



STAR ACADEMY BOSTON

Upper School

Course Selection Guide

2026-2027

Together. Learn. Lead.

10 Atwood Street, Wellesley, MA 02482 | 780 Mount Auburn Street, Watertown, MA 02472
617-744-9807 | 781-235-8000 | admissions@staracademyboston.com

CEEB/ACT Code 223126 | NCAA High School Code 855085

Accredited by the New England Association of Schools and Colleges (NEASC)

Contents

How to Use This Guide	3
Graduation Requirements	3
Course Levels	5
Grading and Weighting	5
The English Program	6
The Mathematics Program	9
The Science Program	13
The Social Studies Program	17
The World Languages Program	21
The Computer Science Program	27
The AP Capstone Diploma Program	29
The Fine and Performing Arts Program	30
Wellness, Physical Education and Driver Safety	33
Elective Courses	34

How to Use This Guide

This guide lists every course offered by the Star Academy Upper School, together with its course code, level, credit value, placement and a description of its content. Each level of each course is listed as a separate entry with its own description, and each year of each world language sequence is listed separately. Course titles in this guide are identical to the titles printed on official Star Academy transcripts.

Where a course has been offered under a different title in earlier years, the former title is recorded in a Previous Course Titles table within that department's section, so that a transcript issued under the former title can be read against this guide.

A student may, with the permission of the department, take more than one course from the same core academic area in a year, and designates at registration whether the additional course counts toward that subject's requirement or toward the elective requirement. The conditions are set out under Graduation Requirements.

The introduction to each department states which graduation requirement its courses satisfy. Where a particular course departs from that rule, or where an elective belongs to a department, a short line closes the course entry and says so. US History, at every level, counts only toward the US History requirement and cannot be designated as an elective.

The credits shown under Graduation Requirements are minimums. Students are encouraged to undertake coursework beyond the stated requirements in any subject area, and many students graduate having earned credits substantially in excess of the minimum.

Star Academy does not assign courses to fixed grade levels. Placement in every course is determined by the department on the basis of the student's prior achievement, readiness and academic goals, and a student may therefore take a given course in any year of the Upper School. No course in this guide carries a fixed course-to-course prerequisite: admission to every course is by the recommendation of the department, which considers the student's prior coursework, demonstrated preparation and academic goals. Students should discuss their intended selections with their counselor and the relevant department chair before registering. All courses are offered subject to enrollment and staffing availability.

Graduation Requirements

Star Academy Upper School follows the model set forth by the Massachusetts Curriculum Frameworks. Most required courses run two terms and are equivalent to a full year of work. A full-year course in a core academic subject carries 6.00 credits in most cases; a few courses carry fewer, according to the hours of instruction each week, and the credit value of every course is stated in its entry. One-semester elective courses carry 2.00 credits each, and one-semester Advanced Placement elective courses carry 3.00 credits each. The credits below are those of the High School Diploma for the Class of 2027.

Subject Area	Duration	Credits Required
English	4 years	24.00
Mathematics	4 years	24.00
Science	4 years	24.00
Laboratory Science	—	0.50
Social Studies	3 years	18.00
US History	1 year	6.00
World Languages	3 years	18.00
Arts	1 year	6.00

Subject Area	Duration	Credits Required
PE / Health	—	3.00
Electives	4 years	24.00
TOTAL CREDITS REQUIRED		147.50

Each subject requirement is expressed in credits. The duration shown is the typical course of study; a student who earns the required credits in fewer years has satisfied the requirement in that subject.

With the permission of the department, a student may enrol in more than one course from the same core academic area in a single academic year. At registration the student designates whether the additional course is to count toward that subject's graduation requirement or toward the elective requirement. A course designated toward the subject requirement advances the student's progress in that area and may allow the requirement to be completed before the final year; a course designated as an elective counts toward the credits required in Electives. Each course counts once, toward one requirement only.

Students are advised that selective colleges expect continued coursework in the core academic areas through the final year of study, whether or not the graduation requirement has already been met. Completing a requirement early is not in itself a reason to discontinue study in that subject.

A course taken in this way is recorded on the transcript, and included in the grade point average, in the same manner as any other course.

Community Service

In addition to course credits, each Upper School student must complete at least forty hours of community service before graduation. Hours may be earned at any point in a student's Star Academy career, beginning with the summer before entry, and may be completed after school, in the evenings, at weekends or during vacations.

Community service means work that benefits at least one unrelated person, performed under the auspices of an organization, without compensation or academic credit. Work for friends and neighbours, service at for-profit businesses other than hospitals, nursing homes and newspapers, participation in religious rites or services, proselytizing, fundraising for religious institutions, and ordinary participation in school clubs or teams do not count toward the requirement.

Students document hours on the Community Service Verification Form within two months of completing the activity. Community service hours are recorded by the school separately from coursework. They carry no letter grade and no academic credit, and they do not appear on the transcript. The full guidelines are published separately, and questions should be directed to the Head of Academic Affairs.

Students must also demonstrate the school's stated competencies in self-assessment and goal setting.

Course Levels

College Preparatory

College Preparatory is the base level of instruction for most Star Academy programs. Students are expected to do creative and independent work, complete daily and long-range assignments, and conduct research using varied resources.

Honors

Honors courses provide intensive instruction to students who have demonstrated strong achievement and interest in studying a subject in depth. Placement is by departmental recommendation. The department weighs the student's prior work in the subject, demonstrated preparation, motivation and academic goals; no fixed grade threshold governs entry to an honors course or continuation in honors work.

Advanced Placement

Advanced Placement courses are significantly more demanding than Honors classes and should be considered college courses in volume of work, depth of ideas and pace. Students who take Advanced Placement courses are expected to sit the corresponding examination in May. Because of the workload, students are strongly encouraged to take no more than three Advanced Placement courses in a single academic year. Placement is by departmental recommendation.

Grading and Weighting

Star Academy calculates both weighted and unweighted grade point averages. The table below gives the grade point value of each letter grade at each course level: Advanced Placement courses carry an additional 1.00 grade point and Honors courses an additional 0.50 grade point over the College Preparatory value. Pass/Fail courses, summer school courses and courses taken at institutions other than Star Academy are not included in the grade point average. Students receive a report card twice each year. Star Academy does not calculate or report class rank.

Letter Grade	Percent	College Preparatory	Honors	Advanced Placement
A+	97-100	4.0	4.5	5.0
A	94-96	4.0	4.5	5.0
A-	90-93	3.7	4.2	4.7
B+	87-89	3.3	3.8	4.3
B	84-86	3.0	3.5	4.0
B-	80-83	2.7	3.2	3.7
C+	77-79	2.3	2.8	3.3
C	74-76	2.0	2.5	3.0
C-	70-73	1.7	2.2	2.7
D+	67-69	1.3	1.8	2.3
D	64-66	1.0	1.5	2.0
D-	60-63	0.7	1.2	1.7
F	0-59	0.0	0.0	0.0

The English Program

All students take four years of English. Each level is a distinct course with its own curriculum and its own description. Elective courses in theatre and journalism are offered separately and are listed under Elective Courses. Every course in this department counts toward the English graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Course Descriptions

English 9

Course code: 1.CP.1 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

English 9 builds on and expands the language arts skills developed in preceding grades. Students read classic and contemporary novels, short stories, nonfiction, drama and poetry, and are introduced to Shakespeare. Through extensive practice, students use the writing process to create sustained pieces of narrative, informative and argumentative writing. Instruction in grammar, mechanics, usage and style is integrated into the study of writing, and vocabulary is studied in the context of literature. Evaluation is based on tests and quizzes, projects, presentations and participation in class activities.

Advanced or Honors English 9

Course code: 1.ADV.1 / 1.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Advanced English 9, carried on some transcripts as Honors English 9, prepares students for the rigorous demands of the Honors and Advanced Placement programs in grades 10-12. Compared with English 9, the reading list is longer and more demanding, the pace is faster, and students are expected to work independently on extended assignments. Students develop critical thinking through analysis and interpretation of literary genres from a variety of historical periods, focusing on technical and aesthetic qualities as well as intellectual merit. Written work emphasizes analytical argument, control of evidence and refinement of personal style.

CP English 10

Course code: 1.CP.2 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP English 10 continues to develop students' language arts skills. Critical analysis of literature improves reading comprehension and appreciation of both classic and contemporary works. The writing component provides varied composition experiences as students produce narrative, expository and argumentative texts. Practice in grammar, usage and vocabulary is integrated into the study of literature and writing. Achievement is assessed through tests, quizzes, written work, projects and presentations.

