High School Course Catalog
2009-2010 School Year

Multiple Levels for Diverse Learners

K12 provides **more than 105 high school courses** designed to help you earn your high school diploma, find your own path, and follow it to post-high school success—whether that's in college or in the workforce. With the K12 curriculum it's your education and your choice.

K12 offers Math, English, Science, and History courses in **multiple levels—Core, Comprehensive, Honors, and Advanced Placement® (AP®)**—to meet the needs of diverse learners. You can also take up to four years of a world language (depending on the language), and choose from a variety of electives, including anthropology, Web design, and digital photography.

Unlike other programs, where a student must be in a particular "academic path", the K12 program allows students to chart their own course, choosing from among the four levels of courses to match their aptitude and goals. So, if a student excels in Math and Science, they may take all Honors/AP® courses in those subjects, while choosing from among the Core and Comprehensive English and History courses. These multiple course levels prevent you from being "locked in" to one level of a particular subject, and account for natural progress and growth.

Online Courses Designed for Online Delivery

K12 serves more online courses to the K–12 market than any other online curriculum provider—and it's in large part because K12 sets the highest standard of course quality.

K12 never just scans a textbook and calls it an online course. K12 courses are designed and developed for online delivery from the outset. The K12 team of curriculum experts and course designers start from scratch, thoroughly scoping out the learning objectives for each course. They map out a strategy for how best to accomplish those objectives using online text, graphics, charts, illustrations, interactive demonstrations, offline reading materials or activities, and interactive online discussions. Then, usability testing is conducted with the intended audience to make sure students can easily navigate through the lessons and master the intended learning objectives.

K12 knows that the combination of rich, engaging content with interesting, interactive demonstrations and activities helps students absorb and retain information. The use of graded assignments and assessments further allows students to demonstrate progress toward learning objectives.

Four Levels of Core Subjects

With the K12 high school curriculum, students can harness the power of individualized learning by choosing from the following four levels of Math, English, Science, and History courses:

The K12 Core courses are similar to the standard courses offered by many other programs. They meet all academic requirements for each course area, both for graduation and for potential admission into a wide range of colleges. In K12 Core courses, topics are broken into discrete modules that are taught in tandem with the framework students need to develop strong study skills. Rich, engaging content with interesting, interactive demonstrations and activities help students in our Core courses to absorb and retain the information presented. Optional content and activities are also available to students wishing to study a particular topic in more depth.

K12 Comprehensive courses are designed for students with a strong foundational knowledge and aptitude in the subject area being covered, as well as solid study skills. As a result, students in our Comprehensive courses do more extensive writing and research projects, and tackle problems that require more analytical thinking. Course projects and activities also demand more independent thinking and self-discipline than projects in Core courses. As with Core courses, additional content and activities are provided to students wishing to delve more deeply into a topic.

K12 Honors courses hold students to a greater degree of accountability, and demand even greater independence and self-discipline than their Comprehensive counterparts. Students synthesize and evaluate information and concepts from multiple sources and read texts typically assigned in college-level courses. Students also demonstrate college-level writing in essays that require analysis of primary and secondary sources, responsible use of evidence, and comprehensive citation of sources. Successful completion of prerequisites, teacher/school counselor recommendation, and a strong interest in the subject are recommended for enrollment in a K12 Honors course.

K12 Advanced Placement® (AP®) courses are college-level courses that follow curriculum specified by the College Board. Like K12 Honors courses, AP® courses require a greater degree of self-discipline for in-depth study of the subject. These courses are designed to prepare students for success on AP® exams, providing students the opportunity to earn credit at most of the nation's colleges and universities. Successful completion of prerequisites, teacher/school counselor recommendation, and a strong interest in the subject are recommended for enrollment in an AP® course.

K12 2009-2010 High School Course List

English

Core
ENG102: Literary Analysis and Composition I
ENG202: Literary Analysis and Composition II
ENG302: American Literature
ENG402: British and World Literature

Comprehensive
ENG103: Literary Analysis and Composition I
ENG203: Literary Analysis and Composition II
ENG303: American Literature
ENG403: British and World Literature

Honors/AP®
ENG104: Honors Literary Analysis and Composition I
ENG204: Honors Literary Analysis and Composition II
ENG304: Honors American Literature
ENG404: Honors British and World Literature
ENG500: AP® English Language and Composition
ENG510: AP® English Literature and Composition

Electives
ENG010: Journalism

History and Social Sciences

Core
HST102: World History
HST202: Modern World Studies
HST212: Geography and World Cultures*
HST302: U.S. History
HST312: Modern U.S. History
HST402: U.S. Government and Politics*
HST412: U.S. and Global Economics*

Comprehensive
HST103: World History
HST203: Modern World Studies
HST213: Geography and World Cultures*
HST303: U.S. History
HST313: Modern U.S. History
HST403: U.S. Government and Politics*
HST413: U.S. and Global Economics*

Honors/AP®
HST204: Honors Modern World Studies
HST304: Honors U.S. History
HST314: Honors Modern U.S. History
HST500: AP® U.S. History
HST510: AP® U.S. Government and Politics*
HST520: AP® Macroeconomics*
HST530: AP® Microeconomics*
HST540: AP® Psychology*

Electives
HST010: Anthropology*
HST020: Psychology*
HST030: Macroeconomics*

Mathematics

Core
MTH102: Math Foundations
MTH112: Pre-Algebra
MTH122: Algebra I
MTH202: Geometry
MTH302: Algebra II
MTH312: Business and Consumer Math*

Comprehensive
MTH113: Pre-Algebra
MTH123: Algebra I
MTH203: Geometry
MTH303: Algebra II
MTH403: Pre-Calculus/Trigonometry

Honors/AP®
MTH124: Honors Algebra I
MTH204: Honors Geometry
MTH304: Honors Algebra II
MTH500: AP® Calculus AB
MTH510: AP® Statistics

Electives
BUS030: Personal Finance*

Science

Core
SCI102: Physical Science
SCI112: Earth Science
SCI202: Biology
SCI302: Chemistry

Comprehensive
SCI113: Earth Science
SCI203: Biology
SCI303: Chemistry
SCI403: Physics

Honors/AP®
SCI114: Honors Earth Science
SCI204: Honors Biology
SCI304: Honors Chemistry
SCI404: Honors Physics
SCI500: AP® Biology
SCI510: AP® Chemistry
SCI520: AP® Physics B

Electives
SCI010: Environmental Science
SCI020: Life Science: Oceanography*

World Languages

Comprehensive
WLG100: Spanish I
WLG200: Spanish II
WLG300: Spanish III
WLG110: French I
WLG210: French II
WLG310: French III
WLG120: German I
WLG220: German II
WLG130: Latin I
WLG230: Latin II
WLG140: Chinese I
WLG240: Chinese II

Honors/AP®
WLG500: AP® Spanish Language
WLG510: AP® French Language

Electives and Additional Courses

ART010: Fine Art
ART020: Music Appreciation
BUS010: Business Communication and Career Exploration *
BUS020: Business and Personal Relationships*
BUS030: Personal Finance*
BUS040: Introduction to Entrepreneurship* (Available Winter 2010)
ENG010: Journalism
HST010: Anthropology*
HST020: Psychology*
HST030: Macroeconomics*
SCI010: Environmental Science
SCI020: Life Science: Oceanography*
OTH010: Skills for Health*
OTH020: Physical Education*
OTH030: Career Planning*
OTH040: Study Skills and Learning Strategies*

Technology and Computer Science
TCH010: Computer Literacy I*
TCH020: Computer Literacy II*
TCH030: Digital Photography and Graphics*
TCH040: Web Design*
TCH050: Digital Video Production*
TCH060: C++ Programming*
TCH070: Game Design I*
TCH080: Game Design II*
TCH090: Online Game Design*
TCH016: Flash Animation*
TCH017: 3D Art I—Modeling*
TCH018: 3D Art II—Animation* (Available Winter 2010)
TCH019: Computer-Aided Design (CAD)* (Available Winter 2010)

Orientation
ORN010: Online Learning 09-10
ORN020: Finding Your Path—Planning for Career and College

*This is a one-semester course.

English

ENG102: Literary Analysis and Composition I

In this course, students work on their written and oral communication skills, while strengthening their ability to understand and analyze works of literature, both classic and modern.

Literature: Students read short stories, poetry, drama, novels, essays, and informative articles. The course sharpens reading comprehension skills and engages readers in literary analysis as they consider important human issues and challenging ideas. Students also learn to read for information in nonfiction texts.

Language Skills: Students learn to express their ideas effectively. They sharpen their composition skills through focus on writing good paragraphs and essays in a variety of genres, such as persuasive and research essays. Students plan, organize, and revise written works in response to feedback on drafts. In grammar, usage, and mechanics lessons, students expand their understanding of parts of speech, phrases and clauses, sentence analysis and structure, agreement, punctuation, and other conventions. Vocabulary lessons build knowledge of Greek and Latin words that form the roots of many English words. Students use word origins and derivations to determine the meaning of new words as they increase their vocabularies.

Course length: Two semesters
Materials: *Explorations: An Anthology of Literature, Volume A; English Language Handbook; Vocabulary from Classical Roots, Book B; Julius Caesar for Young People*
Prerequisites: Middle school English/language arts

Note: This course is only for students who are new to the K12 curriculum. Students who have taken K12 Intermediate English A or B, or K12 middle school Literary Analysis and Composition courses, should not enroll in this course.

ENG103: Literary Analysis and Composition I

This course challenges students to improve their written and oral communication skills, while strengthening their ability to understand and analyze literature in a variety of genres.

Literature: Students read a broad array of short stories, poetry, drama, novels, autobiographies, essays, and famous speeches. The course guides students in the close reading and critical analysis of classic works of literature, and helps them appreciate the texts and the contexts in which the works were written. Literary selections range from classic works such as Shakespeare's *Romeo and Juliet* to contemporary pieces by authors such as Maya Angelou

Language Skills: Students broaden their composition skills by examining model essays in various genres by student and published writers. Through in-depth planning, organizing, drafting, revising, proofreading, and feedback, they hone their writing skills. Students build on their grammar, usage, and mechanics skills with in-depth study of sentence analysis and structure, agreement, and punctuation, reinforced by online activities (Skills Updates). Student vocabularies are enhanced through the study of Greek and Latin root words, improving students' ability to decipher the meanings of new words.

