# CURRICULUM GUIDE 2020-21

KINDERGARTEN THROUGH GRADE 12



# LOWER SCHOOL | K-5

#### **CURRICULUM OVERVIEW**

The Lower School curriculum supports and expands children's natural love of learning and eagerness to be a part of a community. Creativity and collaboration are crucial qualities in educating the whole child.

A child's academic day alternates between homeroom and specialist classes. Homeroom teams build skills in mathematics, language arts, and social studies. Specialists provide instruction in science, Spanish, computer science and engineering, art, music, and physical education. Throughout the year, homeroom teachers and specialists make adjustments to instruction based on what they observe in each child. Differentiation is used carefully with the understanding that students' abilities are constantly evolving, developing, and changing.

Classes are characterized by flexible groupings and individualized guidance, made possible by low student-to-teacher ratios. Having two lead teachers in every homeroom facilitates enhanced learning for all students. The rotating six-day schedule allows for optimum emphasis on multidisciplinary skill-building in the three homeroom disciplines, as well as in the seven specialist classes, while incorporating opportunities for open play which are so important for young children.

#### A WEEK IN GRADE 3

	DAY 1	DAY 2	DAY 3 WEDNESDAY	DAY 4	DAY 5	DAY 6
8:00-8:10	MORNING MEETING			MORNING MEETING		
8:10- 9:00	ASSEMBLY	MINI	LATE START  MORNING MEETING	MINI	ASSEMBLY	MINI
9:00- 10:00	LANGUAGE ARTS	SPANISH	SOCIAL STUDIES	SPANISH	MATH	LANGUAGE ARTS
10:00- 11:00	матн	P.E.	MATH	P.E.	LANGUAGE ARTS	P.E.
11:00- 12:00	LUNCH AND RECESS					
12:00- 1:00	ART	SOCIAL STUDIES	LANGUAGE ARTS	МАТН	SOCIAL STUDIES	МАТН
1:00- 2:00	MUSIC	LANGUAGE ARTS	SPANISH	LANGUAGE ARTS AND SOCIAL STUDIES	SCIENCE	LANGUAGE ARTS AND SOCIAL STUDIES
2:00- 3:00	SCIENCE	MATH	MUSIC		ART	

# LOWER SCHOOL | K-5

#### **LANGUAGE ARTS**

The language arts curriculum develops children's skills in reading, writing, speaking, and listening. The curriculum is designed to meet the needs of every student at their level; it is flexible and appropriately challenging as teachers work with students on phonemic awareness, phonics, vocabulary acquisition, self-expression through writing and oral presentations, appreciation of a variety of literary genres, and the mechanics of spelling and grammar. Students form a love of reading and demonstrate strength in comprehension and critical thinking skills. Small groups allow teachers to provide individualized guidance as students build fluency in their reading and writing; teachers adjust differentiated student groupings throughout the year.

Throughout the Lower School, the language arts are often integrated with other academic content areas such as social studies, where students incorporate research, literary analysis, the give-and-take of discussion, and creative and expository writing.

♦ When students leave the Lower School, they are curious and engaged readers, confident writers, and have the oral and written communication skills they will need in Middle School and beyond.

#### **MATHEMATICS**

The *Math in Focus* curriculum provides the foundation for mathematics instruction in the Lower School. Within the homeroom setting, students are placed in differentiated groupings based on ongoing assessments. In these small groups, teachers challenge and support each student according to the student's skill level and developmental readiness. Students who master basic concepts are encouraged to accept further challenge, enrichment, and acceleration when appropriate.

The *Math in Focus* curriculum emphasizes deep comprehension and the "why" behind quantitative concepts. An understanding of the meaning and significance of mathematical concepts is developed in addition to the fundamental applications of elementary mathematics.

♦ By the end of Grade 5, all students are well-prepared for the demands of Middle School mathematics. Students who have completed accelerated work in Grades 3-5 are placed in an appropriate Middle School course after assessment by SPA math faculty members.

#### SCIENCE

Hands-on science, engineering, and computer science classes take place in two dedicated science classrooms and a Makerspace with two full-time science specialists. Students investigate the world around them, become observers of natural phenomena, build and create solutions to engineering challenges, and are introduced to computational thinking and computer programming. The curriculum includes interdisciplinary content from the core sciences of life science, physical science, and earth science aligned with the content and practices in the Next Generation Science Standards.