Advanced/Honors English 10

Course code: 1.ADV.2 / 1.H.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Advanced English 10, carried on some transcripts as Honors English 10, explores content in greater depth and at a faster pace than English 10, with longer-term assignments and more challenging performance standards. Students refine the organization of argument using the Toulmin model of argumentation. Literature studied includes both classic and contemporary texts, and students practice the writing process through varied writing experiences designed to develop individual style. Expectations include above-average reading and writing ability, strong time management, independent thinking and willingness to take intellectual risks.

CP English 11

Course code: 1.CP.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Designed for juniors preparing for college, CP English 11 has students read, analyze and interpret classic and contemporary works including novels, short stories, drama, poetry, nonfiction and media. Through close reading, students develop a sense of authorial intent and purpose. Critical thinking is nurtured through inference and the use of textual evidence to support reader response. Writing instruction focuses on refining focus, content and organization while improving style, grounded in the Toulmin Method of Argumentation. Units center on rhetoric, social commentary, the American Dream, and storytelling and truth.

Honors English 11

Course code: 1.H.3 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors English 11 is the eleventh-grade honors course in the English sequence. Students read challenging classical and contemporary texts across genres, moving beyond comprehension to critical analysis and evaluation through literary analysis essays, rhetorical analysis, argumentative writing and student-led discussion. Using electronic and printed sources, students gather, organize and incorporate primary and secondary material, documenting sources in MLA format.

Honors English Literature

Course code: 1.H.5 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors English Literature is the eleventh-grade honors course. It develops critical thinking and superior communicative ability through close reading of challenging classical and contemporary American texts, including novels, short stories, poetry, drama, nonfiction, media and important speeches and documents. Students move beyond comprehension to critical analysis and evaluation through literary analysis essays, rhetorical analysis, argumentative writing and student-led discussion. Using electronic and printed sources, students gather, organize and incorporate primary and secondary material, documenting sources in MLA format.

Honors English Literature American

Course code: 1.H.6 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors English Literature American is the honors survey of American literature. Students read novels, short stories, poetry, drama, nonfiction and important speeches and documents from the colonial period to the present, examining how American writers have defined and contested national identity. Written work consists of literary analysis, rhetorical analysis and argumentative essays supported by textual evidence and documented in MLA format.

Honors English Literature British

Course code: 1.H.4 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors English Literature British is the honors survey of British literature. Students read from the Anglo-Saxon period through the twentieth century, including poetry, drama, the novel and essays, and study the literary movements and historical conditions that shaped them. Written work consists of sustained analytical essays and an extended independent research paper; students also lead seminar discussion.

CP English 12

Course code: 1.CP.4 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP English 12 provides a strong language arts background for students who plan further academic study at a two- or four-year college. Students practice advanced writing techniques and critical thinking through assignments of varying length and type. Literary selections include fiction, nonfiction, poetry and drama. Core units include persuasive research writing, social commentary, making pivotal choices, understanding worldly advice and creating a legacy. Students continue to develop research skills, literary analysis and persuasive writing.

Honors English 12

Course code: 1.H.7 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors English 12 is the senior honors course for students who are not enrolled in Advanced Placement English. It carries a heavier reading load and a more demanding writing sequence than CP English 12, culminating in an extended independent research essay. Students study major works across genres and periods, analyze critical scholarship alongside primary texts, and lead seminar discussion. Assessment emphasizes sustained analytical writing, the quality of research and the student's ability to defend an interpretation in discussion.

AP English Language and Composition

Course code: 1.AP.5 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP English Language and Composition is a college-level course in rhetoric and argument. Students read and analyze primarily nonfiction texts, including essays, speeches, journalism, criticism and visual media, examining how writers make and support claims for particular audiences and purposes. Students compose in several modes, with emphasis on synthesis of sources, rhetorical analysis and evidence-based argument, and revise their work through drafting and conference. Students are expected to sit the Advanced Placement English Language and Composition examination in May.

AP English Literature and Composition

Course code: 1.AP.4 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

As the culminating course in the advanced English program, AP English Literature and Composition offers highly motivated students a college-level course in the classics. Students analyze poetry, plays, essays and novels through class discussion of structure, characterization, theme and style. Students are expected to demonstrate a high level of skill in critical thinking, discussion, and expository and analytical writing, as well as in class projects and oral presentations. Students are expected to sit the Advanced Placement English Literature and Composition examination in May.

The Mathematics Program

All students take four years of mathematics. Each course sequence includes work with the Common Core strands of Number and Quantity, Algebra, Functions, Modeling, Geometry, Statistics and Probability. Placement is determined by prior achievement and departmental recommendation. Every course in this department counts toward the Mathematics graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Previous Course Titles

The courses below were offered under a different title in earlier years. A transcript issued before the effective year shows the former title; the course is the same course. Transcripts are not reissued when a title changes.

Former Title	Current Title	Effective
Algebra 2, Geometry and Statistics	Advanced Algebra or Honors Algebra II/Geometry	2026-2027

Course Descriptions

Introduction to High School Math

Course code: 2.CP.18 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Introduction to High School Math prepares students for the Upper School mathematics sequence. The course consolidates arithmetic fluency, proportional reasoning, the language of algebra, linear relationships and introductory geometry, and develops the problem-solving habits and notation expected in later courses. Assessment is through problem sets, quizzes and cumulative examinations.

Integrated Math I

Course code: 2.CP.8 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Integrated Math I is the first course of an integrated sequence combining algebra, geometry and statistics in a single year rather than treating them as separate subjects. Students study linear and exponential relationships, systems of equations, descriptive statistics and bivariate data, congruence and geometric construction, and coordinate geometry. Emphasis falls on modelling and on connecting algebraic and geometric representations.

Integrated Math II

Course code: 2.CP.1 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Integrated Math II continues the integrated sequence. Students extend the number system to include complex numbers, study quadratic functions and equations, similarity, right-triangle trigonometry, circles and their properties, probability, and the geometry of solids. Algebraic and geometric reasoning are developed together, and students justify results through formal proof as well as computation.

Algebra I

Course code: 2.CP.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Algebra I develops the foundational language of algebra. Topics include variables and expressions, linear equations and inequalities, systems of equations, exponents and polynomials, factoring, rational expressions, radicals, and an introduction to quadratic functions. Students model real situations symbolically, graphically and numerically, and are assessed on tests, quizzes, problem sets and cumulative examinations. Successful completion prepares students for all subsequent mathematics courses.

Algebra 2 HS

Course code: 2.CP.16 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Algebra 2 HS is the second-year algebra course. Students work with functions and their graphs, composition and inverses; quadratic functions and the quadratic formula; factoring methods; polynomial, exponential, logarithmic, rational and irrational functions; sequences and series; and an introduction to probability and data analysis. Students fit functions to data and interpret results in context.

Advanced Algebra or Honors Algebra II/Geometry

Course code: 2.ADV.10 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

This honors course, carried on transcripts as Advanced Algebra or as Honors Algebra II/Geometry, integrates second-year algebra with Euclidean geometry across a single academic year. The first half addresses functions and their graphs, composition and inverses; quadratic functions and the quadratic formula; factoring methods; fitting functions to data; polynomial, exponential, logarithmic, rational and irrational functions. The second half addresses quadratic relations and systems, higher-degree functions and complex numbers, sequences and series, probability and data analysis, right-triangle trigonometry, similarity and formal proof, circles, and coordinate geometry. The pace and level of abstraction exceed the standard sequence.

Geometry HS

Course code: 2.CP.9 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Geometry HS is the Upper School course in Euclidean geometry. Students study congruence and similarity, formal proof, parallel and perpendicular lines, triangles and quadrilaterals, circles, right-triangle trigonometry, coordinate geometry, and area and volume. Emphasis falls on constructing valid arguments, writing proofs in several formats, and applying geometric reasoning to modelling problems.

Honors Trigonometry

Course code: 2.H.11 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Trigonometry treats the trigonometric functions in depth. Students study angle measure and the unit circle, graphs and transformations of the trigonometric functions, identities and equations, inverse trigonometric functions, the laws of sines and cosines, vectors, and polar and parametric representations. The pace and level of abstraction prepare students for precalculus and calculus.

CP Precalculus

Course code: 2.CP.2 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP Precalculus prepares students for the study of calculus. Students work with exponential and logarithmic functions; trigonometric functions and analytic trigonometry; systems of equations and inequalities; matrices and determinants; conic sections and analytic geometry; and sequences and series. Emphasis is placed on procedural fluency and on interpreting functions graphically, numerically and symbolically. Assessment is through problem sets, quizzes, tests and a cumulative final examination.

Honors Precalculus

Course code: 2.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Precalculus covers the same conceptual themes as CP Precalculus at greater depth and pace, with additional treatment of vectors, parametric and polar representations, limits, and an introduction to the derivative. Problems are less procedural and more open-ended, requiring students to select methods rather than apply a prescribed one. The course is designed to prepare students to enter AP Calculus AB or BC the following year.

