



KIS HS Curriculum Course Guide

2018 - 2019 School Year

The mission of Korea International School is to inspire students with a passion for learning and cultivate the competence, self-assurance, initiative, and creativity necessary for success in the global community.

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About this guide...

This course guide was prepared by Korea International School (KIS) administrators and teachers to assist you in planning your high school academic program. This document can help identify courses for which you wish to register for the upcoming school year and/or assist you with planning a course of study that will help you accomplish your future educational goals.

This course guide is organized by the programs of study offered to KIS students in each subject area. The following table of contents will direct you to each section:

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KIS Four Year Plan

Students are enrolled in seven courses each year. Each row of the four year plan below is a space where one of their seven courses per year can be selected by check mark or by writing the name of the course in the boxes. Check mark or write in one class per row on the table below.

Use the KIS Course Electives on the next page to choose electives:

- Two Electives for 9th and 10th grades
- Science and three electives for 11th grade
- Five Electives for 12th grade

	9th Grade	10th Grade (AP Limit = 1)	11th Grade (AP Limit = 2)	12th Grade (AP Limit =3)
English (4 years)	<input type="checkbox"/> English 9	<input type="checkbox"/> English 10	<input type="checkbox"/> English 11 <input type="checkbox"/> AP Language	<input type="checkbox"/> English 12 <input type="checkbox"/> AP Literature <input type="checkbox"/> AP Language
Math (4 years) Including: Geometry Algebra II	<input type="checkbox"/> Algebra I <input type="checkbox"/> Geometry <input type="checkbox"/> Algebra II	<input type="checkbox"/> Algebra I <input type="checkbox"/> Geometry <input type="checkbox"/> Algebra II <input type="checkbox"/> Pre-calculus	<input type="checkbox"/> Algebra II <input type="checkbox"/> Functions, Trig & Statistics <input type="checkbox"/> Precalculus <input type="checkbox"/> Calculus <input type="checkbox"/> AP Calc AB <input type="checkbox"/> AP Calc BC	<input type="checkbox"/> Functions, Trig & Statistics <input type="checkbox"/> Precalculus <input type="checkbox"/> Statistics <input type="checkbox"/> AP Statistics <input type="checkbox"/> Calculus <input type="checkbox"/> AP Calc AB <input type="checkbox"/> AP Calc BC <input type="checkbox"/> Multivariable Calc & Linear Algebra
Science (3 years) Including: Biology Chemistry	<input type="checkbox"/> Biology	<input type="checkbox"/> Chemistry	<input type="checkbox"/> _____	
Social Studies (3 years) Including: East Asian Studies World History US History	<input type="checkbox"/> East Asian Studies	<input type="checkbox"/> World History <input type="checkbox"/> AP World History	<input type="checkbox"/> US History <input type="checkbox"/> AP US History	
Other Including: * 2 years of PE & * 1 yr. of Visual or Performing Arts	<input type="checkbox"/> Essentials of Physical Education	<input type="checkbox"/> Advanced PE I and II		
Electives Include 5 Elective credits				
Electives Include 5 Elective credits				

KIS Course Electives

*Semester courses have an asterisk. All other courses are year long.

	Grade 9	Grade 10	Grade 11	Grade 12
World Language	Spanish I, II, III, IV, AP Lang, AP Lit French I, II, III, IV, AP Chinese I, II, III, IV, AP Korean III Survival Korean	Spanish I, II, III, IV, AP Lang, AP Lit French I, II, III, IV, AP Chinese I, II, III, IV, AP Korean III Survival Korean	Spanish I, II, III, IV, AP Lang, AP Lit French I, II, III, IV, AP Chinese I, II, III, IV, AP Korean III Survival Korean	Spanish I, II, III, IV, AP Lang, AP Lit French I, II, III, IV, AP Chinese I, II, III, IV, AP Korean III Survival Korean
English	Creative Writing I*, II* Forensics: Speech & Debate Yearbook	Creative Writing I*, II* Forensics: Speech & Debate Digital Journalism* Adv Digital Journalism Yearbook	Creative Writing I*, II* Forensics: Speech & Debate Film as Literature* Digital Journalism* Adv Digital Journalism Yearbook	Creative Writing I*, II* Forensics: Speech & Debate Film as Literature* Digital Journalism* Adv Digital Journalism Yearbook
Science		AP Biology	Astronomy AP Biology AP Chemistry Environmental Science AP Environmental Science Physics AP Physics I	Astronomy AP Biology AP Chemistry Environmental Science AP Environmental Science Physics AP Physics I, AP Physics II
Social Studies		Economics* Psychology* AP World History	Economics* Philosophy* Psychology* Contemp. Global Issues* AP Psychology AP World History AP US History AP Comparative Gov. AP Macro/Micro Economics	Economics* Philosophy* Psychology* Contemp. Global Issues* AP Psychology AP World History AP US History AP Comparative Gov. AP Macro/Micro Economics
Math		Intro to Math Proofs* Game Theory*	Intro to Math Proofs* Game Theory* AP Statistics	Intro Math Proofs* Game Theory* Statistics AP Statistics
Other	Leadership I*, II*	AP Capstone Seminar Leadership I*, II*	AP Capstone Seminar AP Capstone Research Leadership I*, II*	AP Capstone Research Leadership I*, II* KIS Study*
Computer Tech	Comp Graph App I*, II*, Adv* Programming I*, II* Comp Aided Design I*, II* Physical Comp w/Robotics I*, II*, Engineering Design and Fabrication*	Comp Graph App I*, II*, Adv* Programming I*, II*, Adv* Comp Aided Design I*, II* Physical Comp w/Robotics I*, II*, Engineering Design and Fabrication*, AP Comp Science Princ	Comp Graph App I*, II*, Adv* Programming I*, II*, Adv* Comp Aided Design I*, II* Physical Comp w/Robotics I*, II*, Engineering Design and Fabrication*, AP Comp Science Princ	Comp Graph App I*, II*, Adv* Programming I*, II*, Adv* Comp Aided Design I*, II* Physical Comp w/Robotics I*, II*, Engineering Design and Fabrication*, AP Comp Science Princ
Music	Concert Choir Phoenix Chamber Singers Concert Orchestra Phoenix Orchestra Concert Band Phoenix Wind Ensemble Concert Percussion	Concert Choir Phoenix Chamber Singers Concert Orchestra Phoenix Orchestra Concert Band Phoenix Wind Ensemble Concert Percussion	Concert Choir Phoenix Chamber Singers Concert Orchestra Phoenix Orchestra Concert Band Phoenix Wind Ensemble Concert Percussion AP Music Theory	Concert Choir Phoenix Chamber Singers Concert Orchestra Phoenix Orchestra Concert Band Phoenix Wind Ensemble Concert Percussion AP Music Theory
Theatre	Theatre I, II, Advanced Theatre Costuming* Stage Craft*	Theatre I, II, Advanced Theatre Costuming* Stage Craft*	Theatre I, II, Advanced Theatre Costuming* Stage Craft*	Theatre I, II, Advanced Theatre Costuming* Stage Craft*
Visual Arts	Digital Photography I*, II* 2D Art I*, II* 3D Art I*, II*	Digital Photography I*, II* 2D Art I*, II* 2D Art III 3D Art I*, II* 3D Art III	Digital Photography I*, II* 2D Art I*, II* 2D Art III, AP 2D 3D Art I*, II* 3D Art III, AP 3D	Digital Photography I*, II* 2D Art I*, II* 2D Art III, AP 2D 3D Art I*, II* 3D Art III, AP 3D

KIS GRADUATION REQUIREMENTS

One half credit is awarded for each semester of a course completed with a passing grade of D or higher, in Grades 9 through 12. A minimum of 22 credits is required for graduation. Course requirements for college admission vary greatly depending upon the selectivity, competition and requirements of a specific college or program. Consult your college counselor for a course of study that provides the best chance of admission to the colleges to which you aspire.

Subject Graduation Credit Requirements

English	4 credits	1 English 9 1 English 10 1 English 11 or AP Eng. Lang. 1 English 12, AP Eng Lang, or AP Eng. Lit
Mathematics	4 credit	1 Geometry 1 Algebra II 2 Math Electives
Social Studies	3 credits	1 East Asian Studies 1 World History or AP World History 1 United States History or AP US History
Science	3 credits	1 Biology 1 Chemistry 1 Science Elective
Physical Education	2 credits	
Visual and Performing Arts	1 credit	1 from the Music, Theatre or Arts Department, or Computer Graphics Applications or Computer Aided Design
Electives	5 credits	
Total	22 credits	

English

Course Title	Credits	Course Description
English 9	1.0	<p>This course is survey of World Literature and Composition. Through a variety of short stories, novels, plays, poetry, and works of nonfiction from world literature, students will enhance reading, writing, verbal, and analytical skills independently as well as in small and large group settings. The focus will be on development of reading strategies, literary analysis, and contextual grammar and vocabulary instruction. Through whole class and individualized instruction in outlining, creating drafts, revision, and peer-editing, students will develop a more sophisticated approach to the academic writing process. Speaking and listening will be incorporated through speeches, seminars, and presentations. Technology integration may include drafting and group revisions via Google Drive, building websites, recording audio or video, and conducting database research. Students will read a mixture of classic world literature, from Shakespeare to modern novels, and a variety of short stories, poetry, and nonfiction.</p> <p>Grade(s): 9</p>
English 10	1.0	<p>This course is a survey of British Literature and Composition. Students will read short stories, essays, poems, and novels taken from the Old English, Middle English, Renaissance and Modern literary periods. Readings will range from the earliest works of British Literature to authors such as Chaucer, Shakespeare, Orwell and Huxley. Students will engage in essay and research writing, book projects, independent reading, collaborative conversation, and public speaking.</p> <p>Grade(s): 10</p>

English (cont.)

