



**2016-2017**

# **Upper School Curriculum**



***\*\*One Printed Copy Per Family\*\****

## IMPORTANCE OF THE UPPER SCHOOL CURRICULUM

A college preparatory curriculum requires thorough preparation in literature and composition, mathematics, science and laboratory courses, social studies, and foreign languages. The rigor of the course work a student takes communicates important information to any college admissions personnel. Students are assessed on course rigor, grade point average, and test scores.

All colleges and universities have general requirements unique to their organization. It is important to understand minimum admission requirements at any given institution. It is also important to communicate with admissions departments to better understand expectations in coursework while a student is in high school. This helps inform the student when making choices about course registration. The following chart provides a comparison of typical minimum requirements.

Course	Required by				
	State of MN	Private HS	Public HS	University	St. Croix Prep
<b>Language Arts/English</b>	4	4	4	4	4
<b>Mathematics</b>	3	3	3	4*	4**
<b>Social Sciences</b>	3.5	4	4	2 to 4	4
<b>Science</b>	3	3	3	3 to 4	3
<b>World Languages</b>	Local decision	3	0	2 to 4	2
<b>Arts</b>	1	3	1	1	2
<b>Health/PE</b>	Local decision	.5 and 2.5	.5 and 1	Elective	1
<b>Electives</b>	7	0	6.5	2	4
<b>Service &amp; Yr. End Presentation</b>	—	—	—	While not required, strongly encouraged and considered by admissions	1.5
<b>TOTAL</b>	21.5	23	23	23	25.5

- For public schools, including charter schools, all students must pass a college and career ready assessment that meets Minnesota state law and St. Croix Preparatory Academy School Board Requirements.
- Almost all colleges require you take the ACT and/or the SAT to be considered for admissions. Some institutions have score requirements for entrance.
- Credits: typically classes are held 5 days a week, anywhere from 40-60 minutes. The equivalent of a year long, daily class is 1.0 credit. Semester courses receive .50 credit.
- \*While the “minimum” requirements may be “3” mathematics credits to be admitted to a University, typically, as stated on their websites, they mostly admit only those students who have completed 4 credits of Mathematics while in high school.
- \*\*2014 is the first class of students at SCPA to all graduate with the 4 required credits of math.

## College Readiness, College Admissions and Four-Year High School Course Plan

College admissions requirements vary. The individual transcript is a powerful piece of information. Colleges look at 3 main criteria that include **rigor of courses taken, a grade point average of 2.5 or higher, and strength of academic electives**. The rigor of the transcript is the most important of these three criteria.

In addition, college admissions personnel like to see student's commitment to activities, clubs, athletics, and leadership positions.

At St. Croix Preparatory Academy, our college counselor meets with each individual student to ensure a solid plan is established that meets his or her individual college aspiration. This process is greatly improved if students identify possible colleges ahead of time and are able to use admission expectations as a guide to Upper School course planning.

The following chart distinguishes schools by "types" and delineates the expectations that are typical or average for successful college admission:

Type of college	Admission Standards	Avg. ACT scores, Enrolled Freshmen, 2013-2014*	% of SCPA Alumni accepted at these institutions	High School GPA Expectation	Typical ACT(36) / SAT in Math & Reading (1600)	AP Course/ Exam Score Expectation
Highly Selective	Majority of freshmen in top 10% of their high school class	Ivy League-33 Vassar-31 Carleton-31 Davidson-30 Macalester-30	16%	3.75	28+/1220+	4+ courses/ Score of 4 or 5 on exams
Selective	Majority of freshmen in top 25% of their high school class	UM-Twin Cities-27 Gustavus-27 St. Thomas-25 UM-Morris-25 UMD-24 UW-Eau Claire-24	40%	3.5	24+/1110+ (ACT Range 21-27)	3+ courses/ Score of 3,4,5 on exams
Traditional	Majority of freshmen in top 50% of their high school class	Winona State-23 Mankato State-22 UW-Stout-22 UW-River Falls-22 St. Cloud State-21 Bemidji-21	34%	3.0	21+/990+ (ACT range 21-23)	Not Applicable
Liberal	Usually accept all high school graduates, some programs are more selective	Normandale Community College, DeVry, ITT Technical Institute, etc.	6%	1.0	18+/870+ (ACT range 18-20)	Not Applicable
Open	All high school graduates are accepted	Century, Rasmussen, etc.	4%	High School Diploma/GED	None required	Not Applicable

Course selection is a critical consideration in the college planning. We have identified more rigorous courses with asterisks "\*" indicating coursework that selective and highly selective schools will look for in a competitive Upper School transcript.

St. Croix Prep's College Counselor can assist you with making these determinations.

(Source for information in the chart: State of Minnesota Office of Higher of Education and [www.naviance.com](http://www.naviance.com))

**SCPA Upper School Four-Year Course Plan**

**Graduation Year:** (circle one) Class of '17 '18 '19 '20

<b>SCPA Graduation Requirements</b>	<b>9<sup>th</sup> Grade Freshman Year</b>	<b>10<sup>th</sup> Grade Sophomore Year</b>	<b>11<sup>th</sup> Grade Junior Year</b>	<b>12<sup>th</sup> Grade Senior Year</b>
<b>English Language Arts</b>  4 Credits Required	English 9 OR Honors English 9*  1 credit	English 10 OR Honors English 10*  1 credit	English 11 OR AP Language & Composition*  1 credit	English 12 OR AP Literature*  1 credit
<b>Social Studies</b>  4 Credits Required	Human Geography OR AP Human Geography *  1 credit	<i>World History</i> OR AP World History*  1 credit	U.S. History OR AP U.S. History*  1 credit	U.S. Government & Economics OR AP Government * OR AP Micro & Macro Economics *  1 credit
<b>Science</b>  3 Credits Required	Biology OR Honors Biology*  1 credit	Chemistry OR AP Chemistry*  1 credit	Physics OR AP Physics B*  1 credit	Optional Science* Or Other Elective(s) <hr/> (Your course title here) 1 credit
<b>Math</b>  4 Credits Required	<hr/> (Your course title here) 1 credit	<hr/> (Your course title here) 1 credit	<hr/> (Your course title here) 1 credit	Math or Elective(!) <hr/> (Your course title here) 1 credit
<b>Required: 1 Physical Education Credit (1/2 is general PE; 1/2 elective PE)</b>	Physical Education 9 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
<b>2 Fine Arts Credits</b>	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
<b>2 World Language Credits</b>	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
<b>4 Other Elective Credits</b>	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
Each half box is worth half credit. Full credit courses need TWO hash mark boxes filled in.	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
This is section where you should put a study hall if you desire one. Fill two boxes if you want a study hall all year. <b>Study hall is not worth credit.</b>	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit	<hr/> (Your course title here) 1/2 credit
<b>Service Hours and Performance</b>	10 Hours: .10 credit 1 Presentation .25 credit	10 Hours: .10 credit 1 Presentation .25 credit	10 Hours: .10 credit 1 Presentation .25 credit	20 Hours: .20 credit 1 Presentation .25 credit
<b>25.5 Credits Total</b>	<hr/> (your credit total here)	<hr/> (your credit total here)	<hr/> (your credit total here)	<hr/> (your credit total here)

If being ready to apply to a certain type of college is important to you, please see the **asterisk** \* next to courses throughout the Upper School Curriculum Guide that highlight courses that selective and highly selective colleges and universities will be looking for on your high school transcript.

# LANGUAGE ARTS/ENGLISH

## Curriculum Overview

Graduation Requirements: 4

### Course Offerings:

Grade 9 –	Ancient Literature Honors Ancient Literature*
Grade 10 –	Literature & Composition Honors Literature & Composition*
Grade 11 –	American Literature & Composition AP English Language & Composition*
Grade 12 –	Contemporary Literature AP English Literature & Composition*

### Elective Course Offerings:

Debate – (9-12)
Speech – (9-12)
Shakespeare – (10-12)

# LANGUAGE ARTS/ENGLISH

## Course Descriptions

### Standards

The State of Minnesota requires students in grades 9-12 to be proficient in reading, writing, and speaking. In order to comply with the state standards as well as the academic goals of this high school, the sequence for grades 9-12 in language arts will be as follows:

### English 9:

**Grade - 9 Full Year – 1.0 Credit**

#### Masterpieces in Ancient Literature

**Prerequisite(s):** Successful completion of 8th grade language arts

**Description:** Ninth Grade English will study masterpieces in literature with an emphasis on ancient literature dating from pre-common era through the 1500s, including: *The Epic of Gilgamesh*, *The Odyssey*, *Ramayana*, *Journey to the West*, *Beowulf*, *The Once and Future King*, *Inferno*, *Canterbury Tales*, and *Don Quixote*. Students will develop a deeper understanding of literature through an exploration of Joseph Campbell's hero's journey, while creating and defending their own interpretations and ideas relating to our texts and supplementary material. A focus will be placed on developing written and spoken rhetorical strategies pertaining to our approaches to each text. Students should expect to read 10-15 pages per night, and compose two papers per quarter.

