course, students receive extensive practice in the analysis and interpretation of literary elements, passages, and philosophical ideas. Ideas include the nature of good and evil, the role of society in shaping the portrayal of individual characters, and how authors communicate with their readers through a text. Attention is also given to developing vocabulary, practicing grammar, and enhancing students' persuasive writing and speaking abilities. Additionally, the course is designed to increase reading confidence and enjoyment. Students read full text versions or excerpts from works that may include *Beowulf*, *The Lion in Winter*, *The Tragedy of Richard III*, *The Canterbury Tales*, *Frankenstein*, *Heart of Darkness*, *The Man Who Would Be King*, *Children of Men*, *A Doll's House* and others.

**129 JUNIOR ENGLISH FOUNDATIONS, 11 (½ credit)**

*Prerequisite: Sophomore English or Sophomore English Foundations*

This quarter-long course is designed for juniors whose reading and/or writing skills are still developing and would continue to benefit from targeted skill practice prior to taking college prep Senior English. Intensive and tailored skill development occurs through readings in fiction and nonfiction materials, both short and long.

**131 JUNIOR ENGLISH: American Literature, 11 (½ credit)**

*Prerequisite; any level sophomore English course*

This course covers a wide range of American literature, exploring concepts that have shaped American thought and discourse since its revolution through the study of American literature and rhetoric. There will be a strong focus on modern American literature, and marginalized voices. Texts will include foundational U.S. documents such as Lincoln's Second Inaugural Address and *The Declaration of Independence*, essays by Ralph Waldo Emerson and Henry David Thoreau, as well as poetry by Langston Hughes and Walt Whitman. Students will read full-length works from the 20th and 21st centuries as well as a music as poetry unit that will look at the American Dream through the eyes of modern artists. These texts will help you gather evidence to incorporate in writing speeches, performances, and presentations about the American Dream, what it means to be an American, the freedom of speech, the role of media in a democracy, and literary movements like Transcendentalism and the Harlem Renaissance.

**135 AP ENGLISH LITERATURE, 11 (1 credit)**

*Prerequisite: Sophomore English Honors or Sophomore English Note: Teacher-specified summer reading and writing unit is required.*

"I am human; therefore, nothing human can be alien to me" (Terence). In this course, students engage with literature as a means of engaging with the world around them.

Rather than approaching a book only as some sort of cipher with a single answer hidden inside it, we can also use it as a lens to see in new and exciting ways. Literature—from short fiction to novels to plays to poetry—invites us to experience someone else’s life and perspective and, in doing so, learn more about ourselves. This is a college-level course aligned with the national AP curriculum requirements. Students in this course should expect to read and write, both in class and for homework, daily. Writing varies both in labor and in type, from brief in-class brainstorms to extensively revised investigative essays to creative assignments. In this course, students develop their own critically-informed opinions, and engage in the arduous task of asking the right questions. Discussion and writing is always student-centered, so students become more autonomous in their learning experience. The current booklist, subject to regular change, includes *100 Years of Solitude*, *The Shipping News*, *Their Eyes Are Watching God*, *The Great Gatsby*, and *Song of Achilles*. Students are required to take the AP exam; funding to cover the cost of the exam is available for every student who needs it.

### **136 AP ENGLISH LANGUAGE AND COMPOSITION, 12 (1 credit)**

*Prerequisite: AP Literature and Composition or Junior English Note: Teacher-assigned summer reading and writing is required.*

AP English Language & Composition is designed to invite the student into the rhetorical conversation: the interplay among an author’s purpose, audience, and subject. Through both informal and formal written reflections on works by writers of diverse prose styles and genres, the student participates in this interaction. From close reading, lively discussion, and writing in narrative/personal, expository/ analytical and argumentative modes, students develop the thinking, speaking, and writing skills necessary to delineate a cogent and coherent position on any topic. The coursework includes completion of the Senior Thesis, which is a capstone requirement for a GSA diploma.

### **140 SENIOR ENGLISH: World Literature/Rhetoric, 12 (1 credit)**

*Prerequisite: AP Literature, Junior English or Junior English Foundations*

The senior English literature and composition course is specially designed to push all the students’ skills and increase their knowledge of literature and writing. The literary works included in this course will cover a range of genres (i.e. novels, non-fiction, poetry, and short stories), style and themes. These texts will help students gather evidence to incorporate in writing, speeches, performances, and presentations as students gain an appreciation and deep understanding of the texts as well as a broader perspective on literature and their individual voice and perspective within the world. The coursework includes completion of the Senior Thesis, which is a capstone requirement for a GSA diploma.

### **157 THE ART OF THEATRE: Acting and Analysis of the Stage and Screen, 10-12 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

For over 4,000 years, theatre has served to challenge, entertain, unite, and above all, instruct the world in what it means to be human. In this hands-on course, students explore and learn to analyze the fundamentals of theatre, with a focus on acting, for both stage and screen. This course includes a heavy amount of performance work and a study of

scenes/full works of famous plays and films from multiple genres and time periods. No previous theatre experience is necessary to take this course.

### **158 THE WORLD OF NEW MEDIA, 10-12 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

Storytelling is a process as old as human language. In many ways, it changes every day. In other ways, it remains completely the same. In this course, students engage a critical lens toward what is referred to as “new media,” that is, the storytelling that goes on in our digital, connected world. We begin with a historical overview of how storytelling has evolved and changed, as well as how many original facets of storytelling have remained stable. Students then take and apply this knowledge of storytelling to examining podcasts, YouTube, video-gaming, Tik-Tok, and other social media platforms. Using a similar toolkit as they use to analyze fiction or poetry, students unpack, deconstruct, and examine the way stories are being told in today’s culture. Ultimately, the question being asked of students in this course is why do humans tell stories?

### **159 THE UTOPIAN/DYSTOPIAN GENRE, 10-12 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

This course is an introduction to literature through the lens of “utopia,” or the desire for a different, better way of being. Through exploring short stories, novels, poetry, songs, advertisements, films, TV shows, the news, social media, and our own experiences, we critically examine the blurry line between utopia & dystopia: when/how/why various utopian impulses (such as happiness, progress, technological advancement, efficiency, stability) that are intended to improve society can go (and have gone) terribly awry. Themes include family, the individual and society, good and evil, gender, faith, and “the human heart in conflict with itself.” Essays and exams based on readings and film.

### **173 CREATIVE WRITING, 10-12 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

Every one of us has a story to tell. Creative Writing provides an opportunity for students to tell those stories. Students explore daily writing prompts and wordplay and then work on developing ideas into well-crafted pieces of writing. As a group, we learn to provide useful feedback to other writers as we workshop each other’s rough drafts. The objective is to improve our capabilities as writers and editors. Genres include poems, stories, and short nonfiction pieces. Frequent discussions of published authors provide effective models. We focus on the elements of fiction, the relationship of creative nonfiction to fiction, story structure, poetic forms, and methods of revision and editing. Texts include the following: *Creative Writer’s Handbook*, *Handbook of Poetic Forms*, flash fiction, sudden fiction, and *What If? Writing Exercises for Fiction Writers*.

### **175 PUBLIC SPEAKING, 10-12 (½ credit)**

*Prerequisite: Introduction to Literature or Freshman English Foundations*

Public speaking is America’s number one fear and also the first quality that employers want their potential hires to have. This course will not cure the fear of public speaking, but instead give students a safe space to practice and gain skills that will allow them to manage and thrive in public speaking situations. Throughout the course students will

have numerous opportunities for a variety of public speaking venues and learn to evaluate a speaker to help themselves reflect and grow. Students will practice with small, mini speeches and have 3-4 major public speaking assignments that we will develop, organize, and perform in a respectful classroom environment focused on growth and engagement. Public speaking can be fun! It should be taken seriously, but do not worry too much. We will talk through speech anxieties and learn coping mechanisms.

## SOCIAL STUDIES

**Graduation requirements:** three credits of social studies, including US History

**Core courses:** (usually offered at foundations through honors levels)

ISOS (9th grade) → World History (10th grade) → US History (11th grade)

Both 9th and 10th grade honors students will take the same course each year; in 2024-25 World History honors will be offered; in 2025-26 ISOS Honors will be offered.

**Elective courses for juniors and seniors:**

|   |            |
|---|------------|
| 21st Century America in the World (one credit course for seniors) |            |
| Philosophy  | Economics  |
| History of Modern Feminism  | Psychology |
| Classical Western Civilization                                    | Street Law |

| Course # | Course Title  | Grades  | Credits | Prerequisites |
|----------|---|---------|---------|---------------|
| 210      | Introduction to Social Science  | 9       | 1       |               |
| 215      | <i>Introduction to Social Science Honors (not offered in 2024-2025)</i> | 9 or 10 | 1       |               |
| 271      | Social Studies Foundations  | 9 - 10  | 1       |               |
| 220      | World History   | 10      | 1       |               |
| 225      | World History Honors  | 9 or 10 | 1       |               |
| 230      | US History  | 11      | 1       |               |
| 235      | US History Honors   | 11      | 1/2     |               |
| 265      | AP US History   | 11      | 1       |               |
| 251      | 21st Century America in the World                                       | 12      | 1       |               |
| 213      | History of Modern Feminism  | 11-12   | 1/2     |               |
| 246      | Street Law  | 11-12   | 1/2     |               |
| 248      | Psychology  | 11-12   | 1/2     |               |
| 250      | Philosophy  | 11-12   | 1/2     |               |
| 266      | Economics   | 11-12   | 1/2     |               |

**210 INTRODUCTION TO SOCIAL SCIENCE, 9 (1 credit)**

This ninth grade social studies course introduces students to the main disciplines and skills of the GSA Social Studies program. Students study the sub-disciplines of Anthropology, Economics, Geography, History, Political Science, and Religion through topics and case studies drawn from not just the United States, but the whole globe. Students learn how to use the knowledge gained from the course to develop and articulate their own opinions about a wide range of topics so that they can interact with the world around them. Students will also be taught the critical skills of note-taking, short essay writing, map reading/memorization, and media literacy. Students will occasionally have homework assignments.