There is a strong focus on creative problem-solving and the engineering design process. Over the course of their Lower School experience, students will design, carry out, and present experiments ranging from investigating the variables that affect the germination of seeds to the behavior of waves and sound; They will learn about alternative energy and then design, build, and test wind turbines. They will also study and observe earth surface processes, learn about the Mississippi River watershed, and design and build a drinking water filter. Finally, students will learn the basics of computational thinking and computer programming through block-based programs such as Kodable, Scratch, and Tickle, and program small robots including BeeBots and Dash and Dot.

#### **SOCIAL STUDIES**

Social studies units deepen literacy, develop research and writing skills, and often integrate science, music, art and technology skills and concepts. Units foster skills in critical thinking, gathering and organizing information, analyzing cause and effect, and expository reading. Students are introduced to geography, basic economic principles, civics and government, history, and cultural studies. Kindergarten students explore community citizenship and the history, geography, environment, and stories of native peoples of the world, and the concept of needs versus wants. Units in Grades 1 and 2 rotate between a year on how individuals interact with communities and a year on the city of St. Paul. In Grades 3 and 4 students complete

# LOWER SCHOOL | K-5

#### **SOCIAL STUDIES. CONTINUED**

interdisciplinary research projects and then showcase their presentation skills as well as their understanding of topics such as U.S. geography, economics, immigration, and "The World 1000 Years Ago." Grade 5 students explore the cultures of Native American nations before contact with Europeans; colonial and revolutionary America; and the U.S. Constitution and basic structure of the U.S. government. Students take on more independent work through a range of simulations, projects, research, and presentations.

#### **SPANISH**

Spanish classes emphasize creative and interactive games, songs, stories, skits, puppet shows, movements, and conversations to help students develop their listening, speaking, reading, and writing skills. The curriculum offers interdisciplinary integration with homeroom content area units, an understanding of Spanish-speaking cultures around the world, and multiple opportunities for exchanges with native Spanish speakers both in and beyond the classroom.

Students who join SPA in Grades 3-5 with limited Spanish experience are supported in Spanish through a mini-course offered in addition to regular class times to help them build competence and confidence in the basics of Spanish language as they transition into the school community in the fall.

♦ By the end of Grade 5, students have completed the first half of a beginning high school Spanish course. This puts students on track to complete Spanish II by the end of Middle School, entering Spanish III when they move to the Upper School.

#### **COMPUTER SCIENCE AND ENGINEERING**

Students in every grade have at least one unit each year in their science classes in which they explore computer science, robotics and/or engineering at a developmentally-appropriate level. This initiative involves three strands of skill development: computers and devices as learning tools; computer science and engineering skills; and Maker education where students utilize the Makerspace for design, construction, and special projects. Together, these three strands give students the opportunity to explore new ways of thinking that can also be applied to the academic subjects they study in their homeroom and with the specialists.

#### **ART**

In the Lower School, art is a vibrant, creative, and essential part of day-to-day life. Students participate in formal art classes taught by specialist teachers twice per six-day rotation. In art classes, they explore and express themselves through many media and styles. Student work is prominently exhibited throughout the school.

#### **MUSIC AND MOVEMENT**

Students attend music classes twice per six-day rotation, and are taught by teachers trained in the Orff-Schulwerk approach. Instruction in singing, movement, instruments, and speech guides students through exploration, improvisation, and composition. Students performing on stage is an important part of the music experience in the Lower School.

When students move to the Middle School, they continue their music coursework in choir, band, or orchestra.

#### **HEALTH AND WELLNESS**

Lower School students benefit from an intentional culture and integrated curriculum promoting healthy bodies, healthy minds, and healthy relationships. Lessons on topics such as human anatomy, families, puberty, gender, human reproduction, friendships, stress, and consent will be presented across the curriculum, in age-appropriate ways.

Students take Physical Education three times per six-day rotation. Teachers engage, instruct, and encourage each student while students build strong bodies, athletic skills and teamwork. Team sports instruction begins in Grade 3. Students may participate in interscholastic sports beginning in Grade 5.

#### **TECHNOLOGY TOOLS**

Technology is integrated into academic subject areas and includes an emphasis on creativity and innovation. Students in grades K-2 share classroom iPads, and students in grades 3-5 are assigned individual iPads for school use. There are also mobile labs of laptops which students may use as needed to achieve particular learning objectives or enhance specific projects. Students use technology to collaborate with peers, learn digital citizenship, and create subject-related content.