Course Title	Credits	Course Description
English 11	1.0	<p>This course is a survey of American Literature and Composition. Students will read short stories, essays, poetry, novels, and plays that emphasize thematic and historical concepts that have defined and shaped the way we view culture, race, society, and the media in the United States. Since this class is typically taken during the 11th grade, along with U.S. History, students will be expected to integrate the thematic learning from both subjects. Students will engage in a variety of writing modes including narrative, rhetorical analysis, argumentative, synthesis, and research. Oral skill work will range in formality from class discussions and group presentations, to delivering a formal speech.</p> <p>Grade(s): 11</p>
AP English Language	1.0	<p>Students read critically, think analytically, and communicate effectively in both writing and speech. We will examine a broad range of texts with an emphasis on American non-fiction. This includes essays, speeches, letters, images, novels, articles, and film. Students will use these texts as models for their own writing. Students will demonstrate their skills through an exploration of genres in writing. This will include timed and multi-draft essays, a research paper, a writing project centered on identity, and varied writing assignments. In essence, this course is a study of language, so awareness of a writer's purpose, style, and strategies is essential. Furthermore, we will strictly adhere to course objectives that are provided by College Board.</p> <p>Grade(s): 11, 12</p> <p>Prerequisite: English 10 or English 11</p> <p>Additional Information: A rising 11th or 12th grade student who has strong critical thinking, reading, and writing skills. In addition to getting signature approval from their current English teacher, students should have a "B" average or higher in either English 10 or English 11. For rising juniors, there is a required written diagnostic in January/February.</p>

English (cont.)

Course Title	Credits	Course Description
AP English Literature	1.0	<p>The purpose of this course is to read and critically analyze imaginative literature. Students will close read a variety of texts as a way to extend their comprehension of a writer's use of language, structure, and theme. The course will build on a student's knowledge of figurative language, imagery, symbolism, and tone, while adhering to the College Board curriculum. Students will work to become powerful readers—able not only to understand what a writer is communicating, but also how he or she manipulates the English language to achieve those effects. Students will take this knowledge and apply it to their own writing.</p> <p>Grade(s): 12 Prerequisite: English 11 or AP English Language Additional Information: Students should be passionate about reading literature and participating in analytic discussions regarding literature, characters, and relating them to the world in which we live. In addition to getting signature approval from their current English teacher, it is recommended that students have earned at least a B+ in previous English courses.</p>
English 12	1.0	<p>This course is a survey of Thematic Literature and Composition. Students will explore language arts from a variety of perspectives, focusing on the core skills of reading, writing, speaking, and listening, and their application to the world around us. Students will explore universal themes and enjoy the power of the written word. In addition, students will build on their close reading and reflection skills, focusing on both the big ideas and the details of a text. Students' writing will move towards college-level analysis, argument and considered reaction, and engaging narratives. Speaking assessments will focus on collaborative group discussion, individual formal speaking and presentations.</p> <p>Grade(s): 12 Prerequisite: English 11 or AP English Language</p>

English (cont.)

Course Title	Credits	Course Description
Film as Literature	.5	<p>In this course, students will study how films are constructed and how to “read” films from a variety of genres and time periods in order to analyze the relationship between the film, audience, and the world in which we live. Students will use language and literary techniques to analyze and discuss thematic, technical, artistic and personal factors to identify how narrative is developed in film, how representations are constructed and how it affects the audience. Students will be expected to write in a variety of modes, such as analytical essays and film critiques and be able to analyze supplementary print materials. This knowledge will be applied to the development of numerous practical projects that mirror what is learned in watching films. The major focus will be for students to learn the craft of screenwriting and filmmaking in order to understand and appreciate media texts as a form of literature and art.</p> <p>Grade(s): 11, 12</p>
Creative Writing I	.5	<p>In this semester course, students will have the opportunity to hone their craft as short-story writers and poets. Various narrative and poetic techniques will be studied and practiced in informal classroom activities, such as writing from prompts, listening to author interviews, and reading exemplar poems and stories. Students will transfer their knowledge and skills to write and revise original stories and poems. Ultimately, students will share their pieces in a workshop setting, with the goal of utilizing the feedback of peers and the instructor to make worthwhile revisions to their works. Students will have the opportunity to share their best work with the KIS community.</p> <p>Grade(s): 9, 10, 11, 12</p>
Creative Writing II	.5	<p>In this semester course, students will continue to work on their development of short stories. They will take what they learned about character, and by using various writing techniques will create stories that intertwine with one another. The main focus of the semester will be on world building and the stories that are told in that world. Workshops will continue to be one of the main focuses of feedback as well as feedback from the instructor to create polished pieces ready for publication.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Creative Writing I</p>

English (cont.)

Course Title	Credits	Course Description
Forensics: Speech and Debate	1.0	<p>Forensics class offers students an opportunity to hone their skills in debate and speech events. Categories include Parliamentary, Public Forum, and Lincoln-Douglas style debate; as well as a variety of individual speech events, including Original Oratory, Dramatic and Humorous Interpretation, Interpretive Reading, Extemporaneous Speaking, and Impromptu Speaking. Forensics offers students the opportunity to gain expertise in a variety of valuable skills, including research skills, critical thinking, evaluation of sources, rhetoric and verbal communication, non-verbal communication, and the ability to think on one's feet. It also affords the opportunity to explore fields such as current events, public policy, and philosophy. Participants may have the opportunity to compete in speech and debate events both locally and internationally. Those wishing to participate in KAIAC speech and debate competitions must try out for the speech and/or debate team.</p> <p>Grade(s): 9, 10, 11, 12 Additional Information: The course will accept both novices (beginners) and experienced debaters.</p>
Digital Journalism	.5	<p>Students taking this course will learn through hands-on, project-based assignments how to design persuasive news stories that both inform and entertain their audiences. This course will focus on the design elements of the still image, the use of persuasive language in writing feature articles and editorials, the production values used in producing broadcast quality news stories and analyzing a wide range of Media texts using Film Language. Practical journalism skills will be further developed by students in the production of media products such as vox-populi (man-on the-street) montages, public service announcements, advertisements and mini-documentaries. Contributions to the school news will be managed using Media Industry practices. Technologies including SLR and digital video cameras and editing software such as iMovie and Adobe Premiere will also be explored. This is a demanding but engaging course of study suitable for those interested in strengthening their written, creative thinking and analytical skills.</p> <p>Grade(s): 10, 11, 12</p>

English (cont.)

Course Title	Credits	Course Description
Advanced Digital Journalism	1.0	<p>The primary focus of the Advanced Digital Journalism (ADJ) course is for students to work as a team to simulate the production of a professional broadcast news program. In the making of PTV – Phoenix Television. Students design news stories by modeling industry practices, which require skills such as researching, investigating, interviewing, writing voice-over and camera scripts, scheduling location film shoots and video editing. All important life skills such as organization, problem-solving, negotiating, public speaking and time management skills (which are intrinsic to the nature of Journalism) are also developed. While video production will be the primary focus of the course with episodes having to meet deadlines for uploading onto KIS’ website for PTV students will engage further in the theoretical study of Journalism by examining the Code of Ethics and investigating famous Journalists and news correspondents. Media Literacy skills such as the analysis of media texts using Film Language will also be an essential element of this full year course. Advanced Digital Journalism will challenge students to be inquisitive citizens, who can think creatively and articulate their ideas clearly to produce insightful content based on the world they live in.</p> <p>Grade(s): 10, 11, 12 Prerequisite: Digital Journalism or teacher approval Additional Information: Students must complete an application during the registration process. Acceptances will be based upon prior experience with journalism and/or completion of Digital Journalism.</p>
Yearbook	1.0	<p>The goal of this course is to create the KIS yearbook and video yearbook. The process will involve elements of journalism, photography, and design. For the journalism component, students will learn to write in a concise, active manner. For the photography component, students will learn basic photography skills, understand terms used in digital photography, and how to use Adobe Photoshop and iPhoto to edit and enhance their photos. Finally, students will organize and design the overall layout using InDesign to create the pages that will make up the yearbook, which will be published in the spring. This course requires serious commitment, the desire to take on a leadership role and the ability to work actively as a team.</p> <p>Grade(s): 9, 10, 11, 12 Additional Information: Admittance by interview only in spring of prior school year.</p>

English for Speakers of Other Languages (ESOL)

Course Title	Credits	Course Description
English for Speakers of Other Languages: Level I	2.0	<p>High school students who test into Level I are required to enroll in the HS Beginning ESOL course. Beginning ESOL will cover two blocks. These courses are designed for “Entering” and “Beginning” English language learners. Students engage in intensive academic instruction designed to improve listening, speaking, reading, and writing communication skills. Emphasis is on developing academic English communication skills across all content areas.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: WIDA language assessment results between level 1.6 - 2.5 or ESOL department recommendation.</p>
English for Speakers of Other Languages: Level II	2.0	<p>High school students who test or matriculate into Level II are required to take two courses (ESOL Writing and ESOL Reading & Language) designed for “Developing” and “Expanding” English language learners. The ESOL Writing and ESOL Reading & Language courses are taken concurrently, and are a continuation of the Beginning ESOL course. Students engage in intensive academic instruction designed to improve oral, reading, and writing communication skills. Like Beginning ESOL, this course includes a heavy emphasis on academic language across content areas.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: WIDA language assessment results between level 2.6 - 3.9 or ESOL department recommendation.</p>
English for Speakers of Other Languages: Level III	1.0	<p>High school students who test or matriculate into Level III qualify as “monitored” students and are mainstreamed in content area courses. Level III students are required to enroll in this course which focuses on content area writing. When students achieve a score of 5.0 or higher on the WIDA language assessment, they will be fully mainstreamed and will no longer require an ESOL course.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: WIDA language assessment result between level 4.0-4.9 or ESOL department recommendation.</p>

