



# ***SADDLE RIVER DAY SCHOOL***

## **Curriculum Guide**

Academic Year  
2021-2022

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# **Saddle River Day School**

## **Mission Statement**

*We inspire each child to achieve personal excellence and to become a caring and ethical contributor to society.*

### **Core Values**

#### ***Everyone counts.***

At Saddle River Day School, all children and adults matter; their talents and contributions are prized.

#### ***Love of learning.***

Saddle River Day School engenders a lifelong love of learning in our students with a caring and committed faculty, staff and administration.

#### ***Intellectual risk taking.***

Intellectual risk taking is encouraged and celebrated through a nurturing, intimate environment that ensures the physical and emotional security of each child.

### **Operating Principles**

In order for us to fulfill our mission, we believe that it is necessary for us to:

- ❖ Recognize and develop the individual talents and gifts of each child.
- ❖ Ensure a complete education, which involves a combination of core content, basic skill development, conceptual understanding of academic material, and the development of the integrity and skills to make individual, ethical decisions.
- ❖ Articulate and maintain the highest academic, aesthetic, athletic and behavioral standards.
- ❖ Maintain small classroom environments.
- ❖ Teach and integrate technology into the daily curriculum in a relevant manner.
- ❖ Encourage intellectual risk taking and a commitment to lifelong learning on the part of children and adults as they grow into a community of learners.
- ❖ Prepare students to serve the needs of their school community and the community-at-large.

## **Lower School Curriculum and Program Overview: Grades PreK-4**

### *Language Arts*

The lower school language arts program is based on a balanced literacy approach which incorporates both phonics and whole language instruction. This is accomplished through the use of Reading Workshop, Writing Workshop and Word Study.

In Reading Workshop, children are taught reading and comprehension strategies, how to make connections with the text, how to check for understanding, how to predict and infer, and how to choose books that are at their independent reading levels. Students are given the opportunity to explore quality literature and practice reading strategies in small group, whole group, and individual settings. Students are assessed throughout the school year and guided reading instruction is differentiated to meet the needs of each child.

In Writing Workshop, writing is taught by exploring mentor texts and authors' writing styles. Teachers model how to choose meaningful writing topics and mini-lessons provide students with writing strategies they can incorporate in their writing. Mini-lessons focus on concepts such as capitalization, punctuation, grammar, expanding ideas, mechanics, revising, and editing.

Students maintain a Writing Notebook to gather ideas and create writing pieces such as poems, narratives, and information books, which they take through the writing process. Children work in a whole group setting, small group setting, independently, and one on one with the teacher which allows for differentiated instruction.

In Word Study, Kindergarten uses Lucy Caulkin's *Units of Study in Phonics*. This program introduces phonics strategies and concepts through the use of games, songs, rhymes, and chants. Through independent, partner and small group work, children learn to love phonics and understand its importance in the development of their reading and writing. Phonics instruction teaches students to understand when, how, and why they can use phonics to read and write.

In first through fourth grades, the Lower School uses the Zaner Bloser Spelling Connections program in which instruction is based on spelling principles and patterns, as well as phonics. Students work in differentiated groups, independently, and one-on-one with the teacher to dive deeper into spelling-meaning connection, vocabulary expansion, writing, and test practice. The program also highlights how to correctly use a dictionary and thesaurus.

### *Mathematics*

Students in Kindergarten through fourth grades use the Go Math! which focuses equally on conceptual understanding, fluency, and application. Interactive lessons and differentiated instructional resources, ensure that all students are successful. Word problems and multi-step problems are introduced early so that as a student's mathematical ability grows so does the complexity of the kinds of problems he or she can solve. Students have access to online math practice and enrichment.

Direct instruction of essential math is provided by the teacher as the students become more and more able to break apart complex tasks. As children most often learn best by discovery, math instruction uses a variety of manipulatives allowing students to learn things for themselves. At age appropriate levels, children receive instruction in topics which include: basic arithmetic operations, measurement; data collection and analysis; probability, logic and problem solving. Through continuous review, the math curriculum is designed to meet the ever changing challenges of new times.