### LOWER SCHOOL K-5

#### MINIS AND ASSEMBLY

**Minis:** Students in Grades 3-5 take part in a series of eight-week electives known as "Minis," taught by Lower School teachers and specialists. Minis offer students an opportunity to learn new skills outside the classroom and collaborate with different students and adults in the community. Minis offered in recent years include "Mindfulness for Kids," origami, flag football, drums around the world, stop-motion animation, scrapbooking, video production, broomball, geocaching, cribbage, bridge building, and bird watching.

**Assembly:** All-school assemblies take place in the Sarah Converse Auditorium at the beginning and end of each week. Assemblies bring together all Lower School students, faculty, staff, and often parents to share memorable moments and showcase learning. Students sing, perform, and celebrate accomplishments as a group. Assemblies are led by students in Grade 5 who serve as ushers, stage and sound crew members, and emcees. As a culmination of the Lower School experience, each Grade 5 student leads an assembly as the emcee. Each student is mentored by a Grade 5 teacher to prepare for their "emcee day," and these are much-anticipated community events.

#### **BEFORE/AFTER-SCHOOL PROGRAM**

**Before School Care:** Morning care is offered each weekday morning free of charge to all Lower School students. Every morning the Adventure Kids (AK) program runs from 7 a.m. to the start of school; on Wednesdays, when classes begin at 8:45 a.m., students may attend AK from 7 to 8:30 a.m. Before-school care is supervised by staff members who are committed to providing a fun, caring, and safe setting for students.

**After School Care:** The after-school AK program is held each school day from the end of classes until 6 p.m. and is staffed by the same caring, skilled staff as the morning AK program. Less structured than the regular school day, the after-school AK program offers a variety of mixed-age group activities, snack time, and quiet time for independent reading, games, and homework. Outdoor play is encouraged for all children throughout the seasons, including sledding and ice skating on the school's playground ice rink. There is a fee for the after-school AK program; please inquire about rates.

**Full-Day Activity Program:** On many days when Lower School classes are not in session, such as Parent Conference or Faculty Professional Days, SPA offers fee-based, full-day care open to all Lower School students. The full-day program features field trips, outdoor play, craft projects, and other activities. The program is not in session on holidays or during school vacations.

### MIDDLE SCHOOL | 6-8

#### **CURRICULUM OVERVIEW**

The Middle School curriculum emphasizes wide-ranging exploration and skill development in specific disciplines, taught by teachers who understand and genuinely care for students at this age. Organization and accountability are emphasized, and students learn to take responsibility for managing their work. Block scheduling allows students to investigate deeply and to absorb concepts in each discipline. Students work collaboratively with each other, and teachers are able to design differentiated strategies to meet the needs of individuals and groups. Technology is a critical component of the Middle School, with a 1:1 laptop program integrated into all disciplines. Time is taken to talk with students about appropriate use and online safety.

Based on the Developmental Designs for Middle School approach, community norms, strong student/teacher relationships, and responsibility to the group are principal features of the Middle School program. Advisory groups of 10–12 students and one faculty member meet every morning and two to three additional times per week, allowing students to interact socially under the guidance of an adult. Advisors oversee their advisees' school experience: they advocate for students, facilitate student-teacher meetings, explore how students learn best, and help students set and meet academic goals in each discipline.

By the time they enter the Upper School, Middle School students are prepared academically for the rigors of advanced study. They have learned to manage their time, make good choices, and advocate for themselves and their ideas.

#### A WEEK IN GRADE 6

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
8:00-8:15	CHECK-IN					
8:15- 9:40	SCIENCE	P.E. ROTATION	SOCIAL STUDIES	LANGUAGE ARTS	МАТН	WORLD
		FINE ARTS/WELLNESS/ COMPUTER SCIENCE ROTATION				LANGUAGE
9:40- 10:25	X-PERIOD ROTATION AND RECESS/SNACK					
10.05	SOCIAL STUDIES	LANGUAGE ARTS	МАТН	WORLD LANGUAGE	SCIENCE	P.E. ROTATION
10:25- 11:50						FINE ARTS/WELLNESS/ COMPUTER SCIENCE ROTATION
11:50- 12:20	LUNCH/MUSIC					
12:20- 12:50	MUSIC/LUNCH					
12:50- 2:15	МАТН	WORLD LANGUAGE	SCIENCE	P.E. ROTATION	SOCIAL STUDIES	LANGUAGE
				FINE ARTS/WELLNESS/ COMPUTER SCIENCE ROTATION		ARTS
2:15- 3:00	WORK STUDY					