AP Precalculus

Course code: 2.AP.14 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Precalculus follows the College Board framework, organized around polynomial and rational functions; exponential and logarithmic functions; trigonometric and polar functions; and functions involving parameters, vectors and matrices. Students study function behavior through modeling, describing how quantities change in relation to one another and justifying conclusions with mathematical reasoning. Students are expected to sit the Advanced Placement Precalculus examination in May.

Honors Calculus

Course code: 2.H.3 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Calculus is a first course in single-variable differential and integral calculus for students who intend a rigorous treatment without the external examination requirement. Topics include limits and continuity, the definition and computation of the derivative, applications of differentiation including related rates and optimization, the definite integral and the Fundamental Theorem of Calculus, and applications of integration to area and volume. Emphasis falls on conceptual understanding and on justifying results, not solely on computation.

Honors Calculus BC

Course code: 2.H.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Calculus BC extends the first-year calculus sequence. Beyond the content of Honors Calculus, students study techniques of integration including integration by parts and partial fractions, improper integrals, differential equations and slope fields, parametric, polar and vector-valued functions, and infinite sequences and series including Taylor and Maclaurin series with error analysis. The course is intended for students continuing to university-level mathematics, engineering or the physical sciences.

AP Calculus AB

Course code: 2.AP.3 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Calculus AB is a college-level course in single-variable calculus following the College Board framework. Students study limits and continuity; differentiation including definitions, rules and analytical applications; contextual applications of differentiation; integration and accumulation of change; and differential equations. Students are expected to justify reasoning, connect graphical, numerical, analytical and verbal representations, and communicate solutions in writing. Students are expected to sit the Advanced Placement Calculus AB examination in May.

AP Calculus BC

Course code: 2.AP.4 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Calculus BC includes the full content of AP Calculus AB together with parametric, polar and vector-valued functions, additional techniques and applications of integration, logistic differential equations, and infinite sequences and series including convergence tests and Taylor polynomials with error bounds. The pace is substantially faster than AP Calculus AB. Students are expected to sit the Advanced Placement Calculus BC examination in May.

Multivariable Calculus

Course code: 2.H.5 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Multivariable Calculus extends the calculus of one variable to functions of several variables. Students study vectors and the geometry of space, curves and surfaces, partial derivatives, the gradient and directional derivatives, optimization with and without constraints including Lagrange multipliers, multiple integrals in rectangular, polar, cylindrical and spherical coordinates, and vector fields with line and surface integrals culminating in the theorems of Green, Stokes and Gauss. The course is intended for students prepared at the BC level of the single-variable calculus sequence, including infinite series, and who intend to continue in mathematics, engineering, physics or economics at

university. Assessment is based on problem sets, examinations and an independent application project.

Linear Algebra

Course code: 2.H.15 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Linear Algebra introduces the theory of vector spaces and linear transformations. Students study systems of linear equations and Gaussian elimination, matrix algebra and inverses, determinants, vector spaces and subspaces, linear independence, basis and dimension, linear transformations, eigenvalues and eigenvectors, and orthogonality. Applications are drawn from geometry, data analysis, computer graphics and the physical sciences.

Honors Statistics

Course code: 2.H.4 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Statistics introduces the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students explore one- and two-variable data, design observational studies and experiments, study probability and random variables, and carry out inference including confidence intervals and significance tests. Students complete an independent data-collection project and defend their conclusions. The course is rigorous but does not require the Advanced Placement examination.

AP Statistics

Course code: 2.AP.6 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Statistics follows the College Board framework across six conceptual themes: exploring one- and two-variable data; collecting data through sampling and experimental design; probability, random variables and probability distributions; sampling distributions; inference for categorical data including chi-square procedures; and inference for quantitative data including regression slopes, confidence intervals and significance tests. Students are expected to sit the Advanced Placement Statistics examination in May.

Math Project Based Learning

Course code: 2.CP.7 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Math Project Based Learning develops mathematical understanding through extended investigation rather than through a fixed sequence of topics. Students work individually and in teams on open-ended problems drawn from modelling, data analysis, optimization and discrete mathematics, select appropriate mathematical tools, and present and defend their findings. Assessment is based on the quality of the mathematical reasoning, the written report and the presentation.

The Science Program

All students take four years of science. Every science course listed below is a laboratory course; upon successful completion students earn credit in a laboratory science that meets college entrance requirements. Placement in each course is made by the department. Every course in this department counts toward the Science graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Previous Course Titles

The courses below were offered under a different title in earlier years. A transcript issued before the effective year shows the former title; the course is the same course. Transcripts are not reissued when a title changes.

Former Title	Current Title	Effective
Honors Physics 9	Honors Physics	2026-2027
CP Chemistry 1 / CP Chemistry 2	CP Chemistry	2026-2027
Advanced Chemistry 1 / Advanced Chemistry 2	Honors Chemistry	2026-2027

Course Descriptions

CP Biology

Course code: 3.CP.1 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP Biology is a survey of modern biology that emphasizes the connections between cellular, organismal, and ecological processes. Units of study include principles of biology, the chemical basis of life, cellular function, homeostasis, cell growth and reproduction, genetics, evolution and ecology. Laboratory activities are emphasized, including microscopy, enzyme kinetics, genetics simulation and ecological field work. Evaluation is based on tests, quizzes, homework, laboratory performance and projects.

Honors Biology

Course code: 3.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Biology is an in-depth, fast-paced study of fundamental topics in biology with emphasis on cellular, molecular and environmental concepts. Units of study include principles of biology, the chemical basis of life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution and ecology. Laboratory activities are emphasized, including microscopy, enzyme kinetics, genetics simulation and ecological field work. Evaluation is based on tests, quizzes, homework, laboratory performance and projects.

Pre-AP Biology

Course code: 3.PAP.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Pre-AP Biology is the honors-level biology course taken by students preparing for Advanced Placement work in the sciences. It covers the same body of content as Honors Biology, with additional depth in bioenergetics, molecular genetics and the quantitative analysis of experimental data. Laboratory work is extensive and students are expected to design procedures, evaluate experimental error and present results in formal report format. Evaluation is based on tests, quizzes, homework, laboratory performance and projects.

AP Biology

Course code: 3.AP.1 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Biology is a college-level course organized around four big ideas: evolution; energetics; information storage and transmission; and systems interactions. Students carry out inquiry-based investigations drawn from the College Board laboratory program, covering at minimum enzyme activity, photosynthesis, cellular respiration, genetics, molecular biology and ecology. Students analyze quantitative data, apply statistical reasoning and construct evidence-based arguments. Students are expected to sit the Advanced Placement Biology examination in May.

CP Chemistry

Course code: 3.CP.2 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP Chemistry explores the experimental and theoretical aspects of chemistry. Topics include measurement, matter, atomic theory, nuclear chemistry, bonding, nomenclature, the mole, chemical reactions, stoichiometry, solutions, gas laws, rates and equilibria, and acids and bases. Laboratory work supports each unit and students present results in standard laboratory report format. Evaluation is based on tests, quizzes and laboratory reports.

Honors Chemistry

Course code: 3.H.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Chemistry treats the same core topics as CP Chemistry with greater mathematical demand and a heavier laboratory load, and is designed for students with a strong aptitude for mathematics who intend to pursue mathematics, engineering or the sciences. Additional emphasis falls on quantitative stoichiometry, thermochemistry, equilibrium calculations and acid-base titration analysis. Students develop independent investigative skills, including the design of procedures and the presentation of experimental results in standard laboratory report format.

Chemistry - Early College Level

Course code: 3.ECL.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Chemistry - Early College Level is a second-year chemistry course taught at introductory college level. Students investigate connections among chemistry topics and apply chemical theory to problem solving and laboratory experimentation, working with thermodynamics, kinetics, equilibrium systems, electrochemistry and instrumental analysis. The laboratory component is intensive and students maintain a formal laboratory notebook. Evaluation is based on tests, laboratory reports and homework. Instruction is delivered by Star Academy faculty on the Star Academy campus.

AP Chemistry

Course code: 3.AP.2 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Chemistry is a college-level laboratory course covering atomic structure and periodicity, molecular and ionic compound structure and properties, intermolecular forces, chemical reactions, kinetics, thermodynamics, equilibrium including acid-base and solubility systems, and electrochemistry. Students carry out inquiry-based investigations drawn from the College Board laboratory program, devoting a substantial portion of instructional time to hands-on laboratory work, and maintain a formal laboratory notebook. Students are expected to sit the Advanced Placement Chemistry examination in May.

CP Physics

Course code: 3.CP.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP Physics is an introductory, laboratory-based physics course. The course focuses on laboratory work, experimental design, data collection and analysis, critical reasoning, and algebra-based problem-solving. Topics covered include forces, motion, momentum, energy, optics, waves, electricity and magnetism. Evaluation is based on tests, quizzes, laboratory reports and problem sets.