### *Science*

The lower school science program is a unique aspect of this elementary curriculum. Using a curriculum developed by the National Academies and the Smithsonian Institute, our youngest learners are doing real science. In a lab dedicated to the needs and talents of children, the students learn and explore life, earth, and physical sciences. Elementary students build complete understandings of concepts while learning the basic skills of science. The curriculum design allows students to work independently as well as cooperatively to do investigations; ask questions; make and test predictions; record, reflect on and share their findings; and apply the skills and knowledge they have gained to new situations.

### *Social Studies*

The Lower School Social studies program aligns with the SRDS mission which, in part, states that we inspire each child to become a caring and ethical contributor to society.

Our Social Studies program provides students with a framework through which they can begin to understand themselves and others. They will learn about the history of the past, participate in the present and contemplate the future.

By studying and using map skills the students will build a knowledge of directional terms and a further understanding of spatial relationships. Learning about the globe will enhance their concept of the world. They will begin to realize the influence geography has on human behavior and habits. Students will acquire knowledge about diversity and various ethnic groups and recognize the relevance of contributions from different cultures.

The younger grades will learn about democracy and the value of good citizenship, partly through creating rules and understanding their impact and importance. Who makes the rules? How are they enforced? What happens when a rule is broken? Can a rule change once it is made? As their knowledge and experiences broaden they will expand their ever widening circles to encompass their local communities, the states, the nation and the continents. Upper elementary grades focus on geography by studying landforms, water, climate, and the ways people interact with the environment. The children explore the first Americans and how environment, and location, impacted the lives of these early people. They will do an in depth study of the five regions of the United States and begin to discuss prominent events in American history that helped shape the country we are today. An emphasis is placed on reading and understanding facts through various sources of information. Research skills are taught as students learn how to apply and share their knowledge.

### *Spanish*

The primary goal of the World Language program in the Lower School is to establish a comfortable level of verbal and written usage of the Spanish language, which will provide a foundation for the continued study of languages in the Middle and Upper Schools. There is a firm focus on communication, cultural appreciation, and connection to various aspects of the school curriculum, such as reading and writing.

The program strives to instill a natural enjoyment for the use of the target language in order to express such things as greetings, family, clothing, animals, food, numbers, and classroom objects. Throughout their language acquisition, students will engage in simulations, games, and activities that will place them in real-life situations while reinforcing the subject matter. At each grade level the topics are expanded upon in terms of incremental vocabulary and idiomatic expressions.

### *Music*

The Lower School music program is designed to bring the joy of music to each student and to provide the students with the fundamental musical understanding and skills that will prepare them for more advanced study in the Middle School. Music classes consist of singing, movement, learning to play Orff instruments and in the fourth grade, learning to play the recorder. The students are taught how to listen to music, proper vocal technique, how to read musical notation, how to use movement to understand rhythm, and improvisation is taught via the Orff instruments. In addition to Music Class, the students attend choir practice once a week, during which the students prepare pieces for concerts that take place in December and June.

### *Visual Arts*

The visual arts are a means to gain personal satisfaction through individual accomplishment in the creation of images and forms. The students are taught the basic elements and principles of art throughout their years in the Lower School Art program. Their projects involve the child in imagining, exploring, reasoning, inventing, and selecting; so that the experience will not only be rich in itself, but lead to personal creative growth, assimilation of information, and development of art skills. Students will enjoy creating both two and three-dimensional art pieces using a variety of techniques and materials. The students learn about a number of artists, styles and cultures throughout their art experiences. In addition to traditional studio art, fourth grade students begin the study of Graphic Design in classes where they learn what defines a graphic composition aimed at conveying a clear message in a powerful way. All students exhibit their artwork in the SRDS art show at the end of the year.

### *Physical Education*

The goal of physical education is to teach students how to control and use their bodies to perform skills at the mastery level. In the earlier stages of lower school, we aim to enhance a child's throwing and catching ability, balance, and their spatial awareness. As students grow and mature through the lower school years, the program seeks to improve sport-specific skills, coordination, agility, and sport knowledge.

### *Activities and Service Organizations*

Lower School clubs meet through the RebelLeap program and are conducted by SRDS faculty and staff. Activities depend on interest and availability and are offered by athletic season (Fall, Winter and Spring).