Course length: Two semesters
Materials: *Classics for Young Readers, Volume 8; Classics for Young Readers, Volume 8: An Audio Companion; BK English Language Handbook, Level 1; Vocabulary from Classical Roots, Book C; The Narrative of the Life of Frederick Douglass, An American Slave,* by Frederick Douglass; *Anne Frank: Diary of a Young Girl*, by Anne Frank; *Romeo and Juliet*, by William Shakespeare
Prerequisites: K12 Intermediate English A and B, or equivalent

Note: Students who have already succeeded in K12 middle school Literary Analysis and Composition should not enroll in this course.

ENG104: Honors Literary Analysis and Composition I

This course challenges students to improve their written and oral communication skills, while strengthening their ability to understand and analyze literature in a variety of genres. Students enrolled in this course work on independent projects that enhance their skills and challenge them to consider complex ideas and apply the knowledge they have learned.

Literature: Students read a broad array of short stories, poetry, drama, novels, autobiographies, essays, and famous speeches. The course guides students in the close reading and critical analysis of classic works of literature, and helps them appreciate the texts and the contexts in which the works were written. Literary selections range from the Greek tragedy *Antigone* to Shakespeare's *Romeo and Juliet* to contemporary pieces by authors such as Annie Dillard and Maya Angelou.

Language Skills: Students broaden their composition skills by examining model essays in various genres by student and published writers. Through in-depth planning, organizing,

drafting, revising, proofreading, and feedback, they hone their writing skills. Students build on their grammar, usage, and mechanics skills with in-depth study of sentence analysis and structure, agreement, and punctuation, reinforced by online activities. Student vocabularies are enhanced through the study of Greek and Latin root words, improving students' ability to decipher the meanings of new words.

Course length: Two semesters
Materials: *Classics for Young Readers, Volume 8; Classics for Young Readers, Volume 8: An Audio Companion; BK English Language Handbook, Level 1; Vocabulary from Classical Roots, Book C; The Narrative of the Life of Frederick Douglass, An American Slave,* by Frederick Douglass; *Anne Frank: Diary of a Young Girl,* by Anne Frank; *Romeo and Juliet*, by William Shakespeare
Prerequisites: Success in K12 Intermediate English A and B, or equivalent, and teacher/school counselor recommendation

Note: Students who have already succeeded in K12 middle school Literary Analysis and Composition should not enroll in this course.

ENG202: Literary Analysis and Composition II

In this course, students build on their language skills while reading classic and modern works of literature and improving their writing skills.

Literature: Students read short stories, poetry, drama, and novels, sharpening their reading comprehension skills and analyzing important human issues.

Language Skills: Students continue to work on their oral and written expression skills, writing a variety of essays, including persuasive and research essays. Students plan, organize, and revise their essays in response to feedback. They build on their skills in grammar, usage, and mechanics by studying parts of speech, phrases and clauses, sentence analysis and structure, agreement, punctuation, and other conventions. Thematic units focus on word roots, suffixes and prefixes, context clues, and other strategies help students strengthen their vocabularies.

Course length: Two semesters
Materials: *Explorations: An Anthology of Literature, Volume B; The Miracle Worker,* by William Gibson
Prerequisites: ENG102: Literary Analysis and Composition I, or equivalent

Note: Students who have taken K12 Intermediate English A or B or K12 middle school Literary Analysis and Composition courses should not enroll in this course.

ENG203: Literary Analysis and Composition II

In this course, students build on existing literature and composition skills and move to higher levels of sophistication.

Literature: Students hone their skills of literary analysis by reading short stories, poetry, drama, novels, and works of nonfiction, both classic and modern. Authors include W. B. Yeats, Sara Teasdale, Langston Hughes, Robert Frost, Edgar Allan Poe, Nathaniel Hawthorne, Kate Chopin, Amy Tan, and Richard Rodriguez. Students read Shakespeare's *Macbeth*. They are offered a choice of novels and longer works to study, including works by Jane Austen, Charles Dickens, Elie Wiesel, and many others.

Language Skills: In this course, students become more proficient writers and readers. In composition lessons, students analyze model essays from readers' and writers' perspectives, focusing on ideas and content, structure and organization, style, word choice, and tone. Students receive feedback during the writing process to help them work toward a polished final draft. In addition to writing formal essays, résumés, and business letters, students write and deliver a persuasive speech. Students expand their knowledge of grammar, usage, and mechanics through sentence analysis and structure, syntax, agreement, and conventions. Unit pretests identify skills to address more fully. Students strengthen their vocabularies through thematic units focused on word roots, suffixes and prefixes, context clues, and other important vocabulary-building strategies.

Course length: Two semesters
Materials: *Journeys in Literature: Classic and Modern, Volume B; Journeys in Literature: Classic and Modern, Volume B: An Audio Companion; Vocabulary for Achievement, Fourth Course; Macbeth*, by William Shakespeare
Prerequisites: ENG103: Literary Analysis and Composition I, or equivalent

ENG204: Honors Literary Analysis and Composition II

In this course, students build on existing literature and composition skills and move on to higher levels of sophistication. Students work on independent projects that enhance their skills and challenge them to consider complex ideas and apply the knowledge they have learned.

Literature: Students hone their skills of literary analysis by reading short stories, poetry, drama, novels, and works of nonfiction, both classic and modern. Authors include W. B. Yeats, Sara Teasdale, Langston Hughes, Robert Frost, Edgar Allan Poe, Nathaniel Hawthorne, Kate Chopin, Amy Tan, Richard Rodriguez, and William Shakespeare. Students have a choice of novels and longer works to study, including works by Jane Austen, Charles Dickens, and Elie Wiesel.

Language Skills: In this course, students become more proficient writers and readers. In composition lessons, students analyze model essays from readers' and writers' perspectives, focusing on ideas and content, structure and organization, style, word choice, and tone. Students receive feedback during the writing process to help them work toward a polished final draft. In addition to writing formal essays, résumés, and business letters, students write and deliver a persuasive speech. Students expand their knowledge of grammar, usage, and mechanics through sentence analysis and structure, syntax, agreement, and conventions. Unit pretests identify skills to address more fully. Students strengthen their vocabularies through thematic units focused on word roots, suffixes and prefixes, context clues, and other important vocabulary-building strategies.

Course length: Two semesters
Materials: *Journeys in Literature: Classic and Modern, Volume B; Journeys in Literature: Classic and Modern, Volume B: An Audio Companion; Vocabulary for Achievement, Fourth Course*
Prerequisites: Success in ENG104: Honors Literary Analysis and Composition I, or equivalent, and teacher/school counselor recommendation

ENG302: American Literature

In this genre-based course, students sharpen their reading comprehension skills and analyze important themes in classic and modern works of American literature, including short stories, poetry, drama, and novels. Students refine their skills of written expression by writing memoirs, persuasive essays, research essays, workplace documentation, and more. They develop vocabulary skills and refresh their knowledge of grammar, usage, and mechanics in preparation for standardized tests.

Literature: Students read short stories, poetry, drama, and novels, sharpening their reading comprehension skills and analyzing important themes in American literature.

Language Skills: Students continue to work on their oral and written expression skills, writing a variety of essays including memoirs, persuasive and research essays, and workplace documentation. Students plan, organize, and revise their essays in response to feedback.

Course length: Two semesters
Materials: *Explorations: An Anthology of American Literature, Volume C; Our Town,* by Thornton Wilder; *To Kill a Mockingbird,* by Harper Lee
Prerequisites: ENG202: Literary Analysis and Composition II, or equivalent

ENG303: American Literature

In this course, students read and analyze works of American literature from Colonial to contemporary times, including poetry, short stories, novels, drama, and nonfiction. The literary works provide opportunities for critical writing, creative projects, and online discussions. Students develop vocabulary skills and refresh their knowledge of grammar, usage, and mechanics in preparation for standardized tests.

Course length: Two semesters
Materials: *Journeys in Literature: American Traditions, Volume C; The Great Gatsby,* by F. Scott Fitzgerald; *The Glass Menagerie* by Tennessee Williams. Students will also read one selection of their choice from the following: *The Old Man and the Sea,* by Ernest Hemingway; *The House on Mango Street,* by Sandra Cisneros; *A Lesson Before Dying,* by Ernest Gaines; *The Red Badge of Courage,* by Stephen Crane
Prerequisites: ENG203: Literary Analysis and Composition II, or equivalent

ENG304: Honors American Literature

In this course, students read and analyze works of American literature from Colonial to contemporary times, including poetry, short stories, novels, drama, and nonfiction. The literary works provide opportunities for critical writing, creative projects, and online discussions. Students develop vocabulary skills and refresh their knowledge of grammar, usage, and mechanics in preparation for standardized tests. Students enrolled in this challenging course will also complete independent projects that deepen their understanding of the themes and ideas presented in the curriculum.

Course length: Two semesters
Materials: *Journeys in Literature: American Traditions, Volume C; The Great Gatsby,* by F. Scott Fitzgerald; *The Glass Menagerie,* by Tennessee Williams. Students will also read one selection of their choice from the following: *The Old Man and the Sea,* by Ernest Hemingway; *The House on Mango Street* by Sandra Cisneros; *A Lesson Before Dying,* by Ernest Gaines; *The Red Badge of Courage,* by Stephen Crane; and two selections of their choice from the following: *Billy Budd,* by Herman Melville, *A Connecticut Yankee in King Arthur's Court,* by Mark Twain; *Catcher in the Rye,* by J.D. Salinger; *Song of Solomon,* by Toni Morrison
Prerequisites: Success in ENG204: Honors Literary Analysis and Composition II, or equivalent, and teacher/school counselor recommendation

ENG402: British and World Literature

This course engages students in selections from British and World literature from the ancient world through modern times. They practice analytical writing and have opportunities for creative expression. Students also practice test-taking skills for standardized assessments in critical reading and writing.