### Honors English 9\*:

**Grade - 9 Full Year – 1.0 Credit**

#### Masterpieces in Ancient Literature Through the 1500's

**Prerequisite(s):** Honors English 9 students are asked to read, write, and discuss ideas at a more advanced abstract level with more independence, that will begin to prepare them for the AP English exams taken later in their academic career. Ninth grade English will study masterpieces in literature dating from pre-common era through the 1500s, including: *The Epic of Gilgamesh*, *The Odyssey*, *Ramayana*, *Journey to the West*, *Beowulf*, *The Once and Future King*, *Inferno*, *Canterbury Tales*, and *Don Quixote*. Students should expect to read 15-20 pages per night, and compose two to three papers per quarter.

### English 10:

**Grade - 10 Full Year – 1.0 Credit**

#### Masterpieces in Literature 1600-1950 with Composition

**Prerequisite/s:** English 9 or the equivalent

**Description:** Students study major works of literature written between 1600-1950 selected from *Macbeth*, *Gulliver's Travels*, *Pride and Prejudice*, *Frankenstein*, *Great Expectations*, *Things Fall Apart*, *Night*, and *Animal Farm*. Students will focus on the reading skills needed for these complex works. We'll examine the relationship between literature and the historical ideas and movements that created them. The writing focus for the year will be on argumentative writing where students will study the types of arguments, different ways to structure an argument, and different rhetorical writing devices.

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**Honors English 10\*:****Grade - 10 Full Year – 1.0 Credit****Masterpieces in Literature 1600-1950 with Composition****Prerequisite/s:** English 9 or the equivalent

**Description:** Students in honors will study major works of literature selected from *Macbeth*, *Gulliver's Travels*, *Pride and Prejudice*, *Frankenstein*, *Great Expectations*, *Things Fall Apart*, *Night* and *Animal Farm*. Honors students will be expected to work on a deeper and more abstract level, including themes, historic context, and literary devices. Students will continue to develop a deep understanding of literature and create and defend their own interpretations and ideas by studying different philosophies and approaches to analyzing literature. The writing focus for the year will be on argumentative writing where students will focus on developing their own ideas and interpretations, and then creating cohesive and persuasive arguments. Honors students will need to be able to read complex texts independently and quickly move beyond the literal level of a text to abstract concepts and deep analysis of literary terms.

**English 11: American Literature and Composition****Grade - 11 Full Year – 1.0 Credit****Prerequisite/s:** English 9 and English 10 or the equivalent

**Description:** This course is a chronological survey of American literature designed to engage students in the careful reading and critical analysis of literature. Through the close reading of selected texts from the American Canon, students deepen their rhetorical analysis skills and develop a deeper understanding of the ways writers use language to provide both meaning and pleasure for their readers. Works may include: *The Scarlet Letter*, *The Crucible*, *Ethan Frome*, *My Antonia*, *A Streetcar Named Desire*, *The Great Gatsby*, *Catcher in the Rye*, *The Things They Carried* and a variety of selections from American essays, poetry, and short stories. Students should expect to read up to 30 pages per night and compose two papers per quarter.

**AP English Language and Composition\*****Grade - 11 Full Year – 1.0 Credit****Prerequisite/s:** English 9 and English 10 or the equivalent

**Description:** This course is a chronological survey of American literature designed to engage students in the careful reading and critical analysis of rhetoric. Through the close reading of selected texts from the American Canon as well as from contemporary rhetoricians, students deepen their understanding of the ways writers use language to communicate a message. Ultimately, we will examine the methods, techniques, and writing skills students need to be successful at the college level. The class consists of an in-depth study of expository and argumentative writing, rhetorical techniques, source citation, and the writing process. Writing assignments will be analytical, critical, and creative in nature. Designed to parallel American History, works may include: *The Scarlet Letter*, *The Crucible*, *Ethan Frome*, *My Antonia*, *All the Pretty Horses*, *A Streetcar Named Desire*, *The Great Gatsby*, *Catcher in the Rye*, *Beloved*, and selections of American essays, speeches, and poetry. Students should expect to read 30 pages per night, and compose two formal papers per quarter. Students will be well prepared to take the AP Language and Composition Exam at the end of the year.

**English 12: Contemporary Literature****Grade - 12 Full Year – 1.0 Credit****Prerequisite/s:** English 9, English 10, English 11 or the equivalent

**Description:** This course engages students in the careful reading and critical analysis of literature with a focus on pairing contemporary readings with classical models. As we read, students will consider a work's structure, style, and themes as well as the use of schemes and tropes such as figurative language, imagery, and symbolism. As a capstone project, all students will complete an original writing assignment on a contemporary topic raised in our discussion, demonstrating a sophisticated understanding of the research process. Works may include *Hamlet*, *Chronicle of a Death Foretold*, *Slaughterhouse 5*, *Persepolis*, *All the Pretty Horses*, *1984*, and a variety of selections from contemporary essays, poetry, and short stories. Students can expect to read up to 40 pages a night and compose two papers per quarter in addition to the capstone project.

**AP English Literature and Composition\*****Grade - 12 Full Year – 1.0 Credit****Prerequisite/s:** English 9, English 10, English 11 or the the equivalent

**Description:** This course engages students in the careful reading and critical analysis of imaginative literature, with a focus on contemporary readings and authors. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Works read may include Aristotle's *Poetics*, Milton's *Paradise Lost*, *Hamlet*, *Othello*, *Jane Eyre*, *1984*, *Never Let Me Go*, *A Doll's House*, *Chronicle of a Death Foretold*, *Latin American Short Stories*, one contemporary drama, and plenty of poetry. Students will also have an Independent Reading assignment each quarter. Students in AP English will have nightly reading assignments in addition to completing a thoughtful journal entry about each reading. Students will be well prepared to take the AP Exam in Literature at the end of the year.

**Shakespeare (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** None

Find out why Shakespeare is often considered the greatest writer of the English Language. While most known for his tragedies (*Hamlet, Macbeth*), Shakespeare also wrote amazing comedies, histories, and romances as well. Students will look at a variety of plays and scenes to examine what earned Shakespeare this reputation. Centered around seminars, in class activities, and reading, this course will look at not only how Shakespeare’s plays were written, but also how they have been interpreted through different adaptations in film and pop culture. Don’t be intimidated by Shakespeare’s language, join this course to see how much fun Shakespeare can be!

**Debate (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** None

In this course students will be introduced to the different aspects of formal debate and rhetorical style. Students will develop an understanding of unique critical thinking skills, philosophical approaches to political questions, and impromptu speaking strategies and techniques as methods of defending opposing sides of social issues. Students will learn how to research and evaluate evidence, analyze and counter opposing positions, and debate using formal techniques framed by the National Speech and Debate Association. Students will be required to write argumentative speeches, create files of supporting evidence, and participate in multiple debates in class. Students enrolled in this course will also have the opportunity to join the extracurricular debate team at SCPA.

**Speech (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** None

**Description:** Students in this course will explore techniques and strategies for increasing one’s comfort with public speaking, while also focusing on the process of speech writing, delivery, and audience engagement. Students will explore a variety of speeches, based on formats used in the extracurricular speech activity and also more basic speech styles. Students will develop listening and critical thinking skills, while also learning to overcome speaking anxiety.

## SOCIAL SCIENCES

### Curriculum Overview

### Graduation Requirements: 4

**Course Offerings:**

Grade 9 –	Human Geography AP Human Geography*
Grade 10 –	World History AP World History*
Grade 11 –	U.S. History AP U.S. History*
Grade 12 –	United States Economics & Politics AP Government & Politics: United States* AP Microeconomics & Macroeconomics*

**Elective Course Offerings:**

AP Comparative Government & Politics* – (11-12)
AP Government & Politics: United States* – (11-12)
AP Micro/Macroeconomics* – (11-12)
Introduction to Psychology – (10-12)
Capstone Research – (11-12)

## SOCIAL SCIENCES

### Course Descriptions

#### Human Geography

Grade – 9 Full Year – 1.0 Credit

**Prerequisite/s:** None

**Description:** Human Geography is a yearlong course that focuses on the distribution, processes, and effects of human populations on the planet. Units of study include population, migration, culture, language, religion, ethnicity, political geography, economic development, industry, agriculture, and urban geography. Global case studies as well as local examples will be studied as students practice the spatial thinking skills of geographers. Developing note-taking, writing and study skills will also be a focus in this 9th grade course.

