



2019-2020
Program of Studies

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George Stevens Academy is an independent high school on the coast of Maine. The academy is a caring educational community committed to meeting the needs of each local and boarding student with a challenging, comprehensive academic and experiential program that fosters the pursuit of knowledge, inspires creativity, develops self-reliance, and prepares graduates for a purposeful life in a changing world.

January 2019

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 choose to follow their unique interests by pursuing multiple courses in an area of expertise or by broadening their experience by sampling from our wide array of electives.

In addition to traditional courses, GSA offers many ways for students to individualize some of their learning beyond the curriculum listed in the Program of Studies: Alternative Course Contracts, Independent Study (ISIP), Cooperative Education, AP4ALL, and links to 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 cursive script that reads 'David Stearns'.

David Stearns
Dean of Curriculum and Instruction

GRADUATION REQUIREMENTS AND THE DIPLOMA

Students are encouraged to challenge themselves throughout their years at GSA by taking an ambitious course of study. Faculty advisors and the Dean of Curriculum and Instruction are available to help students plan their schedules. GSA encourages every student to prepare for some education beyond high school.

The George Stevens Academy 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 English Language and Composition)

3 credits of mathematics (must include two years of algebra or higher level analytic math courses plus one year of geometry)

3 credits of science

3 credits of social science (must include U.S. history)

1 credit of physical education

1 credit of visual and performing arts

½ credit of health

6½ credits of electives

Grade 9 Seminar*

Total: 22 credits

*Grade 9 Seminar provides a structured learning environment where students develop skills and habits they need to be academically successful and independent. Topics include: keeping track of assignments, organization, time management, study skills, test preparation, note-taking, and self-advocacy. Grade 9 Seminar is required of every ninth-grade student enrolled in a study hall. Students who complete Grade 9 Seminar earn .25 credit towards graduation.

Minimum Course Load

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

Honors Course Policies

Honors courses challenge students to pursue a subject more deeply, more intensively, and more rigorously than is normally possible in the college prep (CP) sequence. Honors course enrollment policies are as follows:

- New students should consult with Student Services and their advisor about the appropriateness of taking an honors course.
- Students enrolled in an honors course must achieve a final grade of 80 or better in order to enroll in the next level honors course in that department. However, if the next level course is an honors-level course but no alternative non-honors course is available, a student may enroll in the honors course without having achieved a grade of 80 or better.
- A student who either (1) earns a final grade of 90 or better in a CP course or (2) has an average of 87 for the year in a CP course AND a 90 for the second semester, may enroll in the honors level in the next appropriate course in the department.

Courses Requiring the Approval of the Dean of Curriculum and Instruction

The Dean of Curriculum and Instruction must approve in advance Alternative Course Contracts, independent study courses, and courses taken for credit outside George Stevens Academy.

For more detail 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:

Most selective colleges

These schools typically accept fewer than 20% of those who apply—some as few as 6-8%. They include the Ivy League schools, elite liberal arts colleges such as Bowdoin, Colby, Colgate, Middlebury, Smith, and Williams, and prestigious public universities such as the University of Virginia, North Carolina, and Michigan. Applicants are expected to pursue the most challenging courses in every subject area, including

- 4 years of English, including AP English Literature and AP English Language and Composition;
- 4 years of math, preferably including AP calculus;
- 3-4 years of social studies, including AP U.S. history;
- 3-4 years of science, including honors or AP biology, chemistry, or physics;
- 3-4 years of the same foreign language at the honors level.

Very selective colleges

Colleges in this group admit fewer than 50% of their applicants. They include such popular schools as Boston University, Northeastern University, Skidmore College, and Connecticut College. Successful applicants pursue a challenging program of honors or AP courses in most subjects, including

- 4 years of English, including AP English Literature and AP English Language and Composition;
- 4 years of math, including honors pre-calculus (Advanced Algebra and Trigonometry);
- 3-4 years of social studies, including at least one honors or AP course;
- 3-4 years of science, including honors courses in biology and chemistry;
- 3 years of the same foreign language, preferably at the honors level.

Selective colleges

Many colleges popular with GSA students are included in this group, including the University of Maine, Husson University, the University of Vermont, and Wentworth Institute of Technology. Students hoping to attend schools in this category should take the following, including honors or AP courses in some subjects:

- 4 years of English;
- 3 years of math, including two years of algebra and one of geometry;
- 3 years of social studies, including U.S. History;
- 2-3 years of science, including biology and chemistry;
- 2-3 years 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 years of English;
- 3 years of math, including at least one year of algebra and one of geometry;
- 3 years of social studies;
- 2-3 years of lab science, preferably including biology and chemistry;
- 2 years of the same foreign language.

Keep in mind that these are merely guidelines, and that they 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.

ENGLISH

Graduation requirement: four credits of high school English, including Senior English or AP English Language and Composition.

Core classes:

9 th grade	Introduction to Literature Honors, Introduction to Literature, or Freshman English Foundations
10 th grade	Sophomore English Honors: British Lit, Sophomore English: British Lit, or Sophomore English Foundations
11 th grade	AP English Literature (year), or Junior English or Junior English Foundations (semester) plus a topics course (semester)
12 th grade	AP English Language and Composition (year) or Senior English (semester) plus a topics course (semester)

Topics courses:

Maine Writers	Reading Across the Curriculum
Journalism	Writing for TV and Film
Public Speaking	

Elective: Creative Writing (see note below)

Notes:

- Creative Writing is offered to all students as an elective credit, but it cannot count as an English class for graduation. Creative Writing is offered in alternate years.
- Juniors and seniors may take an extra topics course as an elective.
- Juniors and seniors who need extra support can take English Support. These English Support periods do not earn credit, nor do they count as one of the six courses students must take each semester.

English for Speakers of Other Languages (ESOL)

GSA offers four semester-long levels of instruction representing two years of English study. The curriculum is divided into two course sequences (Language and Fluency) in recognition that English learners are often at different levels of achievement in the two areas. Having both course sequences also provides more intensive English study for students taking both courses.

ESOL or English Language I - IV	level determined by placement test
ESOL or English Fluency I - IV	level determined by placement test

Course #	Course Title	Grade Level	Credits	Prerequisites
110	Introduction to Literature	9	1	
111	Freshman English Foundations	9	1	
115	Introduction to Literature Honors	9	1	
120	Sophomore English	10	1	9 th -grade English
122	Sophomore English Foundations	10	1	9 th -grade English
125	Sophomore English Honors	10	1	9 th -grade English
129	Junior English Foundations	11	½	10 th -grade English
131	Junior English	11	½	10 th -grade English
133	English Support A	11	0	Teacher/administration
134	English Support B	12	0	Teacher/administration
135	AP English Literature	11	1	10 th -grade English
136	AP English Language and Composition	12	1	11 th -grade English
141	Senior English	12	½	11 th -grade English
150	Maine Writers	11-12	½	10 th -grade English
151	Journalism	11-12	½	10 th -grade English
152	Writing for TV and Film	11-12	½	10 th -grade English
155	Reading Across the Curriculum	11-12	½	10 th -grade English
173	Creative Writing	9-12	½	
175	Public Speaking	11-12	½	10 th -grade English
189	ESOL Language I	9-11	½	placement test
190	English Language II	9-11	½	placement test
201	English Language III	9-11	½	placement test
203	English Language IV	9-12	½	placement test
193	ESOL Fluency I	9-11	½	placement test
195	English Fluency II	9-11	½	placement test
205	English Fluency III	9-11	½	placement test
207	English Fluency IV	9-12	½	placement test
197	ESOL Subject Support	9-12	0	teacher recommendation

110 INTRODUCTION TO LITERATURE, 9 (1 credit)

Due to the modular nature of this course, students are not allowed to change from the CP level (110) to the honors level (115) after the beginning of the second quarter.

This dynamic course, designed with the needs of first-year students in mind, is a year-long course divided into four modules, or mods, each presented by a different teacher in a quarter-long unit of study. The modules are (1) short fiction, (2) drama, (3) poetry, and (4) nonfiction and grammar. The course develops reading, writing, thinking, speaking, and listening skills primarily through the study of literature in a way that maximizes student interest, maintains student focus, and promotes organizational skills. Writing assignments tend to be expository-analytical responses (paragraphs and essays) to text, but also include other modes of writing such as journaling, poetry, and various forms of creative expression. A premium is placed on writing as a process, not just as a product; students can expect to engage in prewriting, drafting, peer editing, and revising. Students also study grammar and usage, vocabulary in context, and some aspects of research-based writing. The oral component of this course is ongoing, developed through brief presentations, reading aloud, active participation in class discussions, and especially through the study of drama and poetry.

111 FRESHMAN ENGLISH FOUNDATIONS, 9 (1 credit)

This course is strongly recommended for entering students who need remediation in basic reading and/or writing skills prior to admittance to college preparatory studies. Reading instruction focuses on the development of skills such as reading for details, finding the main idea, using context clues, and making inferences. Individualized instruction in reading, paragraph and essay writing, vocabulary development, and basic grammar is provided. The primary goal for each student at course completion is a gain of two or more years in reading comprehension level. Readings may include *Of Mice and Men*, *The Education of Little Tree*, *The Old Man and the Sea*, *A Day No Pigs Would Die*, and *Our Town*.

115 INTRODUCTION TO LITERATURE HONORS, 9 (1 credit)

Due to the modular nature of this course, students are not allowed to change from the honors level (115) to the CP level (110) after the beginning of the second quarter.

This course has the same modular format as Introduction to Literature (see course description above), and incorporates essentially the same material. What makes it an honors-level course is faster pace, greater depth of focus, and use of supplemental materials. Enrolling students should have strong reading skills (including making inferences and understanding main ideas), strong expository-analytical writing skills, strong thinking skills (both intuitive and logical), and a solid understanding of sentence structure, grammar, and punctuation.