Course length: Two semesters
Materials: TBD
Prerequisites: ENG302: American Literature

ENG403: British and World Literature

Students read selections from British and World literature in a loosely organized chronological framework. They analyze the themes, styles, and structures of these texts and make thematic connections among diverse authors, periods, and settings. Students complete guided and independent writing assignments that refine their analytical skills. They have opportunities for creative expression in projects of their choosing. Students also practice test-taking skills for standardized assessments in critical reading and writing.

Course length: Two semesters
Materials: TBD
Prerequisites: ENG303: American Literature, or equivalent

ENG404: Honors British and World Literature

Students read selections from British and World literature in a loosely organized chronological framework. They analyze the themes, styles, and structures of these texts and make thematic connections among diverse authors, periods, and settings. Students work independently on many of their analyses and engage in creative collaboration with their peers. Students also practice test-taking skills for standardized assessments in critical reading and writing.

Course length: Two semesters
Materials: TBD
Prerequisites: ENG304: American Literature, or equivalent, and teacher/school counselor recommendation

ENG500: AP® English Language and Composition

Students learn to understand and analyze complex works by a variety of authors. They explore the richness of language, including syntax, imitation, word choice, and tone. They also learn composition style and process, starting with exploration, planning, and writing. This continues with editing, peer review, rewriting, polishing, and applying what they learn to academic, personal, and professional contexts. In this equivalent of an introductory college-level survey class, students prepare for the AP® exam and for further study in communications, creative writing, journalism, literature, and composition.

Course Length: Two semesters
Materials: *The Norton Reader: An Anthology of Nonfiction*, 11th ed.; *Writing: A College Handbook*, 5th ed.
Prerequisites: Success in ENG303: American Literature (or equivalent) and teacher/school counselor recommendation

ENG510: AP® English Literature and Composition

In this course, the equivalent of an introductory college-level survey class, students are immersed in novels, plays, poems, and short stories from various periods. Students read and write daily, using a variety of multimedia and interactive activities, interpretive writing assignments, and discussions. The course places special emphasis on reading comprehension, structural and critical analyses of written works, literary vocabulary, and recognizing and understanding literary devices. Students prepare for the AP® Exam and for further study in creative writing, communications, journalism, literature, and composition.

Course Length: Two semesters
Materials: Required (both semesters): *The Norton Anthology of Poetry*, 5th ed.; *The Story and Its Writer: An Introduction to Short Fiction*, compact 7th ed.
Required (first semester): *Their Eyes Were Watching God*, by Zora Neale Hurston; *Hedda Gabler*, by Henrik Ibsen; *A Streetcar Named Desire*, by Tennessee Williams; *Twelfth Night*, by William Shakespeare
Required (second semester): *The Great Gatsby*, by F. Scott Fitzgerald; *Annie John*, by Jamaica Kincaid; *Jane Eyre*, by Charlotte Brontë
Prerequisites: Success in ENG303: American Literature (or equivalent) and a teacher/school counselor recommendation

ENG010: Journalism (Elective)

Students examine the development of journalism, from print to the multimedia environment, while learning how to publish an online newspaper. Students write newspaper-style articles and opinion pieces, and examine careers in multimedia communication. They also consider the historical effects of "yellow" journalism, freedom of the press, and journalism's contributions to today's world, with an emphasis on the mutual influence of media and policy.

Course length: Two semesters
Materials: *Associated Press Stylebook*
Prerequisites: Success in previous English/language arts course and a teacher/school counselor recommendation

Mathematics

MTH102: Math Foundations

Students assess their mastery and focus on skills that need reinforcement. They practice skills of mathematical reading, writing, and reasoning. Topics include number sense; statistics, data analysis, and probability; functions; measurement and geometry; and algebraic concepts. Throughout the course, students use Real-World Connection and Geometry Infusion problems to apply mathematical skills to real-life situations.

Course length: Two semesters
Materials: None
Prerequisites: Middle school math, or equivalent (minimum)

MTH112: Pre-Algebra

In this course, students learn computational and problem-solving skills and the language of algebra. Students translate word phrases and sentences into mathematical expressions; analyze geometric figures; solve problems involving percentages, ratios, and proportions; graph different kinds of equations and inequalities; calculate statistical measures and probabilities; apply the Pythagorean theorem; and explain strategies for solving real-world problems. The textbook provides students with a ready reference and explanations that supplement the online material. Online lessons provide demonstrations of concepts, as well as interactive problems with contextual feedback.

Course length: Two semesters
Materials: *Pre-Algebra: Reference Guide and Problem Sets*
Prerequisite: MTH102: Math Foundations

MTH113: Pre-Algebra

In this course, students take a broader look at computational and problem-solving skills while learning the language of algebra. Students translate word phrases and sentences into mathematical expressions; analyze geometric figures; solve problems involving percentages, ratios, and proportions; graph different kinds of equations and inequalities; calculate statistical measures and probabilities; apply the Pythagorean theorem; and explain strategies for solving real-world problems. Online lessons provide demonstrations of key concepts, as well as interactive problems with contextual feedback. A textbook supplements the online material.

Course length: Two semesters
Materials: *Pre-Algebra: Reference Guide and Problem Sets*
Prerequisites: K12 Pre-Algebra A, MTH102: Math Foundations, or equivalent

Note: Students who have already succeeded in K12 middle school Pre-Algebra B should not enroll in this course.

MTH122: Algebra I

In this course, students explore the tools of algebra. Students learn to identify the structure and properties of the real number system; complete operations with integers and other rational numbers; work with square roots and irrational numbers; graph linear equations; solve linear equations and inequalities in one variable; solve systems of linear equations; use ratios, proportions, and percentages to solve problems; use

algebraic applications in geometry including the Pythagorean theorem and formulas for measuring area and volume; complete an introduction to polynomials; and understand logic and reasoning.

Course length: Two semesters
Materials: *Algebra I: Reference Guide and Problem Sets*
Prerequisites: MTH112: Pre-Algebra

MTH123: Algebra I

Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Students learn to use number properties to simplify expressions or justify statements; describe sets with set notation and find the union and intersection of sets; simplify and evaluate expressions involving variables, fractions, exponents, and radicals; work with integers, rational numbers, and irrational numbers; and graph and solve equations, inequalities, and systems of equations. They learn to determine whether a relation is a function and how to describe its domain and range; use factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulate and evaluate valid mathematical arguments using various types of reasoning; and translate word problems into mathematical equations and then use the equations to solve the original problems.

Course length: Two semesters
Materials: *Algebra I: Reference Guide and Problem Sets*
Prerequisites: K12 Pre-Algebra B, MTH113: Pre-Algebra, or equivalent

Note: Students who have already succeeded in K12 middle school Algebra 1 should not enroll in this course.

MTH124: Honors Algebra I

This course prepares students for more advanced courses while they develop algebraic fluency, learn the skills needed to solve equations, and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Students learn to use number properties to simplify expressions or justify statements; describe sets with set notation and find the union and intersection of sets; simplify and evaluate expressions involving variables, fractions, exponents, and radicals; work with integers, rational numbers, and irrational numbers; and graph and solve equations, inequalities, and systems of equations.

They learn to determine whether a relation is a function and how to describe its domain and range; use factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulate and evaluate valid mathematical arguments using various types of reasoning; translate word problems into mathematical equations and then use the equations to solve the original problems. The course is expanded with more challenging assessments, optional exercises, and threaded discussions that allow students to explore and connect algebraic concepts. There is also an independent honors project each semester.

Course length: Two semesters
Materials: *Algebra I: Reference Guide and Problem Sets*
Prerequisites: Success in previous math course and teacher/school counselor recommendation

MTH202: Geometry

Students learn to recognize and work with core geometric concepts in various contexts. They develop sound ideas of inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry, as well as a solid, basic understanding of mathematical structure, method, and applications of Euclidean plane and solid geometry. Students use visualizations, spatial reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; and the use of transformations.

Course length: Two semesters
Materials: *Geometry: A Reference Guide*; a drawing compass, protractor, and ruler
Prerequisites: MTH122: Algebra I, or equivalent

MTH203: Geometry

In this comprehensive course, students are challenged to recognize and work with geometric concepts in various contexts. They build on ideas of inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry. They develop deeper understandings of mathematical structure, method, and applications of Euclidean plane and solid geometry. Students use visualizations, spatial

reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; the use of transformations; and non-Euclidean geometries.

Course length: Two semesters
Materials: *Geometry: A Reference Guide*; a drawing compass, protractor, and ruler
Prerequisites: MTH123: Algebra I, or equivalent

MTH204: Honors Geometry

Students work with advanced geometric concepts in various contexts. They build in-depth ideas of inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry. They also develop a sophisticated understanding of mathematical structure, method, and applications of Euclidean plane and solid geometry. Students use visualizations, spatial reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; the use of transformations; and non-Euclidean geometries. Students work on additional challenging assignments, assessments, and research projects.

Course length: Two semesters
Materials: *Geometry: A Reference Guide;* a drawing compass, protractor, and ruler
Prerequisites: MTH123: Algebra I or MTH124: Honors Algebra I, or equivalent, and teacher/school counselor recommendation

MTH302: Algebra II

This course builds upon algebraic concepts covered in Algebra I. Students solve open-ended problems and learn to think critically. Topics include conic sections; functions and their graphs; quadratic functions; inverse functions; and advanced polynomial functions. Students are introduced to rational, radical, exponential, and logarithmic functions; sequences and series; and data analysis.