**215 INTRODUCTION TO SOCIAL SCIENCE HONORS, 9 or 10 (1 credit) – not offered in 2024 - 2025**

*This accelerated social studies course is designed for ninth and tenth grade students with a keen interest in the humanities and will alternate every year with the Honors World History curriculum. Students who take this class must possess the ability to read for comprehension, write well, and study independently. The course introduces students to the main disciplines and skills of the GSA Social Studies program at an advanced pace and greater depth. Students will study the sub-disciplines of Anthropology, Economics, Geography, History, Political Science, and Religions through topics and case studies drawn from both the United States and the whole globe. Students will learn how to use the knowledge gained from the course to develop and articulate their own opinions about a wide range of topics. Students will also be taught the critical skills of note-taking, essay writing, map reading/memorization, and media literacy. In this class, students may expect to have 2-4 hours of homework per week.*

**271 SOCIAL STUDIES FOUNDATIONS, 9 and/or 10 (1 credit)**

*Note: May be taken in both the 9th and 10th grades with teacher permission*

The subject matter of this joint ninth- and tenth-grade social studies course alternates every other year. Students can take this course in either or both years as a foundations-level alternative to ISOS and to World History. Students learn about government, economics, history, and geography through topics and case studies drawn both from the United States and from other countries. Social studies students and citizens must have a body of knowledge, but more importantly, must use that knowledge for the purpose of developing and articulating opinions. As a foundations-level course, there is special focus on working with students on their reading and writing skills in the social studies. Students also learn to investigate the accuracy of information, arguments, and sources, and to develop and debate opinions about social studies issues.

**220 WORLD HISTORY, 10 (1 credit)**

*Prerequisite: Introduction to Social Science, Introduction to Social Science Honors, or Social Studies Foundations*

This course introduces students to five important themes in history: power & authority, revolution, interaction with the environment, cultural interaction, and empire building. These themes are explored globally from the Renaissance to the late 20th Century. Students will develop note taking skills from lectures, videos, and books, and also work

to hone their organizational and critical thinking skills. There are written assignments, chances for independent research, group projects, homework, and checks for comprehension in the form of quizzes and tests.

### **225 WORLD HISTORY HONORS, 9 or 10 (1 credit)**

This accelerated social studies course is designed for ninth and tenth grade students with a keen interest in the humanities and will alternate every year with the Honors Introduction to Social Science curriculum. Students who take this class must possess the ability to read for comprehension, write well, and study independently. This course introduces students to five important themes in history: power & authority, revolution, interaction with the environment, cultural interaction, and empire building. These themes are explored globally from the Renaissance to the late 20th Century. Students will develop note taking skills from lectures, videos, and books, and also work to hone their critical thinking, essay writing, map, and media literacy skills. There are written assignments, chances for independent research, group projects, and checks for comprehension in the form of quizzes and tests. Students may expect to have 2-4 hours of homework per week.

### **230 U.S. HISTORY, 11 (1 credit)**

*Prerequisite: World History, World History Honors, or Social Studies Foundations*

This course deals with the development of American ideals and institutions through the study of major events and personalities of American history from colonization to the modern era. The course provides a perspective on the relationship between the past and contemporary issues. Students learn how to think like a historian by analyzing primary and secondary sources to justify their perspectives. The focus is on critical thinking.

### **235 U.S. HISTORY HONORS, 11 (1 credit)**

*Prerequisite: World History or World History Honors*

This course deals with the development of American society, ideals, and institutions through an intensive study of the political, social, economic, and cultural history of the United States. The course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with materials and problems in US history. Students learn to assess a variety of historical materials, their relevance, reliability and importance, and to weigh the evidence and interpretations presented in historical scholarship. This course emphasizes historical research and writing.

### **265 AP U.S. HISTORY, 11 (1 credit)**

*Prerequisite: World History or World History Honors*

This course deals with the development of American society, ideals, and institutions through an intensive study of the political, social, economic, and cultural history of the United States. The course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with materials and problems in U.S. history. Students learn to assess a variety of historical materials— their relevance to a particular problem, their reliability and importance—and to weigh the evidence and interpretations presented in historical scholarship. In preparation, summer reading and writing are required. Students who enroll in this class should be seeking a college-level history experience; they also are required to take the AP exam in May.



**251 21ST CENTURY AMERICA IN THE WORLD, 12 (1 credit)**

*Prerequisite: US History*

In this course we will explore America in the 21st century: American history, but also with a special focus on the US' setting in the world. We will study key political, economic and social events and processes in the country and world we live in. The course will be structured by themes built around key topics such as 9/11 and its impact, environmental topics, presidential elections, issues of race and gender, the Constitution, technological change, relations with China, etc. The primary student outcome of the course will be for students to develop their ability to learn about US and world events and to communicate persuasive opinions about those events. With only a quarter century to study, we can dig deep, and students will have the opportunity to do individualized learning about events and topics that are meaningful to them. The course can either be taken at the honors level or the standard level, with major activities and assessments structured at different levels of challenge to meet various student needs.

**213 HISTORY OF MODERN FEMINISM, 11-12 (½ credit)**

This course explores the struggles, fights, and experiences of feminists across the globe during the last few centuries. We explore issues that women have wrestled with for ages: the call for equality in education, the desire for universal suffrage, the mix of fierce indignation and deep scientific research in the early environmentalist movement, the rallying cry for equal pay and reproductive rights, and today's global perspective on sexual politics and human empathy. Our goal is to gain an understanding of how feminism has evolved over time. Students are evaluated through their written responses to assigned texts, active participation during classroom discussion, homework completion, and performance on several tests.

**246 STREET LAW, 11-12 (½ credit)**

This course examines various aspects of your legal rights and responsibilities as citizens. Topics include law and values, civil liberties, and criminal law. We also learn about careers in criminal justice, such as a CSI detective or a police officer, through guest speakers. Students are evaluated through tests, reports, case studies, worksheets, and class participation, and are expected to participate actively in class debates.

**248 PSYCHOLOGY, 11-12 (½ credit)**

This course introduces students to some of the major areas of psychology. Students explore the nature of psychology: Is it objective and scientific? What are the different approaches to psychology? Students are introduced to some of the main topic areas of psychology: consciousness, learning, intelligence, abnormal psychology, personality, and gender. The coursework and grading emphasizes developing and arguing opinions based on fact and analysis. Students may take this course because of interest in a related career (psychology, medical careers, advertising) or out of personal interest.

**250 PHILOSOPHY, 11-12 (½ credit)**

How can we lead wiser, more meaningful lives? Do truth and beauty really exist? Should I fear death? This class explores some of the ways, past and present, that philosophy has helped people pursue wisdom and find their way in the world. Over eight weeks, we will

learn about the fundamentals of philosophy and study the perspectives of some of history's greatest thinkers. Our course work will take the form of lectures, discussion, reading, and short writing assignments, as well as true/false quizzes.

**266 ECONOMICS, 11-12 (½ credit)**

Economics is designed to introduce students to the basic concepts of macro and microeconomics. Students learn about the economic factors that affect local businesses and citizens; in particular, students learn how interest rates, inflation, tax policy, and supply and demand factors impact their lives and affect local businesses. Students learn to think critically and creatively about current economic issues facing America and the world today while interacting with a variety of materials to further their understanding. This course is designed for students who may have a future operating their own business, but should also be valuable to students who might study it further in college.

## MATHEMATICS

**Graduation requirements:** three credits of high school math, including (or qualifying out of) two credits of algebra, plus geometry

**Core courses:** (offered at foundations through honors levels)

Algebra I → Algebra II → Geometry (or Lab Geometry)

- Students not ready for Algebra will take Pre-Algebra.
- Students may take both Algebra II Honors and Geometry Honors as sophomores in order to be able to take Calculus in 12th grade.

**Beyond the core courses:**

|                      |          |   |
|----------------------|----------|---|
| Precalculus Honors   | 1 credit | Students planning to take math in college   |
| Personal Finance     | ½ credit | Useful for all students   |
| Advanced Math Topics | 1 credit | College-bound seniors not taking Precalculus Honors   |
| AP Statistics        | 1 credit | Strong math students interested in business or economics, sciences, nursing, or social sciences |
| AP Calculus AB       | 1 credit | Students interested in science, engineering, economics or business                              |
| AP Calculus BC       | ½ credit | Take in addition to AP Calculus AB  |

| Course # | Course Title           | Grades  | Credits | Prerequisites     |
|----------|------------------------|---------|---------|-------------------|
| 313      | Pre-Algebra            | 9       | 1       |                   |
| 310      | Algebra I              | 9 - 10  | 1       |                   |
| 314      | Algebra I Foundations  | 10      | 1       |                   |
| 315      | Algebra I Honors       | 9 - 10  | 1       |                   |
| 320      | Geometry               | 11 - 12 | 1       |                   |
| 323      | Lab Geometry           | 11 - 12 | 1       |                   |
| 325      | Geometry Honors        | 9 - 12  | 1       |                   |
| 329      | Algebra II Foundations | 11 - 12 | 1       |                   |
| 330      | Algebra II             | 10 - 12 | 1       |                   |
| 335      | Algebra II Honors      | 9 - 10  | 1       |                   |
| 355      | AP Statistics          | 10 - 12 | 1       | Algebra II Honors |
| 358      | Precalculus Honors     | 11 - 12 | 1       | Algebra II Honors |
| 359      | Advanced Math Topics   | 12      | 1       | Algebra II        |
| 365      | AP Calculus AB         | 11 - 12 | 1       | Precalculus       |
| 374      | AP Calculus BC         | 11 - 12 | ½       | AP Calculus AB    |
| 377      | Personal Finance       | 10 - 12 | ½       |                   |

**313 PRE-ALGEBRA, 9 (1 credit)**

Students who do not have a solid arithmetic background are strongly encouraged to take this course. The course starts with the basics: understanding numbers, place value, and operations, and working with increasingly complicated arithmetic expressions. From there, students make the transition to fundamental algebra topics, including signed numbers, solving equations, graphing, ratios, proportions, and percentages.

**310 ALGEBRA I, 9-10 (1 credit)**

This course is the first installment of a traditional sequence in college-prep math. Topics include properties of the real number system, solution of linear and quadratic equations, functions, graphing, laws of exponents, polynomials, probability, and proportions. A strong pre-algebra background is necessary before taking this course.