Student Support

Course Title	Credits	Course Description
Student Support	.5	<p>In this course, students will evaluate their learning styles and utilize them to adopt corresponding study strategies. The students will learn how to develop measurable SMART goals, as well as, track and evaluate outcomes. In addition, students will receive guided support in organization and time management skills. This course aims to provide students with strategies and resources to achieve their highest level of success.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Prior documentation of needed intervention</p>

Mathematics

Course Title	Credits	Course Description
Algebra I	1.0	<p>Algebra I focuses on developing algebraic fluency. Students develop an understanding of algebra as a tool for thinking and communicating across all strands of mathematics and to think critically using problem-solving activities. Topics include solving algebraic equations and simplifying expressions, factoring polynomials, applying fractions in ratios and proportions, solving systems of linear equations and inequalities, and solving quadratic equations.</p> <p>Grade(s): 9 Text: <i>Pearson Algebra 1 Common Core</i> Calculator: TI-Nspire CX CAS Prerequisite: Pre-Algebra</p>
Geometry	1.0	<p>Geometry focuses on the study of shapes and their application to real-world scenarios. Students use and develop logic as a problem-solving tool. Topics include points, lines, planes, triangles, quadrilaterals and other polygons, angles, reasoning, proofs, proportion and similarity, trigonometry, circles, area, surface area, volume, and transformations.</p> <p>Grade(s): 9, 10 Text: <i>Pearson Geometry Common Core</i> Calculator: TI-Nspire CX CAS Prerequisite: Algebra I</p>
Algebra II	1.0	<p>Algebra II focuses on the deeper development of algebra skills in order to prepare students for higher-level mathematics. Students explore mathematics through traditional means while expanding their knowledge through the use of technology. Topics include linear equations and inequalities, systems of linear equations and inequalities, quadratic functions, polynomials, powers, roots, radicals, exponential and logarithmic functions, rational equations, trigonometric ratios and functions, matrices and applications.</p> <p>Grade(s): 9, 10, 11 Text: <i>Pearson Algebra 2 Common Core</i> Calculator: TI-Nspire CX CAS Prerequisite: Algebra I and Geometry</p>

Mathematics (cont.)

Course Title	Credits	Course Description
Introduction to Mathematical Proofs	.5	<p>Introduction to Mathematical Proofs focuses on exploring the methods of reasoning used in advanced mathematics. This abstract class uses logic and mathematical reasoning to verify and prove whether mathematical statements are true or false. Proof techniques will include direct proof, contrapositive proof, proof by contradiction, proof by induction, disproofs, etc.</p> <p>Grade(s): 10, 11, 12 Text: <i>Book of Proof</i> (2nd Edition), Richard Hammack Prerequisite: Algebra II</p>
Game Theory	.5	<p>Game Theory is the study of strategic interactions amongst rational decision makers. This class uses an investigative approach to explore the concepts of Best Response, Nash Equilibrium, Elimination of Dominated Strategies and Backward Induction as they apply to Simultaneous and Sequential two (or more) person Games. Included is Basic Probability as it applies to Mixed Strategy Games.</p> <p>Grade(s): 10, 11, 12 Text: <i>Strategy: An Introduction to Game Theory</i>, Joel Watson Prerequisite: Algebra II</p>
Functions, Trigonometry, and Statistics	1.0	<p>Functions, Trigonometry, and Statistics (FTS) is built upon student application and exploration into topics in mathematics essential for success in higher level mathematics. While the development of technical skills is a focus, the ability to understand the fine details and reasons behind why the math we do behaves the way it does is the primary goal of this course.</p> <p>Lessons take a student-driven approach and begin with a task that has been designed to develop mathematical understanding, solidify that understanding, or allow for practice of the new concepts. Students are encouraged to explore, question, ponder, discuss their ideas and listen to the ideas of their classmates while they continuously form deeper connections and understanding of core mathematical concepts.</p> <p>Grade(s): 10, 11, 12 Text: <i>Secondary Mathematics III: An Integrated Approach</i> Calculator: TI-Nspire CX CAS Prerequisite: Algebra II</p>

Mathematics (cont.)

Course Title	Credits	Course Description
Precalculus	1.0	<p>Precalculus focuses on specific skills necessary for higher-level courses, including Calculus and Statistics. Topics include polynomial, exponential logarithmic, trigonometric functions, sequences and series, analytic geometry (ie: conics and polar equations), probability, 3D geometry, and an introduction to limits.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Precalculus With Limits: A Graphing Approach</i> Calculator: TI-Nspire CX CAS Prerequisite: C+ in Algebra II</p>
Statistics	1.0	<p>Statistics focuses on exploring and analyzing real-world data sets, along with designing and carrying out studies. The course will focus on building skills in data collection, descriptive and inferential statistics, probability, and using technological tools to analyze statistics. Students will use multiple representations to present findings including written descriptions, numerical statistics, formulas, and graphs.</p> <p>Grade(s): 12 Text: <i>The Practice of Statistics</i> (Starnes, Tabor, Yates, and Moore) Calculator: TI-Nspire CX CAS Prerequisite: Senior with Algebra II</p>
Calculus	1.0	<p>Calculus focuses on an introduction to the rigorous study of college-level mathematics. Topics include a brief review of Precalculus topics, analysis of graphs, limits of functions, continuity, asymptotes, applications of derivatives, integrals, anti-differentiation, Fundamental Theorem of Calculus, and applications of integration.</p> <p>Grade(s): 10, 11, 12 Text: <i>Calculus: A Single Variable</i> 9th Ed. Larson Edwards Calculator: TI-Nspire CX CAS Prerequisite: Precalculus with at least a “C+” average both semesters and teacher recommendation</p>

Mathematics (cont.)

Course Title	Credits	Course Description
AP Statistics	1.0	<p>AP Statistics is an introduction to the rigorous study of college-level statistics. The course focuses on building knowledge of key statistical concepts and their subtleties, and the development of good technical writing skills in order to convey the results of a statistical analysis. The year is divided into four major themes: exploratory analysis, planning and conducting a study, probability, and statistical inference.</p> <p>Grade(s): [11], 12 Text: <i>The Practice of Statistics</i> (Starnes, Tabor, Yates, and Moore) Calculator: TI-Nspire CX CAS</p> <p>Prerequisite: Precalculus with at least "B" or "A" in FTS, and teacher recommendation Additional Information: Juniors may enroll in AP Statistics as a math elective and must be concurrently enrolled the next requisite math course</p>
AP Calculus AB	1.0	<p>AP Calculus AB focuses on understanding the meaning and relationships among concepts of calculus. Topics include a brief review of Precalculus topics, analysis of graphs, limits of functions, continuity, derivatives, integrals, applications of derivatives and integrals, and the Fundamental Theorem of Calculus.</p> <p>Grade(s): 10, 11, 12 Text: <i>Calculus of a Single Variable: Early Transcendental Functions</i> Calculator: TI-Nspire CX CAS Prerequisite: Precalculus with at least "B+" both semesters and teacher recommendation</p>
AP Calculus BC	1.0	<p>AP Calculus BC focuses on deepening the understanding of calculus concepts. Topics include an overview of all the topics of AP Calculus AB, sequences and series, polar functions, parametric functions, l'Hopital's rule, vector functions.</p> <p>Grade(s): 11, 12 Text: <i>Calculus: Graphical, Numerical, Algebraic</i> Calculator: TI-Nspire CX CAS Prerequisite: B- in AP Calculus AB both semesters; <i>or</i> A- in Calculus and teacher recommendation; <i>or</i> 95% in Precalculus both semesters with a teacher recommendation and successful completion of learning objectives outlined in KIS independent study program</p>

Mathematics (cont.)

Course Title	Credits	Course Description
Multivariable Calculus & Linear Algebra	1.0	<p>The first semester of the course is Multivariable Calculus, which focuses on the material of AP Calculus and expands these notions to three dimensions. Topics include graphing, partial derivatives, extrema of functions with two independent variables, double and triple integrals, etc. All topics include applications in engineering, physics and other discipline areas.</p> <p>The second semester of the course is Linear Algebra, which focuses on the material covered in college as a one-semester linear algebra class. Topics include linear systems, linear transformations, orthonormal bases, subspaces of R^n, other linear spaces, the Gram-Schmidt orthogonalization process, least squares curve fitting procedures, linear spaces and determinants.</p> <p>Grade(s): 11, 12 Text: <i>Calculus</i> Ron Larson Text: <i>Linear Algebra with Applications</i>, Otto Bretscher Calculator: TI-Nspire CX CAS Prerequisite: B in AP Calculus BC both semesters and teacher recommendation <i>or</i> 95% in AP Calculus AB both semesters with a teacher recommendation <i>and</i> successful completion of learning objectives outlined in KIS independent study program</p>

Science

Course Title	Credits	Course Description
Biology	1.0	<p>This required grade 9 course will explore the inner workings of the living world through authentic scientific investigations. Students will engage in inquiry-based experiments of their own design to explore the content. Assessment and knowledge will be developed through group discussion, experiments, lab reports, and application of content to real-world scenarios. Topics include but are not limited to: biochemistry, cells, cellular energetics, DNA and RNA, genetics, evolution, and ecology.</p> <p>Grade(s): 9 Text: <i>Biology</i>, 2012 edition, by Holt</p>
Chemistry	1.0	<p>This required grade 10 course will provide a firm foundation in chemical concepts and principles. Students will be instilled with an appreciation of the vital role chemistry plays in our lives. Students will be engaged through lectures, projects, laboratory activities, and lab reports. Topics will include, but are not limited to: the nature of chemistry as a science, atomic structure, electron configuration, the periodic table of elements, chemical formulas and bonding, chemical reactions and equations, states of matter, chemical equilibrium, acids and bases, and chemical thermodynamics.</p> <p>Grade(s): 10 Text: <i>Modern Chemistry</i>, by Holt Prerequisite: Algebra 1</p>
AP Biology	1.0	<p>This is an intensive course that will help prepare students for the AP Biology examination. This course carries an immense time commitment. Students will be engaged through lectures, projects, laboratory activities, biotechnology experiences and lab reports. Topics include but are not limited to: biochemistry, cells and cellular genetics, heredity, molecular genetics and evolutionary biology, diversity of organisms, structure and function of plants and animals, and ecology.</p> <p>Grade(s): 10, 11, 12 Text: <i>Campbell Biology: A Global Approach</i> – 10th edition Prerequisite: Biology, Algebra 1 (Chemistry is a corequisite for Grade 10) Additional Information: Chemistry may be taken concurrently for 10th grade students).</p>

Science (cont.)