#### AP Human Geography\*

Grade – 9 Full Year – 1.0 Credit

**Prerequisite/s:** None

**Description:** AP Human Geography is a yearlong course that focuses on the distribution, processes, and effects of human populations on the planet. Units of study include population, migration, culture, language, religion, ethnicity, political geography, economic development, industry, agriculture, and urban geography. Emphasis is placed on geographic models and their applications. Case studies from around the globe are compared to the situation in both the United States and locally in our state. Students will practice the types of questions and essays found on the AP Human Geography exam. This college-level course prepares students to take the AP Human Geography exam.

#### World History

Grade – 10 Full Year – 1.0 Credit

**Prerequisite/s:** Geography **Description:** World History is a yearlong course that focuses on the development, dynamics, distribution, and effects of humankind on the planet. We emphasize knowledge of and appreciation for the contributions of both Western and non-Western civilizations from prehistory through modern times. Using primary documents to explore literature, artifacts, and other social sciences, students will practice evaluating sources and crafting arguments to explain historical phenomena. The course is organized around cultural, political, economic, and social themes. Writing, active reading, note-taking skills, and critical thinking skills will also be developed.

#### AP World History\*

Grade – 10 Full Year – 1.0 Credit

**Prerequisite/s:** AP Human Geography or instructor's approval

**Description:** AP World History is a yearlong course that emphasizes the development of historical thinking skills alongside the study of global cultures from 10,000 BCE to the present. AP World History focuses on five basic themes in studying history: interactions with the environment, development of cultures, political state building and conflict, creating economic systems, and transforming social structures. Throughout our coverage of world history, from prehistory and the first human settlements to the present age of globalization and technology, we will explore historical time periods through these themes. AP World History will build the skills necessary to be analytical students of history by focusing on the four thinking skills of AP World History: crafting historical arguments using primary sources, applying chronological reasoning, comparing and contrasting historical processes, and evaluating various historical interpretations. This college-level course prepares students to take the AP World History exam.

#### U.S. History

Grade – 11 Full Year – 1.0 Credit

**Prerequisite/s:** None

**Description:** United States History is a year long course that provides an essential understanding of the formative events that have shaped us as a people. The course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and ideas that comprise United States history. Building on prior knowledge and course work, U.S. History focuses on specific touchstones, or topics, that have impacted the development of America. These topics are set within their historical context and presented chronologically. The topics focus not simply on political history, but rather give students an understanding of all facets of US History and culture. Students will examine these topics using all of the disciplines of the social sciences (Anthropology, Geography, Economics, Sociology, Psychology, and Political Science) in order to form deep connections to the topics.



**AP U.S. History\*****Grade – 11 Full Year – 1.0 Credit****Prerequisite/s:** Previous AP course work or instructor's approval

**Description:** The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. The program prepares students for college courses. Students learn to assess historical materials—their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. Students will develop an awareness of multiple interpretations of historical issues in secondary sources and be able to compare developments or trends from one period to another. This course prepares students to take the AP United States History exam.

**AP Microeconomics/AP Macroeconomics\*****Grade – 11-12 Full Year – 1.0 Credit****Prerequisite/s:** None

**Description:** Microeconomics studies the functions of individual decision makers, both consumers and producers, within the economic system. It includes a study of factor markets and the role of government in promoting greater efficiency and equity in the economy. Macroeconomics gives students a thorough understanding of the principles of the economic system as a whole. It emphasizes monetary and fiscal policies that affect unemployment and inflation as well as international trade and the value of currency. This college-level course prepares students to take the AP Microeconomics and AP Macroeconomics Exams.

**AP Government and Politics: United States\*****Grade – 11-12 Full Year – 1.0 Credit****Prerequisite/s:** None

**Description:** This yearlong course focuses on the discussion of problems and characteristics of the modern United States political system. No prior AP course experience is necessary to be successful in this class. The course emphasizes discussion and analysis of key issues in American politics including the relationships between Congress, the President, the Courts and the Bureaucracy; as well as how the media and interest group impact the political system. The course also focuses on campaigns, elections and an in depth look at civil rights and civil liberties. The class is designed to prepare students for college level coursework in political science and related social sciences and includes frequent discussion of political events and application of key concepts in American politics to current political situations. This course prepares students to take the Advanced Placement exam in Government and Politics: United States.

**United States Economics and Politics****Grade – 12 Full Year – 1.0 Credit****Prerequisite/s:** None

**Description:** This full year course will cover the fundamentals needed to understand how the United States economic and political systems function. Understanding the principles taught in the economics portion of this course will enable students to have a basic knowledge of the workings of the U.S. economy. We highlight the components of basic economic macro and micro principles, and outline micro-economic principles associated with individual businesses and households including trade-offs and scarcity. The macroeconomics concepts we'll explore delve into the Federal Reserve System and issues associated with inflation, unemployment and a worldwide economy. The course builds on a fundamental knowledge of American government and helps students understand the political process and how individual citizens play a vital role in establishing policy. Students will also explore the problems and controversies prevalent in our republic and evaluate solutions and arguments that often come up in political discourse. A realistic appraisal of government and politics is emphasized and critically analyzed in a constructive way.

**AP Comparative Government and Politics\* (Elective)****Grade – 11-12 Full Year – 1.0 Credit****Prerequisite/s:** Previous AP course work or instructor's approval

**Description:** AP Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course illustrates the rich diversity of political life, shows available institutional alternatives, explains differences in processes and policy outcomes, and communicates to students the importance of global political and economic changes. Six countries form the core of the AP Comparative Government and Politics course: China, Great Britain (EU), Iran, Mexico, Nigeria, and Russia.

**Capstone Research (Elective)****Grade - 11-12 1 Full Year –1.0 Credit****Prerequisite/s:** None

**Description:** Are you afraid of going to a library? Do you enjoy discussing topics but research intimidates you? Have you ever wanted to pause in a social studies class to study a topic further? Follow your passion! This yearlong course focuses on the strategies, processes, and best practices that go into creating a college-level research project. Students will explore many facets of the humanities, such as sociology, psychology, politics, geography, and history, and apply their knowledge and skills towards major research papers and presentations. We will investigate how to pick a topic, formulate questions, find reliable resources, organize notes, and write and present an original thesis. In December, students will begin working on History Day, which is a regional and national research project where students show case their projects and can earn recognition.

**Introduction to Psychology (Elective)****Grade - 10-12 1 Semester -.50 Credit****Prerequisite/s:** None

**Description:** This course is designed to introduce students to the study of psychology. The semester course begins with important concepts and the various fields of psychology. Students will build on that foundation as they study different theoretical approaches and research methods. Major subject areas of this course include: biological bases of behavior, sensation and perception, state of consciousness, learning, cognition, motivation and emotion, development, personality, abnormal behavior, treatment of psychological disorders, and social behavior.

## MATHEMATICS

### Curriculum Overview

#### Graduation Requirements: 4

*Rather than progressing by grade level, Math courses follow a content and skill progression.  
Refer to the flow chart on the following page to note the Math course sequence.*

**Course Offerings:**

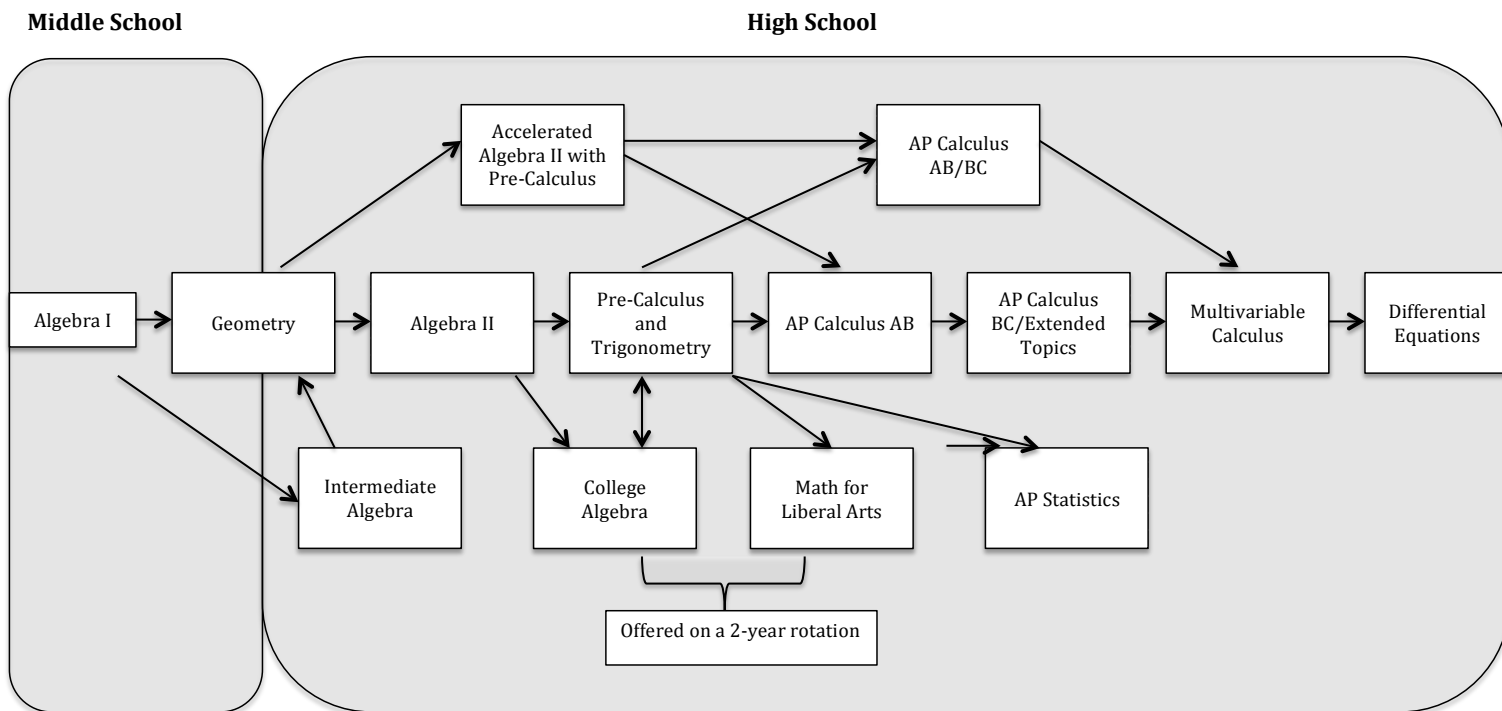
Intermediate Algebra  
 Geometry  
 Algebra II  
 Accelerated Algebra II with Pre-Calculus\*  
 Pre-Calculus and Trigonometry  
 College Algebra  
 AP Calculus AB/BC\*  
 AP Calculus AB\*  
 AP Calculus BC/Extended Topics\*  
 Multivariable Calculus\*