Course length: Two semesters
Materials: None
Prerequisites: MTH122: Algebra I

MTH303: Algebra II

This course builds upon algebraic concepts covered in Algebra I and prepares students for advanced-level courses. Students extend their knowledge and understanding by solving open-ended problems and thinking critically. Topics include conic sections; functions and their graphs; quadratic functions; inverse functions; and advanced polynomial functions. Students are introduced to rational, radical, exponential, and logarithmic functions; sequences and series; and data analysis.
Course Length: Two semesters
Materials: None
Prerequisites: MTH123: Algebra I and MTH203: Geometry

MTH304: Honors Algebra II

This course builds upon advanced algebraic concepts covered in Algebra I and prepares students for advanced-level courses. Students extend their knowledge and understanding by solving open-ended problems and thinking critically. Topics include functions and their graphs; quadratic functions; complex numbers, and advanced polynomial functions. Students are introduced to rational, radical, exponential, and logarithmic functions; sequences and series; probability; statistics; and conic sections. Students work on additional challenging assignments, assessments, and research projects.

Course Length: Two semesters
Materials: None
Prerequisites: MTH123: Algebra I or MTH124: Honors Algebra I and MTH203: Geometry or MTH204: Honors Geometry, or equivalents, and teacher/school counselor recommendation

MTH312: Business and Consumer Math

Students learn mathematical skills relevant to everyday life, such as balancing a checkbook, calculating net pay, budgeting expenses, making cost comparisons, buying and renting a home, and finding the cost of operating a motor vehicle. Students also explore business topics, including borrowing money, investing, and calculating business profits and losses. The course guides students toward logical thinking and problem solving, to help them make good decisions about money and finances. Through projects and activities, students apply their skills and knowledge to real-life situations.

Course length: One semester
Materials: None
Prerequisites: MTH112 or MTH113: Pre-Algebra (or equivalent) recommended, but not required

MTH403: Pre-Calculus/Trigonometry

Pre-calculus weaves together previous study of algebra, geometry, and functions into a preparatory course for calculus. The course focuses on the mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. Topics include linear, quadratic, exponential, logarithmic, radical, polynomial, and rational functions; systems of equations; and conic sections in the first semester. The second semester covers trigonometric ratios and functions; inverse trigonometric functions; applications of trigonometry, including vectors and laws of cosine and sine; polar functions and notation; and arithmetic of complex numbers. Cross-curricular connections are made throughout the course to calculus, art, history, and a variety of other fields related to mathematics.

Course length: Two semesters
Materials: Texas Instruments T1-84 Plus graphing calculator
Prerequisites: Success in MTH203: Geometry and MTH303: Algebra II

MTH500: AP® Calculus AB

This course is the equivalent of an introductory college-level calculus course. Calculus helps scientists, engineers, and financial analysts understand the complex relationships behind real-world phenomena. Students learn to evaluate the soundness of proposed solutions and apply mathematical reasoning to real-world models. Students also learn to understand change geometrically and visually (by studying graphs of curves), analytically (by studying and working with mathematical formulas), numerically (by seeing patterns in sets of numbers), and verbally. Students prepare for the AP® exam and further studies in science, engineering, and mathematics.

Course length: Two semesters
Materials: Texas Instruments T1-84 Plus graphing calculator
Prerequisites: Success in MTH203: Geometry, MTH303: Algebra II, MTH403: Pre-Calculus/Trigonometry, and a teacher/school counselor recommendation

MTH510: AP® Statistics

This course is the equivalent of an introductory college-level course. Statistics—the art of drawing conclusions from imperfect data and the science of real-world uncertainties—plays an important role in many fields. Students collect, analyze, graph, and interpret real-world data. They learn to design and analyze research studies by reviewing and evaluating examples from real research. Students prepare for the AP® exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

Course length: Two semesters
Materials: Texas Instruments T1-84 Plus graphing calculator
Prerequisites: Success in MTH303: Algebra II and a teacher/school counselor recommendation

BUS030: Personal Finance (Elective)

Students learn about different aspects of personal economics and finance in a virtual neighborhood setting. Topics include spending plans and borrowing decisions; career planning; and investing, insurance, and other financial services. Students complete activities and projects to apply the knowledge they gain to their own lives. This course may meet the needs of most students requiring financial skills or economics credit.

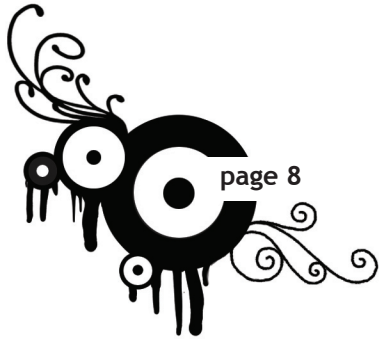
Course length: One semester
Materials: None
Prerequisites: MTH112 or MTH113: Pre-Algebra (or equivalent) recommended, but not required

Science

SCI102: Physical Science

Students explore the relationship between matter and energy by investigating force and motion, the structure of atoms, the structure and properties of matter, chemical reactions, and the interactions of energy and matter. Students develop skill in measuring, solving problems, using laboratory apparatuses, following safety procedures, and adhering to experimental procedures. Students focus on inquiry-based learning, with hands-on laboratory investigations making up half of the learning experience. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Physical Science: A Laboratory Guide*; materials for laboratory experiments
Prerequisites: K12 middle school Physical Science, or equivalent



SCI112: Earth Science

This course provides students with a solid earth science curriculum, focusing on geology, oceanography, astronomy, weather, and climate. The program consists of online lessons, an associated reference book, collaborative activities, and hands-on laboratories students can conduct at home. The course provides a base for further studies in geology, meteorology, oceanography, and astronomy, and gives practical experience in implementing scientific methods. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Earth Science: A Reference Guide*; materials for laboratory experiments
Prerequisites: K12 middle school Earth Science, or equivalent

SCI113: Earth Science

This course provides students with a comprehensive earth science curriculum, focusing on geology, oceanography, astronomy, weather, and climate. The program consists of in-depth online lessons, an associated reference book, collaborative activities, and hands-on laboratories students can conduct at home. The course prepares students for further studies in geology, meteorology, oceanography, and astronomy courses, and gives them practical experience in implementing scientific methods. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Earth Science: A Reference Guide*; materials for laboratory experiments
Prerequisites: K12 middle school Life Science, or equivalent

SCI114: Honors Earth Science

This challenging course provides students with an honors-level earth science curriculum, focusing on geology, oceanography, astronomy, weather, and climate. The program consists of online lessons, an associated reference book, collaborative activities, and hands-on laboratories students can conduct at home. The course prepares students for advanced studies in geology, meteorology, oceanography, and astronomy courses, and gives them more sophisticated experience in implementing scientific methods. Additional honors assignments include debates, research papers, extended collaborative laboratories, and virtual laboratories. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Earth Science: A Reference Guide*; materials for laboratory experiments
Prerequisites: K12 middle school Life Science, or equivalent, success in previous science course, and teacher/school counselor recommendation

SCI202: Biology

In this course, students focus on the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. The program consists of online lessons including extensive animations, an associated reference book, collaborative activities, and hands-on laboratory experiments students can conduct at home. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Biology: A Reference Guide*; materials for laboratory experiments, including a compound microscope
Prerequisites: K12 middle school Life Science, or equivalent

SCI203: Biology

In this comprehensive course, students investigate the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. The program consists of in-depth online lessons including extensive animations, an associated reference book, collaborative explorations, and hands-on laboratory experiments students can conduct at home. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Biology: A Reference Guide*; materials for laboratory experiments, including a compound microscope
Prerequisites: K12 middle school Life Science, or equivalent

SCI204: Honors Biology

This course provides students with a challenging honors-level biology curriculum, focusing on the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. The program consists of advanced online lessons including extensive animations, an associated reference book, collaborative explorations, and hands-on laboratory experiments students can conduct at home. Honors activities include debates, research papers, extended collaborative laboratories, and virtual laboratories. K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Biology: A Reference Guide*; materials for laboratory experiments, including a compound microscope
Prerequisites: K12 middle school Life Science, or equivalent, success in previous science course, and teacher/school counselor recommendation

SCI302: Chemistry

This course surveys all key areas of chemistry, including atomic structure, chemical bonding and reactions, solutions, stoichiometry, thermochemistry, organic chemistry, and nuclear chemistry. The course includes direct online instruction and related assessments, used with a problem-solving book. Instructions for hands-on labs are included, for which K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Chemistry: Problems and Solutions; Chemistry: A Laboratory Guide*; K12-provided laboratory materials; common household materials for labs
Prerequisites: K12 middle school Physical Science or SCI102: Physical Science and satisfactory grasp of Algebra basics, evidenced by success in MTH122: Algebra I, or equivalent

SCI303: Chemistry

This comprehensive course gives students a solid basis to move on to future studies. The course provides an in-depth survey of all key areas, including atomic structure, chemical bonding and reactions, solutions, stoichiometry, thermochemistry, organic chemistry, and nuclear chemistry. The course includes direct online instruction and related assessments, used with a problem-solving book. Instructions for hands-on labs are included, for which K12 provides all lab materials that cannot easily be found in the home.

Course length: Two semesters
Materials: *Chemistry: Problems and Solutions; Chemistry: A Laboratory Guide*; K12-provided laboratory materials; common household materials for labs
Prerequisites: Satisfactory completion of either K12 middle school Physical Science or SCI102: Physical Science and solid grasp of Algebra basics, evidenced by success in MTH122: Algebra I, or equivalent

SCI304: Honors Chemistry

This advanced course gives students a solid basis to move on to more advanced courses. The challenging course surveys all key areas, including atomic structure, chemical bonding and reactions, solutions, stoichiometry, thermochemistry, organic chemistry, and nuclear chemistry, enhanced with challenging model problems and assessments. Students complete community-based written research projects, treat aspects of chemistry that require individual research and reporting, and participate in online threaded discussions. Instructions for hands-on labs are included, for which K12 provides all lab materials that cannot easily be found in the home.
Course length: Two semesters
Materials: *Chemistry: Problems and Solutions; Chemistry: A Laboratory Guide*; common household materials for labs
Prerequisites: Success in previous science course, success in Algebra I, or equivalent, and teacher/school counselor recommendation

SCI403: Physics

This course provides a comprehensive survey of all key areas: physical systems, measurement, kinematics, dynamics, momentum, energy, thermodynamics, waves, electricity, and magnetism, and introduces students to modern physics topics such as quantum theory and the atomic nucleus. The course gives students a solid basis to move on to more advanced courses later in their academic careers. The program consists of online instruction and related assessments, plus an associated problem-solving book and instructions for conducting hands-on laboratory experiments at home. K12 provides all lab materials that cannot be found easily in a typical home.