Course Title	Credits	Course Description
Environmental Science	1.0	<p>The Environmental Science course is an engaging and interdisciplinary field of study showing students the unlimited opportunities for careers in environmental science and engineering. This course emphasizes how humans impact their environment, and how these impacts are controlled and mitigated through today's political, scientific, and engineering communities. The course is entirely project-based and has significant topic flexibility with opportunities for individual student research. Topics include water resource management, forestry, soil science, recycling, toxicology, alternative energy, engineering, ethics, and economics. All of these topics will have a "think globally, act locally" feel to understand how we must use Earth's natural resources economically and sustainably.</p> <p>Grade(s): 11, 12 Texts: <i>Silent Spring</i> (Carson); <i>Human Nature</i> (Trefil); Other landmark sources. Prerequisites: Biology and Chemistry</p>
AP Environmental Science	1.0	<p>The AP Environmental Science course is a rigorous, college-level course designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, and sit for the AP exam. Students will identify and analyze environmental problems that are both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. This course differs from the Environmental Science course in that it is more laboratory- and textbook-based requiring detailed lab reports and summative exams. APES integrates the students' prior coursework in biology and chemistry, and uses case-studies and laboratories to develop content knowledge and scientific methodologies to explore our living world.</p> <p>Grade(s): 11, 12 Prerequisites: Biology and Chemistry</p>

Science (cont.)

Course Title	Credits	Course Description
Astronomy	1.0	<p>In this class open to juniors and seniors, we will be studying the universe. We will start with "classical" astronomy, describing the night sky and organizing what we see as was done in ancient times, including observational astronomy using telescopes. We will then embark on a journey, starting here on Earth and progressing outward, to study the Solar system, the Milky Way galaxy, and the wonderful and strange objects we observe in deep space, such as black holes, quasars, and supernovae. We will end with some discussion of what scientists know today about the universe as a whole. We will examine different theories relating to the origin of the universe and where it's headed in the future. Along the way we will introduce some of the methods, theoretical and experimental, that have been used to understand all of this, from Newton's laws, through our understanding of light and matter, to Einstein's theory of relativity, and from Galileo's telescope to WMAP.</p> <p>Grade(s): 11, 12 Text: Cosmic Perspective, 7th ed.</p>
AP Chemistry	1.0	<p>The course begins with the structure of matter, and rapidly progresses through bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics, and chemical equilibrium. At least 16 labs are conducted that foster excellent analytical and science writing skills, as each lab requires a detailed laboratory report to be written. Strong algebra skills are important for success. The College Board sees AP Chemistry as preparation for 84 career areas and 48 college majors.</p> <p>Grade(s): 11, 12 Prerequisite: Chemistry and Algebra II Text: Prentice Hall; <i>Chemistry: The Central Science</i> Additional Information: "B" average or higher in Chemistry is recommended</p>
Physics	1.0	<p>Introduction to Physics is an introductory, year-long course combining both the conceptual and problem solving aspects of physical science. It is designed primarily for juniors and seniors who are interested in pursuing further studies in physical science. Topics include: Forces and Interactions, Energy, Waves and Their Applications, Earth's Place in the Universe, and Earth's Systems. Students will develop problem solving skills using basic algebra and trigonometry. The major goal of the program is to understand the basic principles of physics and how they connect to our everyday life. The ability to apply these principles in the solution of problems is emphasized throughout the course.</p> <p>Grade(s): 11, 12 Prerequisite: Biology, Chemistry, Algebra I</p>

Science (cont.)

Course Title	Credits	Course Description
AP Physics I	1.0	<p>AP Physics I is intended to be the first physics course for juniors or seniors interested in pursuing further study in science, technology, engineering, medicine, and other related fields. This course relies heavily on proportional reasoning, basic trigonometry, and algebra, and moderate fluency with these concepts is necessary for success in the course. However, AP Physics I emphasizes deep conceptual understanding through application, lab-work, discussion, design thinking, and written analysis. College Board describes the course as being “the equivalent to a first-semester college course in algebra-based physics.” Content in the course includes: mechanics, dynamics, work, energy, power, waves, sound, and electric circuits.</p> <p>Grade(s): 11, 12 Text: <i>OpenStax: College Physics for AP Courses</i> Prerequisite: Biology, Chemistry Additional Information: Precalculus (“B” average or higher) or Algebra II (“A-“ Average or higher) is recommended</p>
AP Physics II	1.0	<p>AP Physics II is designed for students who have already taken AP Physics I or Introduction to Physics, and are interested in pursuing further study in science, technology, engineering, medicine, and other related fields. This course relies heavily on proportional reasoning, basic trigonometry, and algebra, and moderate fluency with these concepts is necessary for success in the course. However, AP Physics II emphasizes deep conceptual understanding through application, lab-work, discussion, design thinking, and written analysis. College Board describes the course as being “the equivalent to a second-semester college course in algebra-based physics.” Content in the course includes: fluid mechanics, thermodynamics, electricity and magnetism, optics, nuclear physics, and modern physics.</p> <p>Grade(s): 11, 12 Text: <i>OpenStax: College Physics for AP Courses</i> Prerequisite: Successful completion of AP Physics I or “B” average or higher in Physics is recommended.</p>

Social Studies

Course Title	Credits	Course Description
East Asian Studies	1.0	<p>East Asian Studies is a year long survey course introducing students to a variety of academic disciplines in the social sciences and humanities. This class will address the geography, economies, political systems, philosophies and history of China, Korea, and Japan. The scope of this content is vast and by necessity we will be looking at selected topics. The largest portion of the class will focus on modern East Asia from the 19th century to contemporary times. There will be particular emphasis on developing academic skills essential to success in high school social studies and to college readiness.</p> <p>Grade(s): 9</p>
World History	1.0	<p>This course breaks down the immense content of World History into six different themes. The first semester will explore the classics, trade and exploration, and revolutions, while the second semester will focus on how Industrialization leads to imperialism, nationalism leads to world conflict, and finally examine the Cold War to the modern era. By using a variety of different strategies students will also learn what it is to be a historian by looking at how events and themes tend to repeat themselves throughout history.</p> <p>Grade(s): 10 <i>Text: World History: Patterns of Interaction</i></p>
AP World History	1.0	<p>In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.</p> <p>Grade(s): 10, 11, 12 <i>Text: Traditions and Encounters</i> Additional Information: B or better in Social Science and English courses is recommended. Strong reading and writing skills are required. Teacher recommendation is required from a student's previous social studies teacher.</p>

Social Studies (cont.)

Course Title	Credits	Course Description
United States History	1.0	<p>This course is a broad study of United States History. Students will devote much of the first semester to a study of the first one hundred years of U.S. history including the deep divisions surrounding the Civil War. The second semester will concentrate on important political, social, economic, and foreign policy issues in the 20th century. Throughout the year, we will focus heavily on historical research, analysis, and writing skills. The recurring theme of this class will be the role of government in society, and the rights and responsibilities of individuals.</p> <p>Grade(s): 11</p>
AP United States History	1.0	<p>The Advanced Placement program in United States History is designed to provide students with the factual knowledge and analytical skills necessary to deal critically with the problems in U.S. History. Students will learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. This course develops skills necessary to arrive at conclusions on the basis of an informed judgment and to present ideas clearly and persuasively.</p> <p>Grade(s): 11, 12 Text: <i>American Pageant 14th edition</i> Text: <i>Amsco United States History Preparing for the Advanced Placement Examination, 2015 edition</i> Additional Information: B or better in current social studies class is recommended. Teacher recommendation is required from a student's previous social studies teacher.</p>
AP Comparative Government	1.0	<p>This course introduces students to the rich diversity of political life around the world.. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.</p> <p>Grade(s): 11, 12 Additional Information: B or better in current social studies class is recommended.</p>

Social Studies (Cont.)

Course Title	Credits	Course Description
Economics	.5	<p>This semester elective course focuses on the principles of economic thought and theory. Students will learn the economic way of thinking, the nature of markets by examining supply and demand, the different market structures, and how to measure economic performance. The understanding of economics is a valuable tool for any responsible adult and students enrolled will benefit from the economic way of thinking.</p> <p>Grade(s): 11, 12 Text: <i>Economics: Concepts and Choices</i></p>
AP Economics (Micro/Macro)	1.0	<p>The purpose of this course is to give students a thorough understanding of both Microeconomic and Macroeconomic principles and theories. This course is designed to give students a strong background in the basics of economics along with the ability to excel on the AP Microeconomics and Macroeconomics exams. Microeconomics topics will include the nature of supply and demand, insight into making production decisions, and examining the structures of different markets. Macroeconomics topics will include economic systems, national incomes and price levels, measuring and interpreting economic growth, international markets, the financial sector, and the effect of government policies on the economy.</p> <p>Grade(s): 11, 12 Text: <i>Economics for AP: Paul Krugman</i> Additional information: B or better in current Social Studies and Math class is recommended. Teacher recommendation is required from a student's previous social studies teacher.</p>
Psychology	.5	<p>Students will study human behavior and mental processes through the approaches of various and divergent schools of psychological thought. Topics of investigation will include areas such as human development, learning, personality, and psychological disorders.</p> <p>Grade(s): 10, 11, 12 Text: <i>Introduction to Psychology Plotnik and Kouyoumdjian</i> Additional information: Teacher recommendation is required from a rising G10 student's previous social studies teacher.</p>