**314 ALGEBRA I FOUNDATIONS, 9-10 (1 credit)**

*Prerequisites: Pre-Algebra and permission of the Math Department*

The Algebra I Foundations-Algebra II Foundations sequence is designed to give students a working knowledge of algebra. The sequence does not contain enough content to satisfy the mathematics admissions requirement of many colleges. This is the first year of a sequence of courses that continues with Algebra II Foundations and Lab Geometry. It is designed for students who have completed a pre-algebra course at GSA or another high school but who may not be ready for the pace of Algebra I. This course emphasizes the algebra skills necessary for community colleges and technical schools.

**315 ALGEBRA I HONORS, 9-10 (1 credit)**

Algebra I Honors covers much of the same material as Algebra I, but at a faster pace and in considerably more depth. The course is suitable for students of high mathematical ability who are planning to go into a technical field or who wish to study mathematics for its own sake. There is no formal prerequisite for this course, but a strong pre-algebra background and solid study habits are necessary.

**320 GEOMETRY, 10-12 (1 credit)**

*Prerequisite: Algebra I or Algebra I Honors Strongly recommended: Students should have completed or be currently enrolled in Algebra II or Algebra II Honors*

Geometry is concerned with the measurement of and relations between lines, angles, surfaces, and solids. Students explore basic spatial relationships and study the notion of proof. This course includes a significant amount of analytic geometry and intensive use of algebra.

**323 LAB GEOMETRY, 11-12 (1 credit)**

*Prerequisites: a second-year algebra course and permission of the Math Department*

This course is designed to give students a working knowledge of geometry. It does not contain enough content to satisfy the mathematics admissions requirement of many colleges. This course is divided into two parts: one taught by a technology teacher and one by a mathematics teacher. In the more hands-on part of the course, students work on real-world projects in a workshop setting and are exposed to community resources to

see geometric principles applied. Course topics include, but are not limited to, angles, parallel lines, area, volume, and trigonometry.

### **325 GEOMETRY HONORS, 9-12 (1 credit)**

*Prerequisites: Algebra I or Algebra I Honors Strongly recommended: Students should have completed or be currently enrolled in Algebra II or Algebra II Honors*

Students explore basic spatial relationships and study the notion of proof. This course covers much the same material as Geometry but in greater depth and with greater emphasis on proof. Geometry Honors includes a significant amount of analytic geometry and intensive use of algebra. Students in this course should have already taken or should be taking a second-year algebra course.

### **329 ALGEBRA II FOUNDATIONS, 10-12 (1 credit)**

*Prerequisites: Algebra I or Algebra I Foundations and permission of the Math Department*

The Algebra I Foundations / Algebra II Foundations sequence is designed to give students a working knowledge of algebra. The sequence does not contain enough content to satisfy the mathematics admissions requirement of many colleges. Students should take Algebra II Foundations in the year immediately following their Algebra I class. This course is a continuation of Algebra I Foundations. Topics include the solution of quadratic equations, the solution of systems of linear equations, and basic statistics and data analysis. This course emphasizes the algebra skills necessary for community colleges and technical schools.

### **330 ALGEBRA II, 10-12 (1 credit)**

*Prerequisite: Algebra I Note: (1) Students should take Algebra II in the year immediately following their Algebra I class. (2) The Math Department recommends that sophomores not take geometry and Algebra II in the same year unless they intend to take math in both their junior and senior years.*

After a review of Algebra I, students explore transformations, systems of equations, complex numbers, fractional exponents, rational expressions, basic probability and statistics, and logarithmic and exponential functions.

### **335 ALGEBRA II HONORS, 9-12 (1 credit)**

*Prerequisite: Algebra I Note: (1) Students should take Algebra II in the year immediately following their Algebra I class. (2) The Math Department recommends that sophomores not take geometry and second-year algebra in the same year unless they intend to take math in both their junior and senior years.*

After a review of Algebra I, students explore transformations, systems of equations, complex numbers, fractional exponents, rational expressions, basic probability and statistics, logarithmic and exponential functions, and sequences and series. The course paced and depth of coverage are more intense than in Algebra II.

### **355 AP STATISTICS, 10-12 (1 credit)**

*Prerequisite: Algebra II*

This honors class is a rigorous, college-level introduction to statistics. The four major areas covered are exploring data, planning a study, anticipating patterns, and statistical

inference. The course syllabus is aligned with the nationally recognized standards of the College Board Advanced Placement program. Students are expected to take the College Board AP Statistics exam in May.

### **358 PRECALCULUS HONORS, 11-12 (1 credit)**

*Prerequisite: Algebra II Honors, Geometry Honors (can be taken concurrently)*

Precalculus is a class for students intending to take calculus in high school or later in college. Topics include properties and graphs for diverse functions, solving systems of linear equations, sequences and series, a review of exponential functions, logarithms, and imaginary numbers, and trigonometry.

### **359 ADVANCED MATH TOPICS, 11-12 (1 credit)**

*Prerequisite: Algebra II and Geometry*

This course is an elective for upperclassmen who have completed the math requirements for graduation and want to take an additional math class; in particular, senior math accommodates those for whom honors precalculus might be too rigorous. The curriculum includes extended algebra, elementary statistics, and basic trigonometry, with the opportunity to delve into topics requested by the class.

### **365 AP CALCULUS AB, 11-12 (1 credit)**

*Prerequisite: Precalculus Honors*

This is a rigorous, college-level course equivalent to about a semester of calculus at most colleges. The syllabus is aligned with the nationally recognized standards of the College Board Advanced Placement program. All students are expected to take the College Board AP Calculus AB exam in May. Fluency in algebra and trigonometry is essential, and students are required to do preparatory homework during the summer preceding the course. Major topics include differentiation and integration of algebraic and transcendental functions.

### **374 AP CALCULUS BC, 11-12 (½ credit)**

*Prerequisites: Permission of the math department or co-registration in AP Calculus AB is required.*

This is a rigorous, college-level introduction to calculus equivalent to a full year of calculus at most colleges. The course moves very rapidly. The syllabus is aligned with the nationally recognized standards of the College Board Advanced Placement program. All students are expected to take the College Board AP Calculus BC exam in May. Fluency in algebra and trigonometry is essential, and students are required to do preparatory homework during the summer preceding the course. Major topics expand on the work done in AP Calculus AB, and include sequences and series, as well as polar equations.

### **377 PERSONAL FINANCE, 10-12 (½ credit)**

This course covers interest, banking, credit card debt, mortgages, budgeting, and other topics involving the handling of money. This highly practical course teaches finance skills that every student will need to deal with in life after high school.

## SCIENCE

**Graduation requirements:** three credits of science

**Core courses:** (usually offered at foundations through honors levels)

Earth Systems (9th) → Biology (10th) → Chemistry (11th) → Elective (12th)

**Elective courses:** In 10th - 12th grade, students are encouraged to take additional elective science courses. The science elective courses are:

| full-credit courses  |           | half-credit courses         |           |
|--|-----------|-----------------------------|-----------|
| AP Biology   | 11th-12th | Astronomy                   | 10th-12th |
| AP Environmental Science                                   | 11th-12th | Forensics I & II            | 10th-12th |
| Advanced Scientific Research Honors                        | 11th-12th | Maine Environment electives | 10th-12th |
| Integrated Physical Science Foundations (chem and physics) | 11th-12th | Anatomy and Physiology      | 10th-12th |
| Physics or Physics Honors                                  | 12th      |                             |           |

| Course # | Course Title                                 | Grades  | Credits | Prerequisites |
|----------|--|---------|---------|---------------|
| 400      | Exploring Earth Systems                      | 9       | 1       |               |
| 420      | Biology                                      | 10      | 1       |               |
| 425      | Biology Honors                               | 10      | 1       |               |
| 452      | Biology Foundations                          | 10      | 1       |               |
| 442      | Chemistry                                    | 11      | 1       | Biology       |
| 445      | Chemistry Honors                             | 11      | 1       | Biology       |
| 473      | Integrated Physical Science Foundations      | 11 - 12 | 1       | Biology       |
| 474      | Physics                                      | 12      | 1       | Biology       |
| 475      | Physics Honors                               | 12      | 1       | Biology       |
| 428      | AP Biology                                   | 11 - 12 | 1       | Biology       |
| 436      | Forensics I                                  | 10 - 12 | 1/2     |               |
| 438      | Forensics II                                 | 10 - 12 | 1/2     |               |
| 465      | AP Environmental Science                     | 11 - 12 | 1       | Biology       |
| 466      | Maine Environment: Land (Geology)            | 10 - 12 | 1/2     |               |
| 467      | Maine Environment: Sea (Marine Science)      | 10 - 12 | 1/2     |               |
| 468      | Maine Environment: Life (Zoology and Botany) | 10 - 12 | 1/2     |               |
| 469      | Maine Environment: Forest (Ecology)          | 10 - 12 | 1/2     |               |
| 470      | Astronomy                                    | 11 - 12 | 1       | Biology       |
| 480      | Anatomy & Physiology                         | 10 - 12 | 1/2     |               |
| 485      | Advanced Scientific Research Honors          | 11 - 12 | 1       | Biology       |

**400 EXPLORING EARTH SYSTEMS, 9 (1 credit)**

This challenging ninth-grade course provides a starting point for students' science growth at the high school level by exploring the interactions between the geosphere, atmosphere, hydrosphere, and biosphere. This course integrates chemistry, physics, biology, and earth science while investigating issues of relevance to everyone. Lab work, fieldwork, and analysis of data are important course components and opportunities for students to apply math skills, analyze case studies, and conduct independent research are embedded in this course.

**420 BIOLOGY, 10 (1 credit)**

*Prerequisite: Exploring Earth Systems or Exploring Earth Systems Honors, or Earth Systems Foundations with teacher recommendation*

This course is designed to provide students with a survey of the science of biology, covering ecology, evolution, and cell biology, including photosynthesis, cellular respiration, and genetics. Lab work reinforces classroom study. Emphasized skills include reading for understanding of content, data organization and analysis, use of lab equipment, use of the internet for scientific research, and scientific reasoning.