**Elective Course Offerings:**

AP Statistics \*\* - (11-12)  
 Logic and Reasoning - (10-12)

# MATHEMATICS

## Course Sequence Overview



### Math Electives:

- AP Statistics and Math for Liberal Arts are electives for 11<sup>th</sup> - 12<sup>th</sup> grade.
- AP Statistics and Math for Liberal Arts can be taken as a math credit during 12<sup>th</sup> grade only with permission.
- Accelerated Algebra II with Pre-Calculus covers both Algebra II and Pre-Calculus (2 years of content in 1 year).

# MATHEMATICS

## Course Descriptions

### Intermediate Algebra

**Full Year – 1.0 Credit**

**Prerequisite/s:** Teacher recommendation

**Description:** This course will develop and reinforce algebraic skills. It will begin with a review of the rectangular coordinate system, graphing, and linear functions and move on to other functions, including absolute value, exponential, and quadratic. Students will study data analysis and probability. Further topics will include factoring polynomials, solving systems of equations and inequalities, radicals and rational functions. These topics will be studied using graphic, numeric, symbolic and verbal methods. The course will utilize investigation, projects and presentations to ensure understanding is conveyed through communication.

### Geometry

**Full Year – 1.0 Credit**

**Prerequisite/s:** Algebra I or Intermediate Algebra

**Description:** Geometry focuses on spatial relationships, proof, and probability in addition to strengthening algebraic skills. Topics include: transformations, symmetry, relationships between figures, measurements and properties of plane figures, measurements of three-dimensional shapes, tools for analyzing and measuring shapes, and investigation and proof.

### Algebra II

**Full Year – 1.0 Credit**

**Prerequisite/s:** Algebra I and Geometry

**Description:** Algebra II covers all topics that are traditionally covered in a second-year algebra course. Real-world problems are included along with application to other subjects. Topics include, but are not limited to, the structure of the real numbers system with an extension into the complex number system, mathematical functions (constant, linear, quadratic, rational, logarithmic, exponential), sequences and series (arithmetic, geometric, quadratic), matrices and determinants, trigonometry, permutations, and probability.

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## Accelerated Math Course Descriptions - General Overview

This course sequence is designed for students who would like to accelerate their math studies. Three courses, Geometry, Algebra 2, and Pre-calculus, will be covered over two years. Students must have strong algebra and problem solving skills in addition to a dedicated work ethic in order to keep up with the pace of the course. The first year will cover geometry and selected algebra topics while the second year will focus on more advanced algebra, trigonometry and pre-calculus topics.

### Accelerated Algebra II with Pre-Calculus\*

Full Year – 1.0 Credit

**Prerequisite/s:** Geometry and teacher recommendation

**Description:** This course is intended for the student who would like to participate in an accelerated math sequence. This class combines coursework from Algebra II and Pre-calculus into 1 year of content. Students will deepen their knowledge of functions by analyzing a variety of equations including polynomial, exponential, logarithmic, inverse, and piecewise functions. Students will apply their knowledge of the unit circle and the trigonometric identities to explore advanced trigonometric functions. Additional topics include matrices, vectors, and preparation for Calculus topics such as rates of change and limits.

### College Algebra

Full Year – 1.0 Credit

**Prerequisite/s:** Algebra II and teacher recommendation

**Description:** This course will reinforce algebra skills by covering topics such as radicals and rational exponents, factoring polynomials, rational expressions, graphs, solving equations (linear, quadratic, polynomial, rational, exponential, logarithmic, etc.), linear, polynomial, and rational inequalities, and functions (including inverse functions, exponential functions, and logarithmic functions). Learning outcomes include solving a variety of algebraic equations, creating and understanding graphs, working with a variety of functions and applying a variety of algebraic techniques to real world problems and applications.

### Pre-Calculus with Trigonometry\*

Full Year – 1.0 Credit

**Prerequisite/s:** Algebra II and teacher recommendation

**Description:** This course fully integrates topics from Algebra, Geometry, Trigonometry, and Discrete Mathematics. Topics include, but are not limited to: transformations, advanced trigonometry, area under a curve, piecewise functions, exponentials and logarithms, limits, rates of change, vectors and parametric equations, polar and complex numbers, and conic sections.

### AP Calculus AB/BC\*

Full Year - 1.0 Credit

**Prerequisite/s:** Pre-Calculus and teacher recommendation

**Description:** This course covers all topics included in Calculus AB plus roughly 30% more material. This represents material covered in the first two semesters of college Calculus including series, vectors, parametric functions and polar functions. Students are encouraged to take the AP Calculus BC exam upon completion.

### AP Calculus AB\*

Full Year – 1.0 Credit

**Prerequisite/s:** Pre-Calculus and teacher recommendation

**Description:** AP Calculus AB is designed for prospective mathematics majors and students interested in engineering, computer science, physics, business, or the life sciences. The course is the equivalent of a first semester college Calculus course. Topics include optimization, limits, differential equations, derivative and integral applications, volumes of revolution, and the Fundamental Theorem of Calculus. Students are encouraged to take the AP Calculus AB exam upon completion.

### AP Calculus BC/Extended Topics\*

Full Year – 1.0 Credit

**Prerequisite/s:** AP Calculus AB and teacher recommendation

**Description:** This course is a continuation of Calculus AB, covering material included in a second semester college Calculus course. The course will also include other advanced mathematical topics such as Differential Equations and Linear Algebra. Students are encouraged to take the AP Calculus BC exam upon completion.

**Multivariable Calculus\*****Full Year – 1.0 Credit****Prerequisite/s:** Calculus BC (or AB/BC) and teacher recommendation**Description:** The material in this course is equivalent to Calculus 3 in a semester college curriculum. Topics include: multivariable functions, three-dimensional analytical geometry, partial derivatives, multiple integrals, curves and surfaces, vector fields, Green's Theorem, Stokes' Theorem, and Divergence Theorem. Applications include but are not limited to science, engineering, economics, and ecology.**AP Statistics\*+ (Elective)****Full Year – 1.0 Credit****Prerequisite/s:** Pre-Calculus or College Algebra**Description:** The purpose of this course is to introduce students to major concepts and tools for collecting, analyzing, and drawing conclusions from data. The major themes are exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students may take the AP Statistics exam upon completion.**Logic and Reasoning (Elective)****Grade - 10-12 1 Semester -.50 Credit****Prerequisite/s:** None

This course will examine propositional logic and mathematical problem solving. We will start with propositional logic and build towards predicate logic, eventually reaching a point where we can apply both to mathematical puzzles and problem solving. Our problem solving will include topics beyond logic, and also include geometric and algebraic reasoning. The ultimate goal for the course is for students to be able to recognize, analyze and write logical and mathematical explanations.

+ **AP Statistics** and **Math for Liberal Arts** may be used by seniors as a fourth year mathematics credit upon successful completion of College Algebra or Pre-Calculus and approval from principal and college counselor. Please check with the colleges you are applying to, to ensure that this course will satisfy their admissions expectations. Otherwise elective credit will be granted for these courses.