### MIDDLE SCHOOL 6-8

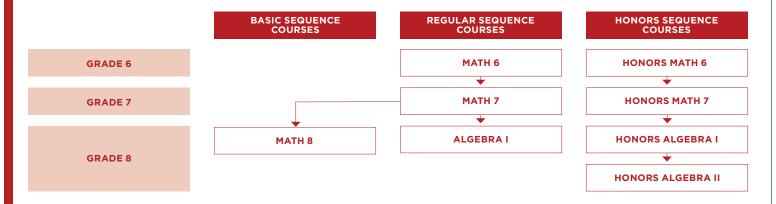
#### **ENGLISH**

Middle School English features a workshop model in which students become independent, passionate, habitual, skilled, and critical readers and writers. Reading choice, depth, comprehension, and engagement are valued every step of the way. The workshop model allows students focused, regular class time to build their writing and analytical skills while working collaboratively through peer-review, one-on-one teacher conferences, whole-group mini lessons, and frequent discussions of shared mentor texts. Grammar instruction is both geared to the whole class and individualized. The Middle School's English curriculum guides students to create high expectations for themselves as they set their own goals and are nudged toward authentic independence, curiosity, and awareness as readers, writers, and citizens.

#### **MATHEMATICS**

Middle School mathematics courses emphasize the nature of mathematical thought as well as the development of facility with the applications of mathematics. SPA's math program emphasizes the "why" behind the "how"—students explore, discover and make sense of concepts before applying them; they investigate the significance of concepts in addition to using them to solve problems. With three sequences of math available, students proceed at the pace and with the level of abstraction that best fits their mathematical development and understanding.

♦ When students leave the Middle School they typically have completed a rigorous first algebra course, which is the essential foundation of the Upper School mathematics program. Please see the Upper School mathematics sequence chart, below, for detailed information about the Upper School mathematics program.



#### **SCIENCE**

Middle School students experience an iterative trial-and-error process in their roles as developing scientists, engineers, and computer programmers.

In Grade 6, students take an integrated course which ties together topics in geology, biology, and physical science. Throughout the year, students learn laboratory skills and practice observing, recording, analyzing, and reporting data. In Science 7, the overarching theme is environmental science, with a focus on Minnesota ecology. Earth science, life science, and physical science is grounded in the environment surrounding St. Paul, with an emphasis on data analysis, modeling, application, and problem-solving.

The Grade 8 science course offers an introduction to a wide range of physical science concepts. The curriculum immerses students in the skills and practices of being a scientist and engineer through daily lab work and communicating their results in writing. The first half of the course culminates in an investigative "sludge" project where students employ their lab procedures and deductive reasoning to identify a range of mystery substances. In the second half of the year, students study atomic structure, the periodic table, electricity, and electromagnetism, concluding the year with an electronics-focused engineering project.

# MIDDLE SCHOOL | 6-8

#### **SOCIAL STUDIES**

The Middle School social studies program encourages appreciation of people from different periods and cultures while developing analytical research, critical reading, discussion, and writing skills. In Grade 6, students study contemporary and historical Minnesota from its earliest inhabitants to its most recent immigrants. In Grade 7, students explore sustainability and civic engagement, including a comprehensive, interdisciplinary unit on water issues. In Grade 8, students explore 20th-century U.S. history and contemporary political and social issues.

Students are taught to formulate and articulate their own interpretations of the material. They learn to work independently through major research projects in each grade and present their research to teachers, peers, and the community—another step in acquiring the public-speaking and communication skills that will serve them as they advance to the Upper School.

#### **WORLD LANGUAGE**

In Middle School, all students have the opportunity to start a new language of their choosing in Spanish, French, Chinese, or German. Middle School world language study emphasizes communication, culture, and personal connections to language. Lessons focus on conversation, reading and listening, and writing for presentation. Students with prior language experience, including those moving up from the Lower School's Spanish program, may choose to continue their study of a specific language based on their skill level and placement test results. Middle School students also have the option to pursue accelerated language courses in the Upper School, when appropriate. Students typically complete Level II in their chosen language by the end of middle school, enabling them to enter Level III in the Upper School.