Social Studies

Course Title	Credits	Course Description
AP Psychology	1.0	<p>The goal of AP Psychology is to increase students' understanding of psychology: the scientific study of behavior and mental processes. In this course, students will explore the theories and principles of the major approaches of psychology with the objective that each student successfully completes the Advanced Placement Examination at the end of the year. To achieve this, this course is taught at the college level and student's independent and collaborative learning practices should reflect this. The expanded knowledge of psychology gained in this class should enhance each student's perceptions of the world around them, and provide insights into one's own and others' behaviors as they explore the complexity of human behavior and thinking.</p> <p>Grade(s): 11, 12 Text: <i>Psychology for AP: Myers Second Edition</i> Prerequisite: Recommendation from current social science teacher Additional Information: B or better in Biology is recommended</p>
Philosophy	.5	<p>This is a one-semester elective course focusing on the role played by philosophy in the life of individuals and societies. It will provide an introduction to many important philosophers and their contributions to the intellectual development of humankind. This course shall also provide intellectual tools to analyze major issues confronting contemporary society. The chief objective of the philosophy course will be to engage students in the activity of doing philosophy. In keeping with this description as an activity rather than a subject matter, the class will encourage critical inquiry, debate, and reflection upon the discipline's fundamental questions. A further important objective will be to sharpen students' critical thinking and ability both to orally analyze and write arguments with clarity and precision. Finally, the course will encourage shared inquiry through goodwill, careful listening and thoughtful conversation. This will include several Sunday night on-line discussions.</p> <p>Grade(s): 11, 12 Text: <i>Ultimate Questions: Rauhut/ Philosophy for Beginners: Osborne</i></p>
Contemporary Global Issues	.5	<p>Contemporary Global Issues is a course that seeks to help students better understand the world and their place in it. To do this, students will explore current global issues, viewing each through a variety of lenses (e.g., environmental, governmental, sociocultural, etc.) in order to develop a stronger appreciation for world cultures, communities and perspectives, and empower themselves to become responsible and engaged global citizens.</p> <p>Grade(s): 11, 12</p>

World Languages

Course Title	Credits	Course Description
Chinese I	1.0	<p>Chinese I helps students develop their linguistic proficiency in the four areas of speaking, listening, reading, and writing. Students should also establish a foundation for their knowledge of Chinese culture, history, and customs. Students will participate in conversations on relevant topics with Chinese speakers.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Integrated Chinese Level I – Part I</i></p>
Chinese II	1.0	<p>Chinese II helps students further develop their linguistic proficiency in the four areas of speaking, listening, reading, and writing, and to expand their knowledge of Chinese culture and history. Topics of study include: weather, dining, directions, birthday party, visiting doctors, sports and travel. By the end of this course, students should be able to communicate with Chinese language speakers through oral and written communication skills.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Integrated Chinese Level I – Part II</i> Prerequisite: Chinese I</p>
Chinese III	1.0	<p>Chinese III continues the study of the Chinese language, and the culture of the Chinese people. The goal of the course is to polish each student's grasp of Chinese vocabulary, grammar and its usage. Topics include: campus life, eating in Chinese restaurants, shopping, relationships, internet, part-time job, education and geographic features of China. Students should be able to use Chinese language to effectively communicate in appropriate settings.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Integrated Chinese Level II – Part I</i> Prerequisite: Chinese II with at least "C-" or with a teacher recommendation</p>
Chinese IV	1.0	<p>Chinese IV continues the study of the Chinese language and culture. The goal of this course is to strengthen each student's grasp of Chinese vocabulary, grammar, and usage. Students will be able to effectively communicate in specific environments. Topics include: festivals, changes in China, travel, life and wellness, gender equality, environmental protection, and plans for the future. This course should prepare students for success in the AP Chinese course.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Integrated Chinese Level II – Part II</i> Prerequisites: Chinese III with at least "B-" or with a teacher recommendation</p>

World Languages (cont.)

Course Title	Credits	Course Description
AP Chinese Language & Culture	1.0	<p>The AP Chinese Language and Culture course aims to provide qualified students with opportunities to further explore Chinese culture and improve communication skills (interpersonal mode, interpretive mode, and presentational mode). In doing so, students will develop language proficiency in listening, speaking, reading, and writing. There are various supplementary materials and authentic materials provide in addition to the texts. By the end of the course, students will be able to further develop the communicative proficiency in Chinese, to develop students awareness and appreciation of in Chinese culture, to use critical thinking skills to compare Chinese with other languages and cultures, to use Chinese language to communicate with native Chinese speaker appropriately and be involved in Chinese community. Assessments will be geared to the expectations of the AP Chinese Language and Culture Exam.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>JiaYou – Chinese for the Global Community</i> Prerequisite: Chinese IV with at least "B-" or with a teacher recommendation</p>
French I	1.0	<p>This first year French program is designed to introduce students to linguistic structures necessary for basic communication in French as well as to introduce a variety of culture topics. Students will develop their linguistic proficiency in the areas of speaking, listening, reading, and writing through immersion. By the end of the year, students will be able to write passages related to and converse about familiar topics related to themselves and others as well as francophone culture. The goal of this class is to achieve the strong Intermediate Low proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning (D'accord! 1)</i></p>
French II	1.0	<p>In an immersion environment, students will continue to develop their linguistic proficiency in the areas of speaking, listening, reading, and writing. By the end of the course, students will be able to engage comfortably in spontaneous oral and written communication in simple tenses about a range of topics. The goal of this class is to achieve the strong Intermediate Mid proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning (D'accord! 2)</i> Prerequisite: French I</p>

World Languages (cont.)

Course Title	Credits	Course Description
French III	1.0	<p>In an immersion environment, students will expand their linguistic proficiency in the areas of speaking, listening, reading, and writing. By the end of the course, students will be able to use factual information from the French-speaking world to present their opinions about a variety of topics related to themselves and society using advanced linguistic structures. The goal of this class is to achieve the strong Intermediate High proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning (D'accord! 3)</i> Prerequisite: French II with at least "C-" or with teacher recommendation</p>
French IV	1.0	<p>In an immersion environment, students will solidify their linguistic proficiency, with an emphasis on developing strong skills in the three modes of communication: presentational, interpersonal and interpretive. Students will continue to enhance proficiency in the comprehension of spoken and written French, and will further develop their fluency and proficiency in writing and speaking about current topics of the French-speaking world, including making comparisons to their own communities. The goal of this class is to achieve the strong Advanced Low proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning (Thèmes)</i> Prerequisite: French III with at least "B-" or with teacher recommendation</p>
AP French Language & Culture	1.0	<p>AP French Language and Culture is a rigorous course equivalent to a third year university level language course. The objective of this course is to prepare students for the AP French Language and Culture exam, by continuing to develop their proficiency in the three modes of communication: Interpretive, Interpersonal, and Presentational. In an immersion environment, students read and listen to a variety of authentic materials from all over the French-speaking world. Additionally, they will engage in written and oral analysis and discussion on a wide variety of cultural topics of the French-speaking world, making comparisons to their own communities. Assessments will be geared to the expectations of the AP French Language and Culture Exam.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Barron's (AP French Language and Culture)</i> Prerequisite: French IV with at least "B-" or with teacher recommendation</p>

World Languages (cont.)

Course Title	Credits	Course Description
Spanish I	1.0	<p>This first year Spanish program is designed to introduce students to linguistic structures necessary for basic communication in Spanish as well as to introduce a variety of culture topics. Students will develop their linguistic proficiency in the areas of speaking, listening, reading, and writing through immersion. By the end of the year, students will be able to write passages related to and converse about familiar topics related to themselves and others as well as hispanic culture. The goal of this class is to achieve the strong Intermediate Low proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning Descubre 1</i></p>
Spanish II	1.0	<p>In an immersion environment, students will continue to develop their linguistic proficiency in the areas of speaking, listening, reading, and writing. By the end of the course, students will be able to engage comfortably in spontaneous oral and written communication in simple tenses about a range of topics. The goal of this class is to achieve the strong Intermediate Mid proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning Descubre 1 & 2</i> Prerequisite: Spanish I</p>
Spanish III	1.0	<p>In an immersion environment, students will expand their linguistic proficiency in the areas of speaking, listening, reading, and writing. By the end of the course, students will be able to use factual information from the Spanish-speaking world to present their opinions about a variety of topics related to themselves and society using advanced linguistic structures. The goal of this class is to achieve the strong Intermediate High proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning Descubre 3</i> Prerequisite: Spanish II with at least "C-" or with a teacher recommendation</p>

World Languages (cont.)

Course Title	Credits	Course Description
Spanish IV	1.0	<p>In an immersion environment, students will solidify their linguistic proficiency, with an emphasis on developing strong skills in the three modes of communication: presentational, interpersonal and interpretive. Students will continue to enhance proficiency in the comprehension of spoken and written Spanish, and will further develop their fluency and proficiency in writing and speaking about current topics of the Spanish-speaking world, including making comparisons to their own communities. The goal of this class is to achieve the Advanced Low proficiency level of communication.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Vista Higher Learning Temas</i> Prerequisite: Spanish III with at least "B-" or with a teacher recommendation</p>
AP Spanish Language & Culture	1.0	<p>AP Spanish Language and Culture is a rigorous course equivalent to a third year university level language course. The objective of this course is to prepare students for the AP Spanish Language and Culture exam, by continuing to develop their proficiency in the three modes of communication: Interpretive, Interpersonal, and Presentational. In an immersion environment, students read and listen to a variety of authentic materials from all over the Spanish-speaking world. Additionally, they will engage in written and oral analysis and discussion on a wide variety of cultural topics of the Spanish-speaking world, making comparisons to their own communities. Assessments will be geared to the expectations of the AP Spanish Language and Culture Exam.</p> <p>Grade(s): 9, 10, 11, 12 Text: Pearson Publisher: <i>“AP Spanish, Preparing for the Language and Culture Examination”</i> by José Díaz Prerequisite: Spanish IV with at least "B-" or with a teacher recommendation</p>
AP Spanish Literature	1.0	<p>AP Spanish Literature is essentially an independent study course in the literature of the Hispanic World, from the Medieval and Golden Age through modern prose and poetry. Students will meet concurrently with the Spanish AP Language class. They will work independently to read and analyze texts and will meet weekly with the instructor to discuss their progress. This course will require extensive reading and writing.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Abriendo paso Lecturas, Momentos cumbres de las literaturas hispánicas: Introducción al análisis literario</i> Prerequisite: Spanish AP Language with at least "B-" or with teacher recommendation</p>

World Languages (cont.)