## SCIENCE

### Curriculum Overview

### Graduation Requirements: 3

**Course Offerings:**

Grade 9 –	Biology
Grade 10 –	Pre-AP Chemistry ( <i>online</i> )
Grade 10 –	Chemistry AP Chemistry*
Grade 11 –	Physics AP Physics C: Mechanics*
Grade 12 –	AP Biology* AP Chemistry

**Elective Course Offerings:**

Anatomy & Physiology – (10-12)
Neuroscience – (10-12)
Microbiology – (10-12)
Biotechnology – (10-12)
AP Physics C: Mechanics* – (11-12)
AP Physics C: Electricity & Magnetism* – (11-12)
AP Biology* – (11-12)

# SCIENCE

## Course Descriptions

### Biology

Grade - 9 Full Year – 1.0 Credit

**Prerequisite/s:** None

**Description:** Biology will cover elements of the following: biochemistry, cell structure, organelles, cell function, cancer, meiosis, genetic diversity and mutations, microbiology, molecular genetics, heredity, evolutionary biology, comparative genomics, classification, phylogeny, structure and function of animals, photosynthesis, respiration, plant biology, ecology. Student work will involve book assignments, online assignments, worksheets and projects. Students will develop skills in designing inquiry laboratory activities and writing complete lab reports. Students are expected to engage cooperatively in class discussions and group activities. The level of learning in this course is designed to sufficiently prepare students for AP Biology. Because there are many labs associated with this course, the grading is weighted on both lab completion/lab reports and tests.

### AP Biology\*

Grade - 11-12 Full Year – 1.0 Credit

**Prerequisite/s:** Chemistry or AP Chemistry

**Description:** Students taking AP Biology will be continuing the coverage started in the introductory Biology class. The course format is aligned with College Board AP Biology required learning for skills and content. Students will investigate concepts including enzyme activity, macromolecule structure and function, cellular energetics, cell cycle and regulation, DNA structure, transcription, translation, molecular genetics, proteomics, evolutionary biology, phylogeny, organismal structure and function and ecology. The lab component is a major part of this class with regular in depth inquiry-based lab activities that require formal lab reports. Student work will involve online book assignments and supplemental worksheets as well as quizzes and exams. Students are expected to work collaboratively on in-class activities and laboratory activities and should expect to dedicate time outside of class hours on learning details of concepts that are introduced in class. We use a college level text and many assignments are associated with the online component of this text. Students should have strong reading skills and be comfortable with online learning programs. Students enrolled in AP Biology are strongly advised to take the AP Biology Exam in May.

### Chemistry

Grade - 10 Full Year – 1.0 Credit

**Prerequisite/s:** Algebra I and Algebra II or concurrent enrollment

**Description:** A first year chemistry course covering Scientific Measurement and Problem Solving; Atomic Structure; Chemical Names and Formulas; Chemical Reactions, Balanced Chemical Equations and Stoichiometry; States of Matter; Thermochemistry; Electronic Structure, Periodicity and Bonding; and Solutions, Acids and Bases. Student work will include book assignments, supplemental worksheets, group challenge problem solving, and frequent quizzes. Students should be comfortable with basic algebra before taking this course. Laboratory work will accompany each topic and may require pre-lab preparation and written formal lab reports.

### Pre-AP Chemistry (Hybrid summer course)

Grade - 10 Semester – .50 Credit

**Prerequisite/s:** Algebra I

**Description:** This course is a combination of online content combined with 5 classroom meetings with the instructor over 5 weeks beginning in mid-July. Classroom meetings allow for feedback on concepts and reinforcement to allow students to successfully prepare for AP Chemistry. Topics include: scientific measurement, atomic structure, chemical formulas and naming, types of chemical reactions, stoichiometry and solutions. *This course is required for students taking AP Chemistry in the fall.*

### AP Chemistry\*

Grade - 10 Full Year – 1.0 Credit

**Prerequisite/s:** Pre-AP Chemistry or Chemistry (full year) with a B- or better and Algebra II or concurrent enrollment

**Description:** Students entering AP Chemistry should have an understanding of scientific measurement, atomic structure, chemical formulas and naming, types of chemical reactions, stoichiometry and solutions. The class will cover the six main topics of: Atoms and Elements, Structure and Properties of Matter, Chemical Reactions, Kinetics, Thermodynamics, and Equilibrium. The lab activities will address each of the main topics of study and be an important component of course time with students being expected to maintain a lab notebook.

**Physics****Grade - 11 Full Year – 1.0 Credit****Prerequisite/s:** Algebra II

**Description:** In this course we will study in considerable depth such fundamental physics topics as kinematics, mechanics, energy, momentum, thermodynamics, waves, electricity, magnetism and atomic/nuclear physics. Sound knowledge of algebra and trigonometry is REQUIRED for the course. Some basic calculus concepts will be introduced in connection with physics phenomena (i.e. acceleration, work, impulse), but it is not assumed that students will have taken calculus before or in conjunction with Physics.

**AP Physics C: Mechanics\*****Grade - 11-12 1 Semester –1.0 Credit****Prerequisite/s:** Calculus AB or concurrent enrollment

**Description:** In this course we will study in considerable depth fundamental physics topics in mechanics, including both linear and rotational kinematics and dynamics. Sound knowledge of algebra, trigonometry and calculus is REQUIRED for the course. All students will be well prepared to take the AP Physics C: Mechanics exam.

**AP Physics C: Electricity and Magnetism\*****Grade - 11-12 Full Year –1.0 Credit****Prerequisite/s:** AP Physics C: Mechanics or Physics with Calculus BC or concurrent enrollment

**Description:** This course is suggested for seniors who are interested in pursuing a career in the physical sciences. In this course we will study in considerable depth fundamental physics topics in electricity and magnetism, including Maxwell's Equations. Sound knowledge of algebra, trigonometry and calculus is REQUIRED for the course. All students will be well prepared to take the AP Physics C: Electricity and Magnetism exam.

**Anatomy and Physiology (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Biology

**Description:** Anatomy and Physiology is a survey course of study directed through the anatomical and physiological systems of humans. This laboratory course is designed for students who are interested in health occupations or just interested in how the body works. Students will explore the structure and function of body systems, and how each contributes to the complete homeostasis of the body. Systems of study to include: integumentary, skeletal, muscular, cardiovascular, digestive, respiratory, excretory and reproductive. The student also participates in the examination of cells, histology, and basic chemistry as it applies to the study of anatomy and physiology.

**Neuroscience (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Biology and Anatomy & Physiology recommended

**Description:** Neuroscience is an introduction to the study of the nervous system in humans. This course will help to develop a better understanding of a subject that has been rapidly expanding in the past few years. The class will take the form of lecture, hands on lab activities and collaborative learning. Subjects covered in this class include: nerve signaling, senses and information processing, movement, and complex brain functions. Special topics to include neurobiology and its application to human development, learning, addiction, mental illness, and the pharmaceutical industry and drug development.

**Biotechnology (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Biology and Chemistry recommended

**Description:** Biotechnology is a one-semester laboratory intensive course that will introduce students to the wide variety of techniques that are used to study various biological processes and molecules. As part of this course, students will learn how to use and operate analytical tools such as micropipets, colorimeters, pH meters, protein gels, nucleic acid gels and size chromatography. Laboratory activities include: determining protein and glucose concentrations of unknown samples, establishing pH standards and determining pH of unknowns, determining enzyme activity, comparing DNA homologies of different species, performing restriction enzyme digests and analysis of DNA samples, performing polymerase chain reaction (PCR) to amplify small amounts of DNA. Students will be expected to design their own studies using these methods to answer biological questions. A significant portion of the grade will be based on successfully completing these lab activities in a group environment and writing complete lab reports. In addition, students will be expected to learn and explain the principles of how the equipment works. While the test component of the class grade will be minimal, there will be several major writing assignments outside of lab reports that will contribute to the final grade.

**Microbiology (Elective)**

**Grade - 10-12 1 Semester --.50 Credit**

**Prerequisite/s:** Biology and Chemistry recommended

**Description:** Microbiology is a one-semester laboratory intensive course that will introduce students to the world of microbes and the important role these have in our daily existence. We will study the structure and function of bacteria, fungi, viruses, prions and protists. Students will participate in laboratory activities that include: identification of different types of bacteria, antibiotic resistance, using bacteria for gene manipulation, bacteria in food, mold analysis, yeast life cycles, and protist eating behavior. In addition, we will use current scientific literature to study the beneficial role of bacteria and yeasts as well as major diseases associated with bacteria, fungi and prions. Students will be expected to learn complex laboratory procedures and design independent research studies. A significant portion of the grade will be based on successfully completing these lab activities in a group environment and writing complete lab reports. While the test component of the class grade will be minimal, there will be several major writing assignments outside of lab reports that will contribute to the final grade.