#### **COMPUTER SCIENCE AND ENGINEERING**

All Middle School students take a Computer Science (CS) class every year. CS 6 begins with programming in a block-based environment. Students are introduced to physical computing and explore how the concepts they learn can be applied across the Middle School curriculum. In CS 7, students apply computer science skills to program simulations related to thematic topics. Students continue to explore physical computing and create an individual project. CS 8 focuses on building an abstract understanding of computational constructs and computational thinking skills.

◆ Students who complete Computer Science 6, 7, and 8 courses in Middle School enter the Grade 9 ready to explore Upper School advanced computer science electives.

#### **FINE ARTS**

All Middle School students take drama, art, and music courses, and may audition for three annual theater productions. The Grade 6 studio art course covers various media and techniques; Grade 7 studio art courses introduce two-dimensional art techniques and three-dimensional ceramics. In Grade 8, students may opt to take elective courses in two- and three-dimensional art.

The required Grade 6 drama class prepares students for later electives in Grade 8, including acting, production and performance, and scriptwriting. All Grade 6 students participate in choir or beginning instrumental classes; advanced instrumentalists in Grade 6 may audition to participate in advanced band or orchestra. In Grades 7 and 8, students continue in choir or in the instrument and ensemble of their choice.

#### **HEALTH AND WELLNESS**

Middle School Compass courses engage students in an interdisciplinary approach to health and wellness. The Grade 6 and 7 Compass courses are team-taught by the Learning Specialist, the MS Counselor, and the Director of Intercultural Life. Students explore social skills, academic strategies, human relationships, healthy communication, identity development, and personal values. In Grade 8, Compass class explores health-related topics such as substance use and abuse, stress management, nutrition, and sexuality.

Students take Physical Education two times per six-day rotation in Grades 6 and 7. The curriculum includes cooperative games, health/nutrition units, and sports. Emphasis in sports units will be placed on developing skills, form, and teamwork. In Grade 8, students take a one-trimester Fitness 8 course which helps students develop personal fitness plans through exposure to weight training and cardio classes. Students also learn about nutrition, heart rate, physical health, and injury prevention.

### MIDDLE SCHOOL 6-8

#### **TECHNOLOGY TOOLS**

In Grade 6, each student is assigned a school-owned laptop for use in school and at home during the school year. This laptop is used across classes as an essential tool for content creation, research, organization, and collaboration. Necessary technology skills are developed in the context of academic classes where they are needed, often taught collaboratively by the content teacher and an integration specialist. Strategies encouraging responsible use of technology, both personally and academically, are emphasized in all grades through Advisory and Compass courses. Students also use school laptops for a range of extra-curricular activities, such as Lego League, Technovation, and the Middle School Yearbook.

♦ By the end of Grade 8, students are prepared to transition from using school-owned technology to more independent use of personal technology in the Upper School.

#### STUDENT VOICE AND COMMUNITY

In Middle School, students are becoming more independent and figuring out who they are as individuals. Spending time with peers doing activities they enjoy is an important part of this process, and the Middle School student life program reflects that.

Much of our student life programming takes place during the school day. The advisory program is where academic life and student life come together, and the work students do in advisories defines life and community in the Middle School. Our experiential learning opportunities are tied to the curriculum and some, like the week-long Grade 7 retreat to Camp Widjiwagan, are significant rites of passage. Middle School "Activities" are similar to the Mini program in the Lower School, and offer students a wide range of electives that are a fun change of pace from their academic subjects.

The vast majority of Middle School students— almost 80%—participate in one or more of our interscholastic athletic teams, and many students also take advantage of the Private Music Lesson program that offers individualized instruction at the Randolph Campus before or after school. Additional programming after school includes three theatrical productions, Lego League, and a supervised After School program offering care until 6 p.m. on school days.

### **UPPER SCHOOL | 9-12**

#### **CURRICULUM OVERVIEW**

The Upper School offers a challenging and innovative college preparatory program that emphasizes discussion-based learning. The intellectual community is characterized by close student-faculty and student-student relationships that foster advanced inquiry, lively discussion around Harkness seminar tables, and deep engagement with ideas. The Upper School's 75-minute class periods provide time for broad exploration of ideas within each class and each discipline. The schedule also has built-in time during the school day for co-curricular activities, studying, and meeting with teachers, and allows for a balanced approach to homework. Students are energetic and informed participants in discussions, nuanced and accountable in their analysis, and articulate in their critique and defense of ideas. The program culminates in seminars that use college-level texts and require substantial independent work.