**425 BIOLOGY HONORS, 10 (1 credit)**

*Prerequisite: Exploring Earth Systems or Exploring Earth Systems Honors*

This course is designed to provide students with a survey of the science of biology. Areas of study include ecology, the cell, photosynthesis, cellular respiration and division, reproduction, heredity, evolution, and classification of organisms from each of the phyla. Biology Honors students are expected to complete a research presentation and additional readings, as well as to read at an independent level and to be personally responsible for their work planning and budgeting of time. Biology Honors goes into greater detail on each of the topics than Biology. Lab work is coordinated with and reinforces classroom study.

**452 BIOLOGY FOUNDATIONS, 10 (1 credit)**

*Prerequisite: Exploring Earth Systems*

This course explores the basic principles of biology, such as taxonomy and the diversity of life, cells, genetics, anatomy and physiology, cycles of matter, ecology, and evolution. Students are encouraged to examine real-world issues as they relate to biological concepts. Lab investigations are an important part of this course.

**442 CHEMISTRY, 11 (1 credit)**

*Prerequisites: Biology or Biology Honors, and Algebra I*

This is a laboratory and math-intensive course for any student with an interest in chemistry. Students should be comfortable with Algebra and problem-solving. Students learn the principles of chemistry through a mixture of laboratory, discussion, team-learning, and lecture formats. Topics covered include atomic structure, the states of matter, chemical names and formulas, chemical reactions, stoichiometry, the nature of energy, gas laws, electron structure and bonding, solution chemistry, and acids and



bases. Laboratory investigations reinforce material covered in the class. Student evaluation is based primarily upon reports, group work, quizzes, and tests.

#### **445 CHEMISTRY HONORS, 11 (1 credit)**

*Prerequisites: Biology and Algebra I*

This is a laboratory problem-solving course for honors students with a serious interest in chemistry. Students enrolled in this course should be very comfortable with algebra. This course is faster paced and covers more content than Chemistry. Students in this course learn the principles of chemistry through a mixture of laboratory, discussion, and lecture formats. Topics covered include atomic structure, chemical names and formulas, chemical reactions, stoichiometry, the states of matter, gas laws, electron structure and bonding, solution chemistry, reaction rates and equilibrium, acids and bases, oxidation reduction reactions, electrochemistry, and organic chemistry. Laboratory investigations and reports review and reinforce material covered in the class. Student evaluation is based primarily upon reports, group projects, quizzes, and tests.

#### **473 INTEGRATED PHYSICAL SCIENCE FOUNDATIONS, 11-12 (1 credit)**

*Prerequisite: Biology*

This laboratory course is a foundations-level alternative to chemistry and physics. It provides students with broad based, hands-on learning experience in the various disciplines of physical science. The course centers on geology, meteorology, physics, and astronomy. Although there is some mathematics, the emphasis of the course is on the application of knowledge to solve problems and investigate scientific principles.

#### **474 PHYSICS, 12 (1 credit)**

*Prerequisites: Biology or Biology Honors, and Algebra I*

This is a math-intensive, problem-solving course for any student with a serious interest in mathematical problem-solving and the physical sciences. Students learn from a combination of lectures, reading, labs, and problem-solving. Topics to be discussed include concepts of mechanics including motion, forces, momentum, energy and energy transfer, as well as heat, light, electricity and magnetism, relativity, and quantum theory.

#### **475 PHYSICS HONORS, 12 (1 credit)**

*Prerequisites: Biology or Biology Honors, and Algebra I*

This is a math-intensive, problem-solving course for any student with a serious interest in mathematical problem-solving and the physical sciences. This course covers more content and goes at a faster pace than Physics. For example, vector operations in Physics is limited to simpler cases, while in Physics Honors, trigonometry is required. Students learn from a combination of lectures, reading, labs, and problem solving. Topics to be discussed include concepts of mechanics including motion, forces, momentum, energy and energy transfer, as well as heat, light, electricity and magnetism, relativity, and quantum theory.

#### **428 AP BIOLOGY, 11-12 (1 credit)**

*Prerequisite or corequisite: Chemistry*

This college-level biology course covers the same areas of study as the basic biology courses. Students in this course are prepared for the AP Biology exam and are expected to take it.

**436 FORENSICS, 10-12 (½ credit)**

*Prerequisite or corequisite: Earth Systems*

Forensics I is designed to give students an introduction to the world of crime science. Students can expect to learn introductory techniques employed by the FBI and local crime scene technicians, such as evidence collection, crime scene photography, blood typing and spatter analysis, fingerprinting techniques, DNA analysis, and handwriting examination. Hands-on labs, famous cases, and mock crime scenes will require students to think, analyze and imagine possible scenarios as a forensic scientist would, while working independently and in groups as needed.

**438 FORENSICS II, 10-12 (½ credit)**

*Prerequisite or corequisite: Earth Systems*

Forensics II is designed to advance students beyond the content of Forensics I. Students will expand their knowledge of evidence collection and analysis, focusing on case studies involving blood spatter, ballistics, tire/shoe impressions, fiber analysis, facial reconstruction, anatomy and arson. Acting as forensic investigators, students will be responsible for the entire process from evidence gathering to presentation in court.

**465 AP ENVIRONMENTAL SCIENCE, 11-12 (1 credit)**

*Prerequisite: Biology*

This rigorous interdisciplinary course explores the interconnections between the physical environment and living organisms, the impact of human activities on our planet, and our choices for the future. Topics covered include population dynamics, pollution, climate change, renewable and nonrenewable resources, risk assessment, and solutions to environmental problems. Labs and field activities are designed to encourage students to critically observe environmental systems, develop and conduct well-designed experiments, and analyze and interpret data.

**466 MAINE ENVIRONMENT LAND (GEOLOGY), 10-12 (½ credit)**

**467 MAINE ENVIRONMENT SEA (MARINE SCIENCE), 10-12 (½ credit)**

**468 MAINE ENVIRONMENT LIFE (ZOOLOGY AND BOTANY), 10-12 (½ credit)**

**469 MAINE ENVIRONMENT FOREST (ECOLOGY), 10-12 (½ credit)**

*Prerequisite or corequisite: Earth Systems*

In this place-based hands-on course, students study natural history and gain an appreciation for the Maine environment. We will seek out current experts in their field of study and explore all aspects of the natural world from the land to the sea and from the trees to the soil. The curriculum follows the four distinct themes: land, sea, life, and forest, and we will explore how natural resources are harvested or managed (from deer hunting to forestry conservation). We also consider the impact of climate change and how human modification of the environment is influencing the population dynamics of different species, such as deer, moose, ticks, scallops, white pine trees, salmon, bears, turkeys,

and woodpeckers. We explore how scientific studies inform current fishing and hunting laws. Overall, we learn how science-based research can be used to protect and preserve the rich natural resources of our Pine Tree State for future generations of Mainers to enjoy.

#### **470 ASTRONOMY, 11-12 (1/2 credit)**

*Prerequisite: Biology*

This course exposes students to the practices and methods of one of the physical sciences, astronomy. Students learn concepts of modern astronomy, conduct observations through sky simulations, do laboratory and field investigations, work collaboratively, use scientific methods, and make informed decisions using critical thinking and scientific problem-solving. The course covers the following topics: discovering the night sky; gravitation and the motions of the planets; light, color, and telescopes; our star, the sun; the solar system, including both the terrestrial planets and the Jovian planets; moons; comets and asteroids; the lives of stars, galaxies, and cosmology; and exoplanets, astrobiology, and space exploration.

#### **480 ANATOMY AND PHYSIOLOGY, 10-12 (½ credit)**

*Prerequisite or corequisite: Earth Systems*

This course is designed for anyone curious about the human body. We study most of the human body systems including muscular, nervous, skeletal, endocrine, cardiovascular, respiratory, digestive, and urinary. The course emphasizes lab work, and often you are the lab subject! The class is good preparation for anyone interested in a healthcare profession. Note: We dissect vertebrate specimens.

#### **485 ADVANCED SCIENTIFIC RESEARCH HONORS, 11-12 (1 credit)**

*Prerequisite: Biology*

This course is intended for students who have an interest in expanding their science education by completing guided-inquiry investigations followed by student-led scientific research and environmental design. This may include several science fair themed projects of their choosing. These projects will follow proper experimental design methodologies such as forming questions from observations, developing hypotheses, identifying variables, creating testing parameters, collection of data, and modification and retesting.

## WORLD LANGUAGES

**Graduation recommendation:** all students take two to four credits of one world language.

|                |   |
|----------------|---|
| <i>Spanish</i> | <i>Four years of Spanish Honors and three years of college-prep level Spanish are offered</i> |
| <i>French</i>  | <i>Four years of French Honors and two years of college-prep level French are offered.</i>    |

| Course # | Course Title       | Grades | Credits | Prerequisites |
|----------|--------------------|--------|---------|---------------|
| 512      | Spanish I          | 9 - 12 | 1       |               |
| 505      | Spanish I Honors   | 9 - 12 | 1       |               |
| 522      | Spanish II         | 9 - 12 | 1       | Spanish I     |
| 575      | Spanish II Honors  | 9 - 12 | 1       | Spanish I     |
| 532      | Spanish III        | 9 - 12 | 1       | Spanish II    |
| 585      | Spanish III Honors | 9 - 12 | 1       | Spanish II    |
| 595      | Spanish IV Honors  | 9 - 12 | 1       | Spanish III   |
| 510      | French I           | 9 - 12 | 1       |               |
| 515      | French I Honors    | 9 - 12 | 1       |               |
| 520      | French II          | 9 - 12 | 1       | French I      |
| 525      | French II Honors   | 9 - 12 | 1       | French I      |
| 535      | French III Honors  | 9 - 12 | 1       | French II     |
| 555      | French IV Honors   | 9 - 12 | 1       | French III    |

**512 SPANISH I, 9-12 (1 credit)**

This introductory class in the Spanish language is designed to encompass all four language skills: reading, writing, listening, and speaking. This course moves at a gentle pace to provide for additional practice and for building confidence for students who have little to no exposure to the study of foreign languages. The emphasis is placed on developing basic communication skills on a variety of themes. Vocabulary acquisition, the mechanics of speaking, reasoning skills (grammar), and listening comprehension are given special focus. An introduction to the Hispanic culture and basic geography of Spanish speaking countries is also presented. Spanish films supplement the program. The primary texts for this course are *Buen Viaje 1* and *Exprésate I*.