## WORLD LANGUAGES

### Curriculum Overview

### Graduation Requirements: 2

**Course Offerings:**

- Grade 9-12 – Latin I  
Latin II  
Spanish I  
Spanish I-II
- Grade 10-12 – Latin III  
Spanish II  
Spanish III  
Spanish II-III
- Grade 11-12 – Honors Latin IV  
Honors Latin V  
AP Latin  
Honors Spanish IV  
AP Spanish

## WORLD LANGUAGES

### Course Descriptions

**World Language Courses are yearlong and may not be dropped mid-year.**

**Latin I (Elective)**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** None

Latin I begins a two to three year sequence designed to introduce students to the vocabulary and grammar of the Latin language. Daily readings, vocabulary study and translation will be the focus of homework, while class time will be spent mastering such grammar concepts as basic verb conjugation and noun declension, the use of case endings, giving commands, the agreement of adjectives and the formation of adverbs. Successful completion of the course will find students able to read basic Latin texts. **Note: This course is designed for students who are new to the school, did NOT have Latin I in 8<sup>th</sup> grade, or have the prior consent of the instructor.**

*If being ready to apply to a certain type of college is important to you, please see the **asterisk** \* next to courses throughout the Upper School Curriculum Guide that highlight courses that selective and highly selective colleges and universities will be looking for on your high school transcript.*



**Latin II (Elective)****Grade - 9-12 Full Year – 1.0 Credit****Prerequisite/s:** Latin I

**Description:** Latin II is a continuation of the grammar and vocabulary introduced in Latin I. Students will find daily readings longer and more complex as instruction centers around conjugation of all verb tenses in both the active and passive voices, the declension of all noun families, the use of participles and infinitives, the construction of indirect statements, the comparison of adjectives and adverbs, and the use of irregular verbs, among other topics. Students will explore passages in both modified and unabridged Latin. Note: This course is designed for students who successfully completed Latin I at the 8th grade level.

**Latin III (Elective)****Grade - 10-12 Full Year – 1.0 Credit****Prerequisite/s:** Successful completion of Latin II

**Description:** Latin III is the final course in a three-year sequence. It will find students with a strong enough vocabulary and broad enough understanding of Latin to be able to read selected unabridged texts from ancient Roman writers such as Caesar, Martial and others. Students will expand their comprehension of grammar by mastering the subjunctive and its many intricate uses, the concepts of the sequence of tenses, ablative absolutes, gerunds, gerundives, indirect questions and a number of other grammatical structures.

**Honors Latin IV: Ovid, Horace and Catullus (Elective)****Grade – 11-12 Full Year – 1.0 Credit****Prerequisite/s:** Latin III

**Description:** This Latin literature course focuses not just on reading and translating Latin, but also on understanding, analyzing and interpreting the literature. Students will acquaint themselves with the epic and love poetry of Ovid, Horace and Catullus and become familiar with the times and circumstances under which these poets lived. Mythology and ancient religion will be a major theme of the course, as students will be reading in its entirety in English Ovid's mythological masterpiece, "the Metamorphoses", and translating passages as well. Students who have taken Honors IVA may also take this course for full credit. Alternating year course.

**Honors Latin V: Vergil and Caesar (Elective)****Grade - 12 Full Year – 1.0 Credit****Prerequisite/s:** Latin III

**Description:** This Latin literature course focuses not just on reading and translating Latin, but also on understanding, analyzing and interpreting the literature. Students will acquaint themselves with selections from Vergil's "Aeneid" as well as the writings of a few other historians such as Livy and Caesar. The "Aeneid" will be read entirely in English; students will translate select passages throughout the book as well. The course will also explore the historical context and influence of Vergil and the impact of the civil wars of the 1st century BCE on Roman politics and society. Roman history will be examined thoroughly from the foundation of the Republic through the collapse of the Empire. Students who have taken Honors Latin IV may also take this course for full credit.

**AP Latin: Vergil and Caesar (Elective)****Grade - 12 Full Year – 1.0 Credit****Prerequisite/s:** Latin III

**Description:** AP Latin will complete an advanced placement curriculum which will focus not just on reading and translating Latin, but also on understanding, analyzing and interpreting the literature. Students will acquaint themselves with selections from Vergil's "Aeneid" as well as the writings of a few other historians such as Livy and Caesar. The "Aeneid" will be read entirely in English; students will translate select passages throughout the book as well. The course will also explore the historical context and influence of Vergil and the impact of the civil wars of the 1st century BCE on Roman politics and society. Roman history will be examined thoroughly from the foundation of the Republic through the collapse of the Empire. Students who have taken Honors Latin IV may also take this course for full credit. This course will prepare students to take the AP Latin exam in the spring.

**Spanish I (Elective)****Grade - 9-12 Full Year – 1.0 Credit****Prerequisite/s:** None

**Description:** Students explore the Spanish language and cultures of the people who speak this modern world language. Emphasis is placed upon communicating in the target language about familiar themes including self, school, food, past times, family, house, and clothing.

**Accelerated Spanish I-II (Elective)****Grade: 9-12 Full Year – 1.0 Credit****Prerequisite/s:** None

**Description:** Students explore the Spanish language and cultures of the people who speak this modern world language. Emphasis is placed upon communicating in the target language covering familiar themes from part of Spanish I and part of Spanish II. This course precedes Accelerated Spanish II-III so the student will end up taking three years of Spanish in two years.

**Spanish II (Elective)****Grade - 10-12 Full Year – 1.0 Credit****Prerequisite/s:** Spanish I or instructor approval

**Description:** Students continue to explore the language and the cultures of the people who speak this modern world language. Students continue to develop their ability to understand spoken and written Spanish with emphasis placed upon authentic texts and materials. Communication will take place in the target language in regards to the following themes; self, school, daily routines, shopping, community, emergencies, cooking, and travel.

**Accelerated Spanish II-III (Elective)****Grade: 10-12 Full Year – 1.0 Credit****Prerequisite/s:** Spanish I-II or instructor approval

**Description:** Students continue to explore the language and the cultures of the people who speak this modern world language. Students further their ability to understand spoken and written Spanish with emphasis placed upon authentic texts and materials. Upon completion of course students will have earned two credits and are eligible to take Spanish IV.

**Spanish III (Elective)****Grade - 10-12 Full Year – 1.0 Credit****Prerequisite/s:** Spanish I, II

**Description:** Students will utilize their previously acquired language skills in order to work towards fluency in the target language. Through the study of thematic vocabulary and advanced grammatical structures, students will develop their command of language through a multitude of presentational styles.

**Honors Spanish IV (Elective)****Grade - 11-12 Full Year – 1.0 Credit****Prerequisite/s:** Successful completion of Spanish through level III

**Description:** Students will improve and refine their previously acquired language skills. Emphasis will be placed upon the integration of authentic materials to facilitate class discussions, writing and reading tasks, and comprehension of practices and products of the target culture.

**AP Spanish (Elective)****Grade - 11-12 Full Year – 1.0 Credit****Prerequisite/s:** Successful completion of Spanish through level IV

**Description:** AP Spanish will complete an advanced placement curriculum, which will include the reading and writing of authentic Spanish texts, as well as various discussions in the target language. Students will be required to complete presentations in the target language in order to strengthen presentational speaking skills and verbal communication.

## FINE ARTS

### Curriculum Overview

### Graduation Requirements: 2

**Course Offerings: Music - Full Year**

Grade 9-12 – Concert Band  
Symphonic Band  
Jazz Band  
Prep Choir  
Collaborative Piano  
Chamber Orchestra  
Concert Orchestra  
Chamber Strings  
Grades 10-12 – Chamber Choir

**Course Offerings: Fine Arts**

Grade 9-12 – Drawing I  
Digital Photography I  
Grade 10-12 – Drawing II  
Painting I  
Printmaking  
Yearbook  
Ceramics I  
Ceramics II  
Grade 11-12 – Art History

## FINE ARTS

### Music Course Descriptions

All Music courses that are yearlong may not be dropped mid-year.

#### **Symphonic Band (Elective)**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** Two or more years of playing experience on registered instrument and director approval

**Description:** This performing ensemble is open to students in grades 7-12 who play woodwind, brass, and percussion instruments. Students will develop their technical and musical abilities on their instruments through scale studies, rhythm exercises, chorales, and full band pieces. Students are assessed with lesson preparation, playing tests, written exercises, and concert performances. Students participate in three band concerts throughout the year as well as opportunities for students to perform chamber music and/or solos. Students will participate in small group lessons.

#### **Concert Band (Elective)**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** Entrance determined by audition and director approval

**Description:** This advanced performing ensemble is open to students in grades 7-12 who play woodwind, brass, and percussion instruments. Students will work toward competency in all areas of music (performing, composing, conducting, listening, discussing) so that they understand what they play and why. The band will develop technical skills through the use of scales and other patterns, and a sense of harmony through the use of Bach chorales and similar materials. These skills will be put to use in the performance of quality repertoire, which ranges from band classics to modern compositions. Students are assessed with playing tests, written exercises, listening homework, and performances. There will be three full band concerts during the year as well as opportunities for students to perform chamber music and/or solos. Private lessons outside school are strongly encouraged.