♦ SPA graduates are thoroughly prepared to excel and lead at the most demanding colleges and universities. While SPA has chosen not to offer designated AP (Advanced Placement) classes, our courses are designed to go well beyond the prescribed AP curriculum in depth and complexity. When SPA students elect to take AP exams, they are very successful: more than 61 percent of students who take an AP exam earn a score of 4 or 5, and more than 93 percent earn a score of 3 or above.

A WE	A WEEK IN GRADE 9					
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
8:00-8:10			ADVISORY	CHECK-IN		
8:10- 9:25	ALGEBRA II	JOURNEYS IN LITERATURE	STUDY HALL	COMPUTER SCIENCE	DEBATE	SPANISH III
9:25- 10:10	X PERIOD: ASSEMBLIES, CLUBS, ADVISORY, CLASS MEETINGS					
10:10- 11:25	STUDY HALL	COMPUTER SCIENCE	DEBATE	SPANISH III	ALGEBRA II	JOURNEYS IN LITERATURE
11:25- 11:55	LUNCH					
11:55- 1:10	WORLD HISTORY I	PHYSICS 9	WORLD HISTORY I	PHYSICS 9	WORLD HISTORY I	PHYSICS 9
1:10- 1:45	TUTORIAL					
1:45- 3:00	DEBATE	SPANISH III	ALGEBRA II	JOURNEYS IN LITERATURE	STUDY HALL	COMPUTER SCIENCE

### UPPER SCHOOL 9-12

#### **ENGLISH**

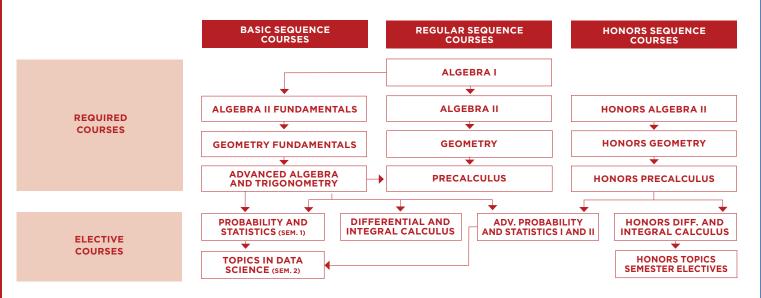
In the Upper School English program, students actively engage with literary works, explore both content and form, and acquire sophisticated skills in analysis, writing, and public speaking. In Journeys in Literature (Grade 9) and American Literature (Grade 10), students build strong critical reading, expository and creative writing, and assertive yet generous discussion skills. English electives in Grades 11 and 12 are semester-long courses focusing on the analysis of literature. Students apply critical lenses, develop literary awareness and appreciation, and demonstrate sophisticated expression of ideas in writing and in discussion. Reading lists feature classical and contemporary titles. Electives include Speculative Fiction, Poetry: Connection and Community, Classics in Society, Literature of the Asian Diaspora, Literature of Migration, and Gender in Literature. Robust, award-winning programs in debate, journalism, and theater encourage students to deepen skills in performance and print.

◆ All Grade 11 and 12 English electives may be used in preparation for the English Composition AP exam.

#### **MATHEMATICS**

Upper School math courses emphasize the nature of mathematical thought as well as the development of facility with the applications of mathematics; students gain a deep understanding of principles before applying them. Three course sequences offer each student the best fit in terms of pace, depth, and level of abstraction. Teachers assess progress to determine the best sequence for all students, and students may switch between sequences with departmental approval.

◆ Differential and Integral Calculus can be used as preparation for the AP Calculus AB Exam; Honors Differential and Integral Calculus can be used as preparation for the AP Calculus BC Exam; Adv. Prob/Stats can be used as preparation for the AP Statistics Exam.



#### **SCIENCE**

In the Upper School, all science courses are laboratory based.