120 SOPHOMORE ENGLISH: BRITISH LITERATURE, 10 (1 credit)

Prerequisites: Introduction to Literature, Freshman English Foundations, or Introduction to Literature Honors

This is a reading-intensive course in which students sharpen their critical and analytical reading, writing, speaking, and thinking skills through an exploration of classic British texts from the Saxon era to the late 20th century. Students may also explore a wide variety of non-British literature to enhance skill development. Throughout the course, students receive extensive practice with 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 student confidence in and enjoyment of reading. 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*, *The Picture of Dorian Gray*, *And Then There Were None*, *Treasure Island*, *All Creatures Great and Small*, *The Lord of the Flies*, and more.

122 SOPHOMORE ENGLISH FOUNDATIONS, 10 (1 credit)

Prerequisites: Freshman English Foundations

This year-long course is designed for sophomores whose reading and/or writing skills are still developing and are not quite ready for the college-prep level of English instruction delivered in 120 Sophomore English. Through short fiction, nonfiction, and drama, students continue to develop reading skills, review grammar, and apply their learning to various writing assignments. Literature options include *Romeo and Juliet*, *And Then There Were None*, *Lord of the Flies*, and *Walkabout*, among others.

125 SOPHOMORE ENGLISH HONORS: BRITISH LITERATURE, 10 (1 credit)

Prerequisites: Introduction to Literature Honors (preferred) or Introduction to Literature

Note: To take this course, students must complete the teacher-specified summer reading and journal assignment.

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 of classic British texts from the Saxon era to the late 20th Century. Although this honors course shares some common texts and skill development activities with the CP version, the difficulty of the reading materials and topics covered, the amount of homework assigned, and the expectations as to the quality of that homework becomes 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*, and others.

12th-Grade English Requirements

Note: At the senior level, all students must enroll in either the college preparatory English or the Honors/AP level. Seniors who need extra support should add English Support to their schedules. English Support does not earn credit and does not count toward the English graduation requirement, but it offers valuable support and guidance, and increases the chances of success in Senior English.

College Preparatory (CP) English:

All CP juniors and seniors must enroll in an approved English course every semester. Exceptions are made rarely, and only with the permission of both the English Department and the Dean of Curriculum and Instruction. CP students are allowed to take one extra junior/senior topics course each year. Doing so earns academic credit but does not count toward required English credits.

- CP juniors must take the one-semester Junior English: American Literature course and choose a one-semester junior/senior topics course.
- CP seniors must take the one-semester Senior English: World Literature/Rhetoric course and choose a one-semester topics course.

Junior/senior topics courses include: Maine Writers (150), Journalism (151), Writing for TV and Film (152), Reading Across the Curriculum (155), and Public Speaking (175). See course descriptions below.

Honors/AP English:

AP English Literature and AP English Language and Composition are one-year courses. Students enrolled in these courses may also enroll in topics courses, pending available space. Doing so earns academic credit but does not count toward required English credits.

129 JUNIOR ENGLISH FOUNDATIONS, 11 (½ credit)

This semester-long course is designed for juniors whose reading and/or writing skills are still developing and are not quite ready for the college-prep instruction in Junior English. Intensive and tailored skill development occurs through readings in fiction and nonfiction, as well as through PSAT/SAT prep materials. Readings may include *The Catcher in the Rye*, *The Old Man and the Sea*, *Winterdance* (a humorous, factual account of running The Iditarod), short fiction by Steinbeck, such as "The Pearl," and contemporary works relevant to various aspects of Maine life.

131 JUNIOR ENGLISH: AMERICAN LITERATURE, 11 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

This is a semester-long study of American literature. The course is divided into two units, each roughly one academic quarter in length. The first unit is an abbreviated survey of American literature from the colonial era to the early 20th century. Readings in this unit consist of short stories, poems, and essays. The second unit focuses on a novel, most likely *The Catcher in the Rye*. The course provides continued composition development, including expository-analytical paragraph and essay writing, and a personal essay that might be the basis of a future college application essay. We spend time on vocabulary and grammar, and we complete some brief but focused PSAT/SAT preparation. Oral communication skills are encouraged and developed

through active and appropriate participation in class activities and in our numerous discussions of the literature at hand. Finally, although the readings are discussed separately and on their own terms, we also examine how they connect to a course theme, currently “the journey.”

133/4 ENGLISH SUPPORT A (fall) ENGLISH SUPPORT B (spring)

These courses provide students with extra English support for their junior and senior English courses. In these courses tutored by an English teacher, students work on their homework, coursework, and skills development for their English classes, and perhaps other classes as well.

135 AP ENGLISH LITERATURE, 11 (1 credit)

Prerequisites: Sophomore English Honors (preferred) or Sophomore English (see Honors Policy)

Note: Teacher-specified summer reading and writing unit is required.

This is a challenging college-level course aligned with the national AP curriculum requirements. The course is delivered as a study of American literature covering several major American literary figures, primarily from the 19th and 20th centuries, and the recurring themes in their works. We are especially concerned with reading well and closely, with further developing a familiarity with various literary elements and how they create meaning, and with developing clear and authoritative expository-analytical essays on literature. Writing tasks are numerous, divided between take-home and on-demand assignments, vary in length, and almost always require students to engage with textual detail and theme. One or two creative writing assignments and sometimes a personal essay are assigned to supplement student understanding of the literature at hand. All literature-based work in this course is extensively supported through frequent class discussions, most of which are student-led and teacher-facilitated and, to a certain extent, modeled after college seminars. Language-intensive work includes grammar, vocabulary in context, and some specific PSAT and SAT preparation. A significant amount of time is devoted to preparing for the AP exam, which all students are absolutely expected to take.

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

Prerequisites: AP Literature and Composition (preferred) or Junior English

Note: Teacher-assigned summer reading and writing is required.

This college-level course, aligned with the national AP curriculum requirements, has replaced Senior Honors English and is designed to invite the student into the rhetorical conversation: the interplay among the subject, the audience, and the author’s purpose. Through both formal and informal written reflections and analyses of diverse prose styles and genres, the student participates in this interaction. From close reading, lively discussion, and writing in narrative, personal, expository, and argument modes, students develop the critical-thinking, speaking, and writing skills necessary to delineate a cogent and cohesive position on any topic. The coursework includes a college essay, classics of modern fiction, and Senior Debate. A significant amount of time is devoted to preparing for the AP exam, which all students are expected to take.

141 SENIOR ENGLISH: WORLD LITERATURE/RHETORIC, 12 (1/2 credit)

Prerequisites: AP English or Junior English (see Honors Policy)

Through the study of archetypes, students examine readings from Western mythology and learn to recognize their application today in marketing, modern literature, poetry, art, music, and film. Using Hamilton’s *Mythology* as a resource, and texts such as *The Odyssey*, *Siddhartha*, and creation myths from around the world, students identify patterns of human behavior and qualities of character that are timeless. Students are also introduced to the art of persuasion through writing requirements that include the following: response journals, outlines, research, creative and analytic essays, drafting, revising, and editing. A major oral component involves the study of public speaking in preparation for Senior Debate. A culminating assignment, the Senior Debate, demonstrates that a student has synthesized all aspects of the language arts curriculum, from working cooperatively as well as independently, to researching, writing, delivering, and arguing a debate topic of serious merit.

150 MAINE WRITERS, 11-12 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

This course explores Maine writers, covers a variety of literary genres and themes, and focuses primarily on the Maine coastal experience. It examines such issues as how we relate to the land and sea; how in some ways who we are is determined by where we are; how an interesting, complex, and sometimes tense dynamic has developed between people “from away” and people “from Maine”; and how Maine has been and continues to be an inspiring place for writers. Authors will include some traditional literary figures such as E.B. White, but the emphasis is on more contemporary (and in many cases, local) writers such as Greenlaw, Doiron, Phippen, Blair, McCall, Kestenbaum, Carpenter, Russo, Chute, Wormser, Wood, Thayer, Peavey, Shetterly, Lockyer, and Beem. As we make our way through the course, we will work toward answers to these questions: What is a Mainer? Who decides? If there is such a thing as Maine literature, what exactly is it? During the course, two or three Maine writers visit the class to share life stories and talk about their writing experiences.

151 JOURNALISM, 11-12 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

This course focuses on writing the kind of hard news and feature stories commonly found in newspapers and magazines. Students learn how these forms of writing differ considerably from typical academic writing; develop a sense of what is and isn't legitimate news; and actively engage in the writing process, including prewriting, interviewing, drafting, and finalizing. For inspiration and models of journalistic craft, we refer frequently to area newspapers and magazines, as well as to journalists working on the regional and national stages. We might visit a working newsroom to see how it functions, and we might have guest appearances by working journalists.

152 WRITING FOR TV AND FILM, 11-12 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

Do you like to make trouble? That's what writing screenplays is all about: developing a sympathetic character, putting that character through a series of seemingly insurmountable obstacles, and helping that character achieve a desirable outcome. Eliciting emotion in the reader through this kind of dynamic script is the key to a successful film. By writing original screenplays, students learn basic screenwriting format, scene structure, screenplay terminology, grammar, and characterization techniques. Projects may include reading and analyzing scripts and writing synopses, individual screenplays, group plays, a short story adaptation, and a one-act play. Text: *Save the Cat*.

155 READING ACROSS THE CURRICULUM, 11-12 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

This reading-intensive course is designed to help students of all reading levels deepen and broaden their interpretations of a variety of texts, old and new, fictional and nonfictional, literary and visual. Students develop skills of analysis, vocabulary building, and logical reasoning through an exploration of a multitude of concepts, not only from literature, but also from history, sociology, psychology, science, drama, philosophy, and cryptography. Additionally, students will continue to develop their written and oral communication skills through persuasive writing and research assignments, in-class discussions, small presentations, and hands-on activities. Texts may include *The Wave*, *Anthem*, *Twelve Angry Men*, *Animal Farm*, *A Man For All Seasons*, *Down River*, “The Lottery,” “The Ledge,” “The Veldt,” *The Man Who Mistook His Wife for a Hat*, *The Hungry Ocean*, *Into Thin Air*, *Guts*, *Watch on the Rhine*, *Crime and Punishment*, dialogues of Plato, and more.