**505 SPANISH I HONORS, 9-12 (1 credit)**

Spanish I Honors contains the same elements as the Spanish I program but moves at an accelerated pace for the motivated language learner.

**522 SPANISH II, 9-12 (1 credit)**

*Prerequisite: Spanish I, Spanish I Honors, or qualifying grade on a placement test*

Spanish II builds upon the acquired skills of Spanish I. The emphasis is placed on vocabulary and grammar building as well as on developing fluency via oral and written communication on a variety of themes. Grammar instruction and practice is given special focus, especially the use of the verb and pronoun system. There is a heightened cultural awareness about the Spanish world. The primary texts for this course are *Buen Viaje 1* and *Exprésate I*. Videos and authentic realia supplement the program.

**575 SPANISH II HONORS, 9-12 (1 credit)**

*Prerequisite: Spanish I, Spanish I Honors, or qualifying grade on a placement test*

Spanish II Honors contains the same elements as the Spanish II program but moves at an accelerated rate.

**532 SPANISH III, 9-12 (1 credit)**

*Prerequisite: Spanish II, Spanish II Honors, or qualifying grade on a placement test*

The class is conducted primarily in Spanish and students are encouraged to communicate in the target language in order to move towards communication proficiency. Students work towards conversational competency on practical themes, and on achieving command of the verb and pronoun system. The technique of translation is introduced by using online media sources such as news outlets to talk in Spanish about current events. Spanish films supplement the program. The primary textbook is *Exprésate 2* and for supplemental reading, *Susana y Javier* is used.

**585 SPANISH III HONORS, 9-12 (1 credit)**

*Prerequisite: Spanish II, Spanish II Honors, or qualifying grade on a placement test*

Spanish III Honors contains the same elements as the Spanish III program but moves at an accelerated rate.

**595 SPANISH IV HONORS, 9-12 (1 credit)**

*Prerequisite: Spanish III, Spanish III Honors, or qualifying grade on a placement test*

This class is conducted primarily in Spanish to encourage proficiency in all foreign language skills. Students continue to work towards conversational competency on practical themes, and achieving command of the verb and pronoun system. Research and translation skills are practiced using online media sources such as news outlets to talk in Spanish about current events. Spanish literature is introduced through the analysis and discussion of short stories and poems by various authors. Spanish films supplement the program. The primary textbook used is *Exprésate 2*. Completion of this four-year sequence will fulfill the language requirements and recommendations of all colleges and universities.

**510 FRENCH I, 9-12 (1 credit)**

This course is designed to encompass the four areas of language learning: reading, writing, listening, and speaking, with an emphasis on orally directed questions and answers, paired activities, and small group work. The textbook, *Bon Voyage I*, is used as a resource. The material is covered with much repetition and includes poetry and songs. Students acquire a strong vocabulary base to build on. They learn how to conjugate regular and irregular verbs in the present tense and how to form the near future tenses. They also are introduced to the simple past and imperative tenses. They study the articles and learn how to make simple sentences and perfect their pronunciation skills. They also learn about Francophone culture.

**515 FRENCH I HONORS, 9-12 (1 credit)**

This course uses and encompasses the same skills as French 1 but moves at an accelerated rate for the motivated language student. This course requires attention to details and strong note-taking skills. The *Bon Voyage 1* textbook is used as a resource.

**520 FRENCH II, 9-12 (1 credit)**

*Prerequisite: French I, French I Honors, or qualifying grade on placement test*

This is a continuation of French I, focusing primarily on building a basic French vocabulary and familiarity with simple grammatical structures while continuing to explore Francophone cultures around the world. The *Bon Voyage 1* textbook is used as a resource.

**525 FRENCH II HONORS, 9-12 (1 credit)**

*Prerequisite: French I, French I Honors, or qualifying grade on a placement test*

This course continues to examine the language and culture of the French-speaking world. It is faster paced for the motivated language learner. This course requires good listening and note-taking skills. The *Bon Voyage 1* textbook is used as a resource.

**535 FRENCH III HONORS, 9-12 (1 credit)**

*Prerequisite: French II, French II Honors, or qualifying grade on a placement test*

The focus of this course is to provide the fundamentals of French grammar as well as an introduction to French literature. Throughout the year, the students learn the major tenses and grammatical constructions that have not already been covered in their previous two

years of study. They also are introduced to *Le Petit Nicolas*, a French song and poem, and they begin writing short compositions.

**555 FRENCH IV HONORS, 9-12 (1 credit)**

*Prerequisite: French III Honors or qualifying grade on a placement test*

This course focuses on speaking, listening, reading, and writing. The textbooks *Bon Voyage 2* and *Tresors du Temps* are used as resources, in addition to articles from *Le Monde* and listening to French and Francophone radio stations. Students have a comprehensive grammar review, more complex syntax, and advanced reading material. Excerpts from *Le Petit Nicolas* with its humorous short stories and *Le Petit Prince* with its lovely images also provide plenty of opportunity for the motivated student to get acquainted with the many expressions and idioms of the French language. Completion of this four-year sequence fulfills the language requirements and recommendations of all colleges and universities.

## VISUAL AND PERFORMING ARTS

**Graduation requirement:** one visual and performing arts credit

|                     |  |
|---------------------|--|
| Visual Arts         | Art I or Art I Honors is a prerequisite for later courses; students then progress to more advanced courses, including Art II Honors, Painting A & B, Printmaking, Drawing A & B, AP Drawing, AP 2-D Art and Design, and 2D Animation |
| Music               | Band, Honors Jazz Combo (by audition), Music Production, Steel Band  |
| Arts in other areas | Photo I & II, Adobe Photoshop, Culinary Arts, Design and Engineering Tech, Architectural Design, Earthworks A and B, Audio Production  |

| Course # | Course Title              | Grades  | Credits | Prerequisites                        |
|----------|---------------------------|---------|---------|--------------------------------------|
| 951      | Art I                     | 9 - 12  | 1       |                                      |
| 945      | Art I Honors              | 9 - 12  | 1       |                                      |
| 955      | Art II Honors             | 10 - 12 | 1       | Art I                                |
| 956      | Drawing A                 | 10 - 12 | 1/2     | Art I                                |
| 957      | Drawing B                 | 10 - 12 | 1/2     | Art I                                |
| 953      | Painting A                | 10 - 12 | 1/2     | Art I                                |
| 954      | Painting B                | 10 - 12 | 1/2     | Art I                                |
| 943      | Printmaking               | 10 - 12 | 1       | Art I                                |
| 935      | AP Drawing                | 11 - 12 | 1       | 2 art credits and teacher permission |
| 937      | AP 2-D Art and Design     | 11 - 12 | 1       | 2 art credits and teacher permission |
| 950      | Photography I             | 10 - 12 | 1/2     |                                      |
| 9501     | Photography II            | 10 - 12 | 1/2     |                                      |
| 960      | Adobe Photoshop           | 10 - 12 | 1/2     |                                      |
| 67       | 2D Animation              | 10 - 12 | 1/2     | Art I                                |
| 9400     | Earthworks A              | 9 - 12  | 1/2     |                                      |
| 9420     | Earthworks B              | 9 - 12  | 1/2     |                                      |
| 842      | Architectural Design      | 11 - 12 | 1/2     | Drafting or Art I                    |
| 852      | Design & Engineering Tech | 9 - 12  | 1/2     | Introduction to Technology           |
| 958      | Band                      | 9 - 12  | 1       |                                      |
| 966      | Music Production          | 9 - 12  | 1/2     |                                      |
| 967      | Audio Production          | 9 - 12  | 1/2     |                                      |
| 964      | Jazz Combo Honors         | 9 - 12  | 1       | by audition                          |
| 9620     | Steel Band I              | 9 - 12  | 1/2     |                                      |
| 9630     | Steel Band II             | 9 - 12  | 1/2     |                                      |
| 9650     | Steel Band III            | 10 - 12 | 1/2     |                                      |
| 9651     | Steel Band IV             | 10 - 12 | 1/2     |                                      |
| 1183     | Culinary Arts             | 11 - 12 | 1/2     | Students must be 16 or older         |



**951 ART I, 9-12 (1 credit)**

This is the first in a series of courses in art education. Students are introduced to the elements of design (line, shape, form, space, texture, value, and color) and the principles of organization (balance, repetition, harmony, emphasis, sequence, and perspective) with the intent of building skills and increasing artistic appreciation. In-class projects emphasize techniques and provide students with varied tasks for solving problems, while introducing them to a variety of media. Students are required to keep a sketchbook for weekly assignments. Major assignments are followed by class critiques, enabling students to participate in the assessment of their own work as well as that of others. Projects may vary from year to year.

**945 ART I HONORS, 9-12 (1 credit)**

This course is for students who have a strong interest in the arts and who plan to take an AP studio course during their junior/senior year in high school, as well as for any student who plans to study art in college and will need to create a comprehensive portfolio. It is followed by Art II Honors. Art I Honors introduces students to the elements of design and the principles of organization through a series of in-class projects with the intent of building skills and increasing artistic appreciation. In-class projects emphasize techniques and provide students with varied tasks for solving visual problems while introducing them to a variety of media. Topics in art history and works of specific artists are examined. Major assignments have specific deadlines and may be followed by class critiques and exams. Students are required to keep a sketchbook for weekly assignments.

**955 ART II HONORS, 10-12 (1 credit)**

*Prerequisite: Art I*

Students in Art II Honors work both two- and three-dimensionally, to help potentially prepare for a comprehensive AP studio art curriculum either their junior or senior year. Working at a more intensified pace to specific deadlines and written assignment requirements, students are expected to take the design elements to the next level. Some of the assignments include a large still life in oils, cut paper self-portraits, and intricate wire and paper sculptures, among others. Required weekly sketchbook assignments are in mixed-media sketchbooks, with the assignment sheets given at the beginning of the quarter so that students can plan ahead. This course is for students who are serious about their commitment to the arts.