Physics 9 incorporates research-based approaches that emphasize collaboration, discussion, creativity, and problem-solving. Engineering design and design thinking projects are integrated into the curriculum. Grade 10 biology progresses from evolution to physiology through ecology, molecular biology, biotechnology, and genetics. The Grade 11 chemistry course provides a comprehensive introduction to topics in chemistry with a strong focus on collaboration, including discussions, frequent lab work, demonstrations, and group problem solving.

Students can select from a broad range of second-level and interdisciplinary science electives for their junior and senior years including Environmental Science, Genetics, Space Science, Advanced Mechanics (offered with and without Calculus), Forensic Science, Honors Biology II, Honors Chemistry II, Relativity and Quantum Physics, Waves, Optics and Acoustics, Electricity and Magnetism with Calculus. There are honors level courses in biology, chemistry, physics, and electives.

Continued next page

# UPPER SCHOOL | 9-12

#### SCIENCE. CONTINUED

Juniors and seniors may also apply for the Advanced Science Research elective in which they pursue independent research in any scientific field. This capstone course builds upon current science skills, including lab technique, scientific writing, and formal presentation. Students enter their research in local and national science competitions.

◆ Honors biology and chemistry provide preparation for the AP exams in those content areas.

#### **HISTORY**

In Upper School history courses, students gain historical perspectives, develop critical thinking skills, and refine discussion strategies. All students take a two-year world history sequence in Grades 9 and 10. Topics include classical empires, world religions, the post-classical world, revolutions, industrialization, globalization through colonialism and in the post-colonial world, and a formal history research process and paper each year.

In Grade 11, students complete a United States History course that includes a significant research component and work with various primary documents, scholarly secondary sources, and college level texts.

Senior elective seminars focus in depth on specialized topics. Seminars include Economics, History of Law, Government and Citizenship, History of Thought, US Foreign Policy Since World War II, Global Issues, History of Refugee Communities, World Religions, Honors United States History, Gender in the Americas, History of Law, and History of Race.

◆ World history and U.S. history courses may be used in preparation for AP exams.

#### **WORLD LANGUAGE**

he Upper School offers Spanish through Level VI, and Chinese, French, and German through Level V. Students are expected to demonstrate increasing proficiency in cultural awareness, conversation, listening, reading, writing, and speaking. After completing this sequence, students may elect Advanced Language Seminars, which explore topics at an advanced level entirely in the target language in a seminar format.

Throughout the world language program, students are exposed to increasingly complex themes based on national American Council on the Teaching of Foreign Language standards. In upper levels, substantive units on social and political issues of contemporary societies, economic developments, and cultural histories are also studied.

♦ Honors biology and chemistry provide preparation for the AP exams in those content areas. All Levels V and VI language course have AP themes integrated into the units and lessons, enabling students to prepare for the AP language exams.

#### COMPUTER SCIENCE AND ENGINEERING

Computer Science and Engineering electives allow students to engage with these disciplines in a variety of ways. Students who have completed the Middle School computer science courses enter the Upper School prepared to take any of the electives; all other students can begin by taking the introductory course, Programming and Problem Solving. Elective computer science courses include two AP-aligned courses, numerous intermediate and advanced topic courses, and robotics. Robotics students use programming skills and engineering strategies to design and fabricate robots. Students who take this course are also members of the school's Robotics team, which competes in international robotics competitions. The Engineering curriculum begins in Grade 10, after the completion of Physics 9, with the introductory Principles of Engineering course. Advanced engineering electives focus on a single area or type of engineering such as Aerospace. Courses in computer science and engineering are enhanced through access to design lab spaces where students can prototype projects.

#### **FINE ARTS**

All students are required to take at least three semesters of fine arts, choosing among visual arts classes, musical ensembles, or theater courses. Ensembles include Summit Singers, Academy Chorale, Academy Symphony, Honors Sinfonia, and Upper School Jazz Band, all of which produce two performances a year. More than half of the Upper School student body performs in the fall Pops Concert, which is a highlight of the year for students, faculty, and families. The Honors Music Seminar, for students in Grades 11 and 12, focuses on music analysis, composition, music history, and theory. Visual arts courses emphasize personal expression

### UPPER SCHOOL | 9-12

#### **FINE ARTS. CONTINUED**

through drawing, painting, ceramics, photography, and video arts. After introduction courses are completed, a variety of intermediate classes are available to students to reinforce and strengthen their skills in a medium of their choice. These electives culminate with the Senior Art Seminar course, the most advanced visual arts course in which students pursue independent projects and build a portfolio for college applications. Theater courses focus on acting, directing, production, and design. Theater productions include a student-directed one act play series, a fall drama, and a spring musical.