173 CREATIVE WRITING, 9-12 (½ credit)

Note: Creative Writing is an elective and does not count as a required English credit.

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 as editors. Genres include poems, stories, and short nonfiction pieces. Frequent discussion of published authors will 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, 11-12 (½ credit)

Prerequisites: Sophomore English, Sophomore English Foundations, or Sophomore English Honors

Do you like to speak your mind? Do you want to win the argument when someone says, "You don't know what you're talking about"? This course is designed to help students gain confidence in their public speaking skills. Skills such as eye contact, pace, volume, use of time, and logic are clear, measurable, and easy to learn with enough practice. Jump-start your qualifications for finding a job, for furthering your education, and for building confidence in your ability to connect with an audience. Students write and present introductory, informative, persuasive, impromptu, special tribute, and demonstration speeches. The course also addresses the creation and use of visual aids, and it reviews important job interviewing skills. Bring what you know and learn what you don't about the art of public speaking.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL): PLACEMENT AND PROMOTION PROCEDURES

Initial placement: in-house placement tests are administered on campus to all students for whom English is a second language. Students are placed into these courses based on their scores on these tests.

Promotion: Students who successfully complete a course advance to the next level.

189 ESOL LANGUAGE I, 9-11 (½ credit)

Prerequisites: placement

This course provides a thorough overview and practice of basic reading and writing skills. Sentence and paragraph structure is practiced through weekly writing and revision of description, narration, plot summary, comparison/contrastive, and character compositions. Reading skills are strengthened through speed-reading as well as shared reading and discussion of works such as Native American and international folktales, selected fiction, and nonfiction. Confidence and creative writing experience is gained through weekly free-writes, portfolio presentations, and peer assessments. Ongoing vocabulary acquisition with pronunciation is central. Study skills and time management are part of the course to help students balance extracurricular activities and the time needed for academic reading and writing. The extensive reading program has included the following titles: *The Giver*, *The Old Man and the Sea*, and *Holes*.

190 ENGLISH LANGUAGE II, 9-11 (½ credit)

Prerequisites: ESOL Language I or placement

This course focuses on developing intermediate academic reading and writing skills by studying vocabulary as well as reading and writing strategies and structures. The course includes a thorough understanding of basic research skills. Emphasis is placed on independent revision skills and a solid understanding of fundamental conventions and mechanics through practice. Students focus on increasing reading comprehension through topic and main idea challenges in a wide variety of texts. Students move from strong paragraph writing to essays covering cause and effect, personal narrative (college essay ideas), comparative/contrastive writing, and literary analysis of a variety of short stories. Reading is central to the course, both in and out of class, with presentations, discussions, and projects that lead students to deeper levels of comprehension. Readings may include the following titles: *The Lion, the Witch, and the Wardrobe*; *The Crossover*; *Love that Dog*; and *The Pearl*.

201 ENGLISH LANGUAGE III, 9-11 (½ credit)

Prerequisites: English Language II or placement

This course includes practice with language mechanics and conventions as students write an essay each week in a variety of styles with emphasis on argumentation, debate, and research in preparation for Senior Debate, an integral part of the academic program at GSA. Annotation, proper citation, and critical reading skills, as well as methods of avoiding plagiarism, are key elements of the reading-and-reacting essay on a current controversial topic. Discussion, presentation, and in-class reading responses have focused on the following titles: *Things Fall Apart*, *The Boy in the Striped Pajamas*, and *The Hobbit*.

203 ENGLISH LANGUAGE IV, 9-12 (½ credit)

Prerequisites: English Language III or placement

This course explores critical reading and thinking through literary analysis of a wide range of short stories and articles as well as TOEFL, IELTS, and SAT reading and writing challenges. Students work on college essays and goals, complex sentence structure, analogy, and advanced SAT vocabulary. Research skills are required and practiced. Texts used have included *Maus I*, *Maus II*, *The Diary of Anne Frank*, and *American Born Chinese*. This course may be of interest and benefit to high school students who want to strengthen their core skills, gain study skills, increase knowledge of grammar, and experience cross-cultural connections through academic discussions.

193 ESOL FLUENCY I, 9-11 (½ credit)

Prerequisites: placement

This course focuses on the development of general listening, speaking, and grammar skills through listening for details and information, taking dictation, making demonstrations, practicing pronunciation, and studying the parts of speech and how they are combined.

195 ENGLISH FLUENCY II, 9-11 (½ credit)

Prerequisites: ESOL Fluency I or placement

This course thoroughly reviews the basic mechanics and conventions of the English language with regular presentations and out-in-the-field experience. Along with pronunciation and speaking practice, students conduct interviews, present demonstrations, design surveys and report results, as well as discuss a wide range of topics (current events, technology, the environment) in order to gain the confidence and skill to be actively engaged in their academic classes and community.

205 ENGLISH FLUENCY III, 9-11 (½ credit)

Prerequisites: English Fluency II or placement

This listening and speaking course places a heavy emphasis on language use, grammar, sentence diagramming, and verb usage, combined with research presentation and lively and productive weekly discussion leading.

207 ENGLISH FLUENCY IV, 9-11 (½ credit)

Prerequisites: English Fluency III or placement

This is a demanding listening and speaking course with an advanced grammar intensive, multimedia research presentation, weekly discussion-leading, and a range of speaking activities such as cross-cultural groups, student and faculty presenters and panels, TED Talks, and field events. This course would be of benefit to a high school student interested in increased experience in listening and discussion leading, research and presentation, cross-cultural exchange, and advanced grammar.

197 ESOL SUBJECT SUPPORT, 9-12 (full year, no credit)

Prerequisites: Placement recommended depending on need

This course integrates English language study with history and science course support to better prepare students for lab work, projects, reports, and research. Students study English language vocabulary, writing, and reading by working directly with their history and science textbooks, handouts, papers, and assignments. The course focuses on assessing the individual student's needs and provides accommodations for successful progress and confidence with the English language and navigating the academic program.

ENGLISH EXTRA

English Extra is for students whose English skills may need support in English classes as well as other courses, such as history or biology. Students are referred to English Extra by their teachers or they may request the additional language study and support. Additionally, TOEFL and SAT exam classes are available by request. Each spring and fall, a six-week course is offered during the evenings; however, students may work with the English/ESOL Director to design a program that fits their needs and deadlines. Afternoons, study halls, and evenings are available for exam preparation and skill practice directly related to the tests.

SOCIAL STUDIES

Graduation requirement: three credits of high school social studies, including one year of U.S. history

Core classes: offered at honors, college prep, and foundations levels

ISOS (9th grade) → World History (10th grade) → U.S. History (11th grade)

Elective classes for juniors and seniors (semester classes):

AP U.S. History (year-long class for interested juniors as their U.S. history course)	
AP Human Geography (year-long course for seniors)	
Philosophy	Economics
History of Modern Feminism	Psychology
Holocaust	Street Law
Current Affairs	Classical Western Civilization

Course #	Course Title	Grade Level	Credits	Prerequisites
210	Introduction to Social Science	9	1	
215	Intro. to Social Science Honors	9	1	
220	World History	10	1	ISOS or Foundations
225	World History Honors	10	1	ISOS
271	Social Studies Foundations	9-10	1	
230	U.S. History	11	1	World History
265	AP U.S. History	11	1	World History
255	AP Human Geography	12	1	U.S. History
213	History of Modern Feminism	11-12	½	
214	Classical Western Civilization	11-12	½	
246	Street Law	11-12	½	
248	Psychology	11-12	½	
250	Philosophy	11-12	½	
261	The Holocaust	11-12	½	
266	Economics	11-12	½	
269	Current Affairs	11-12	½	

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 subdisciplines of government, economics, history, and geography through topics and case studies drawn mostly from the United States but also 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. Students learn to discern patterns in information, investigate the accuracy of information, arguments, and sources, and develop and debate opinions about social studies issues. Students learn more about using readings, maps, charts, and graphs to extract and analyze information. Students develop their writing skills within the social studies, especially argumentative and persuasive writing.

215 INTRODUCTION TO SOCIAL SCIENCE HONORS, 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 subdisciplines of government, economics, history, and geography through topics and case studies drawn mostly from the United States but also 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. Students learn to discern patterns in information, investigate the accuracy of information, arguments, and sources, and develop and debate opinions about social studies issues. Students learn more about using readings, maps, charts, and graphs to extract and analyze information. Students develop their writing skills within the social studies, especially argumentative and persuasive writing.

220 WORLD HISTORY, 10 (1 credit)

Prerequisites: Introduction to Social Science, Introduction to Social Science Honors, or Social Studies Foundations

This course introduces students to eight important themes in history: power and authority, religious and ethical systems, revolution, interaction with the environment, economics, cultural interaction, empire building, and science and technology. These themes are explored globally from antiquity to modern times. Students develop organizational skills, note-taking skills from lecture, video, and books, as well as critical-thinking skills. There are written assignments, chances for independent research, group projects, homework, and checks for comprehension that are test- and quiz-based.

225 WORLD HISTORY HONORS, 10 (1 credit)

Prerequisites: Introduction to Social Science or Introduction to Social Science Honors

This course introduces students to eight important themes in history: power and authority, religious and ethical systems, revolution, interaction with the environment, economics, cultural interaction, empire building, and science and technology. These themes are explored globally from antiquity to modern times. Students develop organizational skills; note-taking skills from lecture, video, and books; as well as critical-thinking skills. There are written assignments, chances for independent research, group projects, homework, and checks for comprehension that are test- and quiz-based. Students in this course should be prepared for significant homework, especially reading, and significant class discussion.

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

Prerequisites: None. 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 study 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.

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

Prerequisites: World History or 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. Emphasis is placed on the development of written and oral communication skills and research through special projects, papers, simulations, and debates. Students are routinely required to use charts and maps as well as their reading to make inferences and draw conclusions about major events in U.S. history. Documentaries are also used to enrich the study of historic periods.

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

Prerequisites: 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 will also be required to take the AP exam in May.