## Middle School Curriculum and Program Overview: Grades 5-8

At Saddle River Day, we are responsive to the needs and learning styles of all of our students. We believe that disciplines and departments are porous. We encourage students to learn, access, and use skills that will benefit them across the curriculum. The content of the curriculum is the vehicle through which we communicate these skills, but at the heart of the Middle School education at SRDS is the belief that we aid in the child's journey from student to scholar, and from adolescent to adult.

To aid in their multifaceted development, every middle school student is part of an Advisory group which meets regularly and discusses academic as well as social concerns. Advisory provides students with a time to fit in, to recognize that they do not travel this journey through adolescence on their own, to connect with the adults in the building on a different level, and an opportunity to interact with students not only in their own division, but also across the lower and upper schools. The goal of Advisory and peer leaders is to provide young teens with many opportunities to interact with peers and adults as they adjust to becoming young adults.

### *Learning Across Disciplines: Humanities and STEAM*

In Middle School students work with the same teacher for both their English and Social Studies class in grades 5-7. They identify and explore connections between these disciplines. Skills in the Humanities readily complement one another. Similarly, Math and Science courses in the Middle School adopt a student-centered inquiry based approach to learning that integrates Science, Technology, Engineering, Art, and Mathematics. Skills and content developed in these courses build students' capacity for real-world scientific exploration and design.

Middle school classes in the traditional core areas and world language are required each year. In addition to academic classes, students participate in physical education and the arts – with electives of graphic art, studio art, music, and band. Students have nightly homework in most subjects and are expected to do their best on each assignment. Extra help and support is available and advisors help to steer students toward that support when it is needed.

*Table 1. Middle School Program by Grade Level*

<b><u>Grade 5</u></b> English 5 History 5 Math 5 Science 5 Spanish 5 Arts (fine, music, graphic) Digital Citizenship 5 IDEAS Lab Capstone Project Physical Education and Health Study Skills	<b><u>Grade 6</u></b> English 6 History 6 PreAlgebra 6 Science 6 Spanish 6 Arts (fine, music, graphic) Capstone Project Digital Literacy 6 and Coding 6 Physical Education and Health Study Skills
<b><u>Grade 7</u></b> English 7 History 7 Algebra IA or Algebra I Honors Science 7 Spanish 7, French I, or Spanish I Capstone Project Arts (fine, music, graphic) Physical Education and Health Coding 7 and Digital Fluency 7 Study Skills	<b><u>Grade 8</u></b> English 8 History 8 Algebra I, Algebra IB, Algebra I Honors, or Geometry Honors Science 8 Spanish 8, French I, or Spanish I Capstone Project Arts (fine, music, graphic) Physical Education and Health Coding, MiniTED, and Creative Writing

### *Advisory Program*

Students are assigned to faculty Advisors. The Advisors act as an advocate and a liaison between home and school for academic and non-academic issues. Advisory groups meet at various times throughout the week. Advisors assist students with age-appropriate concerns regarding study skills, interpersonal relationships and time management.

### *Rebel Leadership Program*

Rebel Leaders are a specially selected group of Upper School students who meet with the Middle School students once per month throughout the school year. These meetings complement the advisory program with discussions and activities that engage the Middle School students.

### *Bring Your Own Device (BYOD)*

Every student in grades 6-8 is expected to bring a personal computing device for use throughout the school day. By utilizing technology as a tool to aid in their education and development, students engage in learning that is both authentic and extends beyond the walls of the classroom.

### *Interscholastic Athletics*

Middle schoolers may participate in interscholastic athletics. The emphasis in the Middle School is placed on participation and team building rather than competition. Teams participate in interscholastic sports in the following areas:

Fall – soccer (co-ed), tennis (girls)

Winter – basketball (girls and boys), fencing (offered as a club)

Spring – tennis (boys)

### *Other Opportunities*

Co-Curricular courses such as Digital Literacy and SOAR Study Skills

Community Service

Student-Driven Clubs (past offerings include Film, Civil War Appreciation, and Comic Book Creation Clubs, TED Ed, RebelVision, Rebels 404 Technology, and Vid Kids)

Fall Drama and Spring Musical (Grades 8 – 12)

Middle School Musical (Grades 5-8)

French Exchange (Grades 8 – 12)

Library Committee

Math League

Robotics

Student Council

Odyssey of the Mind

## Upper School Curriculum and Program Overview: Grades 9-12

The Upper School program is designed to provide students with a 21st century education, including real-life skills and preparation for college. To graduate, students must complete four years of English, three of mathematics, three of laboratory science, three of social science, three of world language, and one year of visual or performing arts which is generally met by taking two classes in the arts. In accordance with US Department of Education and New Jersey State law, all students must take four years of physical education and two trimesters of Health class. All students are required to take a minimum of five academic classes per year, but we recommend more. Specific graduation requirements are listed in Table 2 and are detailed in the Student Handbook.