Course length: Two semesters
Materials: *Physics: Problems and Solutions;* Materials for laboratory experiments
Prerequisites: MTH303: Algebra II and MTH403: Pre-Calculus/ Trigonometry

SCI404: Honors Physics

This advanced course surveys all key areas: physical systems, measurement, kinematics, dynamics, momentum, energy, thermodynamics, waves, electricity, and magnetism, and introduces students to modern physics topics such as quantum theory and the atomic nucleus. Additional honors assignments include debates, research papers, extended collaborative laboratories, and virtual laboratories. The course gives a solid basis for moving on to more advanced college physics

courses. The program consists of online instruction and related assessments, plus an associated problem-solving book and instructions for conducting hands-on laboratory experiments at home. K12 provides all lab materials that cannot be found easily in a typical home.

Course length: Two semesters
Materials: *Physics: Problems and Solutions;* Materials for laboratory experiments
Prerequisites: MTH303: Algebra II or MTH303: Honors Algebra II and MTH403: Pre-Calculus/Trigonometry, and teacher/school counselor recommendation

SCI500: AP® Biology

This course is designed in three modules with correlating laboratory exercises: molecules and cells, heredity and the theory of evolution, and organisms and populations. Within these modules students learn about energy transfer, continuity and change in the biological world, and relations between the structure and function of living things. They also analyze the interdependence of the elements of nature and the ways in which science must seek to preserve a balance between technology and nature. Students prepare for the AP® exam by modeling the thought processes and critical-thinking skills required to answer questions on the exam. The content aligns to the sequence of topics recommended by the College Board.

Course length: Two semesters
Materials: Materials for laboratory experiments
Prerequisites: Success in SCI203: Biology and SCI303: Chemistry, and teacher/school counselor recommendation

SCI510: AP® Chemistry

Students solve chemical problems by using mathematical formulation principles and chemical calculations in addition to laboratory experiments. They build on their general understanding of chemical principles and engage in a more in-depth study of the nature and reactivity of matter. Students first focus on the structure of atoms, molecules, and ions, and then go on to analyze the relationship between molecular structure and chemical and physical properties. To investigate this relationship, students examine the molecular composition of common substances and learn to transform them through chemical reactions with increasingly predictable outcomes. Students prepare for the AP® exam. The course content aligns to the sequence of topics recommended by the College Board and to widely used textbooks.

Course length: Two semesters
Materials: *Inquiries into Chemistry,* by Abraham and Pavelich, 3rd ed.; materials for laboratory experiments; not provided, but a Texas Instruments T1-84 Plus graphing calculator or one of similar capabilities is required
Prerequisites: Success in SCI303: Chemistry or SCI304: Honors Chemistry and MTH303: Algebra II, and a teacher/school counselor recommendation

SCI520: AP® Physics B

This course is the equivalent of an introductory college-level survey course, but does not require proficiency in calculus. Students focus on five general areas: Newtonian mechanics, thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Students gain an understanding of the core principles of physics and then apply them to problem-solving exercises. They learn how to measure the mass of a planet without weighing it, find out how electricity makes a motor turn, and learn how opticians know how to shape lenses for glasses. Students prepare for the AP® exam and for further study in science and engineering.

Course length: Two semesters
Materials: *Schaum's Outline of College Physics*, by Bueche and Hecht, 10th ed.; materials for laboratory experiments; not provided, but a Texas Instruments T1-84 Plus graphing calculator or one of similar capabilities is required
Prerequisites: Success in MTH303: Algebra II, MTH403: Pre-Calculus/Trigonometry, and teacher/school counselor recommendation

SCI010: Environmental Science (Elective)

This course provides an overview of the nature of ecosystems, energy flow, and the inter-relationships of biology, geology, and chemical cycles. Students explore issues in population studies, environmental pollution, and the organization and dynamics of ecological communities. Specific topics include scientific habits of the mind; the application of scientific knowledge, methodology, and historical context to solve problems; the use of laboratory technologies; earth dynamics; the influence of technology on environmental quality; conservation practices; biodiversity; environmental planning and waste management; environmental monitoring and policy; sustainable use of public land; characteristics of populations; biotic and abiotic environmental factors; and energy production technologies.

Course length: Two semesters
Materials: Common household materials for labs
Prerequisites: Success in previous high school science course and a teacher/school counselor recommendation

SCI020: Life Science: Oceanography (Elective)

In this introductory course, students construct an applied knowledge of the characteristics of aquatic systems. Students study ocean structure and marine ecology through hands-on exploration of coastal waters, open ocean waters, deep ocean waters, coral reefs, kelp forests, deep ocean vents, and tide pools. Through guided practice of the scientific model, using common household materials, students conduct field studies of local aquatic structures.

Course length: One semester
Materials: Common household materials for labs
Prerequisites: SCI202 or SCI203: Biology and SCI102: Physical Science, or equivalents

History and Social Sciences

HST102: World History

This course traces the development of civilizations around the world from prehistory to the present, with a special emphasis on key periods and primary sources. The course covers major events in world history, including the development and influence of human-geographic relationships, political and social structures, economics, science and technology, and the arts. Students investigate the major religions and belief systems throughout history and learn about the importance of trade and cultural exchange. Other topics include the development of agriculture, the spread of democracy, the rise of nation-states, the industrial era, the spread of imperialism, and the issues and conflicts of the twentieth century.

Course length: Two semesters
Materials: None
Prerequisites: K[12] middle school American History Since 1865, World History A or World History B, or equivalent

HST103: World History

In this course, students examine the development of civilizations around the world from prehistory to the present, analyzing human-geographic relationships, political and social structures, economics, science and technology, and the arts. Students investigate major religions and belief systems and explore trade and cultural exchange in relation to the development of civilizations. Studies emphasize major changes in world history, such as the development of agriculture, spread of democracy, rise of nation-states, the Industrial Revolution, the spread of imperialism, and critical issues and conflicts of the twentieth century.

Course length: Two semesters
Materials: None
Prerequisites: K[12] middle school American History Since 1865, World History A or World History B, or equivalent

HST202: Modern World Studies

Students trace the history of the world from approximately 1870 to the present. They begin with a look back at events leading up to 1914, including the Second Industrial Revolution and the imperialism that accompanied it. Their focus then shifts to the contemporary era, including two world wars, the Great Depression, and global Cold War tensions. Students examine both the staggering problems and astounding accomplishments of the twentieth century, with a focus on political and social history. Students also explore topics in physical and human geography, and investigate issues of concern in the contemporary world. Online lessons help students organize study, explore topics, review in preparation for assessments, and practice skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The Human Odyssey, Volume 3*
Prerequisites: HST102: World History, K[12] middle school Intermediate World History A and B, or equivalent

HST203: Modern World Studies

In this comprehensive course, students follow the history of the world from approximately 1870 to the present. They begin with a study of events leading up to 1914, including the Second Industrial Revolution and the imperialism that accompanied it. Their focus then shifts to the contemporary era, including two world wars, the Great Depression, and global Cold War tensions. Students examine both the staggering problems and astounding accomplishments of the twentieth century, with a focus on political and social history. Students also explore

topics in physical and human geography, and investigate issues of concern in the contemporary world. Online lessons help students organize study, explore topics, review in preparation for assessments, and practice sophisticated skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The Human Odyssey, Volume 3*
Prerequisites: HST103: World History, K12 middle school Intermediate World History A and B, or equivalent

HST204: Honors Modern World Studies

In this advanced course, students investigate the history of the world from approximately 1870 to the present. They begin with an analysis of events leading up to 1914, including the Second Industrial Revolution and the imperialism that accompanied it. Their focus then shifts to the contemporary era, including two world wars, the Great Depression, and global Cold War tensions. Students undertake an in-depth examination of both the staggering problems and astounding accomplishments of the twentieth century, with a focus on political and social history. Students also explore advanced topics in physical and human geography, and investigate issues of concern in the contemporary world. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting research. Students complete independent projects each semester.

Course length: Two semesters
Materials: *The Human Odyssey, Volume 3*
Prerequisites: HST103: World History, K12 middle school Intermediate World History A and B, or equivalent, success in previous social studies course, and a teacher/school counselor recommendation

HST212: Geography and World Cultures

This one-semester course introduces students to the countless ways in which geography influences human relationships, politics, society, economics, science, technology, and the arts. Special emphasis is placed on the way geographically derived information is expressed in maps, charts, and graphs in order to teach students how to analyze and create such documents.

Course length: One semester
Materials: None
Prerequisites: HST102: World History is recommended, but not required

HST213: Geography and World Cultures

This one-semester course uses geographic features to explore how human relationships, political and social structures, economics, science, technology, and the arts have developed and influenced life in countries around the world. Throughout the course, students learn how to read maps, charts, and graphs rigorously and critically—and how to create them. Examining the intersection of culture and geography, students discover how a mountain in the distance can inspire national policymakers, civil engineers, or poets; how a river triggers the activity of bridge builders, shipbuilders, and merchants alike; and how the sound of a busy Cairo street can inspire sociologists and musicians. Students come to understand how the drama of human history and cultural encounters—affecting land, natural resources, religious dominance, and more—is played out on the geographical stage

Course length: One semester
Materials: None
Prerequisites: HST103: World History is recommended, but not required

HST302: U.S. History

This course is a full-year survey that provides students with a view of American history from the first migrations of nomadic people to North America to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize their study, explore topics, review in preparation for assessments, and practice skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: K12 middle school Intermediate World History B or HST102: World History

HST303: U.S. History

This course is a full-year survey that provides students with a comprehensive view of American history from the first migrations of nomadic people to North America to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize their study, explore topics in depth, review in preparation for assessments, and practice skills of historical

thinking and analysis. Activities include analyzing primary sources and maps, creating time lines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: HST103: World History or HST203: Modern World Studies

HST304: Honors U.S. History

This course is a challenging full-year survey that provides students with a comprehensive view of American history from the first migrations of nomadic people to North America to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize their study, explore topics in depth, review in preparation for assessments, and practice advanced skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research. Students complete independent projects each semester.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: HST103: World History or HST203: Modern World Studies, success in previous history course, and a teacher/school counselor recommendation

HST312: Modern U.S. History

This course is a full-year survey that provides students with a view of American history from the industrial revolution of the late nineteenth century to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize study, explore topics, review in preparation for assessments, and practice skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: K12 middle school American History Before 1865 and American History Since 1865, or equivalent

HST313: Modern U.S. History

This course is a full-year survey that provides students with a comprehensive view of American history from the industrial revolution of the late nineteenth century to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize study, explore topics in depth, review in preparation for assessments, and practice skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: K12 middle school American History Before 1865 and American History Since 1865, or equivalent

HST314: Honors Modern U.S. History

This course is a challenging full-year survey that provides students with a comprehensive view of American history from the industrial revolution of the late nineteenth century to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize study, explore topics in depth, review in preparation for assessments, and practice advanced advanced skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research. Students complete independent projects each semester.