Honors Physics

Course code: 3.H.3 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Physics is the honors-level laboratory physics course. Students study linear and projectile kinematics, Newtonian dynamics, momentum and energy, and wave theory, using algebra and right-triangle trigonometry throughout, at a faster pace and with greater mathematical demand than CP Physics. Laboratory work is a required component: students design procedures, collect and analyze data, evaluate error, and present findings in formal laboratory reports. Evaluation is based on tests, quizzes, laboratory reports and problem sets.

AP Physics 1: Algebra-Based

Course code: 3.AP.3 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Physics 1: Algebra-Based provides a systematic algebra-based introduction to foundational physics, including translational and rotational mechanics, electrostatics and elementary circuitry, with further topics as time allows in fluids, thermodynamics, waves and optics. Emphasis is on conceptual understanding and problem-solving ability using algebra and trigonometry. Frequent laboratory experiences are coordinated with classroom work and students complete a formal laboratory portfolio. Students are expected to sit the Advanced Placement Physics 1 examination in May.

AP Physics 2: Algebra-Based

Course code: 3.AP.4 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Physics 2 is the second year of the algebra-based physics sequence. Students study thermodynamics and kinetic theory, fluid statics and dynamics, electrostatics, electric circuits including capacitors, magnetism and electromagnetic induction, geometric and physical optics, and quantum, atomic and nuclear physics. Laboratory investigation is inquiry-based, with students designing procedures and analyzing experimental uncertainty. Students are expected to sit the Advanced Placement Physics 2 examination in May.

AP Physics C: Mechanics

Course code: 3.AP.6 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Physics C: Mechanics is a calculus-based college-level course intended for students planning to major in engineering, medicine or the physical sciences. Topics include kinematics, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, rotational kinematics and dynamics, oscillations and gravitation. Differential and integral calculus is applied throughout to the solution of rigorous problems. The hands-on laboratory component is comparable to an introductory college physics laboratory. Students are expected to sit the Advanced Placement Physics C: Mechanics examination in May.

AP Physics C: Electricity and Magnetism

Course code: 3.AP.7 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Physics C: Electricity and Magnetism is a calculus-based college-level course covering electrostatics, conductors, capacitors and dielectrics, electric circuits, magnetic fields, and electromagnetism including Faraday's law and Maxwell's equations. Students apply differential and integral calculus, including line and surface integrals, to field problems. The course includes a hands-on laboratory component comparable to an introductory college physics laboratory. Students are expected to sit the Advanced Placement Physics C: Electricity and Magnetism examination in May.

AP Environmental Science

Course code: 3.AP.8 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Environmental Science is an interdisciplinary college-level laboratory course examining the scientific principles and analyses required to understand the natural world. Units address the living world and biodiversity, populations, earth systems and resources, land and water use, energy resources and consumption, pollution, and global change. Students conduct field and laboratory

investigations, including water quality analysis, soil and species sampling and energy audits, and interpret quantitative environmental data. Students are expected to sit the Advanced Placement Environmental Science examination in May.

Medical Science

Course code: 3.CP.11 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Medical Science introduces the scientific foundations of medicine and the health professions. Students study the organization of the human body, the major organ systems in health and disease, pathogens and immunity, diagnostic reasoning, and the principles of pharmacology and treatment. Laboratory and case-study work develops observation, measurement and clinical reasoning. The course also addresses medical ethics and the structure of the health care system.

Language of Medicine

Course code: 3.CP.5 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Language of Medicine is a one-semester elective in medical terminology. Students learn to analyze medical terms by their Greek and Latin roots, prefixes and suffixes, and build vocabulary system by system across anatomy, physiology, pathology, diagnostic procedures and pharmacology. The course prepares students to read clinical and scientific material with confidence and supports further study in the health professions.

Science Lab

Course code: 3.CP.10 | Level: College Preparatory | Credits: 0.50 | Placement and prerequisite: By departmental recommendation

Science Lab is a supplementary laboratory session attached to a science course. Students carry out extended investigations that do not fit within the regular class period, maintain a laboratory notebook and present findings in formal report format. The course carries 0.50 credits and does not stand alone.

Counts toward the Laboratory Science requirement, not toward the four-year science requirement.

The Social Studies Program

All students earn four social studies units by the end of their senior year. The courses offered in grades nine through twelve meet state requirements for graduation, and the twelfth-grade offerings serve as the capstone of the program. Every course in this department counts toward the Social Studies graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Previous Course Titles

The courses below were offered under a different title in earlier years. A transcript issued before the effective year shows the former title; the course is the same course. Transcripts are not reissued when a title changes.

Former Title	Current Title	Effective
World History I	Honors World History	2026-2027
CP/Honors U.S. History	CP U.S. History / Honors U.S. History	2026-2027
CP/Honors European History	CP European History / Honors European History	2026-2027
CP/Honors Global Studies	CP Global Studies / Honors Global Studies	2026-2027

Course Descriptions

Honors World History

Course code: 4.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors World History is the ninth-grade survey of world history from the earliest civilizations through the early modern period. Students examine the development and interaction of cultures across Africa, the Americas, Asia and Europe; state building, expansion and conflict; the creation and interaction of economic systems; and the transformation of social structures. Students work with primary and secondary sources, practice chronological reasoning and historical comparison, and complete research and writing assignments. Evaluation is based on tests, document-based questions, research projects and class discussion.

AP World History

Course code: 4.AP.1 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP World History develops students' understanding of world history from approximately 1200 C.E. to the present. Students investigate significant events, individuals, developments and processes across six historical periods, using the thinking skills and methods employed by historians. The course focuses on Africa, the Americas, Asia, Europe and Oceania and is built on five themes: human interaction with the environment; development and interaction of cultures; state building, expansion and conflict; creation and interaction of economic systems; and the development and transformation of social structures. Students are expected to sit the Advanced Placement World History examination in May.

CP U.S. History

Course code: 4.CP.2 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

This year-long course introduces the history of the United States from the pre-colonial period to the present, covering major political, social, cultural, intellectual and economic developments. Students use primary and secondary source material to understand and interpret the past. Class assignments

include presentations, reading, research and writing. Evaluation is based on tests, written work, projects and participation.

Counts toward the US History requirement only; unlike other Social Studies courses it cannot be designated as an elective.

Honors U.S. History

Course code: 4.H.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors U.S. History covers the same chronological span as CP U.S. History with a heavier reading load, greater use of historiographical debate, and more demanding written analysis. Students read scholarly interpretations alongside primary documents and are required to construct and defend original historical arguments supported by evidence. The course prepares students for AP U.S. History and for college-level historical study.

Counts toward the US History requirement only; unlike other Social Studies courses it cannot be designated as an elective.

AP US History

Course code: 4.AP.2 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP US History is an introductory college-level course in United States history. Students study the social, political and economic history of the United States chronologically from the period just prior to European contact through the present. Analytical history skills are developed through extensive reading and writing, including the document-based question and long essay formats. Students are expected to sit the Advanced Placement United States History examination in May.

Counts toward the US History requirement only; unlike other Social Studies courses it cannot be designated as an elective.

CP European History

Course code: 4.CP.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP European History surveys the history of Europe from the Renaissance to the present. The course addresses the interaction of Europe and the wider world, poverty and prosperity, objective knowledge and subjective vision, states and institutions of power, and individuals in society. Students take notes, carry out individual and small-group research, participate in class discussion and analysis, and develop essay-writing skills. Evaluation is based on objective and essay examinations, research work and participation.

Honors European History

Course code: 4.H.11 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors European History treats the period from the Renaissance to the present with greater depth of reading and a more demanding writing programme than the college preparatory course. Four categories of historical thinking are developed explicitly: chronological reasoning; comparison and contextualization; crafting historical arguments from historical evidence; and historical interpretation and synthesis. Students engage with conflicting scholarly interpretations and produce extended analytical essays.

AP European History

Course code: 4.AP.11 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP European History is a year-long college-level course covering European history from approximately 1450 to the present. Themes include interaction of Europe and the world, economic and commercial developments, cultural and intellectual developments, states and other institutions of power, social organization and development, national and European identity, and technological and scientific innovation. Students analyze primary and secondary sources and write document-based and long essays. Students are expected to sit the Advanced Placement European History examination in May.

CP Global Studies

Course code: 4.CP.6 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

CP Global Studies is an inquiry into global developments through a historical lens from 1750 to 1945, including American perspectives. Topics include revolutions, the Industrial Age, Reconstruction, imperialism, nationalism, the First World War, the Great Depression and the Second World War. Students examine primary source documents and take part in debates, simulations, Socratic circles and research projects. Skills stressed include geography, reading comprehension, research and writing, and cultural awareness.