**956 DRAWING A, 10-12 (½ credit) - not offered 2023-2024****957 DRAWING B, 10-12 (½ credit) - not offered 2023-2024**

*Prerequisite: Art I*

In Drawing A, students explore techniques using various types of media (graphite, charcoal, ink, etc.) and expand their experience in different types of mark making, value, and color. Drawing B builds upon learned mark-making skills as students explore figurative work. In both semesters, students develop complex compositions, where they establish dimension as well as depict detail. Assignments are given to develop specific skills, while also allowing for individual expression. Sketchbook assignments are given in conjunction with in-class assignments. It is highly recommended that prospective

students have a clear interest in drawing. Students do not need to take Drawing A in order to take Drawing B.

### **953 PAINTING A, 10-12, (½ credit)**

*Prerequisite: Art I*

Painting A focuses on learning various painting techniques using watercolor, gouache, and ink. Students learn basic painting techniques, including different brushes and how to create realistic and abstract imagery from observation and imagination. Students learn about various artists across cultures and time periods to complete a variety of in-class projects. There is a final exam in the form of a final project.

### **954 PAINTING B, 10-12, (½ credit)**

*Prerequisite: Art I*

Painting B focuses on various painting techniques using acrylics, oils, and mixed media. Students begin with a brief review of color theory and fundamental color exercises. Basic painting techniques and brush overview are taught for students to create technically accurate paintings based on realistic and abstract imagery. An examination of contemporary and historical paintings aids students in developing their own artistic voice and style. Students are required to keep a sketchbook for weekly assignments. There is a final exam in the form of a final project.

### **943 PRINTMAKING, 10-12 (1 credit)**

*Prerequisite: Art I*

Printmaking provides students with the opportunity to sample different techniques of printing, such as monotype, intaglio, relief, lithography, and screen printing. For some techniques, students are expected to create series or editions, while for others, there is more emphasis on spontaneous experimentation. Different projects require students to work in black/brown inks and in full color. Students should have a strong interest in drawing and be prepared to work on a project for several weeks. Students are expected to keep a small binder containing all in-class handouts, readings, and preliminary sketches of their work. A midterm project and final exam are given.

### **935 AP DRAWING, 11-12 (1 credit)**

*Prerequisites: 2 art credits and teacher permission*

AP Drawing is a college-level studio art course intended for highly self-motivated individuals to create a comprehensive portfolio containing elements from the disciplines of drawing, painting, and printmaking. The centerpiece of this course is the portfolio that consists of two sections: the Sustained Investigation and Selected Works. The Sustained Investigation requires students to submit 15 digital images and writing that documents their inquiry-guided investigation through practice, experimentation, and revision. The Selected Works section consists of 5 completed art pieces that demonstrate skillful synthesis of materials, processes, and ideas. Students complete mandatory summer homework to prepare the portfolio for the fall semester. The course relies heavily on in-class written and art assignments, group critiques, student-teacher conferences, as well as homework in the form of a visual journal. All students enrolled in the class are required to take the AP exam as part of the course curriculum.

**937 AP 2-D ART AND DESIGN, 11–12 (1 credit)**

*Prerequisites: 2 art credits and teacher permission*

AP 2-D Art and Design is a college-level studio art course intended for highly self-motivated individuals to create a comprehensive portfolio that addresses the elements and principles of design. Students may work in a variety of media including, but not limited to, the following: drawing, painting, printmaking, photography, mixed media, digital media, graphic design, photography, collage, fashion design, etc. The centerpiece of this course is the development of a portfolio that consists of two sections: the Sustained Investigation and Selected Works. The Sustained Investigation requires students to submit 15 digital images and writing that documents their inquiry-guided investigation through practice, experimentation, and revision. The Selected Works section consists of 5 completed art pieces that demonstrate skillful synthesis of materials, processes, and ideas. Students complete mandatory summer homework to prepare the portfolio for the fall semester. The course relies heavily on in-class written and art assignments, group critiques, and student-teacher conferences, as well as homework in the form of a visual journal. All students enrolled in the class are required to take the AP exam as part of the course curriculum.

**950 PHOTOGRAPHY I, 10-12 (½ credit)****9501 PHOTOGRAPHY II, 10-12 (½ credit)**

Photography I and II are a general introduction to digital photography. Familiarity with the digital camera and its functions, lighting, and an understanding of what makes a good photograph are emphasized. Students learn to critique photographs of others as well as their own. Students must have access to a reliable digital camera. Students without their own cameras are loaned one by the school.

**960 ADOBE PHOTOSHOP, 10-12 (½ credit)**

Students explore digital photographic workflow with an emphasis placed on using post-capture, photo manipulation software, mainly Adobe Photoshop, to perfect their photographic statements. Students who have had Photography refine their best images to create portfolio prints. Critique of their own work and the works of others is a focus. Students must have access to a reliable digital camera to complete assignments. Students without their own cameras are loaned one by the school.

**67 2D ANIMATION, 10-12 (½ credit)**

This course will teach the history and conventions of 2D animation through the framework of Adobe Animate. We will explore animation's limitless storytelling and world-building potential by creating naturalistic, character-driven animations that draw upon the unique imaginative perspective of each student. Instructions will provide a solid foundation of both frame-by-frame and automated animation techniques, and students will become confident visual creators with the ability to execute complex narrative ideas from start to finish.

**9400 EARTHWORKS A (fall), 9-12, (½ credit)****9420 EARTHWORKS B (spring), 9-12, (½ credit)**

Earthworks courses use natural materials to design artistic and functional pieces. Earthworks A concentrates on jewelry and making pieces out of wood and other natural materials. Earthworks B focuses on blacksmithing and pottery. Earthworks A is not a prerequisite for taking Earthworks B. Each course meets half of the visual and performing arts requirement.

**842 ARCHITECTURAL DESIGN, 11-12 (½ credit)**

*Prerequisite: Drafting or Art 1*

This course gives students a basic understanding of good house design. Each student develops a full set of house plans and builds a scale model from their plans. This course meets half of the visual and performing arts requirement.

**852 DESIGN & ENGINEERING TECHNOLOGY, 9-12 (½ credit)**

*Prerequisite: Introduction to Technology*

This course meets half of the visual and performing arts requirement and introduces students to the principles of design used in the construction, manufacturing, and communication areas of technology. Students use problem-solving techniques that help them understand how to sketch, draw, form, and shape materials. Students learn how to use cutting, welding, and forming machines and tools to design model cars, boats, rockets, sleds, and other similar products.

**958 BAND, 9-12 (1 credit)**

The George Stevens Academy Band performs at a variety of events during the school year. Activities include concerts in the fall, winter, and spring, as well as performances at elementary schools, parades, basketball games, district and state music festivals, various school activities, and community events. Music selections vary from rock to classical, and rehearsals provide challenges and enjoyment in the making of music. Other music ensembles, to which inclusion into the Band may lead, are the Jazz Band (selected through yearly spring auditions, which are also open to incoming freshmen), jazz combos, and the Honors Combo (both of which require annual auditions), and the Holiday Angels (a group of student musicians who perform seasonal music in December).

**966 MUSIC PRODUCTION, 9-12 (½ credit)**

From modern jazz to trap to metalcore, contemporary music is inseparable from the technology used to produce it. Modern musicians are expected to work with digital and analog technology to record, produce, and disseminate their work. In Music Production, we explore these processes through use of a digital audio workstation (DAW) and USB MIDI keyboards (keyboards will be provided). Students will ultimately apply their knowledge by creating an original recording in Ableton or GarageBand.

**967 AUDIO PRODUCTION, 9-12, (1/2 credit)**

Audio Production further expands the offerings in our new recording studio/music production suite to include audio production skills including podcasting, oral history/documentary production, radio production and sound for film. During this

experiential course, students will: (1) conduct an oral history interview with a local resident and edit and produce a short audio piece; (2) create, direct and produce a short podcast of their own design; (3) produce a short radio spot to be featured on WERU, and (4) practice capturing audio for a video production/film.

### **964 JAZZ COMBO HONORS, 9-12 (1 credit)**

*Prerequisite: By audition (spring prior to the school year)*

Honors Jazz Combo focuses on the study and performance of jazz in its various styles, such as swing, Latin, African, funk, Calypso, jazz-rock, and the ballad. Past Jazz Honors Combos have achieved many awards, winning first, second, or third placement at the Maine State Jazz Festival year after year. The Honors Combo is also asked to perform at many school, community, and prestigious state events. Being a member of the Honors Combo requires a high level of commitment from its members. Many of the former members have majored in music and become successful musicians. Each member of the combo plays in the Jazz Band.

### **9620 STEEL BAND I, 9-12 (½ credit)**

### **9630 STEEL BAND II, 9-12 (½ credit)**

### **9650 STEEL BAND III, 10-12 (½ credit)**

### **9651 STEEL BAND IV, 11-12 (½ credit)**

*Prerequisite: students must pass the preceding level, or teacher permission*

Island music and the steel drum are a vital part of the history and culture of the Caribbean and are important newcomers on the world music scene. Students learn to play “pan”—the steel drum family of instruments—and perform as an ensemble. While prior musical experience is certainly an asset, it is not a prerequisite; the instruments are relatively easy to learn to play. The primary objective of the course is to make music, with instruction in basic music notation, rhythm, harmony, and four-part arranging, and discussion of the construction and cultural background of pans. Each course meets half of the visual and performing arts requirement.

### **1183 CULINARY ARTS, 11-12 (½ credit)**

*Prerequisite: Students must be 16 years old*

Culinary Arts is a quarter-long, hands-on course introducing students to the basics of kitchen work and culinary technique using a variety of teaching methods and experiences. Students learn the art of food preparation, presentation, and service. Lessons include knife skills, menu planning, basic purchasing, nutrition, careers in food service, and other topics pertaining to the hospitality industry.