#### **Jazz Band (Elective)**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** At least 2 years playing on registered instrument and director approval

**Description:** Jazz Band covers the music considered America's art form with a foundation in blues and swing music through Latin, funk, and other styles. Students also study jazz theory and improvisation. The group performs at SCPA, in the community, and at regional jazz festivals.

#### **Prep Choir (Elective)**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** None

**Description:** This is a non-auditioned, mixed choir of women and men. Singers will develop skills in sight-singing, reading music notation, choral score reading, singing technique, choral blend and artistry, music theory/history, and team building. The Prep Choir will study and sing a wide variety of musical styles and perform in 3-4 concerts during the year. Choir members will have the opportunity to audition for various MN Honors Choirs.

#### **Chamber Choir (Elective)**

**Grade – 10-12 Full Year – 1.0 Credit**

**Prerequisite/s:** By audition and director approval

**Description:** The Chamber Choir is an auditioned ensemble group of 10-12th grade women and men. Membership is based on musicianship skills, ear training, ability to sing independently and work ethic. Members of the Chamber Choir will also participate in a Men's or Women's Ensemble on a rotating day basis. Singers will focus on singing technique, blend, balance, intonation, and musical independence. This choir will learn rigorous material and repertoire will span a variety of styles. Singers will receive individual voice lessons on a rotating schedule to work on solo repertoire. Participation at concerts is required and participation in the section Solo and Ensemble contest is strongly encouraged. Extra singing opportunities including guest clinicians, short, traveling performances, contests, and retreats will also be scheduled throughout the year.

#### **Collaborative Piano**

**Grade - 9-12 Full Year – 1.0 Credit**

**Prerequisite/s:** Enrolled by audition and must be studying with a private teacher or have had private lessons

**Description:** Collaborative Piano is a course for advanced piano players who wish to gain experience in accompanying. Students will receive instruction to accompany both instrumental and vocal groups and solos. They will learn techniques to follow directors, musicians, as well as harmonize a melodic line, compose choral accompaniment and lead sectional rehearsals. Students will accompany choirs/ensembles during the school day; as well have the opportunity to accompany groups at concerts, festivals, and solo and ensemble contests.

**Concert Orchestra (Elective)****Grade - 9-12 Full Year – 1.0 Credit****Prerequisite/s:** Entrance determined by audition and director approval**Description:** This performing ensemble is open to students in grades 9-12 who play violin, viola, cello, or bass. Students will develop their technical and musical abilities on their instrument through scales, rhythm studies, shifting, vibrato, and string ensemble pieces. Students are assessed with playing tests, written exercises, listening homework and concert performances. Students participate in three orchestra concerts through the year and a field trip to MSHSL Large Ensemble Contest. Private lessons outside school are strongly recommended.**Chamber Orchestra (Elective)****Grade - 9-12 Full Year – 1.0 Credit****Prerequisite/s:** Entrance determined by audition and director approval**Description:** This advanced performing ensemble is open to students in grades 9-12 who play violin, viola, cello, or bass. Students will focus on musical phrasing and technique on their instrument through advanced repertoire that requires shifting, vibrato and high level bow technique. Students are assessed with playing tests, written exercises, listening homework and concert performances. Students participate in 3-5 concerts through the year and a field trip to MSHSL Large Ensemble Contest. Private lessons outside school are strongly recommended.

## FINE ARTS

### Course Descriptions

**Drawing I (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** None**Description:** This course is designed for the student who is interested in building their technical skills in drawing, direct observation and compositional space. Students will become proficient in a variety of drawing media such as; charcoal, ink, pastel, conte, graphite, and mixed media. Each student will develop a working knowledge of compositional space, still life, landscape, portraiture, as well as artists and historical concepts that have shaped the way we view the art of drawing today. This class will rely heavily on the art of seeing and help students to become more proficient at direct observation techniques as well as working with appropriated images. This is an excellent class for the student who loves to draw and wants to learn the techniques and materials to become more successful in this field.**Drawing II (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I or letter of recommendation from previous school and digital images of student's previous work**Description:** This course builds upon the techniques, tools, and media that students worked with throughout their semester in Beginning Drawing. Students will continue to enhance their understanding and technical skills by adding more skill, depth, and concept to the images they are working with. Students will be pushed to find their personal style, study major trends and influences in contemporary art while working on a variety of the following solutions: portraiture, personal statement drawings, mixed media, a major artist study, a collaborative drawing, and a series of drawings related to a common theme.**Painting I (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I**Description:** This course is designed to engage and introduce the beginning level student with a wide variety of painting techniques and important historical periods in painting. Historical periods from the Renaissance through Modern Art as well as color theory, tempera, watercolor, acrylic, fresco, and oil techniques will be considered. Students will study color, composition, landscape, city scape, still life, abstraction, working from photographs and working plein air to develop their final pieces.**Ceramics I (Elective)****Grade – 10-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I**Description:** This class is designed to enhance the students' historical, technical, and aesthetic understanding of clay. Students taking this class will study a variety of hand building and wheel throwing methods alongside studying the historical trends and influences of functional and sculptural clay methods and ceramic artists. The semester will cover pinch, coil, slab, mask making, glaze chemistry, firing methods, and wheel throwing. Students will study the Bauhaus and Mingei tradition of form and function and the artists behind these traditions.

**Ceramics II (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I and Ceramics I

**Description:** This class is designed to build upon the skills and techniques learned during beginning ceramics. Students will go into greater depth with their knowledge about glazes, wheel throwing techniques, hand building methods, and clay history. They will engage in independent research and create a body of work displaying throwing or hand building methodology. Research of potters and ceramics history is a critical part of the advanced ceramics curriculum. Visits to pottery studios or galleries with a focus on clay are also required. A 10-minute dialogue about a potter, a region of potters, a specific technique, or a historical form in ceramics history is the final in this class.

**Printmaking (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I

**Description:** Printmaking is an art form that incorporates painting, carving, drawing, and collage techniques. This is a perfect class for the student who would like a studio class that encourages a wide variety of techniques. Students will be introduced to some of the following: etching, monotypes, linoleum blocks, collographs, surface printing and textile printing

**Digital Photography I (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** Drawing I

**Description:** Introduction to Digital Photography is a course designed to introduce students to the camera, software, and printing methods used in the medium of photography today. Students will learn how to use different settings with their cameras to create personal imagery and will begin to develop a visual vocabulary to discuss and write about photography.

**Yearbook (Elective)****Grade - 10-12 Full Year –1.0 Credit****Prerequisite/s:** None

**Description:** Students interested in constructing the SCPA Yearbook will have an opportunity to develop their graphic design and leadership skills, explore journalism and photography while adhering to timely deadlines. Students will become skilled in using Balfour StudioWorks software.

**Art History (Elective)****Grade - 11-12 Full Year –1.0 Credit****Prerequisite/s:** Completion of two prior art courses

Art History is a survey course that looks at art from prehistoric times to the present. It provides the same overview and benefits as an introductory college course. Through the examination of different cultures and time periods students will look at the connection between history and art through an examination of painting, sculpture and architecture. The goals of this course are for students to look at art critically and with intelligence, and analyze what they see. Understanding art in its historical context is a key component of this class.

**PHYSICAL EDUCATION/HEALTH****Curriculum Overview****Graduation Requirements: 1****Course Offerings:**

Grade 9 –	Physical Education/Health
Grade 9-12 –	Weights & Conditioning Recreational Sports
Grade 10-12 –	Team Sports Fall Team Sports Spring Fitness for Girls First Aid and CPR

# PHYSICAL EDUCATION

## Course Descriptions

### Physical Education/Health

Grade - 9-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** This class will focus on refining skills for a variety of sports activities while increasing comprehension of the sport, play and teamwork. Fitness is the core focus. Students will run the mile, test their core strength, and measure their flexibility in the fall and spring. Health Education will also be worked into this course. *It is preferred that this course be taken as a freshman or sophomore.*

### Fitness for Girls (Elective)

Grade - 10-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** This course is designed for girls only who are looking to explore a variety of different workout options. It will emphasize personal fitness through strength training, cross training and cardiovascular training. Some of activities will include yoga, pilates, kick boxing and much more.

### Weights and Conditioning (Elective)

Grade - 9-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** This is a great course to stay on top of or improve your physical fitness. Students will set personal fitness goals and work to achieve them during the semester. As we work to achieve those goals, we will explore different types of workouts and training methods including circuit training, 5K training and various other programs.

### Team Sports Fall (Elective)

Grade - 10-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** In this course students gain instruction and strategies to participate in various team sports during the fall season. Some of the sports will include soccer, football, volleyball, team handball, floor hockey and much more. The concepts of cooperation, teamwork and sportsmanship are stressed.