Honors Global Studies

Course code: 4.H.4 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Global Studies covers the same period as the college preparatory course but requires sustained independent research culminating in a substantial paper on a global issue of the student's choosing. Students read scholarly and primary material in greater volume, lead Socratic seminars, and are assessed on the quality of their historical argument and use of evidence rather than on recall.

Government

Course code: 4.CP.4 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Government is the college preparatory course in United States government and civics. Students study the constitutional foundations of the American political system, federalism, the three branches of government, civil liberties and civil rights, political participation, parties and elections, and the making of public policy. Students analyze founding documents and current events, and complete a civic engagement project.

AP US Government and Politics

Course code: 4.AP.4 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP US Government and Politics is an introductory college-level course in United States government and politics. Students cultivate their understanding through analysis of data and text-based sources as they explore constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis. Students complete a political science research or applied civics project. Students are expected to sit the Advanced Placement United States Government and Politics examination in May.

AP Comparative Government and Politics

Course code: 4.AP.5 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Comparative Government and Politics introduces the systematic study of political systems through detailed examination of six countries: China, Iran, Mexico, Nigeria, the Russian Federation and the United Kingdom. Students analyze political systems and regimes, political institutions, political culture and participation, party and electoral systems, and political and economic change and development. Emphasis falls on comparative analysis and the interpretation of quantitative political data. Students are expected to sit the Advanced Placement Comparative Government and Politics examination in May.

Honors Geography

Course code: 4.H.5 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Geography is the honors survey of world geography. Students study physical systems and the distribution of climate, landforms and resources alongside human systems: population and migration, cultural regions, political organization of space, economic development and urbanization. Students work extensively with maps, spatial data and regional case studies, and complete an independent research project on a region or global issue.

Honors Human Geography

Course code: 4.H.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Human Geography is the honors-level survey of how people organize themselves across the earth's surface. Content is organized around population and migration, cultural patterns and processes, political organization of space, agriculture and rural land use, industrialization and economic development, and cities and urban land use. Students work with maps, census data and case studies drawn from all world regions, and complete research and presentation assignments. Evaluation is based on tests, map and data exercises, projects and class participation.

AP Human Geography

Course code: 4.AP.3 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Human Geography presents the curricular equivalent of an introductory college-level course in human or cultural geography. Content is organized around economic geography, cultural geography, political geography and urban geography. Students investigate problems of economic development and cultural change, population change and growth, the impacts of technology, and struggles over political power and control of territory, using case studies drawn from all world regions. Students are expected to sit the Advanced Placement Human Geography examination in May.

AP Psychology

Course code: 4.AP.9 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Psychology introduces the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the facts, principles and phenomena associated with each of the major subfields of psychology, including biological bases of behavior, sensation and perception, learning, cognition, developmental psychology, motivation and emotion, personality, clinical psychology and social psychology. Particular attention is given to research methods and to the application of psychological principles. Students are expected to sit the Advanced Placement Psychology examination in May.

Modern American Media and Politics

Course code: 4.CP.14 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective examines the relationship between the news media and political life in the United States. Students study the development of the American press, the economics and ownership of modern media, the role of broadcast, cable and social platforms in political campaigns, agenda setting and framing, polling, misinformation and the evaluation of sources. Students analyze current coverage and produce a research-based media critique.

The World Languages Program

Students entering the Upper School select one of six languages – Russian, Latin, Hebrew, Spanish, French or Mandarin – and continue in that language for the remainder of their Upper School study. Three years of world language study are required for graduation. A student may elect, at their own discretion and with departmental recommendation, to continue into a fourth year of the sequence, and students intending to present a strong world language record for university admission are encouraged to do so. Each year of each language is a separate course with its own curriculum and its own description; each level introduces new content and increases in linguistic and cultural demand. Students are required to participate actively in the target language in every course. Every course in this department counts toward the World Languages graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Previous Course Titles

The courses below were offered under a different title in earlier years. A transcript issued before the effective year shows the former title; the course is the same course. Transcripts are not reissued when a title changes.

Former Title	Current Title	Effective
Russian 1 / 2 / 3 and AP Russian Language & Culture	Advanced World Languages: Russian I-IV	2026-2027

Course Descriptions

Advanced World Languages: Russian I

Course code: 5.CP.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Russian I is the first year of the Russian sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: Russian II

Course code: 5.CP.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Russian II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: Russian III

Course code: 5.CP.3 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Russian III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: Russian IV

Course code: 5.CP.4 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Russian IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

World Languages: Spanish I

Course code: 5.CP.9 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

World Languages: Spanish I is the first year of the college preparatory Spanish sequence and assumes no prior study. Students acquire the sound system and core vocabulary for everyday contexts, together with foundational structures including present-tense verb forms, noun and adjective agreement and basic sentence construction. Instruction develops listening, speaking, reading and writing within a cultural context, and students are required to participate actively in the target language.

World Languages: Spanish II

Course code: 5.CP.10 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

World Languages: Spanish II builds directly on the first year. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of the Spanish-speaking world.

World Languages: Spanish III

Course code: 5.CP.11 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

World Languages: Spanish III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods, including the conditional and the subjunctive, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations.

World Languages: Spanish IV

Course code: 5.CP.12 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

World Languages: Spanish IV is the capstone of the college preparatory Spanish sequence and is conducted substantially in Spanish. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the Spanish-speaking world. Written work consists of analytical essays and a research project on a cultural or literary topic.

Advanced World Languages: Spanish I

Course code: 5.CP.9 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Spanish I is the first year of the Spanish sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: Spanish II

Course code: 5.CP.10 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Spanish II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: Spanish III

Course code: 5.CP.11 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Spanish III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: Spanish IV

Course code: 5.CP.12 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Spanish IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

World Languages: Latin I

Course code: 5.CP.17 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

World Languages: Latin I is the first year of the college preparatory Latin sequence and assumes no prior study. Students learn the Latin case system, verb conjugations in the present, imperfect and perfect tenses, and core vocabulary, reading adapted passages from the outset. The course also addresses Roman history and daily life and the influence of Latin on English and the Romance languages.

Advanced World Languages: Latin I

Course code: 5.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Latin I is the first year of the Latin sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: Latin II

Course code: 5.H.2 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Latin II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: Latin III

Course code: 5.H.3 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Latin III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: Latin IV

Course code: 5.H.4 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Latin IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

Advanced World Languages: Hebrew I

Course code: 5.CP.13 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Hebrew I is the first year of the Hebrew sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: Hebrew II

Course code: 5.CP.14 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Hebrew II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: Hebrew III

Course code: 5.CP.15 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Hebrew III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: Hebrew IV

Course code: 5.CP.16 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Hebrew IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

Advanced World Languages: French I

Course code: 5.CP.5 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

French I is the first year of the French sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: French II

Course code: 5.CP.6 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

French II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: French III

Course code: 5.CP.7 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

French III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: French IV

Course code: 5.CP.8 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

French IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

AP French Language and Culture

Course code: 5.AP.22 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP French Language and Culture is a college-level course conducted almost entirely in French. Students develop proficiency across the interpretive, interpersonal and presentational modes, working with authentic audio, video and print sources organized around six themes: global challenges, science and technology, contemporary life, personal and public identities, families and

communities, and beauty and aesthetics. Students are expected to sit the Advanced Placement French Language and Culture examination in May.

Advanced World Languages: Mandarin I

Course code: 5.CP.19 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Mandarin I is the first year of the Mandarin sequence and assumes no prior study. Students acquire the sound system and writing system, core vocabulary for everyday contexts, and foundational grammatical structures including present-tense verb forms, noun and adjective agreement where applicable, and basic sentence construction. Instruction develops all four skills – listening, speaking, reading and writing – within a cultural context, and students are required to participate actively in the target language. Assessment includes oral interviews, dictation, written compositions, reading comprehension and unit examinations.

Advanced World Languages: Mandarin II

Course code: 5.CP.20 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Mandarin II builds directly on the first year of study. Students expand vocabulary into thematic domains such as travel, education, health and daily life, and master past and future time reference along with more complex sentence structures. Reading moves from adapted material to short authentic texts, and writing extends to structured paragraphs. Cultural study addresses the geography, traditions and daily life of regions where the language is spoken. Continued active participation in the target language is required.

Advanced World Languages: Mandarin III

Course code: 5.H.5 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Mandarin III consolidates grammatical control and shifts emphasis toward authentic material. Students work with the full range of tenses and moods appropriate to the language, including conditional and subjunctive structures where they exist, and refine accuracy in extended speech and writing. Readings are drawn from literature, journalism and film, and students produce multi-paragraph compositions and sustained oral presentations. Cultural study addresses historical and contemporary questions in the target culture.