Course length: Two semesters
Materials: *The American Odyssey: A History of the United States*
Prerequisites: K12 middle school American History Before 1865 and American History Since 1865, or equivalent, and teacher/school counselor recommendation

HST402: U.S. Government and Politics

This course uses the perspective of political institutions to explore government history, organization, and functions. Students encounter the political culture of our country from the Declaration of Independence to the present day, gaining insight into the challenges faced by presidents, members of Congress, and other political participants. The course also covers the roles of political parties, interest groups, the media, and the Supreme Court. Students learn to use primary historical documents as evidence in evaluating past events and government functions.

Course length: One semester
Materials: None
Prerequisites: HST302: U.S. History is recommended, but not required

HST403: U.S. Government and Politics

This course studies the history, organization, and functions of the United States government. Beginning with the Declaration of Independence and continuing through to the present day, students explore the relationship between individual Americans and our governing bodies. Students take a close look at the political culture of our country and gain insight into the challenges faced by citizens, elected government officials, political activists, and others. Students also learn about the roles of political parties, interest groups, the media, and the Supreme Court, and discuss their own views on current political issues.

Course length: One semester
Materials: None
Prerequisites: HST303: U.S. History is recommended, but not required

HST412: U.S. and Global Economics

This course in economic principles uses real-world simulations to teach the issues faced by producers, consumers, investors, and taxpayers in the U.S. and around the world. Topics include markets; supply and demand; theories of early economic thinkers; theories of value; money; the role of banks, investment houses, and the Federal Reserve; and other fundamental features of capitalism. A survey of current issues in American and global markets rounds out the course.

Course length: One semester
Materials: None
Prerequisites: HST402: U.S. Government and Politics is recommended, but not required

HST413: U.S. and Global Economics

In this course on economic principles, students explore choices they face as producers, consumers, investors, and taxpayers. Students apply what they learn to real-world simulation problems. Topics of study include markets from historic and contemporary perspectives; supply and demand; theories of early economic philosophers such as Adam Smith and David Ricardo; theories of value; money (what it is, how it evolved, the role of banks, investment houses, and the Federal Reserve); Keynesian economics; how capitalism functions, focusing on productivity, wages, investment, and growth; issues of capitalism, such as unemployment, inflation, and the national debt; and a survey of markets in such areas as China, Europe, and the Middle East.

Course length: One semester
Materials: None
Prerequisites: HST403: U.S. Government and Politics is recommended, but not required

HST500: AP® U.S. History

Students explore and analyze the economic, political, and social transformation of the United States since the time of the first European encounters. Students are asked to master not only the wide array of factual information necessary to do well on the AP® exam, but also to practice skills of critical analysis of historical information and documents. Students read primary and secondary source materials and analyze problems presented by historians to gain insight into challenges of interpretation and the ways in which historical events have shaped American society and culture. The content aligns to the sequence of topics recommended by the College Board and to widely used textbooks. Students prepare for the AP® exam.

Course length: Two semesters
Materials: *America: A Narrative History*, by Tindall et al., 7th ed.
Prerequisites: Success in previous history course and a teacher/school counselor recommendation

HST510: AP® U.S. Government and Politics

This course is the equivalent of an introductory college-level course. Students explore the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students gain the analytical perspective necessary to evaluate political data, hypotheses, concepts, opinions, and processes and learn how to gather data about political behavior and develop their own theoretical analysis of American politics. Students also build the skills they need to examine general propositions about government and politics, and to analyze specific relationships between political, social, and economic institutions. Students prepare for the AP® exam and for further study in political science, law, education, business, and history.

Course length: One semester
Materials: *The Lanahan Readings in the American Polity,* 4th ed.; *American Government*, by Lowi et al., 9th ed.
Prerequisites: Success in HST303: U.S. History (or equivalent) and a teacher/school counselor recommendation

HST520: AP® Macroeconomics

This course is the equivalent of an introductory college-level course. Students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. Students also examine how individuals and institutions are influenced by employment rates, government spending, inflation, taxes, and production. Students prepare for the AP® exam and for further study in business, political science, and history.
Course length: One semester
Materials: *Macroeconomics for Today, 4th Ed.,* ISBN: 0-324-30197-9
Prerequisites: Success in MTH303: Algebra II (or equivalent) and a teacher/school counselor recommendation

HST530: AP® Microeconomics

This course is the equivalent of an introductory college-level course. Students explore the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students learn why the same product can cost different amounts at different stores, in different cities, and at different times. Students also learn to spot patterns in economic behavior and learn how to use those patterns to explain buyer and seller behavior under various conditions. Lessons promote an understanding of the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in the economy. Students prepare for the AP® exam and for further study in business, history, and political science.

Course length: One semester
Materials: *Microeconomics for Today, 4th Ed.,* ISBN: 0-324-30192-8
Prerequisites: Success in MTH303: Algebra II (or equivalent) and a teacher/school counselor recommendation

HST540: AP® Psychology

This course is the equivalent of an introductory college-level course. Students receive an overview of current psychological research methods and theories. They explore the therapies used by professional counselors and clinical psychologists, and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They study core psychological concepts, such as the brain and sensory functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Students prepare for the AP® Exam and for further studies in psychology and life sciences.

Course length: One semester
Materials: *Psychology*, by David G. Myers, 8th ed.
Prerequisites: Success in SCI203: Biology and a teacher/school counselor recommendation

HST010: Anthropology (Elective)

Anthropology is the study of human beings and their social, environmental, and cultural relationships over time. In this course, students familiarize themselves with their own culture as they explore cultures from around the world and from different periods in history. Students examine each culture through the lens of family, land, death, identity, and power, to explore the similarities and differences of cultural roles in various times and places.

Course length: One semester
Materials: None
Prerequisites: HST102 or HST103: World History (or equivalent) recommended as a prerequisite or co-requisite, but not required

HST020: Psychology (Elective)

Students explore scientific methods of research as well as the major schools of psychology as they relate to issues of aggression, addictive behavior, memory, interpersonal relations, and self-care. Topics include the importance of ethics in scientific study, psychology's application to daily life, the influence of cultural background on perception, and more.

Course length: One semester
Materials: None
Prerequisites: SCI202 or SCI203: Biology or equivalent

HST030: Macroeconomics (Elective)

Students analyze economic data through a variety of learning activities. They learn how macroeconomics differs from microeconomics. They study the measurement of aggregate economic activity and how it relates to employment and inflation. They explore fiscal and monetary policies designed to promote economic stability. Throughout the course, students use Internet resources to access and analyze current economic data.

Course length: One semester
Materials: None
Prerequisites: Success in previous math/social studies course and a teacher/school counselor recommendation

World Languages

WLG100: Spanish I

Students begin their introduction to Spanish with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training that leads quickly to oral production. Vocabulary and grammar topics are introduced in an ongoing adventure story that prompts students to use skills from all four language-learning areas. Students learn fundamental grammar as embedded in authentic spoken language. Cultural information covers major Spanish-speaking areas in Europe and the Americas. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Vox Everyday Spanish and English Dictionary*
Prerequisites: None

Note: Students who have already succeeded in middle school Spanish 2 should enroll in Spanish II rather than in Spanish I.

WLG200: Spanish II

In this continuing introduction to Spanish, students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then to reproduce new vocabulary in real-life oral expression. Additional verb tenses and idiomatic expressions are also introduced. As in Spanish I, students learn grammar through supplemental texts that supply traditional charts, tables, and explanations. Cultural information addresses Spanish as it is used around the globe. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Vox Everyday Spanish and English Dictionary*
Prerequisites: WLG100: Spanish I, middle school Spanish 1 and 2, or equivalent

WLG300: Spanish III

Intermediate Spanish students who have a strong base of vocabulary, speaking, and listening skills reach a new level of mastery and fluency in this course. Through games and compelling stories, students learn advanced grammar and vocabulary, with an emphasis on correct accents and comprehension of real-world native speech. Error-recognition technology helps students eliminate common mistakes from their speaking and writing. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Vox Everyday Spanish and English Dictionary*
Prerequisites: WLG200: Spanish II, or equivalent

WLG500: AP® Spanish Language

In AP® Spanish Language, students perfect their Spanish speaking, listening, reading, and writing skills. They study vocabulary, grammar, and cultural aspects of the language, and apply what they've learned in extensive written and spoken exercises. By the end of the course, students will have an expansive vocabulary and a solid working knowledge of all Spanish verb forms and tenses. The equivalent of a college-level language course, AP® Spanish Language prepares students for the AP® exam and for further study of Spanish language, culture, and literature.