College preparatory level courses are rigorous and designed to advance student skills and knowledge. Skills such as organized writing, research and inquiry are honed as students explore comprehensive discipline based content. These classes are offered in all departments.

An honors level curriculum is available in each department. These courses are in-depth and require that students invest substantial time outside of class to cover curricular topics. As such, teacher recommendation is required to enroll in these classes.

Advanced Placement (AP) classes are offered in each department according to demand. AP classes require the ability to read and understand college level material, extensive writing, a high level of problem solving, as well as an investment of time outside of class and therefore require teacher recommendation to enroll. AP classes begin two weeks before the start of each school year and students enrolled in AP courses are required to take the AP exam in May.

In all upper school classes, students are expected to be active participants in their own education. Classes are interactive, inquiry based environments where there is ‘no back row’ in which to remain disengaged. Teachers are experienced educators who utilize instructional technologies and methodologies designed to engage students’ minds with the content while fostering the development of the skills needed for success at the current and future level. The goal is to prepare our young adults for college level study and to provide them with the opportunities to contribute to the rich and diverse academic, athletic, and artistic communities that exist at SRDS.

*Table 2. Graduation requirements by department. A full year course earns 3 credits per year.*

Department	Credit	Courses at college prep, honors or AP level
English	12	One English course per year
History	9	World History, Modern World History, US History
Mathematics	9	Algebra I, Geometry, Algebra II
Science	9	Biology, Chemistry, One other lab science
World Language	9	Through level III in one language
Art	3	Performing and/or Visual Arts
Physical Education	4 years	Plus 1 trimester of Health in 9th grade and 1 in 10th grade



*Table 3. Upper School courses (at college prep, honors or AP level) generally taken by grade. Enrollment in 5 major, yearlong courses is required each year.*

<b>Grade 9</b> Research & Writing Freshman Seminars in English Freshman Seminar in History or AP Human Geography Algebra, Geometry, or Algebra II Biology World Language Art or other elective Physical Education and Health	<b>Grade 10</b> English 10 World History or AP World Geometry, Algebra II, or PreCalculus Chemistry World Language Art or other elective Physical Education and Health Sophomore Seminar
<b>Grade 11</b> English 11 or AP English Literature US History or AP US History Algebra II, PreCalculus, Calculus, or AP Calculus Physics or other lab science World Language Art or other elective Physical Education College Counseling	<b>Grade 12</b> English 12 or AP English Language PreCalculus, Calculus or Math Elective Social science elective or AP Macro AP Science or science elective World Language Art or other elective Physical Education College Counseling

### ***Other US Co-Curricular Programming***

***Advisory program*** The Advisory Program establishes and maintains a closer working relationship between students and faculty members. Students are placed with advisors by grade level and remain with their advisor and groups for the duration of their years at SRDS. The faculty member provides academic guidance as well as social and community awareness, in the hopes of preparing students to become well rounded and focused on their academic and social development.

***BYOD*** All of our US students participate in a technology initiative, “BYOD” (Bring Your Own Device), utilizing devices to enhance the learning experience, to collaborate, and to connect with places beyond SRDS. All of our students gain important digital skills preparation through our research curriculum, project work in our IDEAS Lab, and various Google Applications that are fundamentally a part of our class instruction and academic work.

***Arts*** Students have various options to participate in the Arts. All students complete an Arts requirement; the curriculum guide describes the curricular opportunities in the Arts Department. Additionally, students may audition for acting, singing or tech crew roles in our Fall Drama production and Winter Musical.