255 AP HUMAN GEOGRAPHY, 12 (1 credit)

Prerequisites: U.S. History or AP U.S. History

Human geography is the study of the geographic patterns of human culture, politics, and economics. We study how human society is influenced by the physical, cultural, and spatial environment. Topics of study are mostly from modern history and current events; our range of focus will include the local geography of Hancock County as well as geographic issues from the United States and around the world. In addition to learning geographic content knowledge, students develop skills in mapping, statistics, graphical representation of data, and original research. This course is a college-level introduction to human geography. Students should expect a level of independent learning and a workload commensurate with college expectations. Students are also expected to enter the course with a significant knowledge base from previous social studies courses. Students who enroll in this course are required to take the AP test in May.

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

This course will explore the struggles, fights, and experiences of feminists across the globe during the last few centuries. We will 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 will be evaluated through their written responses to assigned texts, active participation during classroom discussion, homework completion, and performance on several tests.

214 CLASSICAL WESTERN CIVILIZATION, 11-12 (½ credit)

Thousands of years have passed since the ancient Mesopotamians, Egyptians, Greeks, and Romans walked the earth. Much of their world has crumbled into dust, but their mythology, artifacts, and philosophies continue to inspire history lovers today. This course will tell the story of the early history of Western civilization. Instead of relying on empires, wars, and dates to describe this vanquished world, we will also study the art, literature, personalities, religions, and social structures of the time. We will attempt to draw connections between the past and Western culture today. Students will be evaluated on the persuasive essay responses to a series of writing prompts and homework, as well as several tests.

246 STREET LAW, 11-12 (½ credit)

This course examines various aspects of your legal rights and responsibilities as citizens. Topics will include law and values, civil liberties, and criminal law. We will 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)

Ethics is the branch of philosophy that aims to answer the question, “How should I live?” Once we take this question seriously, many other difficult, but fascinating, questions emerge: “How do I know what is right?” and “Is right for me the same as right for others?” “What are human rights?” “What happens when rights conflict?” “Do I have to tolerate opinions and behaviors that religious conviction tells me are wrong?” “Do religious beliefs or cultural norms justify offensive or harmful behavior?” “Is it ever right to impose my beliefs and code of conduct on others?” “How do we decide how to treat the unborn? the mentally incompetent? the very young? the very old? the dying? criminals? terrorists?” “Do animals have rights?” “Do I have a moral duty to protect the environment?” In this course, we notice the sorts of problems we begin to encounter when we try to answer these questions; consider several historically important theoretical ethical frameworks; and study in depth several “live” ethical issues, such as assisted suicide, abortion, famine, animal rights, offense to others, and bioethics.

261 THE HOLOCAUST, 11-12 (½ credit)

This course will provide an in-depth look at Germany’s post-World War I social and political environment that gave rise to Adolf Hitler’s rule and the attempted genocide of the European Jewish population. Hitler’s actions during World War II will be examined, as well as the persecution that the Jewish population of Europe endured during his rule. The aftermath of Hitler’s reign on Germany and the Jewish population will also be analyzed through the course, along with reactions from America and other areas of the world. Students are required to read and discuss at least one book about the Holocaust. Films are used extensively in this class.

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.

269 CURRENT AFFAIRS, 11-12 (½ credit)

The course provides an overall understanding of the importance of daily events and demonstrates to students how these events affect their day-to-day lives. This course includes examination and spirited discussion of international, national, state, and local issues with the intent of interpreting their significance. Topics could include education, race, energy, environmental protection, free speech, gun rights, and health care. The course also focuses on the electoral process, examining selected presidential campaigns, analyzing candidates, issues, tactics, political cartoons, and campaign commercials. Daily use of a variety of news media will help place current affairs within a historical perspective as well as consider their current context and future implications.

MATHEMATICS

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

Core classes: offered at honors, college prep, foundations levels

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

- Students not ready for Algebra must take Pre-Algebra first.
- Some students take Algebra II Honors and Geometry Honors concurrently in order to be able to take Calculus in 12th grade.

Beyond the core classes:

Advanced Algebra Advanced Algebra Honors	semester	Students planning to take math in college
Trigonometry Trigonometry Honors	semester	Students planning to take math in college
Personal Finance	semester	Useful for all students
Capstone Algebra	semester	College-bound seniors not taking Advanced Algebra
Elementary Statistics	semester	Useful for all students
AP Statistics	year	Strong math students interested in business or economics, sciences, nursing, or social sciences
AP Calculus AB	year	Students interested in science, engineering, economics or business
AP Calculus BC	semester	Take in addition to AP Calculus AB

Course #	Course Title	Grade Level	Credits	Prerequisites
313	Pre-Algebra	9	1	
310	Algebra I	9-10	1	
314	Algebra I Foundations	9-10	1	
315	Algebra I Honors	9-10	1	
320	Geometry	10-12	1	Algebra I
323	Lab Geometry	11-12	1	Algebra
325	Geometry Honors	9-12	1	Algebra I
329	Algebra II Foundations	10-12	1	Algebra I or Alg. I Foundations
330	Algebra II	9-12	1	Algebra I
335	Algebra II Honors	9-12	1	Algebra I
341	Capstone Algebra	12	½	Algebra II
344	Elementary Statistics	11-12	½	Algebra I
377	Personal Finance	10-12	½	
346	Advanced Algebra	11-12	½	Algebra II
356	Advanced Algebra Honors	11-12	½	Algebra II
347	Trigonometry	11-12	½	Algebra II

Course #	Course Title	Grade Level	Credits	Prerequisites
357	Trigonometry Honors	11-12	½	Algebra II
355	AP Statistics	11-12	1	Algebra II
365	AP Calculus AB	11-12	1	Adv. Algebra, Trigonometry
374	AP Calculus BC	11-12	½	Co-requisite: AP Calculus AB

313 PRE-ALGEBRA, 9 (1 credit)

Students who do not have a solid arithmetic background are strongly encouraged to take this course before taking algebra. 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. There is no formal prerequisite for this course, but a strong pre-algebra background is necessary.

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 fast pace of Algebra I. There is no formal prerequisite for this course, but a strong background in arithmetic is necessary. 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)

Prerequisites: 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 taught by a mathematics teacher in the first semester and a technology teacher in the second. Course topics include, but are not limited to, angles, parallel lines, area, volume, and trigonometry. During the second semester, students

work on real-world projects in a workshop setting and are exposed to community resources to see geometric principles applied.

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)

Prerequisites: Algebra I or Algebra I Honors

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 will 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)

Prerequisites: Algebra I or Algebra I Honors

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 pace of the course and the depth of coverage are more intense than in Algebra II.

341 CAPSTONE ALGEBRA, 12 (½ credit)

Prerequisites: Algebra II or Algebra II Honors

This course concentrates on math skills that students will need to pass college math placement tests and to succeed in freshman college courses. Topics covered include graphing, linear equations, inequalities, basic word problems, exponential and logarithmic relationships, and polynomial functions, all with an emphasis on problems that students are likely to encounter in their first year of college. The course is strongly recommended for college-bound seniors who are not taking Advanced Algebra or an AP math course.

344 ELEMENTARY STATISTICS, 10-12 (½ credit)

Prerequisites: Algebra I or Algebra I Honors

It is hard to understand the world around us without some knowledge of basic statistics. What is a “margin of error” in a political poll? What principles of sampling tell us that certain samples estimate the population well? Students explore data sets, understand the basis of sampling and experimental design, study probability,

review correlation and linear regression, and learn the basics of inferential statistics and hypothesis testing. The course is especially suited for students who will need to use or interpret elementary statistical analysis in business, natural sciences, medical professions, and social science.

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.

346 ADVANCED ALGEBRA, 11-12 (½ credit)

Prerequisites: Algebra II or Algebra II Honors

This is the first half of a course called Pre-calculus in many schools. Topics include graphs of conic sections, solving systems of linear equations 3×3 , sequences and series, partial fraction decomposition, and a review of exponential functions, logarithms, and imaginary numbers. The course will be useful to most students planning to take mathematics courses in college. Students who plan college study of sciences, business, or other fields that require advanced mathematics should also plan to take Trigonometry or Trigonometry Honors before high school graduation.

356 ADVANCED ALGEBRA HONORS, 11-12 (½ credit)

Prerequisites: Algebra II or Algebra II Honors

This is the first half of a course called Pre-calculus in many schools. Topics include properties and graphs for diverse functions, solving systems of linear equations 3×3 and larger, sequences and series, proof by induction, and a review of exponential functions, logarithms, and imaginary numbers. Students who plan college study of sciences, business, or other fields that require advanced mathematics should also plan to take Trigonometry or Trigonometry Honors before high school graduation.

347 TRIGONOMETRY, 11-12 (½ credit)

Prerequisites: Algebra II or Algebra II Honors; students must also have completed or be currently enrolled in Geometry or Geometry Honors

This is the second half of a course called Pre-calculus in many schools. High school trigonometry is essential for admission to many college programs, including math, sciences, engineering, and programs at top-tier business colleges (for example, MMA requires trigonometry). Topics covered include radian measure, definitions and graphs of circular functions, applying trigonometry to geometry and physics problems, derivation and use of fundamental trig identities, and verifying identities.

357 TRIGONOMETRY HONORS, 11-12 (½ credit)

Prerequisites: Algebra II or Algebra II Honors. Students must also have completed or be currently enrolled in Geometry or Geometry Honors

This is the second half of a course called Pre-calculus in many schools. High school trigonometry is essential for admission to many college programs, including math, sciences, engineering, and programs at top-tier business colleges (for example, MMA requires trigonometry). Topics covered include radian measure, definitions and graphs of circular functions, applying trigonometry to geometry and physics problems, derivation and use of fundamental trig identities, and verifying identities.

355 AP STATISTICS, 10-12 (1 credit)

Prerequisites: Algebra II or Algebra II Honors

Note: This course requires college-level reading ability. ESOL students must have successfully completed or be exempt from English Language III and be concurrently enrolled in or exempt from English Language IV.