Course length: Two semesters
Materials: *Vox Everyday Spanish and English Dictionary*
Prerequisites: WLG300: Spanish III (or equivalent) and a teacher/school counselor recommendation

WLG110: French I

Students begin their introduction to French with fundamental building blocks in four key areas of foreign-language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training

that leads quickly to oral production. An ongoing adventure story introduces vocabulary and grammar topics, and prompts students to use skills from the four language-learning areas. Students learn fundamental grammar as embedded in authentic spoken language. All- new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Larousse Student French-English/English-French Dictionary*
Prerequisites: None
Note: Students who have already succeeded in middle school French 2 should enroll in French II rather than in French I.

WLG210: French II

In this continuing introduction to French, students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then to reproduce new vocabulary items in functional real-life oral expression. Additional verb tenses and idiomatic expressions are also introduced. As in French I, students learn grammar through supplemental texts that supply traditional charts, tables, and explanations. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Larousse Student French-English/English-French Dictionary*
Prerequisites: WLG110: French I, middle school French 1 and 2, or equivalent

WLG310: French III

Intermediate French students who have a strong base of vocabulary, speaking, and listening skills reach a new level of mastery and fluency in this course. Through games and compelling stories, students learn advanced grammar and vocabulary, with an emphasis on correct accents and comprehension of real-world native speech. Error-recognition technology helps students eliminate common mistakes from their speaking and writing. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Larousse Student French-English/English-French Dictionary*
Prerequisites: WLG210: French II, or equivalent

WLG510: AP® French Language

In AP® French Language, students apply their French grammar and vocabulary knowledge and their listening, reading, speaking, and writing skills to a wide variety of real-world contexts. Students learn to speak fluently and accurately, write sophisticated compositions, and comprehend native speakers. The equivalent of a college-level language course, AP® French Language prepares students for the AP® exam and for further study of French language, culture, and literature.

Course length: Two semesters
Materials: *Larousse Student French-English/English-French Dictionary*
Prerequisites: WLG310: French III (or equivalent) and teacher/school counselor recommendation

WLG120: German I

Students begin their introduction to German with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training that leads quickly to oral production. An ongoing adventure story introduces vocabulary and grammar topics, and prompts students to use skills from the four language-learning areas. Students learn fundamental grammar as embedded in authentic spoken language. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Langenscheidt's Standard German Dictionary*
Prerequisites: None

Note: Students who have already succeeded in middle school German 2 should enroll in German II rather than in German I.

WLG220: German II

In this continuing introduction to German, students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then to reproduce new vocabulary items in functional real-life oral expression. Additional verb tenses and idiomatic expressions are also introduced. As in German I, students learn grammar through supplemental texts supplying traditional charts, tables, and explanations. All-new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Langenscheidt's Standard German Dictionary*
Prerequisites: WLG120: German I, middle school German 1 and 2, or equivalent

WLG130: Latin I

This introduction to Latin clarifies the traditionally difficult aspects of the language through vocabulary that follows all standard Latin rules but allows students to tell modern stories connected to a contemporary adventure. Students study familiar vocabulary so they can bring into focus the special characteristics of Latin, notably noun cases and declensions. They receive ongoing practice in vocabulary and grammar, which leads to the study of post-Classical Latin, both ecclesiastical and secular, as embodied in the Vulgate Bible and medieval Latin texts. All- new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Bantam New College Latin & English Dictionary*
Prerequisites: None

WLG230: Latin II

Students with a foundation in Latin refine their skills through compelling language lessons, as well as historical and cultural studies. They go from the basics of Latin to a higher level of sophistication through a learning methodology that uses games and stories. Students concentrate on fostering their ability to read and understand (without using a dictionary) classical Latin from a variety of authentic sources. All- new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Bantam New College Latin & English Dictionary*
Prerequisites: WLG130: Latin I or equivalent

WLG140: Chinese I

Students use compelling stories, games, videos, and multimedia experiences in this introduction to Mandarin Chinese. They learn the elegant simplicity of Chinese grammar and the subtleties of Chinese pronunciation through entertaining lessons that give a base of conversational ability and listening comprehension. Students build a foundation for reading and writing in the Chinese language through an adaptive technology that lets them choose an approach that works best for them. All- new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Oxford Beginner's Chinese Dictionary*
Prerequisites: None

Note: Students who have already succeeded in middle school Chinese 2 should enroll in Chinese II rather than in Chinese I.

WLG240: Chinese II

Students continue with engaging stories, games, videos, and multimedia experiences in this second level of Mandarin Chinese. Students further their understanding of Chinese grammar and pronunciation through lessons refining previous practice of conversational ability and listening comprehension. Innovative cultural videos and lessons build awareness of the rich legacy of Chinese culture. Students expand their foundation for reading and writing in Chinese through adaptive technology, providing opportunities to generate fun narratives, a range of well-formed sentences reflecting a solid grasp of grammar structures, and a wide vocabulary. All- new graphics, videos, and games keep students engaged, and make learning languages exciting.

Course length: Two semesters
Materials: *Oxford Beginner's Chinese Dictionary*
Prerequisites: WLG140: Chinese I, middle school Chinese 1 and 2, or equivalent

Electives and Additional Courses

ART010: Fine Art (Elective)

This course combines art history, appreciation, and analysis, while engaging students in hands-on creative projects. Lessons introduce major periods and movements in art history while focusing on masterworks and the intellectual, technical, and creative processes behind those works. Studio lessons provide opportunities for drawing, painting, sculpting, and other creative endeavors.

Course length: Two semesters
Materials: One package of white clay; one set of acrylic paint; one set of round paintbrushes ; no other materials provided. It is recommended, but not required, that students have some means of capturing an image of their studio art projects with a digital camera, webcam, or other imaging device.
Prerequisites: A survey course in World History is recommended as a prerequisite or co-requisite, but not required

ART020: Music Appreciation (Elective)

This course introduces students to the history, theory, and genres of music. The course explores the history of music, from the surviving examples of rudimentary musical forms through to contemporary pieces from around the world. The first semester covers early musical forms, classical music, and American jazz. The second semester presents modern traditions, including gospel, folk, soul, blues, Latin rhythms, rock and roll, and hip hop. The course explores the relationship between music and social movements and reveals how the emergent global society and the prominence of the Internet are making musical forms more accessible worldwide.

To comply with certain state standards for the arts, a student "performance practicum" is required for full credit each semester. The performance practicum requirement can be met through participation in supervised instrumental or vocal lessons, church or community choirs, community musical performances, or any other structured program that meets at regular intervals and provides opportunities for students to build vocal and/or instrumental skills. Parents or guardians will be required to present their proposed practicum to the students' teachers for approval, and validate their children's regular participation in the chosen performance practicum.

Course length: Two semesters
Materials: Finale Notepad music notation software
Prerequisites: None

BUS010: Business Communication and Career Exploration (Elective)

In this course, students explore the ways people communicate in today's business environment. They examine technological advances of the contemporary office and consider future developments. Topics include: reviewing communication fundamentals; developing business letters; researching andreporting; and getting a job. Students perfect their written and oral communication skills, evaluate career interests and aptitudes, and learn how to apply for jobs and conduct interviews.

Course length: One semester
Materials: None
Prerequisites: None

BUS020: Business and Personal Relationships (Elective)

Students receive valuable information and guidelines necessary to navigate business and personal relationships in today's global and multiethnic environment. Through a focus on cultural awareness, positive self-concept, leadership, and communication, students examine how public, business, and personal behaviors intersect.

Course length: One semester
Materials: None
Prerequisites: None

BUS030: Personal Finance (Elective)

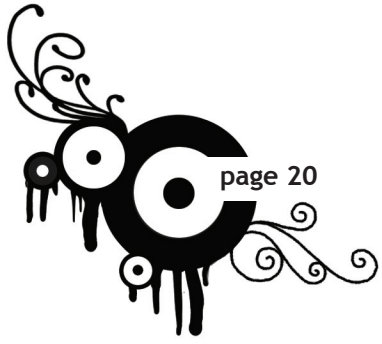
Students learn about different aspects of personal economics and finance in a virtual neighborhood setting. Topics include spending plans and borrowing decisions; career planning; and investing, insurance, and other financial services. Students complete activities and projects that apply the knowledge they gain to their own lives. This course may meet the needs of most students requiring financial skills or economics credit.

Course length: One semester
Materials: None
Prerequisites: MTH112 or MTH113: Pre-Algebra (or equivalent) recommended, but not required

BUS040: Introduction to Entrepreneurship (Elective)

In this introductory business course, students will learn the basics of planning and launching their own successful business. Whether they want to start their own money-making business or create a non-profit to help others, this course will help students develop the core skills they will need to be successful. They will learn how to come up with new business ideas, attract investors, market their business, and manage expenses. Students will get inspired by stories of teen entrepreneurs who have turned their ideas into reality, and then they will plan and execute their own business.

Course length: One semester
Materials: TBD
Prerequisites: None
Available Winter 2010



ENG010: Journalism (Elective)

Students examine the development of journalism, from print to the multimedia environment, while learning how to publish an online newspaper. Students write newspaper-style articles and opinion pieces, and examine careers in multimedia communication. They also consider the historical effects of "yellow" journalism, freedom of the press, and journalism's contributions to today's world, with an emphasis on the mutual influence of media and policy.

Course length: Two semesters
Materials: *Associated Press Stylebook*
Prerequisites: Success in previous English/language arts course and a teacher/school counselor recommendation

HST010: Anthropology (Elective)

Anthropology is the study of human beings and their social, environmental, and cultural relations over time. In this course, students familiarize themselves with their own culture as they explore cultures from around the world and from different periods in history. Students examine each culture through the lenses of family, land, death, identity, and power, allowing them to explore the similarities and differences in cultural roles in various times and places.

Course length: One semester
Materials: None
Prerequisites: HST102 or HST103: World History (or equivalent) recommended as a prerequisite or co-requisite, but not required

HST020: Psychology (Elective)

Students explore scientific methods of research as well as the major schools of psychology as they relate to issues of aggression, addictive behavior, memory, interpersonal relations, and self-care. Topics include the importance of ethics in scientific study, psychology's application to daily life, the influence of cultural background on perception, and more.