Course Title	Credits	Course Description
Survival Korean	1.0	<p>This course is an introductory course to introduce Korean language and culture for the beginners. Students will learn basic words and common expressions used in daily lives that are useful to know when interacting with Koreans. Students will be introduced to different aspects of Korean culture including Korean alphabet, Hangul, food, transportation, etc. This course aims to teach basic communication skills, and help students feel more comfortable in interacting with Korean people. Students will learn about basic greetings, how to order Korean food and do shopping, how to use public transportation, and how to make an appointment in Korean in authentic settings.</p> <p>Grade(s): 9, 10, 11, 12 Text: <i>Learning Korean through English</i></p>
Korean III	1.0	<p>This course is designed for students who have successfully completed Korean II and want to further enhance their Korean proficiency in reading, writing, listening and speaking. Students will learn to communicate in a culturally appropriate manner while utilizing more complex grammar structures and advanced vocabulary. The main text for this course is not only the textbook but also various authentic resource to prepare students for real life situations by providing enough exposure to real world context.</p> <p>Grade(s): 9, 10, 11, 12 Text : <i>Master Korean (2-1 & 2-2)</i> Prerequisite: Korean II with at least C- or with teacher recommendation</p>

Visual and Performing Arts

Course Title	Credits	Course Description
Theatre I	1.0	<p>This course is an introductory course designed for the beginning theatre student. In this course, students will examine and explore their own, unique physical abilities, with the goal of using them as dynamic, creative and expressive tools. Classrooms activities will focus on elements of physical theatre: pantomime, improvisation, movement and the fundamentals of acting through character development and scene performance. Daily participation in activities with collaborative learning groups and ensemble devising, will encourage students to explore their own creative potential. This course develops the student's confidence in group dynamics, self awareness, and problem-solving skills. Students will be given the ability to connect the literature being studied to a variety of cultures, history, and other content areas contributing to their 21st-century skills that will help in their success after high school graduation.</p> <p>Grade(s): 9, 10, 11, 12</p>
Theatre II	1.0	<p>Theatre II is a continuing course from Theatre I and designed for students with some theatre experience. This course promotes enjoyment and appreciation for all aspects of theatre through opportunities to build significantly on existing skills. Class work focuses on characterization, scene writing, and a variety of theatrical styles. Students will continue to practice the technique of improvisation, creative dramatics, and scene work to challenge and strengthen their acting skills and explore the technical aspect of theatre. Intermediate Theatre provides opportunities for students to strengthen skills in critical listening and thinking, as well as stage presence, ensemble work, and aesthetic response. Students will gain a deeper understanding of theatrical performance by exploring the personal, cultural and global impact of the theatre arts.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Theatre I or by audition.</p>
Stage Craft	.5	<p>This course will provide the student with the opportunity to experience, understand, analyze and create all aspects of technical theatre production. Particular emphasis will be placed on developing skills needed by crew members in play production. This class will take students from script analysis, through research, conceptualization, planning, and technical production techniques. Areas specifically covered will include scenic design and construction, stage lighting, sound design, and property building. Students will be introduced to stage make-up, costuming and public relations.</p> <p>Grade(s): 9, 10, 11, 12</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
Costuming	.5	<p>This semester course aims to provide an overall look at the technical side of stage costuming. Through this course students will gain an understanding of the technical costume process including construction, fitting, and costume shop safety and procedures protocol. Students will gain proficiency in sewing skills needed for costuming through learning and applying basic hand and machine sewing techniques. Students will also be fitting and constructing an article of clothing, as well as learning and applying terminology needed for fabric, clothing, and sewing.</p> <p>Grade(s): 9, 10, 11, 12</p>
Advanced Theatre	1.0	<p>This year-long course is designed for students with significant experience in theatre. Advanced Theatre promotes depth of engagement and lifelong appreciation for theatre through a broad spectrum of teacher-assigned and self-directed study and performance. This course is designed to give the theatre student a robust knowledge of all aspects of theatre. Students regularly reflect on aesthetics and issues related to and addressed through theatre, and create within various aspects of theatre in ways that are progressively more innovative. These students are self-directed and display readiness for high levels of critical thinking, research, conceptual thinking, and creative risk-taking. As they work, students will apply 21st-century skills that will help them be successful after high school graduation, including time management, self-assessment, problem solving, collaboration, and critical analysis.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Theatre II or by audition.</p>
Digital Photography I	.5	<p>This course is designed for students with an artistic interest in electronic image making and digital photography. Students will be introduced to the DSLR Camera. Students will learn how to take quality photographs using the manual settings of the camera. We will focus on the Elements of Art and Principles of Design to plan and execute effective and unique compositions. Photography as fine art is the focus of the course. Students will learn the vocabulary of photography as art to use in critiques and self-evaluations. Students will use blogs to plan, present, and reflect on their work throughout the course. A research project investigating a photographer will be the semester exam.</p> <p>Grade(s): 9, 10, 11, 12</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
Digital Photography II	.5	<p>This class requires students to further explore Photography as art. Emphasis will be placed on enhancing creativity through problem-solving and creation of “photo shoots.” Students will concentrate on art production with a goal of completing an electronic portfolio. Students will work to complete projects with compositions based upon the elements of art and principles of design. Students will also develop “serial works.” Art critiques will also be a focus of this class. More advanced topics will be explored, such as artificial lighting, shutter speed manipulations, minimalism and abstraction. A final artist research project will culminate the course.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Digital Photography I</p>
2D Studio Art I	.5	<p>2D Studio Art I is an introductory course designed for students to learn about art and the creative process. We will learn to use the Elements of Art and Principles of Design, learn about art history, create original pieces, and critique our work. 2D Studio work includes a variety of media, including drawing (pencil, charcoal, pen, marker, pastel), painting (acrylic, watercolor), and collage. Sketchbooks will be used for planning, research, and skill development exercises. This course focuses on building foundational art skills as well as finding a sense of artistic voice.</p> <p>Grade(s): 9, 10, 11, 12</p>
3D Studio Art I	.5	<p>This course introduces basic skills in the techniques and tools of the 3D media of clay, found objects, paper mache, and paper sculpture. Art history, criticism, and aesthetics will be included as viewpoints in studying and discussing art. Emphasis will be placed upon proper use of techniques and methods. Students also are introduced to basic techniques on the potter’s wheel. This course will also introduce students to the design process as a communication tool to develop visual perception and imagination skills. An emphasis is placed on an understanding of and use of the Elements and Principles of 3D Design. Personal research will be introduced and recorded in student sketchbooks.</p> <p>Grade(s): 9, 10, 11, 12</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
2D Studio Art II	.5	<p>2D Studio Art II is a semester-long intermediate course designed for students who have previously taken 2D Studio 1. We will focus further on the Elements of Art and Principles of Design, learn about art history, create original pieces, and critique our work. 2D Studio work includes a variety of media, including drawing (pencil, charcoal, pen, marker, pastel), painting (ink, acrylic, watercolor, oil), printmaking, and collage. Sketchbooks will be used for planning, research, and skill development exercises. This course focuses on furthering foundational art skills in a wide variety of media as well as developing artistic voice.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: 2D Studio Art I</p>
3D Studio Art II	.5	<p>This course introduces higher level techniques and skills for producing quality 3D works using materials such as clay, found objects, paper mache, and paper sculpture, among others. Emphasis will be placed on enhancing creativity through problem-solving and proper demonstration of procedures and methods of creating art. Students will be introduced to intermediate level techniques on the potter's wheel. Student sketchbooks will be developed in depth to show a critical examination of meaning in visual images and an understanding of the Elements and Principles of 3D Design.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: 3D Studio Art I</p>
2D Studio Art III	1.0	<p>2D Studio Art III is an advanced course designed for students who have previously taken 2D Studio 1 and 2. Emphasis will be placed on enhancing creativity through problem-solving and proper demonstration of procedures and methods of creating art. We will focus further on the Principles of Design, learn about art history, create original pieces, and critique our work. 2D Studio work includes a variety of media, including drawing (pencil, charcoal, pen, marker, pastel), painting (ink, acrylic, watercolor, oil), printmaking, and collage. Weekly sketchbook assignments will be used for planning, research, skill development exercises, and fully rendered work. Art production will be emphasized with the development of a portfolio. Students will complete projects based upon observations of still-life, self portraits, interiors, and landscapes. Students will be expected to develop "serial works." Art criticism will be a major focus. Students will be able to identify design elements and stylistic qualities, process, and technique to understand evaluative strategies.</p> <p>Grade(s): 10, 11, 12 Prerequisite: 2D Studio Art II</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
3D Studio Art III	1.0	<p>This course requires each student to use advanced level techniques and skills for producing quality 3D works with materials such as clay, found objects, paper mache, and paper sculpture, among others. Students are required to create conceptually advanced and well designed work using the Elements and Principles of 3D Design. Art criticism and critique are major components of the course. Projects will be both teacher driven and student driven as students work towards creating an individualized body of work, or portfolio. Serial works will also be completed.</p> <p>Grade(s): 10, 11, 12 Prerequisite: 3D Studio Art II</p>
AP Studio Art 2D Design & Drawing	1.0	<p>The AP Studio Art class is a rigorous college-level course designed for students who are seriously interested in the practical experience of art. Students will be accepted into AP based upon review of prior enrollments and recommendation by the art teachers. The goals of the AP Studio Art program are to encourage creative and systematic investigation of formal and conceptual issues. Emphasis will be placed upon having each student make art an ongoing process that involves the student with informed and critical decision-making. Students will develop technical skills and become independent thinkers who contribute to their culture through the making of art. Giving back to the community through artmaking skills will also be a focus.</p> <p>AP Studio Art does not have a written exam, instead students are expected to create a strong 24 piece 2D Design or Drawing portfolio to submit to the College Board in early May. The College Board has established a national standard in performance of the visual arts. Completing the AP portfolio may result in Advanced Placement credit at the institution the student chooses to attend after High School, but does not guarantee it. It will, however, help the student to have a strong portfolio to submit for admissions and scholarship opportunities.</p> <p>Grade(s): 11, 12 Prerequisite: 2D Studio Art III and instructor approval through portfolio review Additional Information: 2D Design and Drawing are two different types of AP portfolios a student may submit, and students may take two years of this course if they wish to submit both types of portfolios.</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
AP 3D Design Studio Art	1.0	<p>The AP Studio Art class is a rigorous college-level course designed for students who are seriously interested in the practical experience of art. Students will be accepted into AP based upon review of prior enrollments and recommendation by the art teachers. The goals of the AP Studio Art program are to encourage creative and systematic investigation of formal and conceptual issues. Emphasis will be placed upon having each student make art an ongoing process that involves the student with informed and critical decision-making. Students will develop technical skills and become independent thinkers who contribute to their culture through the making of art. Students will submit portfolios for evaluation near the end of the school year. The College Board has established a national standard in performance of the visual arts. When the portfolio is finalized and submitted, three sections that will be evaluated are Quality, Concentration, and Breadth.</p> <p>Grade(s): 11, 12 Prerequisites: 3D Studio Art III and instructor approval through portfolio review</p>
Concert Choir	1.0	<p>Concert Choir is open to all students in grades 9-12, who are interested in vocal music. Students in this performance-based class will prepare a wide variety of repertoire to be presented at concerts throughout the year. Attendance at all performances is mandatory. The music studied will be drawn from different historical time periods and represent a variety of languages and cultures. Through their preparation of choral music for performance, students will learn the basics of vocal technique, sight-reading, and choral musicianship.</p> <p>Grade(s): 9, 10, 11, 12 Text: Music books will be issued at the beginning of the year</p>
Phoenix Chamber Singers	1.0	<p>Phoenix Chamber Singers is the most advanced choir at KIS. Admission to this ensemble is through audition only. Students in this performance-based class will prepare a wide variety of repertoire, both accompanied and <i>a capella</i>, to be presented at concerts throughout the year. Attendance at all performances is mandatory. Through their preparation of choral music for performance, students will continue the study of vocal technique, sight-reading, and choral musicianship. Auditions consist of a prepared melody and a few short tests in vocal production, ear-training, and sight-reading. Please see the instructor for more details or to set up an audition time.</p> <p>Grade(s): 9, 10, 11, 12 Text: Music books will be issued at the beginning of the year Prerequisite: Audition with instructor for placement</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
Concert Orchestra	1.0	<p>Concert Orchestra is offered to all HS students(9-12) who would like to continue studying their string instrument and playing a string ensemble with their peers. Upon the instructor's recommendation, students are asked to take the proficiency test on their first string instrument in order to start learning their second string instrument. Concert Orchestra is to develop competent high school orchestral musicians including right hand skills (bowing lane and strokes), left hand skills (shifting, vibrato, and upper positions), ear training skills (tuning and recognizing-playing back-notating, designated chord progressions, and improvisation), musical independence (showing practice habits, analyzing unfamiliar music, and playing independent parts in ensemble), musical sensitivity (appropriate tempi, phrasing, articulation, and proper blend/balance in ensemble performance), musical literacy (music reading, printed bowings/fingerings, symbols, terms, and sight-reading), correct habits and attitudes about learning and citizenship (self discipline, group discipline, positive attitude about music playing and performance, awareness of the sacredness of an obligation, positive self-esteem, positive attitude about incentive based competition, a commitment to excellence, awareness of the value of being a supportive person, and ability to cope with stressful performance), ensemble skills (leading, rhythmic responsibility, intonation, uniformity of sound, and stylistic awareness), musical imagination (musically mirror analogies described by instructor), understanding the bowing rules, finger logic (notes between 1st and 5th position and across the string relationships), understanding of the shifting rules, the orchestral skills (how to follow a conductor and how to function efficiently in a rehearsal), the artistic skills (recognizing the mood of a piece of music and recognizing a mood change in a piece of music), and awareness of music theory. Students are expected to be able to generalize previously learned concepts and skills and synthesize all these into a musically proficient performance. Participation in all dress rehearsals and concerts is required. Students need to take private lessons and practice their instruments regularly.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Previous playing experience required</p>