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.

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

Prerequisites: Advanced Algebra, Advanced Algebra Honors, Trigonometry, or Trigonometry 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 will be required to do preparatory homework during the summer preceding the course.

374 AP CALCULUS BC, 11-12 (½ credit)

Prerequisites: Advanced Algebra, Advanced Algebra Honors, Trigonometry, or Trigonometry Honors. Either permission of the Math Department or co-registration in AP Calculus AB is also 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.

SCIENCE

Graduation requirement: three credits of high school science

Core classes: offered at honors, college prep, and foundations levels

Earth Systems (9th grade) → Biology (10th grade)

In the junior and senior year, GSA offers alternating years of science courses. A small number of junior and senior courses are offered each year.

2019-2020

Chemistry Honors Chemistry	year	For students planning to pursue any medical or scientific career, including nursing and engineering
Chemistry Foundations	year	For students planning to go to technical school
AP Biology	year	For students interested in advanced study of life sciences
AP Environmental Science	year	For students interested in local and global environmental issues
The Maine Environment A The Maine Environment B	semester	For students interested in learning about their local environment
Astronomy A Astronomy B	semester semester	For juniors and seniors who've already passed biology
Anatomy and Physiology A Anatomy and Physiology B	semester	For students going into the medical field
Marine Ecology Research Honors	year	For students interested in marine ecology and authentic scientific research opportunities

2020-2021

Physics Honors Physics	year	Physics options for students planning to pursue any medical, engineering, or scientific career, including nursing
Integrated Physical Science Foundations Physics Through Technology	year year	Two physics options for students planning to go to technical school
AP Biology	year	For students interested in advanced study of life sciences
AP Environmental Science Environmental Science	year	For students interested in local and global environmental issues
Marine Ecology Research Honors	year	For students interested in marine ecology and authentic scientific research opportunities
Anatomy and Physiology A Anatomy and Physiology B	semester	For students going into the medical field
Marine Science A Marine Science B	semester	For students interested in the sea around us and the life within
Forensics A Forensics B	semester semester	For students interested in solving crimes using science

Course #	Course Title	Grade Level	Credits	Prerequisites
400	Exploring Earth Systems	9	1	
401	Earth Systems Foundations	9	1	
405	Exploring Earth Systems Honors	9	1	Co-requisite Alg. I Honors
420	Biology	10	1	Earth Systems
425	Biology Honors	10	1	Earth Systems
452	Biology Foundations	10	1	Earth Systems
442	Chemistry	11-12	1	Biology and Algebra
443	Chemistry Foundations	11-12	1	Biology and Algebra
445	Chemistry Honors	11-12	1	Biology and Algebra I
473	<i>Integrated Physical Science Foundations</i>	<i>11-12</i>	<i>1</i>	<i>Biology</i>
474	<i>Physics</i>	<i>11-12</i>	<i>1</i>	<i>Algebra II</i>
475	<i>Physics Honors</i>	<i>11-12</i>	<i>1</i>	<i>Biology and Algebra II</i>
433	<i>Physics Through Technology</i>	<i>11-12</i>	<i>1</i>	<i>Algebra</i>
436	<i>Forensics A</i>	<i>11-12</i>	<i>½</i>	<i>Biology</i>
438	<i>Forensics B</i>	<i>11-12</i>	<i>½</i>	<i>Biology</i>
437	<i>Marine Science A</i>	<i>11-12</i>	<i>½</i>	<i>Biology</i>
439	<i>Marine Science B</i>	<i>11-12</i>	<i>½</i>	<i>Biology</i>
480	Anatomy & Physiology A	11-12	½	Biology
481	Anatomy & Physiology B	11-12	½	Biology
458	The Maine Environment A	11-12	½	Biology
459	The Maine Environment B	11-12	½	Biology
470	Astronomy A	11-12	½	Biology
471	Astronomy B	11-12	½	Biology
454	<i>Science Through Technology</i>	<i>11-12</i>	<i>1</i>	<i>Biology</i>
461	<i>Environmental Science</i>	<i>11-12</i>	<i>1</i>	<i>Biology</i>
465	AP Environmental Science	11-12	1	Biology and Algebra
428	AP Biology	11-12	1	Biology; Chemistry
485	Marine Ecology Research Honors	11-12	1	Biology

400 EXPLORING EARTH SYSTEMS, 9 (1 credit)

This ninth-grade science course explores interactions between the geosphere, atmosphere, hydrosphere, and biosphere. This course will integrate chemistry, physics, biology, and earth science while investigating issues of relevance to everyone. Lab work, fieldwork, and analysis of data will be important components of this course.

401 EARTH SYSTEMS FOUNDATIONS, 9 (1 credit)

This ninth-grade course is designed to strengthen basic skills and stimulate interest in the sciences through an exploration of interactions between the geosphere, atmosphere, hydrosphere, and biosphere. Lab work, fieldwork, and analysis of data will be important components of this course.

405 EXPLORING EARTH SYSTEMS HONORS, 9 (1 credit)

Prerequisites: Must be enrolled in or have completed Algebra I Honors or Algebra II Honors

This challenging ninth-grade science course is an exploration of interactions between the geosphere, atmosphere, hydrosphere, and biosphere. This course will integrate chemistry, physics, biology, and earth science while investigating issues of relevance to everyone. Lab work, fieldwork, and analysis of data will be important components of this course. Students may be required to conduct independent research. Exploring Earth Systems Honors goes into greater detail in each topic and is more math-intensive than Exploring Earth Systems.

420 BIOLOGY, 10 (1 credit)

Prerequisites: 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)

Prerequisites: 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 will be 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)

Prerequisites: Earth Systems Foundations or teacher recommendation

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 will be encouraged to examine real-world issues as they relate to biological concepts. Lab investigations are an important part of this course.

442 CHEMISTRY, 11-12 (1 credit)

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

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 will 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 will be based primarily upon reports, group work, quizzes, and tests.

443 CHEMISTRY FOUNDATIONS, 11-12 (1 credit)

Prerequisites: Biology or Biology Foundations, and Algebra I or Algebra Foundations is strongly recommended

This is a laboratory course for any student with an interest in chemistry, but by itself, it is not intended to prepare students for college level chemistry. Through laboratory investigations, readings, and discussions, students will explore chemistry as it relates to everyday life. Topics will include atoms, elements, compounds, and chemical reactions, as well as pressure and temperature.

445 CHEMISTRY HONORS, 11-12 (1 credit)

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

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 will 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 will review and reinforce material covered in the class. Student evaluation will be based primarily upon reports, group projects, quizzes, and tests.

473 INTEGRATED PHYSICAL SCIENCE FOUNDATIONS, 11-12 (1 credit) - Not offered 2019-20

Prerequisites: Biology

This laboratory course provides students with broad-based, hands-on learning experience in the various disciplines of physical science. The course centers around quarter-long sections on geology, meteorology, physics, and astronomy. Although there will be some mathematics, the emphasis of the course will be on the application of knowledge to solve problems and investigate scientific principles.

474 PHYSICS, 11-12 (1 credit) - Not offered 2019-20

Prerequisites: Biology or Biology Honors, and students must have passed or be enrolled in Algebra II or Algebra II Honors

This is a math-intensive, problem-solving course for any student with a serious interest in mathematical problem-solving and the physical sciences. Students will learn from a combination of lectures, reading, labs, and problem-solving. Topics to be discussed will 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, 11-12 (1 credit) - Not offered 2019-20

Prerequisites: Biology or Biology Honors, and students must have successfully completed or be enrolled in Algebra II or Algebra II Honors

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 will be limited to simpler cases, while in Physics Honors, trigonometry will be required. Students will learn from a combination of lectures, reading, labs, and problem-solving. Topics to be discussed will include concepts of mechanics including motion, forces, momentum, energy and energy transfer, as well as heat, light, electricity and magnetism, relativity, and quantum theory.

433 PHYSICS THROUGH TECHNOLOGY, 11-12 (1 credit) – Not offered 2019-20

Prerequisites: Algebra I, Algebra I Foundations, or Algebra I Honors

This course is activity oriented. Units are designed to help students understand that physics is used to help solve everyday problems by constructing devices to better serve our needs. Topics of study will be measuring devices; heat and temperature; properties of solids, liquids and gases; laws of motion, momentum, and mechanical energy like in rotational and circular systems; electricity and magnetism principles used in circuits, motors, and generators; and hydraulic systems.

436 FORENSICS A 11-12 (½ credit) – Not offered 2019-20

438 FORENSICS B, 11-12 (½ credit) – Not offered 2019-20

Prerequisites: Biology, Biology Honors, or Biology Foundations. Forensics A is not a prerequisite for Forensics B, but is strongly recommended.

Forensics may be taken in the fall and/or spring semester(s). It will incorporate skills acquired in biology, chemistry, and physics while learning techniques used by FBI and local police crime scene technicians. Topics covered may include the history of forensics, crime scene analysis, physical evidence, famous cases, hair and fiber analysis, fingerprinting, DNA, foot and tire prints, fingerprinting, chemical detection, blood analysis and patterns, ballistics, handwriting analysis, facial reconstruction, anatomy, and fire and accident reconstruction. Along with hands-on labs skills, students will be solving mock crimes, requiring students to think, analyze, and imagine possible scenarios. Students will be required to work individually on research projects and in teams when analyzing mock crime scenes.

437 MARINE SCIENCE A, 11-12 (½ credit) – Not offered 2019-20

439 MARINE SCIENCE B, 11-12 (½ credit) – Not offered 2019-20

Prerequisites: Biology, Biology Honors, or Biology Foundations. Marine Science A is not a prerequisite for Marine Science B.

Students will build on information learned in biology and chemistry and will be required to complete independent presentations as well as read at an independent level. The course will incorporate marine biology, marine geology, and oceanography, and may include many of the following topics during the course of the year: the study of organisms, their environment from the high-water mark to the deep oceans, their interactions and classifications, examination of how coastlines are created and how they change over the course of the years and seasons; exploration of ocean currents; tides; salinity and ocean chemistry; sediments, continental margins, ocean basins, and ocean bottom exploration; waves, wave formation, and tsunamis; marine resources; environmental concerns; and atmospheric and ocean circulation and weather phenomena created by the oceans. The first and second semester cover different information.