### Team Sports Spring (Elective)

Grade - 10-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** In this course students gain instruction and strategies to participate in various team sports during the spring season. Some of the sports will include team handball, basketball, softball, cricket and much more. The concepts of cooperation, teamwork and sportsmanship are stressed.

### Recreational Sports (Elective)

Grade - 9-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** This course will explore various recreational sports and leisure activities that aren't necessarily highly competitive. Some of the activities included are hiking, yard games, badminton/pickle ball, volleyball, broomball, bowling and more.

### First Aid and CPR (Elective)

Grade - 10-12 1 Semester –.50 Credit

**Prerequisite/s:** None

**Description:** This course is a great opportunity for those who may be interested in a career in the health field, babysitters, athletes and those who want the experience. Students will learn proper first aid for common injuries, burns, treatment of a choking victim and much more. Knowing CPR can save a life in cardiac arrest situations. In this course students will become first aid and CPR certified. Training will be hands on and classroom based.

## **SERVICE PROJECT**

### **Course Description**

**Graduation Requirement: .50 Credit**

**Service Project**

**Grade - 9-11 Each Year –.10 Credit**

**Prerequisite(s):** None

**Grade - 12 Grad Year –.20 Credit**

**Description:** With character as a primary component of SCPA's mission, we believe "community" service is a part of character development. Each student has the responsibility and opportunity to give back. Therefore, every student in high school is expected to complete 50 hours of "community" service in order to graduate from St. Croix Prep.

Ten hours are required in each grade 9-11 and 20 hours in grade 12. The service project(s) can be done during the school year or the summer before that year begins. The grade level advisor must approve the project(s). Projects should NOT be raising money for something by asking parents, etc. It should require the student DOING something for someone or an agency. A project sheet is to be filled out by the student and signed by the advisor prior to commencement of the project and signed by the supervisor (the person for whom the project is being done) certifying the project has been completed. The sheet(s) is then turned into the student's advisor.

## **ANNUAL HIGH SCHOOL PRESENTATION**

### **Course Description**

**Graduation Requirement: 1.0 Credit**

**High School Speech/Presentation**

**Grade - 9-12 Each Year –.25 Credit**

**Prerequisite(s):** Previous years speech/performance

Each year every student in the Upper School will present a speech, performance or project that was part of his/her goal setting at the beginning of the year or represents some significant learning that year.

For seniors this presentation is meant to encompass something of importance over your high school experience. The presentation may take many forms. It can be a performance, dance, playing an instrument, singing, or a speech. It will be done some time during the senior year in front of the senior class and other invited guests.

## **SCPA School Assistant**

### **Course Description**

**SCPA School Assistant**

**Grade - 9-12 1 Semester –.50 Credit or Service Hours**

**Prerequisite(s):** None

**Description:** SCPA School Assistants assist faculty and staff with the day-to-day duties of conducting the business of the school. Qualified student candidates are mature, responsible and productive. SCPA School Assistants must be punctual, trustworthy and pay attention to detail on a daily basis. A student may take this course to meet their service hours requirement or for course credit. It is not possible to earn both credit and service hours simultaneously.

~For Your Personal Planning Purposes~

## Courses Offered Alternate Years Descriptions For Classes Offered in 2017-2018

### ENGLISH

**Composition: Fundamentals of Writing/Craft and Clarity (Elective)**

**Grade – 10-12 1 Semester – .50 Credit**

**Prerequisite/s:** None

**Description:** This course is designed to focus on the basic fundamentals of writing as well as to explore various types of informational and nonfiction writing. The aim is to expose and enhance an individual's ability to write clearly and effectively. Students will produce a portfolio of clearly written projects that explore elements of persuasion, exposition, description, analysis, and narration. This is an alternating day, .50 credit course.

**Creative Writing I (Elective)**

**Grade - 10-12 1 Semester –.50 Credit**

**Prerequisite/s:** English 9

**Description:** Students will read a variety of fiction and non-fiction texts while highlighting and determining: “What makes effective writing?” Students will learn to create writing that exemplifies an original, entertaining narrative voice with careful attention to tone, character description and well-constructed dialogue. In addition students will explore a vast variety of writing forms: short story, one-act play, poetry, narrative, and non-fiction memoir, in an effort to analyze and discuss the writer’s intentions and the greater themes found in texts (e.g. to inspire, to teach, to illustrate a universal concept).

**Drama (Elective) – (fine arts credit)**

**Grade - 9-12 1 Semester –.50 Credit**

**Prerequisite/s:** None

**Description:** Throughout this course students will study the different aspects of drama and how they collaborate to make a great performance. Students will learn the basics of acting including improvisation and creating characters from their imagination and from a script. Students will also explore the roles backstage including set, costume, lighting, and make-up design. The class uses plays/scenes from major periods in Theater History (Greek, Shakespearean, Modern) to create some of our characters and designs. Students will end the semester by acting in a 5-10 minute play for which they will also direct and design the technical aspects.

### MATH

**Math for Liberal Arts (Elective) +**

**Full Year – 1.0 Credit**

**Prerequisite/s:**

**Description:** Topics selected from: mathematical reasoning, natural number patterns, geometry, combinatorics, elementary probability and statistics, financial mathematics, numeration systems, and selected current topics to give students practical applications of mathematics for their daily lives. This course is an alternative for students who don't want or need to pursue work in Calculus.

**Differential Equations with Linear Algebra\* -**

**Full Year – 1.0 Credit**

**Offered as needed for students who complete Multivariable Calculus as Juniors**

**Prerequisite/s:** Multivariable Calculus and teacher recommendation

**Description:** A continuation of advance mathematics topics in preparation for higher level college coursework. Topics include matrices and systems, vector spaces, linear independence, dimension, linear transformations, eigenvectors, first and second order differential equations, linear and nonlinear systems, and extensive modeling. Applications include science, engineering, economics, and ecology.



**AP Computer Science (Elective)\*****Full Year – 1.0 Credit****Prerequisite/s:** Algebra II

**Description:** This course emphasizes program methodology and procedural abstraction. It also includes the study of algorithms, data structure, and data abstracts to write logically structured, well-documented programs. Block structured programming languages, data structures, computer systems, algorithms, programming methodology and responsible computer use are taught. The course uses the Java Programming Language and covers all topics on the AP Computer Science exam. Students may take the AP Computer Science exam if they choose.

**SCIENCE****Astronomy: Solar System (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Algebra II

**Description:** This course will be an exploration of the solar system and the early history of astronomy. Students will explore objects in our solar system, with a particular focus on the planets and their moons. Regular evening observations and some evening meetings will be required.

**Astronomy: Stellar (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Algebra II

**Description:** This course will be an exploration of the universe through the stars. Students will investigate objects outside of our solar system, with a particular focus on information that can be determined through observation of stars. Regular evening observations and some evening meetings will be required.

**FINE ARTS****Painting II (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** Painting I

**Description:** This course is designed to build upon the techniques and subject matter presented in Beginning Painting. Students will further develop their understanding of techniques such as watercolor, acrylic, tempera, and mixed media. The subject matter and historical periods covered will depend upon the Beginning Painting curriculum and pick up from what could not be fully covered.

**Digital Photography II (Elective)****Grade - 10-12 1 Semester –.50 Credit****Prerequisite/s:** Digital Photography I

**Description:** In Digital Photography 2, students will continue to develop their voice when creating digital photos. The students will continue to further their knowledge of the camera setting and lighting in the production of photographs.

**Digital Graphic Design I (Elective)****Grade - 9-12 1 Semester –.50 Credit****Prerequisite/s:** Foundations of 2D/3D Art

**Description:** Students will work with the design fundamentals used in the fields of advertising, graphic design and more. Skills in designing and combining text and images will be studied along with their impact on the viewer. Possible areas of exploration or design work may include: logo design, Photoshop, 3-D design, animation, printmaking, book design, layout, and architecture, as well as, computer graphic design techniques, which combine computer assisted image making and digital photography.

**AP Studio Art: 2D Design****Grade 11-12 Full Year – 1.0 Credit****Prerequisite/s:** Minimum of four Upper School art classes and approval of the instructor

**Description:** This class is designed for the serious art student who has taken a minimum of three other art classes in the curriculum. The course is designed to help the mature art student problem solve on an advanced level and be introduced to techniques, materials, and art history that has not been covered in their previous classes. Methodologies such as printmaking, sculpture, textiles, painting, paper making, drawing are just a few of the areas that might be covered in this class. The class will design itself depending on the students and the background of classes they have taken. The students will be challenged to explore deep content, serious art making, off site museum, gallery, and studio visits, writing, critiquing, and producing art that exemplifies their personal style and passion. Independent work as well as preparing college portfolios or AP Studio portfolios will be part of the course syllabus.