Visual and Performing Arts (cont.)

Course Title	Credits	Course Description
Phoenix Orchestra	1.0	<p>Phoenix Orchestra is the elite string orchestra at KIS. Admission to this string orchestra is by audition only. Upon their auditions and the instructor's recommendation, students are suggested to start learning their second string instrument. Phoenix Orchestra is to develop competent high school orchestral musicians including right hand skills (bowing styles, chords, and expressive control of the bow), left hand skills (double stops, arpeggios, shifting, and vibrato), ear training skills (tuning, recognizing-playing back-notating, designated chord progressions, and improvisation), musical independence (showing independent and thoughtful practice habits, analyzing unfamiliar music, playing solo/ensemble literature, and playing independent parts in ensemble), musical sensitivity (phrasing, articulation, and proper blend/balance in ensemble performance), musical literacy (printed bowings/fingerings, symbols, terms, and sight-reading), correct habits and attitudes about learning and citizenship (self discipline, group discipline, positive attitude about music playing and performance, awareness of the sacredness of an obligation, positive self-esteem, positive attitude about incentive based competition, a commitment to excellence, awareness of the value of being a supportive person, and ability to cope with stressful performance), ensemble (or chamber music) skills (musical line passing, knowledge of score, and stylistic awareness), musical imagination (combining techniques with imagination to express emotional content of literature), understanding the bowing rules, finger logic, understanding of the shifting rules, orchestral skills (how to communicate in music making, how to maximize the musicianship in an orchestra, and how to function efficiently in a rehearsal), artistic skills (recognizing the mood or major setting of a piece of music, recognizing a mood change in a piece of music, and generating whatever the music demands), and awareness of music history/theory. Students are expected to be able to generalize previously learned concepts and skills and synthesize all these into a musically proficient performance. Participation in all dress rehearsals and concerts is required. Students need to take private lessons and practice their instruments regularly.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Placement based on auditions</p>

Visual and Performing Arts (cont.)

Course title	Credits	Course Description
Concert Band	1.0	<p>Concert Band is an auditioned ensemble that represents the next step for band students moving up from middle school and it serves as a training ensemble for students hoping to one day join the Phoenix Wind Ensemble. Through the study of increasingly advanced repertoire, students will continue to develop as musicians in all aspects. Students are required to provide their own instruments (with the exception of students studying French horn, euphonium and tuba) and must purchase the designated method book for each instrument.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Placement based on auditions</p>
Phoenix Wind Ensemble	1.0	<p>The Wind Ensemble is the elite wind group at KIS. Admission to this ensemble is by audition only. Students will continue their musical studies with development in all aspects of musicianship including technique, tone, sight-reading and artistry. The repertoire studied by this ensemble will be technically advanced and highly challenging. Students are required to provide their own instruments (with the exception of students studying French horn, euphonium and tuba) and they must purchase the designated supplementary study materials for their instrument. Percussion students must provide a fully-stocked stick bag as well as own a student percussion set for at-home practice.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Placement based on auditions</p>
Concert Percussion	1.0	<p>Concert Percussion represents the next step for percussion students moving up from middle school. Concert Percussion is offered to HS students (9-12) with previous experience in the study of percussion instruments. HS percussion will perform with the concert band as well as percussion ensemble performances. Participation in concert performances is required. Students are required to provide their own sticks and mallets.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Previous experience and permission from the percussion class teacher is required for enrollment.</p>

Visual and Performing Arts

Course title	Credits	Course Description
<p>AP Music Theory</p>	<p>1.0</p>	<p>The AP Music Theory course enables highly motivated 11th and 12th grade students to engage in college level work in all areas of music. This will include reading and analyzing notated music and advanced aural (ear) training. Particular emphasis will be placed upon developing listening skills, sight-singing ability, and knowledge of rhythm, melody, harmony, and other compositional devices. The successful student will be endowed with the skills necessary to function intelligently in any musical situation. The work of the course will emphasize preparation for the advanced placement music theory examination. Students wishing to enroll in AP Music Theory must also be enrolled in one of the 7 curricular ensembles offered at KIS (<i>Concert Choir, Concert Band, Concert Percussion, Concert Orchestra, Phoenix Chamber Singers, Phoenix Wind Ensemble or Phoenix Orchestra</i>).</p> <p>Grade(s): 11, 12 Additional Information: Open to students in grade 11-12 with concurrent enrollment in music ensemble (band, chorus, orchestra ensemble)</p>

Design & Innovation

Course Title	Credits	Course Description
Computer Graphics Applications I	.5	<p>This course is an introduction to digital imaging for print and the web. In CGA I students will follow the Design Thinking Process and utilize industry-standard software in order to create original images and designs for print and the web. Students will gain hands-on experience with photo imaging (Photoshop), vector graphics editing (Illustrator), and, time permitting, desktop publishing (InDesign) software applications as they learn the tools and techniques employed by designers to create sophisticated digital imagery. Additionally, students will learn basic design principles of layout and composition, as well as process documentation, content development, and project management skills.</p> <p>Grade(s): 9, 10, 11, 12</p>
Computer Graphic Applications II	.5	<p>This course is an introduction to digital video production and 3D Animation. In CGA II students will follow the Design Thinking Process and utilize industry-standard software in order to create original digital video productions and animated motion graphics. In the first half of the course, students will gain hands-on experience as they are introduced to digital video production software (e.g. Premiere, After Effects). The second half of the course will introduce students to 3D animation concepts and techniques as they explore 3D rendering software (e.g. Autodesk Maya). Process documentation, content development, and project management skills will be emphasized, in addition to the learning of tools and techniques.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Computer Graphic Applications I (or with instructor permission)</p>
Advanced Computer Graphic Applications	.5	<p>Advanced CGA provides an opportunity for students who have completed CGA I and/or II to pursue a personalized course of study in one or more of the applications covered in the introductory courses. Students will work closely with the instructor to develop personalized and authentic projects that require research, collaboration, and independent learning to complete. Additionally, students will implement the Design Thinking Process as they work with clients in the school community to develop and create authentic commissioned work.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Computer Graphic Applications II; <i>or</i> Computer Graphic Applications I with instructor permission</p>

Design & Innovation (cont.)