480 ANATOMY AND PHYSIOLOGY A, 11-12 (1/2 credit)

481 ANATOMY AND PHYSIOLOGY B, 11-12 (1/2 credit)

Prerequisites: Biology

This course, which may be taken for one or two semesters, is designed for those wishing to enter any health-related profession or anyone generally curious about the human body. Students study most of the human body systems including muscular, nervous, skeletal, endocrine, cardiovascular, respiratory, digestive, and urinary. The course emphasizes lab work. *Note: We will dissect vertebrate specimens.*

458 THE MAINE ENVIRONMENT A, 11-12 (½ credit)

459 THE MAINE ENVIRONMENT B, 11-12 (½ credit)

Prerequisites: Biology, Biology Honors, or Biology Foundations. The Maine Environment A is not a prerequisite for The Maine Environment B, but is strongly recommended.

In this course, students will study natural history and gain an appreciation for the Maine environment. We will explore all aspects of the natural world from the land to the sea and from the trees to the soil. The curriculum will follow the four seasons we experience in Maine, and each season, we will explore which natural resources are harvested or managed (from deer hunting to forestry conservation). We will 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 will explore how scientific studies inform current fishing and hunting laws. We will bring in experts such as forestry ecologists, game wardens, freshwater fish biologists, state lawmakers, and local land trust managers. Overall, we will 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 A, 11-12 (1/2 credit)

471 ASTRONOMY B, 11-12 (1/2 credit)

Prerequisites: Biology, Biology Honors, or Biology Foundations

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.

454 SCIENCE THROUGH TECHNOLOGY, 11-12 (1 credit) – Not offered 2019-20

Prerequisites: Biology, Biology Honors, or Biology Foundations

This course is divided into four units of work over the two semesters. The program is an activity-based course that will give the student technological experiences in the areas of solar energy, fluid energy, electrical energy, and mechanical energy. Students will study scientific principles in these areas and then put these ideas into application through technological activities and working models constructed by the students.

461 ENVIRONMENTAL SCIENCE, 11-12 (1 credit) - Not offered 2019-20

Prerequisites: Biology, Biology Honors, or Biology Foundations

This course is an introduction to environmental issues with an emphasis on Maine. Topics include population dynamics, pollution, land use, energy, climate change, renewable and nonrenewable resources, risk assessment, and solutions to environmental solutions. Labs and field activities are important elements of this course.

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

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

This is a rigorous interdisciplinary course that 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 to be 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.

428 AP BIOLOGY, 11-12 (1 credit)

Prerequisites: Biology, Biology Honors, or teacher recommendation. Students must have taken Chemistry or Chemistry Honors, or be taking them concurrently with AP Biology

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

485 MARINE ECOLOGY RESEARCH HONORS, 11-12 (1 credit)

Prerequisites: Biology

This course is about marine ecology, which is the study of the interaction between organisms and their environment. It is intended for science-oriented students who have an interest in the ocean environment and want to learn how to conduct marine research. Students learn different research methods and techniques, and there will be an opportunity to conduct independent research projects to gain a better understanding of the full scientific process. The class takes advantage of our coastal campus and bases our work at field sites close to school. Investigation of the biological and physical factors that influence different habitats is the target of study, from the critters that control the rocky shore, to the open ocean dynamics that influence planktonic communities. Students will also conduct interviews with marine scientists from around the U.S. and visit at least one marine research facility in Maine.

WORLD LANGUAGES

Graduation recommendation: All students take two to four years of one world language.

Spanish	Four years of Spanish offered at honors and college prep level. Cultura Y Fiestas (Culture and Holidays) is a full-year exploratory course offered either to build confidence preceding a Spanish I class or may follow the Spanish I class to reinforce what was learned.
French	Four years of French offered at honors level and three years at a college prep level. College prep students can move into the honors level with a grade of 90% or above.
Latin	One year of Latin for students interested in an introductory study.

Course #	Course Title	Grade Level	Credits	Prerequisites
503	Latin	10-12	1	
562	Cultura Y Fiestas	9-12	1	
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
546	Spanish IV	9-12	1	Spanish III
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
533	French III	9-12	1	French II
535	French III Honors	9-12	1	French II; Honors recommended
555	French IV Honors	9-12	1	French III

503 LATIN, 10-12 (1 credit)

Prerequisites: Completion of 9th-grade English or permission of teacher

Latin significantly influenced the grammar and vocabulary of many modern languages, including English, 70% of whose words have Latin roots. Students in this course learn basic Latin grammar, syntax, and vocabulary, with particular attention to English derivatives. Lessons are based on Greek and Roman myths adapted from Ovid's *Metamorphoses*.

562 CULTURA Y FIESTAS, (Culture and Holidays), 9-12 (1 credit)

Cultura Y Fiestas is a foundation Spanish class that can precede Spanish I to build confidence or follow Spanish I to reinforce the foundations acquired. It is a thematic, vocabulary-building class that follows the Spanish I textbook; it focuses on culture, including holidays, in Spanish-speaking countries. Themes such as family, school and friends, animals (ex. endangered species), food, and sports, to name a few, are studied through simple conversations, hands-on projects, films, cooking, games, and reading beginner level materials.

Students acquire an introductory level of the four skill areas of language: reading, writing, listening, and speaking, though the primary focus will be on listening and speaking in this class. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture.

512 SPANISH I, 9-12 (1 credit)

This course is designed to encompass the four areas of language: reading, writing, listening, and speaking, with an emphasis on orally directed questions and responses. This course moves at a relaxed pace with much repetition to ensure that students have a solid base for continuing Spanish studies. An introduction to Spanish-speaking countries is presented, with an emphasis on Mexico and Spain. Students are encouraged to recognize and appreciate the contributions of the Hispanic culture to our society. The primary text is *Buen Viaje*, with videos, CDs, DVDs, and authentic realia supplementing the program. Students will work on projects, skits, and presentations during the year. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture.

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 rate for the motivated language learner.

522 SPANISH II, 10-12 (1 credit)

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

Spanish II builds upon the acquired skills of Spanish I. Students write compositions with moderately complex syntax, grammar, and vocabulary. Proficiency continues to grow in reading, writing, listening, and speaking skills. Two required research papers this year focus on Central and South American studies. There are required projects with presentations that vary yearly. Examples are: traveling to a ski resort in a Spanish-speaking country, designing a movie poster, creating a clothing catalogue, designing a menu for an imaginary restaurant. The primary text is *Bienvenidos*, with videos, CDs, DVDs, and authentic realia supplementing the program. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture.

575 SPANISH II HONORS, 10-12 (1 credit)

Prerequisites: 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. The text, *Bienvenidos*, is completed and accompanied by readings from the text *Vistazos I*.

532 SPANISH III, 11-12 (1 credit)

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

Spanish III students continue to practice acquired skills with emphasis on accurate pronunciation, increased reading, and more lengthy compositions and presentations. Complex syntax, grammar, and vocabulary are studied here. Cultural study includes planning an authentic train trip in Spain, a cooking project/student prepared meal, and a research project on influential Hispanics and their many contributions. The texts *Bienvenidos* and *Buen Viaje* are used, with videos, CDs, DVDs, and authentic realia supplementing the program. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture.

585 SPANISH III HONORS, 11-12 (1 credit)

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

Spanish III Honors contains the same elements as Spanish III but moves at an accelerated rate to provide greater proficiency in reading, writing, listening, and speaking skills. The text *Abordo* is used. Throughout the year, the class watches different Spanish movies to advance listening and comprehension skills. The class is

taught in Spanish, and students are encouraged to speak. There are required projects related to Spanish speaking countries. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture.

546 SPANISH IV, 11-12 (1 credit)

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

This class is conducted primarily in Spanish to improve speaking and listening proficiency. Proficiency is further enhanced through the program *Mi Vida Loca*, an interactive experience in which the students become tourists in Spain and the Canary Islands, and become involved in a mystery. Students also view the video program *La Catrina*. A workbook accompanies this “telenovela” on Mexico and the Mexican Revolution. Students complete a city map project which enables them to learn how to ask for and give directions to one another. A novel by a Latin American author is required (read in English), followed by an oral presentation in a relaxed, book club setting. A verb list project completes the year and may accompany students to college. Videos, CDs, DVDs, and authentic realia supplement the program. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture. Completion of this four-year sequence will fulfill the language requirements and recommendations of all colleges and universities.

595 SPANISH IV HONORS, 11-12 (1 credit)

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

This class is conducted primarily in Spanish to improve speaking and listening proficiency. Listening proficiency is further enhanced through the video programs *Mi Vida Loca* and/or *La Catrina*. A workbook of reading and writing activities accompanies the telenovela, *La Catrina*, on Mexico and the Mexican Revolution. An advanced reader, *Susana y Javier en España*, stretches the students’ knowledge of the language through many grammatical and vocabulary activities. A novel by a Latin American author is required (read in English), followed by an oral presentation in a relaxed, book club setting. A verb list project completes the year and may accompany students to college. Videos, CDs, DVDs, and authentic realia supplement the program. Hispanic Culture Week, held in the spring, includes speakers from the community, faculty, and students sharing their travel experiences, heritage, and culture. 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*, weaves Francophone culture into the course. The material is covered at a relaxed pace with much repetition, and includes poetry, songs, and games so that students can acquire a strong vocabulary base to build on. This course gives a solid foundation in order to continue studying French.

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. Games, poetry, and songs continue to aid the students in understanding the art of the word in French. Pronunciation games will be an element of this course as in the French I level. A cooking lesson or two will be included this year as an introduction to the importance of the art of cooking in French society. This course requires attention to details and strong note-taking skills. The *Bon Voyage 1* textbook will be used in this course.

520 FRENCH II, 9-12 (1 credit)

Prerequisites: 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 will be used in this course.