Advanced World Languages: Mandarin IV

Course code: 5.H.6 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Mandarin IV is the optional fourth year of the sequence, taken beyond the three-year graduation requirement, and is conducted substantially in the target language. Students read unabridged literary and journalistic texts, analyze film and media, and debate contemporary issues in the target culture. Written work consists of analytical essays and a research project on a cultural or literary topic. The course develops the fluency, accuracy and cultural competence expected at the threshold of university-level study of the language.

The Computer Science Program

The Computer Science program offers two college-level courses following the College Board frameworks. Students may take either course independently; neither is a prerequisite for the other. These courses do not carry credit toward the mathematics graduation requirement. Courses in this department carry no graduation requirement of their own; they count toward the elective requirement.

Course Descriptions

Intro to Game Programming

Course code: 8.CP.4 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective introduces programming through the design and construction of simple games. Students learn the game loop, sprites and animation, collision detection, user input, state management and basic game physics, and apply them in a sequence of working projects. The course also addresses playtesting, iteration and the elements of game design. No prior programming experience is required.

Honors Programming Essentials in C++

Course code: 8.H.1 | Level: Honors | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Honors Programming Essentials in C++ is an introduction to programming in a compiled, statically typed language. Students study data types and memory, control structures, functions and scope, arrays and pointers, strings, structures and classes, file input and output, and the fundamentals of object-oriented design. Emphasis falls on correctness, debugging and the efficiency of the resulting programs.

Programming and Data Science with Python

Course code: 8.H.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Programming and Data Science with Python combines an introduction to programming with the practice of data analysis. Students learn Python syntax, control flow, functions and data structures, then work with libraries for numerical computing, tabular data and visualization. Students acquire, clean and explore real data sets, apply descriptive and inferential techniques, and present their findings in a written and visual report.

Full Stack Javascript

Course code: 8.CP.7 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Full Stack Javascript covers the construction of complete web applications. Students work on the client with HTML, CSS and modern JavaScript, and on the server with a JavaScript runtime, routing, data persistence and an application programming interface of their own design. The course addresses version control, testing, deployment and the security considerations of web software, and culminates in a working application.

Natural Language Processing (External)

Course code: 8.EXT.1 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Natural Language Processing is an externally delivered course in the computational treatment of human language, taken for Star Academy credit under faculty supervision. Content covers text representation, tokenization and preprocessing, classification, language modelling, and the architecture and behaviour of modern sequence models, together with the ethical questions raised by language technology. Students complete programming assignments and a final project.

AP Computer Science Principles

Course code: 8.AP.2 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can affect the world. Students study creative development, data and its representation, algorithms and programming, computing systems and networks, and the impact of computing including cybersecurity and privacy. Students complete the Create performance task, an independently designed program with written and video documentation, in addition to sitting the end-of-course examination in May.

AP Computer Science A

Course code: 8.AP.5 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Computer Science A is a college-level course equivalent to a first-semester introductory course in computer science at university. Students learn object-oriented programming in Java, covering primitive types, using and writing classes, boolean expressions and control structures, iteration, arrays and ArrayLists, two-dimensional arrays, inheritance and polymorphism, and recursion. Students design, implement, test and debug substantial programs and analyze the correctness and efficiency of their solutions. Students are expected to sit the Advanced Placement Computer Science A examination in May.

The AP Capstone Diploma Program

AP Capstone is a two-year College Board program consisting of AP Seminar followed by AP Research. It develops the research, argumentation and communication skills required for success at university. Students who complete both courses and earn scores of 3 or higher on four additional AP examinations receive the AP Capstone Diploma; students who complete both courses alone receive the AP Seminar and Research Certificate. Courses in this department carry no graduation requirement of their own; they count toward the elective requirement.

Course Descriptions

AP Seminar

Course code: 1.AP.9 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Seminar is the first course of the two-year AP Capstone Diploma program. Students investigate real-world issues from multiple perspectives, gathering and analyzing information from a range of sources including articles, research studies, foundational texts, speeches, artistic works and personal accounts. Students learn to construct evidence-based arguments, evaluate the credibility of sources, and communicate their conclusions in writing and in oral presentation. Assessment consists of a team project and presentation, an individual research-based essay and presentation, and an end-of-course written examination.

AP Research

Course code: 1.AP.1 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Research is the second course of the AP Capstone Diploma program. Each student designs, plans and conducts a year-long independent research investigation on a topic of personal interest, working under the guidance of an expert adviser. Students document their process in a research journal, apply an appropriate methodology to their discipline, and produce an academic paper of approximately 4,000 to 5,000 words together with a public presentation and oral defence. There is no end-of-course written examination. Students who complete AP Seminar and AP Research and score 3 or higher on four additional AP examinations earn the AP Capstone Diploma.

The Fine and Performing Arts Program

The arts program serves students who wish to enjoy the creative growth that comes from working in art, develop skill in an art-related area, prepare for a career in the creative industry, or learn about art media and personal aesthetics. Students complete two years of arts study. With the exception of AP Art History, courses in this department are not college preparatory academic courses. Every course in this department counts toward the Arts graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Course Descriptions

Visual Arts

Course code: 6.CP.11 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Visual Arts is the foundation studio course in the two-dimensional arts. Students gain the technical skills needed for the production of drawings and paintings, working with pencil, charcoal, colored pencil, ink, watercolor and acrylic. Students explore composition, value, perspective and color theory, and study the work of established artists to understand technique and intent. Students maintain a sketchbook and complete a portfolio of finished work.

Drawing 1

Course code: 6.CP.12 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Drawing 1 develops the technical skills required for the production of drawings. Students gain understanding of technique through the use of various materials and tools, and explore the work of a range of artists to better understand concepts and approaches. The course prepares students for Drawing 2, Painting and Printmaking.

Drawing 2

Course code: 6.CP.13 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Drawing 2 is intended for students who wish to refine their drawing style by gaining working knowledge of the technology, skills and techniques employed by drawing masters. Students use colored pencils, markers, pastels, conte and ink in a concentrated study of landscape, figure and still-life colour rendering, and select a medium to produce a finished illustration. Students keep sketchbooks and submit homework on a regular basis.

Ceramics 1

Course code: 6.CP.14 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Ceramics 1 is intended for students pursuing mastery of the skills involved in the production of wheel-thrown and hand-built clay objects. Examination of the aesthetics of ceramic works and of the process of production gives students a framework for making critical judgments about clay objects as both creators and consumers. All clay products must exhibit quality construction and finished decoration.

Ceramics 2

Course code: 6.CP.15 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Ceramics 2 is designed for students pursuing advanced-level skills in the production of wheel-thrown and hand-built clay objects. Studio practices are emphasized to encourage the independent design of a coherent body of work.

Sculpture/3D

Course code: 6.CP.4 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Sculpture/3D is a studio elective in three-dimensional design. Students work additively and subtractively in materials such as clay, plaster, wire, wood and found objects, studying mass and void,

balance, surface, scale and the relationship of a work to the space around it. Students document their work photographically and take part in regular critique.

Digital/Animation

Course code: 6.CP.16 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This course introduces digital drawing using graphics tablets together with animation techniques including stop motion, Adobe Animate and Blender. Character development, narrative quality, texture, lighting, space and timing are explored around the central concept of artistic expression and visual communication design.

Cinema Arts

Course code: 6.CP.17 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Cinema Arts provides students the opportunity to develop value judgments as filmmakers and film consumers through the exploration of basic film production. Students produce short movies, conduct research on cinema-related topics and give informed critiques of films.

Performing Arts

Course code: 6.CP.2 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Performing Arts introduces students to the theatrical and musical performing disciplines. Through hands-on projects and lectures, students learn the basics of acting technique, script analysis, movement, voice and ensemble work, together with the technical areas of set design, lighting, costume and properties. Evaluation is based on participation, skill development and individual and group projects.

Stage Performance

Course code: 6.CP.7 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Stage Performance is the advanced performance course. Students prepare and present scenes and monologues before an audience, working on characterization, timing, projection and stage presence. The course culminates in a public performance. Evaluation is based on rehearsal discipline, growth in technique and the quality of the final presentation.

Vocal

Course code: 6.CP.1 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Vocal is a performance elective in singing. Students develop breath support, tone production, diction, intonation and ensemble blend, and work on repertoire drawn from several periods and styles. Music reading and basic theory are taught as they arise in the repertoire. The course culminates in a public performance, and students are assessed on technical growth, rehearsal discipline and participation.

Introduction to Architectural Design

Course code: 6.CP.6 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Introduction to Architectural Design is a studio elective in the design of buildings and spaces. Students work through the design process from site analysis and program to schematic design and presentation, learning orthographic drawing, scale, model making and digital design tools. Projects address function, structure, light and the experience of moving through a space, and conclude with a reviewed presentation.