Course length: One semester
Materials: None
Prerequisites: SCI202: Biology or equivalent

HST030: Macroeconomics (Elective)

Students analyze economic data through a variety of learning activities. They learn how macroeconomics differs from microeconomics. They study the measurement of aggregate economic activity and how it relates to employment and inflation. They explore fiscal and monetary policies designed to promote economic stability. Throughout the course, students use Internet resources to access and analyze current economic data.

Course length: One semester
Materials: None
Prerequisites: Success in previous math/social studies course and a teacher/school counselor recommendation

SCI010: Environmental Science (Elective)

This course provides an overview of the nature of ecosystems, energy flow, and the inter-relationships of biology, geology, and chemical cycles. Students explore issues in population studies, environmental pollution, and the organization and dynamics of ecological communities. Specific topics include: scientific habits of the mind; the application of scientific knowledge, methodology, and historical context to solve problems; the use of laboratory technologies; earth dynamics; the influence of technology on environmental quality; conservation practices; biodiversity; environmental planning and waste management; environmental monitoring and policy; sustainable use of public land; characteristics of populations; biotic and abiotic environmental factors; and energy production technologies.

Course length: Two semesters
Materials: Common household materials for labs
Prerequisites: Success in previous high school science course and a teacher/school counselor recommendation

SCI020: Life Science: Oceanography (Elective)

In this introductory course, students construct an applied knowledge of the characteristics of aquatic systems. Students study ocean structure and marine ecology through hands-on exploration of coastal waters, open ocean waters, deep ocean waters, coral reefs, kelp forests, deep ocean vents, and tide pools. Through guided practice of the scientific model, using common household materials, students conduct field studies of local aquatic structures for the final project.

Course length: One semester
Materials: Common household materials for labs
Prerequisites: SCI202: Biology and SCI102: Physical Science, or equivalents

OTH010: Skills for Health

This course focuses on important skills and knowledge in nutrition; physical activity; the dangers of substance use and abuse; injury prevention and safety; growth and development; and personal health, environmental conservation, and community health resources. The curriculum is designed around topics and situations that engage student discussion and motivate students to analyze internal and external influences on their health-related decisions. The course helps students build the skills they need to protect, enhance, and promote their own health and the health of others.

Course length: One semester
Materials: None
Prerequisites: None

OTH020: Physical Education

This pass/fail course combines online instructional guidance with student participation in weekly cardiovascular, aerobic, muscle-toning, and other activities. Students fulfill course requirements by keeping weekly logs of their physical activity. The course promotes the value of lifetime physical activity and includes instruction in injury prevention, nutrition and diet, and stress management. Students may enroll in the course for either one or two semesters, and repeat for further semesters as needed to fulfill state requirements.

Course length: One semester (or more)
Materials: None
Prerequisites: None

OTH030: Career Planning (Elective)

Students plan for a successful career by analyzing their own goals and decision-making processes. Students use various resources to investigate career options, master job-seeking techniques, and learn how to make the transition from school to work.

Course length: One semester
Materials: *Career Assessment*; *You and Your Career*; *Occupation Finder* guides
Prerequisites: None

OTH040: Study Skills and Learning Strategies (Elective)

Students discover their learning style—the way they process information and apply it—and develop study skills to improve academic and work performance. Topics include time management, oral communications, critical thinking, note-taking, test-taking, and researching.

Course length: One semester
Materials: *Flying Your True Colors for True Success*
Prerequisites: None

Technology and Computer Science

TCH010: Computer Literacy I (Elective)

Today's students must be able to effectively use technology to research, organize, create, and evaluate information. This course provides a foundation in the skills and concepts that define computer literacy in the twenty-first century. From the basics of keyboarding to Internet research techniques, document creation, and digital citizenship, students practice essential skills through individual and team projects.

Course length: One semester
Materials: Microsoft Office 2003 and GIMP (free download)
Prerequisites: None

TCH020: Computer Literacy II (Elective)

This course builds on Computer Literacy I to develop the skills and concepts essential for computer literacy in the 21st century. From the basics of keyboarding to Internet research techniques, document creation, and digital citizenship, students practice essential skills through individual and team projects. When taken with Computer Literacy I, this course maps to the National Educational Technology Standards (NETS).

Course length: One semester
Materials: Microsoft Office 2003 and GIMP (free download)
Prerequisites: TCH010: Computer Literacy I

TCH030: Digital Photography and Graphics (Elective)

This course is for anyone who wants to create compelling, professional-looking graphic designs and photos. Students will learn the basics of composition, color, and layout before moving on to technical topics such as working with layers and masks, adding special effects, and effectively using typefaces

to create visual impact. At the end of this course, students will have created a variety of original projects for their graphic design portfolios.

Course length: One semester
Materials: GIMP (free download)
Prerequisites: None

TCH040: Web Design (Elective)

This course provides a comprehensive introduction to the essentials of Web design, from planning page layouts to publishing a complete site to the Web. Through real-world design scenarios and hands-on projects, students create compelling, usable websites using the latest suite of free tools from Microsoft.
Course length: One semester
Materials: : KompoZer (free download) and GIMP (free download)
Prerequisites: None

TCH050: Digital Video Production (Elective)

This course introduces students to all aspects of digital video, from story-boarding scenes and creating shot lists to editing a finished, professional-quality product. Throughout this project-based course, students demonstrate mastery of the key learning objectives by recording, capturing, and editing their own videos. This is a hands-on course that provides a solid foundation for further study in this exciting field, and progresses from the importing of raw footage through editing basics to transitions, text use, and special effects.

Course length: One semester
Materials: Microsoft Windows Movie Maker; student must supply a video camcorder capable of connecting to a computer, either through USB or FireWire
Prerequisites: None

TCH060: C++ Programming (Elective)

In this introductory course, students learn basic programming concepts through a series of hands-on projects. They also learn about software development careers, the software development process, and industry best practices. Using Microsoft Visual C++ 2008, students master the building blocks of programming: functions, variables, loops, arrays, and classes.

Course length: One semester
Materials: Microsoft Visual C++ 2008 Express (free download)
Prerequisites: None

TCH070: Game Design I (Elective)

This course is for anyone who loves gaming and wants to design and build original games from scratch. Students learn how to use popular game-development software to create engaging, interactive games in a variety of styles. After learning about game genres, students learn about all aspects of the game-design process. From there, it's on to a series of increasingly challenging hands-on projects that teach all the elements of successful game development. This course provides a solid foundation in the essentials of game design.

Course length: One semester
Materials: Multimedia Fusion 2.0
Prerequisites: None

TCH080: Game Design II (Elective)

Students expand their knowledge of the game design industry while mastering event-driven game development through a series of interactive projects. By the end of this course, students will have a variety of polished games for their game-development portfolios.

Course length: One semester
Materials: Multimedia Fusion 2.0
Prerequisites: TCH070: Game Design I

TCH090: Online Game Design (Elective)

This course introduces students to the design of online Flash games. They will learn how to develop a variety of games for the Web, using some basic programming concepts and ActionScript—the native scripting language of Flash—to develop games and publish them online. Professional-quality art is included in each project for students' use, or they can make their own. By the end of this course, students will have a fully-functioning multi-level online game.

Course length: One semester
Materials: Flash CS4
Prerequisites: None

TCH016: Flash Animation (Elective)

This course teaches students how to create interactive movies and engaging games with Flash CS4 animation software. Students master the basics of drawing and animating short movies before moving on to more complex challenges such as adding interactivity and script-driven events. By the end of the course, students will have an interactive portfolio to showcase their finished projects.

Course length: One semester
Materials: Flash CS4
Prerequisites: Permission of a teacher/school counselor

TCH017: 3D Art I—Modeling (Elective)

This course introduces students to 3D modeling tools and concepts. Using Blender, the popular open-source 3D modeling package, students will learn the basics of creating shapes, adding textures and lighting, and rendering. By the end of the course, students will have produced a series of increasingly sophisticated projects for their 3D portfolios. This course is suitable for students with no prior experience with 3D game design or digital media authoring tools.

Course length: One semester
Materials: Blender (free download)
Prerequisites: None

TCH018: 3D Art II—Animation (Elective)

In this advanced course, students will build on the skills they developed in 3D Art I to learn 3D animation techniques. Using Blender, a powerful open-source modeling tool, they will master the basics of animation—rigging, bones, and movement—while learning how to apply traditional animation techniques to their 3D models. They will also learn about jobs in the industry.

Course length: One semester
Materials: TBD
Prerequisites: TCH017: 3D Art I—Modeling
Available winter 2010

TCH019: Computer-Aided Design (CAD) (Elective)

Computer-aided design systems are used by designers and manufacturers in virtually every industry. In this course, students will master the basics of CAD software—creating points, lines, and other geometric forms, isometric drawings, and 3D models. They will learn how to translate initial concepts into functional designs and 3D walkthroughs. They will also explore career options for CAD designers in this hands-on introductory level course.

Course length: One semester
Materials: TBD
Prerequisites: None
Available winter 2010

Orientation

ORN010: Online Learning 09-10

The Online Learning course (required for all new and returning $K^{12}9^{12}$ students) explains to students how the program works, and provides tips on successful online learning. Students are introduced to the online tools they will use during their high school experience, including the Learning Management System that delivers course assignments. Students take part in online discussions and practice submitting computer-scored assessments and other assignments to teachers. Lifelong learning skills such as time management and study habits are also covered. By the end of the course, students will be fully prepared to begin their K^{12} high school courses.

Course length: 6-8 hours
Materials: None
Prerequisites: None

ORN020: Finding Your Path – Planning for Career and College

This course is unique for each student. $K^{12}9^{12}$ school counselors, advisors, and other staff guide students through an in-depth exploration of their interests, abilities, and skills. Students explore their education and career interests, define goals, and create a path through high school that will get them there. In addition, this course serves as a "home base" where students and school counselors can address topics that are critical in their success in high school and beyond. Use of the K^{12} online career and college counseling tools are featured in this course. (Students may re-enroll in this course yearly. Many course activities are related to specific grade levels and proximity to graduation.)

Course length: 30-40 hours
Materials: None
Prerequisites: None

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