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

Prerequisites: 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 will require good listening and note-taking skills. The *Bon Voyage 1* textbook will be used in this course.

533 FRENCH III, 10-12 (1 credit)

Prerequisites: French II or French II Honors

The French III lessons will focus on verbal communication while sharpening reading skills, accent, writing, and continued acquisition of new vocabulary. Topics will include travel, health, prehistory, and texts focusing on the major provinces of France, now and in history. Basic grammar will be reinforced, and new verb tenses introduced. Poetry and songs will be an integral component of the curriculum. The students will be assigned homework to support the class content and will take periodic quizzes and tests. Verbal participation will be essential in order to succeed in this class.

535 FRENCH III HONORS, 10-12 (1 credit)

Prerequisites: French II or French II Honors (recommended)

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 will also be introduced to a variety of short stories and poetry, and will be writing in these mediums as well.

555 FRENCH IV HONORS, 11-12 (1 credit)

Prerequisites: French III Honors

The highest level of French currently offered at GSA, this course focuses on speaking, listening, reading, and writing. The textbooks *Bon Voyage 2* and *Tresors du Temps*, with its texts on the prehistory of France through the modern division of the provinces and departments of the country, will lead students through 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 will 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 will fulfill the language requirements and recommendations of all colleges and universities.

VISUAL AND PERFORMING ARTS

Graduation requirement: one visual and performing arts credit

Arts	Art I or Art I Honors is a prerequisite for later classes; students then progress to more advanced courses, including Art II Honors, Painting A and B, Printmaking, Drawing A and B, AP Drawing, and AP 2-D Art and Design
Music	Band (offered all four years), Honors Jazz Combo (by audition), Music Theory, Steel Band I-IV
Arts in other areas	Photo, Adobe Photoshop, 2D Illustration and Animation, 3D Computer Modeling, Culinary Arts, Design and Engineering Tech, Architectural Design, Earthworks A and B, Dance I-IV

Course #	Course Title	Grade Level	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	½	Art I
957	Drawing B	10-12	½	Art I
953	Painting A	10-12	½	Art I
954	Painting B	10-12	½	Art I
943	<i>Printmaking (not offered 2019-20)</i>	10-12	1	Art I
944	<i>Book Arts A (not offered 2019-20)</i>	9-12	½	
946	<i>Book Arts B (not offered 2019-20)</i>	9-12	½	
935	AP Drawing	11-12	1	2-3 art credits and permission
937	AP 2-D Art and Design	11-12	1	2-3 art credits and permission
950	Photography I	10-12	½	
9501	Photography II	10-12	½	Photography I
960	Adobe Photoshop	10-12	½	
65	2D Computer Illustration & Animation	10-12	½	Art I or teacher permission
66	3D Computer Modeling	10-12	½	2D Computer Illustration
9400	Earthworks A	9-12	½	
9420	Earthworks B	9-12	½	
842	Architectural Design	11-12	½	Drafting or Art I
852	Design and Engineering Technology	9-12	½	Introduction to Technology
958	Band	9-12	1	
961	Music Theory	9-12	½	
964	Jazz Combo Honors	9-12	1	by audition
9620	Steel Band I	9-12	½	
9630	Steel Band II	9-12	½	
9650	Steel Band III	9-12	½	
9651	Steel Band IV	9-12	½	
980	Dance I	9-12	½	Physical Education
982	Dance II	10-12	½	
983	Dance III	10-12	½	

Course #	Course Title	Grade Level	Credits	Prerequisites
984	Dance IV	10-12	½	
1183	Culinary Arts	11-12	½	

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. Midterm and final exams are given.

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 will be followed by Art II Honors. Art I Honors will introduce 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. Midterm and final exams are given.

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

Prerequisites: Art I or Art I Honors

Students in Art II Honors work both two- and three-dimensionally, preparing 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 will be in mixed media scrapbooks, with the assignment sheets to be given at the beginning of the quarter so that students can plan ahead. The course has both a midterm and a final exam. This course is for students who are serious about their commitment to the arts.

956 DRAWING A, 10-12 (½ credit)

957 DRAWING B, 10-12 (½ credit)

Prerequisites: Art I or Art I Honors

In Drawing A, students will 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 will build upon learned mark-making skills as students explore figurative work. In both semesters, students will develop complex compositions, where they establish dimension as well as depict detail. Assignments will be given to develop specific skills, while at the same time allowing for individual expression. Sketchbook assignments will be 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)

Prerequisites: Art I or Art I Honors

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)

Prerequisites: Art I or Art I Honors

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) – Not offered in 2019-2020

Prerequisites: Art I or Art I Honors

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 suites 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 will be given.

944 BOOK ARTS A, 10-12, (½ credit) – Not offered 2019-2020

946 BOOK ARTS B, 10-12, (½ credit) – Not offered 2019-2020

Prerequisites: Art I or Art I Honors

Book Arts or “Artist’s Books” is an emerging field in which the book has been freed from its more traditional role as a container of information and instead becomes the art form. Whether the book also contains information is no longer more important than the book’s structure and the sequencing of how the information is presented. In this class, students will learn a variety of book structures, such as the accordion, tunnel, and lotus books (to name a few) and explore how these structures allow a more “visual” experience. Students will also have the opportunity to incorporate their writing; however, the way the writing is presented will vary. Some of the projects will be directed towards understanding the role of technology in book arts and will incorporate the use of scanners, typography, computers, and digital images. Students will also explore types of papers, inks, simple printmaking techniques, and paste made papers. Book Arts B will introduce sewn bindings.

935 AP DRAWING, 11-12 (1 credit)

Prerequisites: 2-3 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 five completed art pieces that demonstrate skillful synthesis of materials, processes, and ideas. Students will complete 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 will be expected to take the exam as part of the course curriculum.

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

Prerequisites: 2-3 art credits and teacher permission

AP 2-D Art and Design is 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 will complete 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 will be expected to take the exam as part of the course curriculum.

950 PHOTOGRAPHY I, 10-12 (½ credit)

9501 PHOTOGRAPHY II, 10-12 (½ credit)

Prerequisites: Photography I

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 will be 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 will be 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 will refine their best images to create portfolio prints. Critique of their own work and the works of others will be a focus. Students must have access to a reliable digital camera to complete assignments. Students without their own cameras will be loaned one by the school.

65 2D COMPUTER ILLUSTRATION AND ANIMATION, 10-12 (½ credit)

This introductory course allows students to translate analog art skills into digital media by using digital tools to produce, manipulate, and animate original 2D artwork. The course utilizes vector graphics software for creating a wide variety of 2D graphics, such as illustrations, cartoons, icons, logos, diagrams, maps, posters and web graphics. Students learn proportion, perspective, lighting, storytelling, expression, and how basic shapes, symbols, gradients, fill colors, symbols, Bezier curves, and text can be combined to create artwork.

66 3D COMPUTER MODELING, 10-12 (½ credit)

Prerequisites: 2D Computer Illustration and Animation

This introductory course allows students to create illustrations that can then be modeled or animated in 3D. This course utilizes animation software that allows students to visualize, plan, and model in three-dimensional space, as well as explore its animation capabilities. Students create, animate, texture, and light 3D objects and scenes.

9400 EARTHWORKS A 9-12, (½ credit)

9420 EARTHWORKS B, 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 one-half of the visual and performing arts requirement.

842 ARCHITECTURAL DESIGN, 11-12 (½ credit)

Prerequisites: Drafting or Art 1

This course will give students a basic understanding of good house design. Each student will develop a full set of house plans and will build a scale model from their plans. This course meets one-half of the visual and performing arts requirement.

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

Prerequisites: Introduction to Technology

This course meets one-half of the visual and performing arts requirement and will introduce students to the principles of design used in construction, manufacturing and communication areas of technology. Students will use problem-solving techniques that will help them understand how to sketch, draw, form, and shape materials. The student will 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 the 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).

961 MUSIC THEORY, 9-12 (½ credit)

Prerequisites: None

Students learn the fundamental aspects of music theory while learning to play a synthesizer keyboard (keyboards will be provided). The study of chords is also emphasized. A survey of popular, jazz, and classical music deals with the history and form of music.

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

Prerequisites: 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, 9-12 (½ credit)****9651 STEEL BAND IV, 9-12 (½ credit)**

Prerequisites: students must pass the preceding level, or teacher's 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 will 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 one-half of the visual and performing arts requirement.

980 DANCE I, 9-12 (½ credit)

Prerequisites: 1 semester of Physical Education

982 DANCE II, 10-12 (½ credit)

983 DANCE III, 10-12 (½ credit)

984 DANCE IV, 10-12 (½ credit)

Prerequisites: students must pass the preceding level, or teacher's permission

Students in this course will develop their kinesthetic awareness and physical coordination through their practice of dance techniques. They will learn and create dance phrases, experimenting with the elements of dance for artistic expression and creating their own dance compositions, which they will present to their classmates. They are introduced to some reasons why cultures and people create dance, look at historical, cultural, and aesthetic forces that have fused dance traditions from different parts of the world, and consider the influences of historical dance forms on contemporary styles. Students are exposed to a variety of dance styles. Higher-level classes emphasize more advanced dance techniques and continuing development of dance terms and their associated movements and practices. Basic choreographic concepts are further developed into an expressive work. Students have the opportunity to develop further compositional skills and creativity as they create their own choreographic piece to possibly be performed in the GSA Arts Festival Dance Concert. Students critically assess and derive meaning from works of dance, performance of dancers, and original works based on the elements of dance and aesthetic qualities. As dance students, they develop competencies and creative skills in problem-solving, communication, and time management that are interpersonal and intrapersonal.