Understanding Architecture

Course code: 6.CP.9 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Understanding Architecture is a one-semester elective in the history and analysis of the built environment. Students study the major periods and movements of Western and non-Western architecture, the structural systems and materials that made them possible, and the social and

economic forces that shaped cities. Students learn to read plans, sections and elevations and complete an analytical study of a building or urban site.

Art History

Course code: 6.CP.3 | Level: College Preparatory | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

Art History is the college preparatory survey of art across periods and cultures. Students study painting, sculpture, architecture and decorative arts from the ancient world to the present, learning to describe works accurately, analyze form and content, and place them in historical and cultural context. Instruction combines lecture, discussion, image analysis and research, and students complete written analyses and a research project.

AP Drawing

Course code: 6.AP.1 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Drawing is a college-level portfolio course in which students develop mastery of drawing through line quality, mark-making, surface, space, light and shade, and composition. Rather than sitting a written examination, students submit a portfolio to the College Board consisting of a sustained investigation documenting inquiry through practice and a selected works section demonstrating skill. Students maintain a process journal and take part in regular critique.

AP 2-D Art and Design

Course code: 6.AP.2 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP 2-D Art and Design is a college-level portfolio course addressing the elements and principles of two-dimensional design through media such as graphic design, photography, collage, printmaking and digital imaging. Students submit a portfolio consisting of a sustained investigation and a selected works section rather than sitting a written examination. Written commentary accompanying the work documents the student's inquiry, experimentation and revision.

AP 3-D Art and Design

Course code: 6.AP.3 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP 3-D Art and Design is a college-level portfolio course addressing the elements and principles of design in three dimensions through media such as ceramics, sculpture, installation, assemblage and three-dimensional fabrication. Students submit a portfolio consisting of a sustained investigation and a selected works section rather than sitting a written examination. Documentation of works through photography is an integral part of the course.

AP Music Theory

Course code: 6.AP.4 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Music Theory is a college-level course in the analysis and composition of tonal music. Students develop aural, sight-singing, written, compositional and analytical skills, working with pitch and rhythm notation, scales and keys, intervals and chords, harmonic function and voice leading, cadences and phrase structure, and elementary formal analysis. Melodic and harmonic dictation and sight-singing are practised in every class. Students are expected to sit the Advanced Placement Music Theory examination in May.

AP Art History

Course code: 6.AP.5 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Art History is a college-level survey of art forms throughout history and across the world. Students study art history through class discussion, readings, image analysis, video, research and lecture, developing an understanding of the historical events that influenced the ideas, styles and techniques of artists. Students are expected to sit the Advanced Placement Art History examination in May.

Wellness, Physical Education and Driver Safety

These programs address the social, mental, emotional and physical development of each student, together with the theoretical preparation required for driving. Courses in this department are not college preparatory academic courses and do not carry credit toward the English, mathematics, science, social studies or world language graduation requirements. Every course in this department counts toward the PE / Health graduation requirement. A student who has already met that requirement may take a further course in the department and designate it at registration as an elective instead; where a course is an exception, that is stated in the line closing its entry.

Course Descriptions

Physical Education

Course code: 7.CP.1 | Level: College Preparatory | Credits: 3.00 | Placement and prerequisite: By departmental recommendation

Physical Education is concerned with the social, mental, emotional and physical development of each student. The curriculum is fitness based and students are encouraged to participate actively in every unit of instruction. Students are evaluated by teacher observation, goal setting, attitude, participation, sportsmanship and written assessment. Attendance at classes in dance, fencing, martial arts or other sports may be considered toward meeting the Physical Education credit requirement.

Wellness

Course code: 7.CP.3 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Wellness provides a skills-based approach to managing stress and personal health. The course examines individual stressors and the balance of mental, emotional, physical and environmental stress management techniques for leading healthier and more productive lives. Information is presented practically, incorporating current health trends, life management skills and interdisciplinary strategies.

Fitness & Exercise Science

Course code: 7.CP.4 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Fitness and Exercise Science provides students with a broad knowledge of exercise science and the role of science in exercise, athletic performance and health promotion, with a major focus on strength and sports conditioning. Content includes basic exercise science, programme design, advanced strength training concepts, anatomy and physiology, injury prevention and fitness assessment.

Sport Nutrition & Safety

Course code: 7.CP.5 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Students learn how sport nutrition can enhance and sustain performance for exercise. Topics include the development of nutritional meal plans, energy metabolism, essential nutrients, fuelling for muscular strength, power and endurance activities, and weight management. A unit on safety allows students to earn basic life support CPR/AED Healthcare Provider certification.

Driver Safety Education

Course code: 7.CP.6 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This classroom course, required of all students for graduation, provides theoretical information in preparation for driving. Students learn about good driver behaviour, management of risk, the Massachusetts Vehicle Code, and the physical, social and environmental influences on the driver, as well as the safe operation of an automobile. Students complete over thirty hours of instructional time.

Elective Courses

Elective courses help students explore career options or prepare for a chosen profession. Once a student registers for an elective it becomes required for attendance. The diploma requires 24.00 elective credits, which a student normally earns by taking twelve one-semester elective courses over the four years of Upper School study, and any elective may be chosen regardless of grade level. An additional course taken in a core academic area may also be designated as an elective, under the conditions set out in Graduation Requirements. Every elective is owned by a department, named in the line that closes each entry below; except where that line states otherwise, an elective counts toward the elective requirement and not toward its department's own graduation requirement.

Course Descriptions

Leadership

Course code: 4.CP.12 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Leadership is a one-semester elective in the theory and practice of leading groups. Students study models of leadership, motivation and group dynamics, communication and negotiation, decision making under uncertainty, and ethical responsibility. The course is participatory: students take defined roles in a team project serving the school or wider community and reflect in writing on what they observed in themselves and others.

Elective — Social Studies department.

Future Problem Solving

Course code: 1.CP.8 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Future Problem Solving follows the Future Problem Solving Program International model. Working individually and in teams, students research a complex future scene, identify challenges, select an underlying problem, generate and evaluate solutions against defined criteria, and develop an action plan. The course develops research, creative thinking, evaluative reasoning and written and oral presentation, and students may enter competitive evaluation.

Elective — English department.

AP Cybersecurity

Course code: 8.AP.1 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Cybersecurity is a year-long college-level course in the College Board AP Career Kickstart program. Students study the principles of information security, including the confidentiality, integrity and availability model, operating system and network fundamentals, common threats and attack vectors, cryptography, access control and authentication, secure system configuration, and incident detection and response. Instruction is hands-on and laboratory-based, and students work within a defined ethical and legal framework throughout.

Elective — Computer Science department.

Anatomy and Physiology

Course code: 3.CP.4 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Anatomy and Physiology is a one-semester elective involving students in the study of the structure and function of the human body. Attention is given to the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, immune, respiratory, digestive, lymphatic, urinary and reproductive systems. The course includes microscopy and physiological measurement, and provides a foundation for further study at the post-secondary level. Evaluation is based on tests, quizzes, laboratory performance and projects.

Elective — Science department.

Introduction to Forensic Science

Course code: 3.CP.6 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This laboratory-based one-semester elective introduces crime scene investigation and the forensic sciences. Topics include Locard's Exchange Principle, the analysis of trace evidence, fingerprints, blood and DNA, arson investigation and human decomposition. Students apply investigative and scientific techniques to analyze fingerprints, glass, hair, fibers, blood typing and spatter, accelerants and DNA, developing laboratory precision and deductive reasoning.

Elective — Science department.

AP Macroeconomics

Course code: 4.AP.6 | Level: Advanced Placement | Credits: 3.00 | Placement and prerequisite: By departmental recommendation

AP Macroeconomics is a one-semester college-level course in the principles of macroeconomics. Students study basic economic concepts and scarcity, economic indicators including gross domestic product, unemployment and inflation, national income and price determination, the financial sector and monetary policy, long-run consequences of stabilization policies, and open economy international trade and finance. Students apply graphical and quantitative analysis to national economic problems. Students are expected to sit the Advanced Placement Macroeconomics examination in May.

Elective — Social Studies department.

AP Microeconomics

Course code: 4.AP.10 | Level: Advanced Placement | Credits: 3.00 | Placement and prerequisite: By departmental recommendation

AP Microeconomics is a one-semester college-level course in the principles of microeconomics. Students study scarcity and the basic economic concepts, supply and demand and market equilibrium, production and costs, the behaviour of firms under perfect competition and imperfect competition, factor markets, and market failure and the role of government. Students apply graphical and quantitative analysis to economic problems and interpret real-world market behaviour. Students are expected to sit the Advanced Placement Microeconomics examination in May.