Course Title	Credits	Course Description
Computer-Aided Design I	.5	<p>In Computer Aided Design I students will learn to implement the Design Thinking Process in order to develop and implement solutions to authentic problems. Along the way, students will be introduced to 2D and 3D computer aided design software (e.g SketchUp, AutoCad) that will allow them to create virtual prototypes and renderings before manufacturing physical products. This course is especially relevant for students interested in the fields of industrial or product design, engineering, or architecture.</p> <p>Grade(s): 9, 10, 11, 12</p>
Computer-Aided Design II	.5	<p>Computer Aided Design II provides an opportunity for students who have completed CADI to pursue a personalized course of study. Students will work closely with the instructor to develop personalized and authentic projects that require research, collaboration, and independent learning to complete. Additionally, students will implement the Design Thinking Process as they work with clients in the school community to develop and create authentic commissioned work.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Computer-Aided Design I</p>
Physical Computing with Robotics I	.5	<p>In this course students will learn how to use electronics platforms/single-board computers along with the Python programming language and a selection of basic electronic components including resistors, capacitors, diodes, transistors, and integrated circuits. Students will apply these skills and implement the Design Thinking Process as they create robots and other exciting electronics based projects.</p> <p>Grade(s): 9, 10, 11, 12</p>
Physical Computing with Robotics II	.5	<p>This course provides an opportunity for students who have completed the introductory course to continue their exploration in the field. Students will further develop their understanding of electronics-based technologies and hone their programming and electronics skills as they utilize the design thinking process to solve real-world problems.</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Physical Computing with Robotics I</p>

Design & Innovation

Course Title	Credits	Course Description
Programming I	.5	<p>Programming I offers students the chance to build fun apps, games, and graphic art as they learn basic programming concepts. Students will begin with a block-based language (e.g. Stencyl), before progressing to a high-level textual language (e.g. Python). Topics for this course include abstraction, algorithms, data structures, recursion, iteration, debugging, and GUI programming. Students will apply these skills and implement the Design Thinking Process as they create games and apps from scratch.</p> <p>Grade(s): 9, 10, 11, 12</p>
Programming II	.5	<p>Programming II offers students the opportunity to make apps and games for computers, phones and tablet devices using a high-level textual language (e.g. Python), and a variety of modules such as Kivy and PyGame. It will begin with a quick overview of basic programming constructs in the new language and data types, as well as data structures such as arrays and strings. Next, students will explore advanced topics including classes, inheritance, encapsulation, and polymorphism. Students will apply these skills and implement the Design Thinking Process to create exciting computer applications and tools using a single board computer (e.g. Raspberry Pi).</p> <p>Grade(s): 9, 10, 11, 12 Prerequisite: Programming I <i>or</i> with instructor permission</p>
AP Computer Science Principles	1.0	<p>AP Computer Science emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development. It also includes the study of data structures and abstraction, as well as understanding and using standard Java library classes from the AP Java subset. Students will use and understand a variety of large programs consisting of several classes and interacting objects, as well as be able to create projects based on this learning.</p> <p>Grade(s): [10], 11, 12 Texts: <i>Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion</i> by Hal Abelson and Harry Lewis Additional Information: This course is also open to sophomores who have earned at least 93% in Programming II</p>

Design & Innovation

Course Title	Credits	Course Description
Engineering Design and Fabrication	.5	<p>Engineering Design and Fabrication (EDF) is for students who are interested in design, engineering, computer science or other technical fields. The major focus of the EDF course is to create solutions to real world problems, by brainstorming, designing, creating and testing prototypes. EDF aims to expose and build student's knowledge and ability to use the design thinking method to solve problems. The course also develops technical skills such as tool usage, safety, technical documentation, and using advanced fabrication technology such as 3D printers, microcomputers, and laser cutters.</p> <p>Grade(s): 9, 10, 11, 12</p>

Physical Education

Course Title	Credits	Course Description
Essentials of Physical Education	1.0	<p>Essentials of Physical Education is the entry level High School PE course which is a yearlong mandatory course for all students. Students learn about muscular and skeletal body systems and specific fitness principles. Students will participate in a range of team and individual sports as well as personal fitness and work towards goal setting and self improvement. Students will participate in various sports from the main categories of territory/invasion and net/wall games. They will develop and expand on successful strategies that work across all sports within each category. During health, students will understand responsible decision making, the effects of peer pressure and what it means to have a balanced life. Additionally, students will evaluate and record their fitness scores as part of the KIS Fitness Program.</p> <p>Grade(s): 9, 10, 11</p>
Advanced PE I (Semester 1)	.5	<p>Advanced PE I will serve as the first semester prerequisite for the second year of physical education to meet graduation requirements. Instruction is directed toward refinement of skills and techniques previously learned in Essentials of PE coupled with an introduction of advanced skills and techniques, concepts and strategies. These sports/activities have been chosen to encourage students to participate in physical activity for life and to promote good health and wellness. The students will also learn basic CPR/AED and First Aid training. Additionally, students will evaluate and record their fitness scores as part of the KIS Fitness Program.</p> <p>Grade(s): 10, 11, 12 Prerequisite: Essentials of Physical Education</p>
Advanced PE II (Semester 2) Recreational Sports	.5	<p>Recreational Sports is a semester-long in second semester only offered to students as part 2 of Advanced PE I. This course will give students the chance to explore a variety of new sports on a recreational basis. Students will take on leadership roles to develop games or events which promote active living in their community. The contents of this course will focus on the development of transferable skills for success in a wider variety of sporting activities. Additionally, students will pursue a wide range of individual and group fitness options to gain a grasp on the variety of possibilities that will allow them to stay healthy and active after graduation. Students will also explore ways to prevent and treat injuries that may occur while participating in outdoor activities through a Wilderness First Aid unit. This course is mainly for students who are interested in developing healthy active lifestyles. Additionally, students will evaluate and record their fitness scores as part of the KIS Fitness Program.</p> <p>Grade(s): 10, 11, 12 Prerequisite: Essentials of Physical Education and Advanced PE I</p>

Physical Education

Course Title	Credits	Course Description
<p>Advanced PE II (Semester 2) Competitive Team Sports</p>	<p>.5</p>	<p>Competitive team sports is a semester-long course in second semester designed for students who enjoy high energy activities and exercise while working with others in a team setting. This class will place an emphasis on several different team sports which may include, but not limited to basketball, volleyball, soccer, ultimate Frisbee, softball, flag football, and team handball. Students will be presented with skills and training methods for self improvement while also practicing strategies for successful team play. Students will investigate the topic of psychology in sports and learn how to treat some basic sports related injuries. Additionally, students will evaluate and record their fitness scores as part of the KIS Fitness Program.</p> <p>Grade(s): 10, 11, 12 Prerequisite: Essentials of Physical Education and Advanced PE I</p>

AP Capstone

Course Title	Credits	Course Description
AP Capstone Seminar	1.0	<p>AP Seminar is a foundational course for all other AP courses that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances.</p> <p>Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Student choice and student autonomy are essential to the course.</p> <p>Grade(s): 10, 11 Prerequisite: Interview with instructor in January/February and teacher recommendations from multiple disciplines are required Additional Information: The student must have strong collaborative skills, developed analytical skills, and an awareness of current events and global issues. The student also needs to have the ability to self-direct and work autonomously.</p>
AP Capstone Research	1.0	<p>AP Research, the second course in the AP Capstone experience, allows student to deeply explore an academic topic, problem, issue or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of approximately 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.</p> <p>Grade(s): 11, 12 Prerequisite: AP Capstone Seminar</p>

KIS Study

Course Title	Credits	Course Description
KIS Study A (semester 1) and/or B (semester 2)	0	<p>KIS Study is a semester-long class that may be taken one or both semester. The course is open only to 12th grade students and to support academic programming for underclassmen. It is a chance for students to complete schoolwork, Schoolwork includes but is not limited to working on any assignment for KIS courses and clubs as well as anything relating to the college application process. Also, students may use this period as a ‘contact time’ with counselors or with teachers who have a planning period concurrent with the student’s AP Study block. <u>KIS Study is not free time</u>; students must use their time for educational purposes only. KIS Study will not be factored into a student’s GPA nor will it appear on their transcripts. Students may be enrolled in no more than one KIS Study class each semester.</p> <p>Grade(s): 12 or by counselor recommendation for underclassmen</p>

Leadership

Course Title	Credits	Course Description
Leadership	1.0	<p>This elective credit course is designed to equip or enhance students with personal and group leadership skills. Course content and areas of focus include principles and foundations of leadership, speaking in public, developing effective communication and human relations skills, and developing positive public relations. School and community leadership opportunities are used to provide practical application of the course content.</p> <p>Grade(s): 9, 10, 11, 12</p>