1183 CULINARY ARTS, 11-12 (½ credit)

Prerequisites: Students must be 16 years old

Culinary Arts is a semester-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

Similar 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, Boatbuilding
Engineering and Drafting	Drafting, Architectural Design, Pre-Engineering
Technology	Introduction to Technology, Introduction to Metals, Design and Engineering Technology, Digital Fabrication

Course #	Course Title	Grade Level	Credits	Prerequisites
811	Woodworking I	9-12	½	
830	Woodworking II	9-12	½	Woodworking I
843	Advanced Woodworking	11-12	½	Wood II and teacher permission
837	Boatbuilding	9-12	½	
840	Home Repair and Maintenance	10-12	½	
841	Drafting	9-12	½	
842	Architectural Design	9-12	½	Drafting or Art I
844	Pre-Engineering	11-12	½	Drafting (or as corequisite)
865	Digital Fabrication	9-12	½	
863	Introduction to Metals	9-12	½	
850	Introduction to Technology	9-12	½	
852	Design and Engineering Technology	9-12	½	Introduction to Technology
856	Engine Technology	10-12	½	
864	Advanced Engines	10-12	½	Engine Tech or permission

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)

Prerequisites: 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)

Prerequisites: 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.

837 BOATBUILDING, 9-12 (½ credit)

This is a hands-on class. Noise and sawdust will be made, screws will be driven, wood sawn and shaped, parts carefully fitted, epoxy strategically applied, and all will be finished well. Students will work in small teams to build either a 14-foot fisherman's rowing/outboard skiff or a 12-foot racing/training sailboat, each built using modern wooden boat construction materials and techniques. In this class, students will learn by doing, discover how to work together, acquire critically useful tool skills and techniques, and learn about the math, science, engineering, and art in boat design and construction.

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

This course will provide students with the basic information needed to safely use hand tools, power tools, some machines, and assorted building materials. This program will give 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. You will 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)

Prerequisites: Drafting or Art 1

This course will give students a basic understanding of good house design. Each student will develop a full set of house plans and will build a scale model from their plans. This course meets one-half of the visual and performing arts requirement.

844 PRE-ENGINEERING, 11-12 (½ credit)

Prerequisites: Drafting, or as co-requisite

In this course, students learn to apply principles of engineering, science, math, and technology to solve complex, real-world problems. Students will focus on the process of defining and solving a problem. They learn how to apply STEM knowledge and skills to problems they are presented, while designing and testing the solution with hands-on experience. Students are introduced to the engineering design process. They work both as individuals and in teams to design solutions to a variety of problems. The course exercises higher-order thinking skills by using technology to solve problems. All students use an engineering notebook to document and preserve their work. Students study the use of materials, such as steel, concrete, soil, and masonry. This course exposes students to various fields of engineering and should be taken by any student who has an interest in the engineering fields.

865 DIGITAL FABRICATION, 9-12 (½ credit)

Imagine a physical object and then digitally design and create it in two or three dimensions. This course will be taught by a GSA teacher in the Idea Studio fabrication space at BHCS during a normal GSA class period. Students will use 2D and 3D digital design techniques to create objects using a 3D printer, laser cutter/engraver, CNC precision milling machines, electronic circuit production, molding/casting, vinyl cutter, and manual and power hand tools. A wide array of materials will be 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.

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 construct technological solutions to everyday problems. Using a band saw, gas and arc welding equipment, shearing equipment, benders, and molding equipment, students shape and assemble materials into a finished product.

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

Prerequisites: Introduction to Technology

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

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)

Prerequisites: Engine Tech or teacher permission

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

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.

Digital Lifestyle	Web Publishing
Robotics	Digital Publishing
Video Technology	Computer Programming in Java
2D Computer Illustration and Animation	3D Computer Modeling

Course #	Course Title	Grade Level	Credits	Prerequisites
51	Computer Programming in Java	9-12	½	
52	Video Technology	9-12	½	
53	<i>Web Publishing (not offered in 2019-20)</i>	9-12	½	
55	<i>Digital Lifestyle (not offered in 2019-20)</i>	9-12	½	
56	<i>Digital Publishing (not offered 2019-20)</i>	9-12	½	
59	Robotics	9-12	½	
65	2D Computer Illustration & Animation	10-12	½	
66	3D Computer Modeling	10-12	½	2D Illus. & Animation

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 production is an integral component of many technology applications. The process of editing creates a mood, tempo, and pace to enhance the subject matter. Video production is not only instructional and analytical, but also artistic. Students will learn video basics as well as participate in preproduction, production, and postproduction stages of video creation, distribution, and evaluation.

53 WEB PUBLISHING, 9-12 (½ credit) – not offered in 2019-2020

Students will learn to create web pages using HTML, CSS, and JavaScript. Web Publishing is a semester course exploring the different ways to design and create web pages. Topics include instruction in the use of html, image maps, forms, CSS, animation, and java applets. Students will learn how to use the proper syntax and code involved in creating websites for sales, e-commerce, communications, and entertainment and social media. Students will create their own website as a requirement of the class. Creativity and communication will be emphasized.

55 DIGITAL LIFESTYLE, 9-12 (½ credit) – not offered in 2019-2020

In this course, students will elevate their skill with the hardware and software that they will need, at a foundational level, in all of their future course work, and in day-to-day life. Students will work in depth with word processing,

presentation, and spreadsheet software. Basic input and output methods will be emphasized, along with digital presentation skills; advanced internet search skills; email set-up and maintenance; file sharing; network essentials; and laptop troubleshooting.

56 DIGITAL PUBLISHING, 9-12 (½ credit) – not offered in 2019-2020

This course will introduce students to the many possibilities of producing content on the computer. Students will learn how to manipulate images and textual objects using techniques available in software. Setting up documents, advertisements, brochures, and other forms of communication will be covered. Producing video, stop-motion video, blogs, and audio podcasts are also potential topics for the course. Students will be required to produce a project using the concepts taught during the course.

59 ROBOTICS, 9-12 (½ credit)

This class will use 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.

65 2D COMPUTER ILLUSTRATION AND ANIMATION, 10-12 (½ credit)

This introductory course allows students to translate analog art skills into digital media by using digital tools to produce, manipulate, and animate original 2D artwork. The course utilizes vector graphics software for creating a wide variety of 2D graphics, such as illustrations, cartoons, icons, logos, diagrams, maps, posters and web graphics. Students learn proportion, perspective, lighting, storytelling, expression, and how basic shapes, symbols, gradients, fill colors, symbols, Bezier curves, and text can be combined to create artwork.

66 3D COMPUTER MODELING, 10-12 (½ credit)

Prerequisites: 2D Computer Illustration and Animation

This introductory course allows students to create illustrations that can then be modeled or animated in 3D. This course utilizes animation software that allows students to visualize, plan, and model in three-dimensional space, as well as explore its animation capabilities. Students create, animate, texture, and light 3D objects and scenes.

HEALTH AND PHYSICAL EDUCATION

Health	One semester course required for all students, usually taken in 9th grade
Physical Education	Physical Education (semester): can be taken four times for credit Advanced Fitness, Dance I, and EEOL can all be taken for PE credit (prerequisite: one PE class)

Course #	Course Title	Grade Level	Credits	Prerequisites
980	Dance I	9-12	½	Physical Education
995	Advanced Fitness Training	11-12	½	Physical Education
997	Experiential Ed. and Outdoor Leadership	11-12	½	Physical Education
998	Health	9-12	½	
999	Physical Education	9-12	½	

980 DANCE I, 9-12 (½ credit)

Prerequisites: one semester of Physical Education

This class can be taken for physical education credit or for visual and performing arts credit. Students dance in the studio, where they develop their body awareness through application of dance techniques and lessons. Students learn and create dances in class. They experiment with, understand, and control the elements of dance for artistic expression and create their own dance compositions, which they present to their classmates. They are introduced to some reasons why cultures and people create dance; they also look at some historical, cultural, and aesthetic forces that have fused dance traditions from different parts of the world and consider the influences of historical dance forms on contemporary styles.

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

Prerequisites: one credit 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 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 (½ credit)

Prerequisites: 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 will 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 health care; the life cycle; the role of drugs; disease; and 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)

In the fall semester of PE, students are introduced to activities such as: archery, pickleball, volleyball, aerobics, and weightlifting. The spring semester introduces indoor soccer and floor hockey for team sports, as well as tennis, aerobics, and weightlifting for lifetime activities. 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 semesters for one credit. Students may take PE up to four semesters for a maximum of two credits.

EXPERIENTIAL EDUCATION

Course #	Course Title	Grade Level	Credits	Prerequisites
1000	Independent Study (ISIP)	11-12	½	
1201	Cooperative Education A	11-12	½	
1202	Cooperative Education B	11-12	½	
1205	Ocean Studies	9-12	1	Teacher permission

1000 (ISIP) INDEPENDENT STUDY AND INTERNSHIP PROGRAM, 11-12, 60 hours over two weeks (½ credit)

This is an opportunity for juniors and seniors to design their own learning experience. 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. ISIP takes place after February break each year, but planning and related deadlines begin in the late fall.

1201 COOPERATIVE EDUCATION, 11-12 (1st semester), (½ credit)

1202 COOPERATIVE EDUCATION, 11-12 (2nd semester), (½ credit)

Cooperative Education provides students an opportunity to gain practical experience in a business or profession. Students intern in an area business or organization. Students may be released from school during some class periods in order to intern during school hours as necessary. In order to enter and remain in this program, student attendance and effort must be satisfactory, both at school and at their internship. Admission to this course requires approval from the Dean of Curriculum and Instruction and approval from an internship site.

1205 OCEAN STUDIES, 10-12 (1 credit)

Prerequisites: By teacher permission, may be taken up to three times

Ocean Studies is an interdisciplinary course that explores the many facets of the ocean ecosystem, from local to global scales. This course is for students who are interested in marine-related careers and prefer a hands-on approach to learning. Students will learn basic navigation and seamanship skills and will have the opportunity to participate in scientific research. Our coursework will be embedded in our local fishing community so that the work is relevant and timely. We will 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 will also participate in a variety of field trips ranging from excursions in our coastal ecosystem to regional organizations to meet scientists or policy makers who influence fishery regulations. Students will present their work at the Fishermen's Forum in Rockland and also at the Eastern Maine Skippers Program year-end event.

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

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