Elective — Social Studies department.

AP Business with Personal Finance

Course code: 4.AP.7 | Level: Advanced Placement | Credits: 6.00 | Placement and prerequisite: By departmental recommendation

AP Business with Personal Finance is a year-long college-level course, part of the College Board AP Career Kickstart program, combining the principles of business with the management of personal financial resources. Students study earning and career decisions, budgeting and cash-flow management, saving and investing including the time value of money, credit and debt management, insurance and risk management, taxation, and planning for major expenditures including higher education and retirement. Students construct and defend a comprehensive personal financial plan using quantitative analysis.

Elective — Social Studies department.

International Organization & UN Studies

Course code: 4.CP.5 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective examines the structure, powers and limitations of international organizations, with particular attention to the United Nations system. Students study the UN Charter, the roles of the General Assembly, Security Council, Secretariat and specialized agencies, and the mechanisms of international law, peacekeeping and humanitarian intervention. Students research a member state and its policy positions and take part in a formal Model United Nations simulation.

Elective — Social Studies department.

Chinese Literature in Cultural Context

Course code: 5.CP.21 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective introduces Chinese literature in translation, read against the historical and philosophical currents that shaped it. Students study classical poetry, selections from the philosophical traditions, and modern and contemporary fiction, considering questions of form, translation and cultural context. Written work consists of close-reading responses and a comparative analytical essay. No prior knowledge of Chinese is required.

Elective — World Languages department.

Greek and Latin Roots

Course code: 5.CP.18 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective builds vocabulary and etymological reasoning through the study of Greek and Latin roots, prefixes and suffixes. Students learn to analyze unfamiliar words by their constituent parts, with emphasis on the specialized vocabularies of medicine, law, science and the humanities. The course also introduces the history of English and the routes by which classical vocabulary entered it. Evaluation is based on quizzes, word-analysis exercises and a final project.

Elective — World Languages department.

Speech & Debate

Course code: 4.CP.15 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Speech & Debate develops argumentation, research and oral advocacy skills through formal competitive debate formats. Students learn case construction, evidence gathering and citation, cross-examination technique, refutation and rebuttal, and delivery. Topics are drawn from current policy and value questions. Evaluation is based on the quality of research files, performance in practice rounds and participation in class critique.

Elective — Social Studies department.

Application of AI Tools

Course code: 8.CP.1 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective introduces the practical and ethical use of artificial intelligence tools in academic and professional work. Students study how large language models and generative systems function at a conceptual level, practise effective prompting and verification, and examine questions of accuracy, bias, attribution, privacy and academic integrity. Students complete projects in which AI tools are used transparently and their output critically evaluated and documented.

Elective — Computer Science department.

Musical Application

Course code: 6.CP.10 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Musical Application is a one-semester elective in applied music technology and practice. Students work with digital audio workstations, recording and editing, sequencing and basic sound design, and apply elements of music theory including rhythm, melody, harmony and form to their own compositions and arrangements. The course culminates in a portfolio of recorded or produced work.

Elective — Fine and Performing Arts department.

Fashion Design

Course code: 6.CP.8 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Fashion Design is a one-semester studio elective in apparel design. Students study elements and principles of design as applied to garments, produce croquis and technical flats, work with textiles and construction techniques, and develop a small collection from concept sketch through finished presentation board. The history of fashion and the structure of the industry are addressed alongside studio work.

Elective — Fine and Performing Arts department.

Essentials of Cooking or Culinary Arts: Essentials of Cooking

Course code: 6.CP.5 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective introduces the fundamentals of the professional kitchen. Students learn knife skills, mise en place, stocks and sauces, and the principal cooking methods, together with food safety and sanitation, kitchen equipment and terminology, menu planning and costing. Instruction is practical and students are evaluated on technique, kitchen discipline and the quality of finished dishes.

Elective — Fine and Performing Arts department.

Advanced Latin

Course code: 5.H.7 | Level: Honors | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Advanced Latin is a one-semester elective in the Latin language for students who are following a different language sequence as their principal world language. Students work with Latin morphology and syntax, build vocabulary through the reading of adapted and unadapted passages, and study the influence of Latin on English and the Romance languages. The course does not substitute for the four-year world language sequence.

Elective — World Languages department.

Critical Thinking and Communication

Course code: 1.CP.5 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective develops the reasoning and presentation skills students need across the curriculum. Students study the structure of arguments, the identification of assumptions and fallacies, the evaluation of evidence and source reliability, and the construction of clear spoken and written explanation. Evaluation is based on participation, short analytical exercises and oral presentations.

Elective — English department.

Robotics / Computer Science

Course code: 8.CP.2 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective introduces students to what robots do and how to use them. Students learn the theory and practice of robotic devices such as CNC machines, 3D printers, laser engravers and autonomous robots using C language-based programs. A three-part approach teaches robotics through programming, mechanics and electronics. Evaluation is through written tests, projects, labs and design challenges.

Elective — Computer Science department.

SAT Prep Intensive

Course code: 2.CP.17 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

SAT Prep Intensive is a one-semester test-preparation elective. Students review the content and question formats of the SAT in evidence-based reading, writing and language, and mathematics, and practise timing, pacing and test-taking strategy under examination conditions. The course is graded Pass/Fail and is not a college preparatory academic course.

Elective — Mathematics department.

Sales

Course code: 4.CP.16 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester business elective introduces the world of sales and its impact on business. The course covers the selling steps, personal sales, and an analysis of the skills needed to succeed in the sales field. Students participate in classroom theory, projects, field trips and sessions with guest speakers.

Elective — Social Studies department.

Stocks and Investments

Course code: 4.CP.17 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester business elective provides insight into various types of financial assets with a focus on stocks. Students develop a basic understanding of stocks, markets and indexes, then move to decision making and stock valuation using qualitative and quantitative fundamental analysis. Using an online trading simulation, students research stocks and enter trades.

Elective — Social Studies department.

Entrepreneurship

Course code: 4.CP.18 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

In this one-semester elective students learn how to start their own business and prepare a business plan. The curriculum includes types of business ownership and the legal processes required to become an entrepreneur. Students participate in case studies and business etiquette training alongside guest speakers, field trips and projects.

Elective — Social Studies department.

Real Estate Development and Entrepreneurship

Course code: 4.CP.13 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This one-semester elective examines the development of real property as a business activity. Students study site selection, financing, zoning and permitting, project budgeting and the roles of the parties to a development transaction, and prepare an outline development proposal for a hypothetical site.

Elective — Social Studies department.

Babson Youth Entrepreneurship Program

Course code: 4.CP.19 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

The Babson Youth Entrepreneurship Program is an enrichment programme delivered in partnership with Babson College. Students work through the entrepreneurial method – ideation, opportunity assessment, prototyping and pitch – and present a venture concept to a panel. The programme is experiential and is not a traditional academic course.

Elective — Social Studies department.

Personal Finance

Course code: 4.CP.7 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Students build a foundation of personal finance skills for business and personal success. Units include career decisions, money management, financial security, credit management, resource management, risk management, and consumer rights and responsibilities. Topics include investments, budgets, insurance, taxes and banking services.

Elective — Social Studies department.

Business Law

Course code: 4.CP.8 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Business Law is a one-semester course providing a foundation in the legal issues surrounding personal and business rights and duties. Topics include the legal system, court procedure, case law, torts, contracts and employment. Students conduct a mock trial using correct courtroom procedure.

Elective — Social Studies department.

Computer Graphics

Course code: 8.CP.3 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

This hands-on, project-oriented elective introduces a variety of computer graphic and engineering software packages. These are used to develop 2D and 3D model animations, image designs, 3D prototypes and prints, laser etch and cut designs, and for coding and video game development.

Elective — Computer Science department.

Photography

Course code: 6.CP.18 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Students explore photographic theory, process and history. Photographic composition is stressed as students learn to use a digital camera and to operate image-editing software at a basic level. Students maintain a portfolio of their photographs together with the histories of those works as evidence of technical and aesthetic growth.

Elective — Fine and Performing Arts department.

Journalism

Course code: 1.CP.7 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Designed for self-motivated students who wish to work on school publications, this elective teaches the basic skills of interviewing, journalistic writing, photography, editing and layout through an apprenticeship model. This course does not provide credit toward the English graduation requirement.

Elective — English department.

Introduction to Theater

Course code: 6.CP.19 | Level: College Preparatory | Credits: 2.00 | Placement and prerequisite: By departmental recommendation

Introduction to Theater provides an active, participatory introduction to the theatrical arts. Through hands-on projects and lectures, students learn the basics of set design, stage lighting, costumes, properties, make-up, acting, script analysis and directing. This course does not provide credit toward the English graduation requirement.

Elective — Fine and Performing Arts department.