## INDUSTRIAL TECHNOLOGY AND ENGINEERING

Similarly to our computer curriculum, GSA's technology curriculum provides personal and life skills in a variety of areas of interest and develops students' skills to the point of preparing them for more advanced technical training programs.

|                          |   |
|--------------------------|---|
| Engines                  | Engine Technology, Advanced Engines   |
| Woodworking              | Woodworking I & II, Advanced Woodworking, Home Repair and Maintenance   |
| Engineering and Drafting | Drafting, Architectural Design  |
| Technology               | Introduction to Technology, Introduction to Metals, Metals II, Design and Engineering Technology, Digital Fabrication |
| Welding                  | Welding I, Welding II, Mig Welding, Tig Welding   |

| Course # | Course Title                             | Grades  | Credits | Prerequisites   |
|----------|--|---------|---------|---|
| 811      | Woodworking I                            | 9 - 12  | 1/2     |   |
| 830      | Woodworking II                           | 9 - 12  | 1/2     | Woodworking I   |
| 843      | Advanced Woodworking                     | 11 - 12 | 1/2     | Wood II and permission                                |
| 840      | Home Repair and Maintenance              | 10- 12  | 1/2     |   |
| 841      | Drafting                                 | 9 - 12  | 1/2     |   |
| 842      | Architectural Design                     | 11 - 12 | 1/2     | Drafting or Art I                                     |
| 865      | Digital Fabrication                      | 9 - 12  | 1/2     |   |
| 863      | Introduction to Metals                   | 9 - 12  | 1/2     |   |
| 868      | Metals II                                | 10 - 12 | 1/2     | Introduction to Metals                                |
| 850      | Introduction to Technology               | 9 - 12  | 1/2     |   |
| 852      | Design and Engineering Tech              | 9 - 12  | 1/2     | Introduction to Technology                            |
| 856      | Engine Technology                        | 10 - 12 | 1/2     |   |
| 864      | Advanced Engines                         | 10 - 12 | 1/2     | Engine Tech or permission                             |
| 866      | Welding I                                | 10 - 12 | 1       |   |
| 867      | Welding II                               | 10 - 12 | 1       | Welding I   |
| 868      | <i>Mig Welding - not offered 24 - 25</i> | 10 - 12 | 1       |   |
| 869      | <i>Tig Welding - not offered 24 - 25</i> | 10 - 12 | 1       | Intro to Tech, Intro to Metals, or any welding course |

**811 WOODWORKING I, 9-12 (½ credit)**

This course covers the safe use and care of hand and power tools. Students make assigned projects in wood with emphasis on accuracy, safety, and finished quality. Woodworking I can be followed by Woodworking II.

**830 WOODWORKING II, 9-12 (½ credit)**

*Prerequisite: Woodworking I*

This course is a continuation of Woodworking I with much more emphasis placed on the design, construction, and completion of assigned projects. Safety and housekeeping are stressed. Students pay for project materials not found in the shop. Woodworking II can be followed by Advanced Woodworking with permission of the instructor.

**843 ADVANCED WOODWORKING, 11-12 (½ credit)**

*Prerequisite: Woodworking II or teacher permission*

This is a contract course. Students who enroll design and construct their own project. Emphasis is placed on good design principles, quality of workmanship, and proper work habits. Students must pay for their own supplies not found in the shop.

**840 HOME REPAIR & MAINTENANCE, 10-12 (½ credit)**

This course provides students with the basic information needed to safely use hand tools, power tools, some machines, and assorted building materials. This program gives students hands-on activities to learn about repairs and maintenance necessary in the areas of cutting tools, plumbing, electrical wiring, masonry, painting, and finishing.

**841 DRAFTING, 9-12 (½ credit)**

This course introduces students to the basic use of the tools used to design any product made by mankind. They learn how to set up basic lettering used in any graphic communication, develop pictorial drawings, pattern development, multi-view drawings, and dimensioning. Architectural Design may follow this course.

**842 ARCHITECTURAL DESIGN, 11-12 (½ credit)**

*Prerequisite: Drafting or Art I*

This course gives students a basic understanding of good house design. Each student develops a full set of house plans and builds a scale model from their plans. This course meets half of the visual and performing arts requirement.

**865 DIGITAL FABRICATION, 9-12 (½ credit)**

Imagine a physical object and then digitally design and create it in two or three dimensions. Students use 2D and 3D digital design techniques to create objects using a 3D printer, laser cutter/engraver, vinyl cutter, and manual and power hand tools. A wide array of materials are available, including wood, plastics, polystyrene, metals, silicone, clay, and leather.

**863 INTRODUCTION TO METALS, 9-12 (½ credit)**

This class gives students an introduction to hand and power tools associated with metalworking and fabrication. Layout of projects, welding, sharpening drill bits, and micrometer use are some of the areas covered.

**868 METALS II, 10-12 (½ credit)**

*Prerequisite: Introduction to Metals*

Metals II will take the skills learned in Introduction to Metals and expand on them. Students will fabricate projects that are more complicated and involved than anything they have built so far. Each student will receive training on every machine or tool needed to complete the project. The projects built in the class will aim to expand the student's abilities on the use of the following machines and tools: welding equipment, machining parts on a lathe, bending equipment, milling machine operations, manual shear, drill press, and plasma cutter. As with all the metal working classes, shop safety and cleanliness will be stressed.

**850 INTRODUCTION TO TECHNOLOGY, 9-12 (½ credit)**

This course acquaints students with our ever-changing technology in the processes centered around communication, manufacturing, construction, transportation, and energy and power systems. Students work to design and build model cars, rockets, and other similar products.

**852 DESIGN & ENGINEERING TECHNOLOGY, 9-12 (½ credit)**

*Prerequisite: Introduction to Technology*

This course meets half of the visual and performing arts requirement and introduces students to the principles of design used in construction, manufacturing, and communication areas of technology. Students use problem-solving techniques to help them understand how to sketch, draw, form, and shape materials. Students will also learn how to make modifications to their designs and complete a reliable and working product.

**856 ENGINE TECHNOLOGY, 10-12 (½ credit)**

This course acquaints students with the basic principles involved in external and internal combustion engines. Students learn how each system of an engine operates. Through labs, they learn about two and four-cycle engine principles, carburetion, ignition, cooling, lubrication, and overhaul, as well as how vehicles using gasoline, diesel, propane, jet, turbine, rotary, and rocket engines basically operate.

**864 ADVANCED ENGINES, 10-12 (½ credit)**

*Prerequisite: Engine Tech or teacher permission*

This course covers maintenance, efficiency, and performance of diesel engines.



## GSA WELDING SEQUENCE

GSA offers a four-course welding sequence over a two-year rotation. Welding I and Welding II will then be offered in 2024-2025; Mig Welding and Tig Welding will be offered again in 2025-2026; and so forth. Welding I and Welding II teach techniques and procedures needed for passing structural welding certification tests; students who take GSA welding courses, especially two or more courses, are well-prepared for post-secondary employment or further work in related fields at technical colleges or engineering programs. However, many students find it valuable to take single or multiple courses for their own personal interest.

### **866 WELDING I, 10-12 (1 credit)**

In this course, students learn to perform all types of oxyacetylene cutting, brazing, and welding, as well as basic shielded metal arc welding (stick welding) techniques and procedures. They learn basic welding procedures to start preparing for welding certification tests. They learn proper safety procedures, proper metal preparation, and how to make good quality welds in various welding positions. Heat distortion and warpage, and how to minimize both, are taught as well. This course also introduces students to reading and understanding weld symbols on blueprints.

### **867 WELDING II, 10-12 (1 credit) Prerequisite: Welding I**

Students continue to learn shielded metal arc welding techniques and procedures. Uphill, overhead, and out-of-position welding are covered. Jobsite safety is stressed as well. Students continue to learn and use welding symbols and blueprints that are relevant to what is used in the welding industry. This class also introduces students to part layout, preparation, and fabricating using geometry to figure angles and shapes.

### **868 MIG WELDING, 10-12 (1 credit) - not offered in 2024 - 2025**

Students perform all types of gas metal arc welding (mig welding). They learn about basic mig as well as structural flux core mig welding. Students weld in all positions, flat, horizontal, overhead, vertical up and vertical down, using mig welding. Students use welding symbols and blueprints commonly used in the welding industry. Students are taught how to cut a fit pipe together using geometry. As always, shop and jobsite safety are stressed. Students also are introduced to gas tungsten arc welding (tig welding). There is an opportunity in this class for art students to make metal artwork.

### **869 TIG WELDING, 10-12 (1 credit) - not offered in 2024 - 2025**

*Prerequisite: Intro to Tech, Intro to Metals, or any welding course*

Students learn to weld steel, stainless steel, and aluminum using the gas tungsten arc welding (tig welding) method. All types of welding joints and positions are performed in this class. Students learn how to keep parts square and/or straight while welding. There is a great demand for talented tig welders. Aluminum bike frames, aluminum oil delivery tankers, marine fabrication, and stainless steel pipe lines are just some of the many jobs that involve this method of welding.

## COMPUTER TECHNOLOGY

GSA's pedagogical approach to the computer curriculum is to offer a wide range of exploratory courses that develop students' interest and skills in the ways computers are used in personal life, society, and the workplace. In addition to these courses listed here, there are other courses using computer technology listed under Visual and Performing Arts and Industrial Technology and Engineering.

| Course # | Course Title                 | Grades | Credits | Prerequisites |
|----------|------------------------------|--------|---------|---------------|
| 51       | Computer Programming in Java | 9 - 12 | 1/2     |               |
| 52       | Video Technology             | 9 - 12 | 1/2     |               |
| 59       | Robotics                     | 9 - 12 | 1/2     |               |

### **51 COMPUTER PROGRAMMING IN JAVA, 9-12 (½ credit)**

Computer programming involves the understanding of programming language concepts and how they are applied to problem-solving. Programming equips students with skills, which involve more than the syntax of a programming language. Computer programs are a form of communication. When developing program solutions, students consider clarity of expression, program maintenance, ease of debugging, program extension, reliability, utility and validity. These concepts are taught by learning to program in Java, an object-oriented programming language and currently the language being used for AP programming at the high school level.

### **52 VIDEO TECHNOLOGY, 9-12 (½ credit)**

Video is probably the most universally known of all visual media and is an integral component of many technology applications. Video creation is not only instructional and analytical, but also artistic. The course covers all stages of video creation, distribution, and evaluation. Students learn video basics (camera handling, lighting) as well as pre-production (story generation, script writing, storyboarding), production (casting, direction, filming) and post-production (editing, titling, audio, effects).