#### **HEALTH AND WELLNESS**

The Grade 9 Fitness for Life course includes instruction in traditional sports, supervised training on fitness equipment, and certification in CPR. Grade 10 Wellness is a one-quarter class taught by one of the Upper School counselors which provides a supportive and reflective opportunity to explore and develop personal values, choices, and skills.

#### **TECHNOLOGY TOOLS**

At the start of their Upper School experience, families purchase a laptop to be used for research, organization, collaboration, and content production in all disciplines throughout the student's time in the Upper School. All Grade 9 and new students participate in a three-hour technology orientation where they are introduced to their new devices, the technology they'll use as Upper School students, and general expectations around appropriate use of academic technology.

#### **COMMUNITY**

Within and beyond the classroom, the Upper School program helps students develop their unique voice within a close network of adult and student relationships. Each morning includes time in advisory groups with one adult and a small group of students. Student-led assemblies start and end most weeks. Students on *The Rubicon*, SPA's award-winning student newspaper, and the nationally-ranked debate team employ the verbal and written skills developed in the classrooms. A thriving program of student-led clubs, leadership, and interest groups create a strong sense of community; these groups include the Community Action and Service Club, Film Club, Art Club, PAWS, Science Team, Spartan Boosters, Intercultural Club, Student Political Union, Quiz Bowl, Students for Social Justice, Gender and Sexuality Acceptance, Spartan Beats, Math Team, and many others.

Capstone projects mark the senior year. Senior Speeches, written and delivered by each senior, are important community events affording each student the chance to share his or her own insights with peers, faculty, staff, and parents. At the end of the senior year, each student also designs and implements a month-long Senior Project that combines a working internship with career exploration and service.

# UPPER SCHOOL 9-12

#### ACADEMIC PLANNING AND COLLEGE COUNSELING

The college counseling process at SPA is focused on building relationships with individual students throughout their time in the Upper School. Every student is assigned one of three full-time college counselors in Grade 10, and the college planning process begins with counselors getting to know their students and encouraging them to establish a strong academic foundation and cultivate personal interests well before thinking about specific colleges. College counselors help their advisees plan academic schedules and extracurricular activities, and provide emotional support and encouragement as students identify the areas of study and engagement that truly excite them.

By the time students enter the junior year, college counselors know their advisees well, and can provide personalized guidance as the college search begins in earnest. Counselors work closely with the student and the family to identify key college criteria based on the student's interests and personality, suggest colleges to research and visit, develop a testing plan, review essays and applications, and advocate on behalf of students with college admission officers across the country. Counselors also help students and parents understand financial aid and scholarship opportunities, and counsel seniors in making their final college choice.

The goal in the college counseling process is finding the college that is the best fit for each student. Ultimately, the college counseling process is designed to help students cultivate self-reflection, critical thinking, communication, self-advocacy, and decision-making skills—skills that will be vital for their success in college and in life.

#### REQUIREMENTS FOR GRADUATION

ENGLISH	Successful completion of four full years of English with at least one-half credit per semester: Journeys in Literature (Grade 9), American Literature (Grade 10), and four semester English courses (Grades 11-12).
FINE ARTS	Three-fourths credit (typically three semesters) of fine arts completed in Grades 9-12.
HISTORY	Successful completion of World History I (Grade 9), World History II (Grade 10), and U.S. History (Grade 11); 96% take history/social studies in senior year.
LANGUAGE	Successful completion of level III of a world language or, by permission, level II of two languages. Enrollment in a language required through Grade 10; 91% take world language through Level IV, with 65% continuing through Level V or Advanced Study.
MATHEMATICS	Successful completion of a third-level course in mathematics: Advanced Algebra and Trigonometry, Precalculus or Honors Precalculus; 98% study math through Grade 12, with 83% studying calculus or advanced math.
SCIENCE	Successful completion of three years of the following lab sciences, taken in sequence: Physics, Biology, Chemistry; 99% study science through Grade 12.
FITNESS/ WELLNESS	Participation in one quarter of Wellness (Grade 10). Participation in Fitness for Life class for one semester (Grade 9).
SENIOR YEAR	Successful completion of Senior Speech. Successful completion of Senior Project.