### **59 ROBOTICS, 9-12 (½ credit)**

This class uses robots to cover the fundamentals of problem-solving, mechanical design, and computer programming. A robot is an embedded system of software and hardware. Programming and building robots applies science, technology, engineering, and math (STEM) concepts. This course introduces the fundamental concepts of programming and robotics.

## HEALTH AND PHYSICAL EDUCATION

|                    |  |
|--------------------|--|
| Health             | required, usually taken in 9th grade   |
| Wellbeing          | elective, 11th or 12th grade   |
| Physical Education | Physical Education can be taken four times for credit. Advanced Fitness and EEOL can all be taken for PE credit. |

| Course # | Course Title                           | Grades  | Credits | Prerequisites |
|----------|--|---------|---------|---------------|
| 995      | Advanced Fitness Training              | 11 - 12 | 1/2     | Phys Ed       |
| 997      | Experiential Ed and Outdoor Leadership | 11 - 12 | 1/2     | Phys Ed       |
| 998      | Health                                 | 9 - 12  | 1/2     |               |
| 999      | Physical Education                     | 9 - 12  | 1/2     |               |
| 996      | The Art and Science of Wellbeing       | 11 - 12 | 1/2     |               |

**995 ADVANCED FITNESS TRAINING, 11-12 (½ credit)**

*Prerequisite: two semesters of Physical Education*

This course is designed for students to explore different methods of fitness training for athletics. The class stresses the importance of a year-round fitness program to enhance performance and reduce the chance of athletic injury. The course covers flexibility, speed, aerobic, anaerobic, core body, and strength training. In consultation with the instructor, students design a program with short- and long-term fitness goals. Students are graded on participation, a daily journal to keep record of short- and long-term goals, body composition, height, weight, and daily workouts.

**997 EXPERIENTIAL EDUCATION & OUTDOOR LEADERSHIP, 11-12 (1 credit)**

*Prerequisite: one semester of Physical Education*

This course is designed to enrich the intellectual, social, emotional, and physical growth of students by experiencing a wide range of content areas and opportunities within the Blue Hill Peninsula, Acadia National Park, and the state of Maine. Through class instruction, student journals, guest speakers, group projects, and field trips, students develop skills in leadership, communication, trust-building, group problem-solving, and decision-making.

**998 HEALTH, 9-12 (½ credit)**

This course is designed to help students achieve overall physical, mental, and social well-being. Classes offer up-to-date information in six interrelated content areas: health and the mind; personal healthcare; the life cycle; the role of drugs; disease; health and society. In each area, the class stresses the active role of the individual and provides, whenever possible, practical techniques that students can use to achieve positive changes.

**999 PHYSICAL EDUCATION, 9-12, (½ credit)**

Students are introduced to activities such as archery, pickleball, volleyball, aerobics, indoor soccer, floor hockey, tennis, aerobics, and weightlifting. The primary goal of this course is to introduce students to a wide variety of activities in an enjoyable atmosphere to benefit them beyond high school. Students are required to enroll in and receive a passing grade in Physical Education for at least two quarters for one credit. Students may take PE up to four quarters for a maximum of two credits.

**996 THE ART AND SCIENCE OF WELLBEING, 11-12 (½ credit)**

*Prerequisite: Health*

This advanced health class explores wellness through personal experience and growth, and through classroom study of important health topics. The goals of the course are for students to increase their own wellness, to learn in depth about key aspects of health, and to find joy (!) in every day. Students are expected to participate in activities and document their participation in various ways including class discussion and journaling. Note: Some topics may be difficult to discuss with a whole class. There are alternate ways to participate when a subject becomes difficult to explore publicly. Topics we explore and experience: mindfulness, meditation, benefits of outdoor exercise, as well as advanced health experiences in the biology of addiction and addiction treatment, nutrition, understanding of gender/ sexuality, and more as time and interest allow. There are opportunities for students to select topics to study.

## SIGNATURE PROGRAMS

### **EASTERN MAINE SKIPPER'S PROGRAM/ OCEAN STUDIES**

Students participate in the Eastern Maine Skippers program along with a number of area high schools. This program is for students interested in marine-related careers who prefer a hands-on approach to learning. Much of the coursework that has been in the Ocean Studies course is now found in the Maine Environment courses and the Skippers program component is now done through activity period. We work with fishermen and other community members to understand the current issues in the fishery and use creative problem-solving and critical thinking skills to develop an understanding of how to sustain local fisheries, as well as promote ocean health. Students present their work at the Fishermen's Forum and also at the Eastern Maine Skippers Program year-end event.

### **INDEPENDENT STUDY AND INTERNSHIP PROGRAM (ISIP)**

This is an opportunity for juniors and seniors to design their own learning experience and earn one-half elective credit. Students are responsible for determining an area of study that may include exposure to a potential career, development of a talent or interest, travel with an academic focus, or exploration of an area completely unknown. Students begin planning for ISIP in October, creating a completed proposal by January. During the two-week ISIP period, immediately after February break, students participate in their 60-hour project and then demonstrate their achievement at the ISIP Exhibition in March. All juniors and seniors are required to pursue an ISIP project each year.

### **NINTH-GRADE SEMINAR**

Ninth-Grade Seminar is designed to help students successfully transition to the high school learning environment. The Ninth-Grade Seminar teacher provides students with the support and resources needed to handle the academic rigors of GSA and beyond. Daily classes combine short, focused, academic lessons with guided independent study time, tutoring, and daily monitoring of grades in all of their courses. Throughout the course, students learn the skills needed to self-advocate, manage time and stress, think critically, collaborate with peers, and become stronger, independent learners. Students take Ninth-Grade Seminar either in the fall or spring semester in place of a study hall.

### **54 YEARBOOK AND DIGITAL JOURNALISM A, 10-12 (1/2 credit)**

### **57 YEARBOOK AND DIGITAL JOURNALISM B, 10-12 (1/2 credit)**

In this course students will gain skills in one or more of the following areas: yearbook production including graphic design, copywriting, photo composition, interviewing techniques, and organizational and management skills, page design, advanced publishing techniques, editing and photography while producing a creative, innovative yearbook which records school memories and events. There is an emphasis on journalism skills in this class. Participants gain useful, real world skills in time management, marketing, teamwork, and design principles. Course instructional

philosophy: students will be given challenging real world projects and assignments typical of the graphic design and publishing industries. High quality work is expected and students will be given opportunities to redo work until it meets standards specified during instruction. Classroom activities will include reading, research, projects, and problem solving. Students will often work in teams, but will be expected to complete individual assignments in relation to the team's work. Assessment methods will include the students' individual yearbook page assignments completed on time with limited to no errors. Other project based assignments will be provided with an assessment rubric. Students can take this course for one semester or two.

## **THE LEARNING CENTER**

The Learning Center provides services for students with an Individualized Education Plan (IEP). This can mean different things for different students:

- Students are taught in a one-on-one setting in an area of need as identified by their team;
- Students use the Learning Center as a guided study hall where they get assistance completing work;
- Students, who have identified accommodations, come to the Learning Center where the accommodations are provided;
- The Learning Center also provides Ed Tech support in regular classes when the team decides that the regular classroom is the best place for the student to achieve the goals of the IEP.

## **RISE (ROAD TO INDEPENDENCE, SELF-ADVOCACY, AND EMPOWERMENT)**

The RISE program at George Stevens Academy provides a learning environment to students whose academic, social, emotional, or behavioral needs require highly supportive and supervised special education services throughout the school day. The program fosters enhanced support for students with special needs in the mainstream classrooms and in a nurturing classroom experience with one-to-one specially designed instruction. The RISE program has found great success by embracing a culture that embodies opportunity to feel a part of a community. The program promotes independence in academic growth, life skills, social/emotional skills and executive functioning skills. Our program supports our students as they become more empowered to make healthy choices in their school experiences and guides them towards being active participants in their communities now and into their future. Our students are given opportunities to practice life skills and are supported and guided as they discover their career interests. Our RISE program educators guide our students through their academic years by providing support in finding effective tools and strategies to feel successful. Ongoing communication with students' families, special service providers, and the education team is key in ensuring that students are provided with the support necessary for their growth, development and post-secondary transition plans.

## **ADAPTIVE COURSES: ENGLISH, MATH, SOCIAL STUDIES, AND SCIENCE**

Adaptive classes are offered for credit, when appropriate, for students with IEPs. These are offered on an individual basis and are IEP-driven. These classes count towards graduation goals as well as credits in the core areas of study. When possible, this curriculum parallels the topics taught in the regular education curriculum. When possible, students spend a significant amount of course time in the regular curriculum class. Teaching is done in units of study that are appropriate to the student's level. Students are evaluated through tests, reports, worksheets, and hands-on activities. Focus is on development of basic skills in the area of study as well as a solid foundation in reading, vocabulary, writing, and comprehension.

## **ALTERNATIVE COURSES**

Students may take courses through other educational institutions or may design their own Alternative Course (AC). Credit varies depending on the course or program. The most common institutions GSA students have taken courses through are Brigham Young University (online high school courses); AP4ME (online AP courses that are not offered at GSA); Virtual High School (online high school courses); ExplorEC (University of Maine early college online courses); the Maine Community College System's On Campus program; and Husson University's ECAP program. Students who design their own Alternative Course create a curriculum they want to follow and work with a mentor who guides their independent study. Alternative Courses can also consist of interning with local organizations in healthcare, business, or other areas. Students can learn more about taking courses through other institutions or designing their own Alternative Course by meeting with the Dean of Curriculum and Instruction.

## **GSA CAREER INTERNSHIP**

GSA has partnered with local businesses to provide our students with job and career-oriented learning experiences. Through this program students will:

- learn job specific skills;
- learn transferable job/career skills, i.e. the "soft skills" most employers require;
- build connections with local employers;
- be mentored by skilled and experienced workers;
- learn how local business operate.

Students will participate in their internship while continuing to take courses at GSA to fulfill graduation requirements. The internships may be as short as one quarter (marking period) to a full year, and will be for a total of 60 to 240 hours. At the end of their internship, students will make a presentation to a small audience as a capstone component to their entire experience. Students will earn  $\frac{1}{2}$  elective credit for every 60 hours of their internship.