***Athletics*** Full interscholastic program open to students in grades 9 – 12

<b>Fall</b>	<b>Women's</b> Soccer Cross Country Volleyball Tennis	<b>Men's</b> Soccer Cross Country
<b>Winter</b>	Basketball Winter Track	Basketball Winter Track
<b>Spring</b>	Lacrosse Track	Tennis Track

***Activities and Service Organizations***

Admissions Ambassadors	Blood Drive
Retrospect Yearbook	Community Service
Drama and Musical Theater Productions	Film club
French Exchange	Library Committee
Mimesis Literary Arts Publication	Model U.N.
Peer Leaders	Rebels 404 tech club
Rebel Report Student Newspaper	Rebelvision (broadcast news show)
Rebel Muffins (broadcast talk show)	Vid Kids
Spanish Club	Unplugged Cafe (open-mic night)
Spanish Language Trip	Student Council
TEDEd club	

## Course Descriptions grades 5-12

*Unless otherwise noted, students may take any courses for which they meet the prerequisite which is generally the prior course. For honors and AP classes, students must have demonstrated strong performance in prior classes, have the recommendation of their current teacher, and, the approval of the department chair. For AP English classes there is also a placement exam required.*

### **Department: English**

In English courses throughout the Middle and Upper School, certain goals remain constant as students develop and progress. All English courses help students to read intelligently, write well, speak effectively, and listen attentively. Students are taught to analyze, criticize, judge—with eye, ear, mind, voice, and pen to express these skills in an appropriate fashion. Since students make use of their analytical, critical, evaluative, and judging capacities in all disciplines, the English Department coordinates with other Departments to provide students with many opportunities for practical application of their knowledge and skills throughout their courses.

Activities that train students to analyze, criticize, evaluate, and judge are the mainstays of the language arts: reading, writing, speaking and listening. In our English courses, students develop a sense of the chronology of literature and of one's heritage, which includes elements of Greek, Roman, and Judeo-Christian civilizations, as well as the diverse cultures that constitute aspects of both our diverse student population and our American experience. Through the use of essential questions, the English Department seeks to provoke deep thought, lively discussion, sustained inquiry, and new understandings within its students, as well as spark meaningful connections with prior learning and personal experiences. At the heart of all the English Department's activities is the conviction that reading, writing, speaking, and listening demand a high degree of intellectual sophistication, emotional conviction, and personal discipline, which we address in developmentally appropriate ways as the students progress throughout their years at SRDS.

In the English program each course builds on the skills and experiences students acquire in previous grades. Throughout the Middle and Upper School English courses, students learn vocabulary and grammar; explore the reading and writing of major literary genres including poetry, short story, drama, essay, memoir, graphic novels and traditional novels; and hone their oral presentation skills with presentations to their classmates and larger audiences. Every Saddle River Day School student takes at least one English course every year. In 5th through 8th grades, English courses are taught from a Humanities approach, integrated with Social Sciences courses. This same approach is applied to 9th and 10th grade English courses as well, where teachers collaborate with the Social Sciences Department. A robust selection of electives are also offered in the upper grades. Advanced Placement Literature and Language are offered in Grades 11 and 12 for students of demonstrated ability and superior motivation.

### **Humanities Core: English Grade 5**

Fifth grade English and Language Arts continues to build, develop and strengthen students' abilities to read and comprehend a variety of literary genres. Students grapple with essential questions, such as *How do we determine an author's purpose?* and *What do good readers do?* The course also develops both oral and written communication skills, and connects directly to social studies topics. In doing so, students investigate and utilize proper mechanics and style, while developing their ability to think, speak, and write critically.

### **Humanities Core: English Grade 6: The Human Condition as Reflected in Literature**

The aim of the English 6 course is to give students a firm foundation in the close reading of and the written response to literature with, and emphasis on, developing active reading strategies. Much of the writing done for class is driven by the compelling literature read together, as well as independent reading, and the various ideas and issues these works prompt. Writing may range from personal reactions, to writing in the voice of a character, to literary analysis. As students develop over the course of the school year, they respond to

assignments that are more analytical, and less literal, in nature. Students learn the format of a five-paragraph essay through the use of the writing process, including: prewriting, drafting, revising, editing and publishing, will be emphasized. Parts of speech and grammar rules will be covered, as well as usage of new vocabulary. Several essential questions such as these will be explored. What is the relationship between justice and fairness? How do conflict and adversity contribute to change? What are the shared traits of a culture or a community? What shapes identity?

### **Humanities Core: English Grade 7: Transition and Survival in Literature**

English 7 is designed to encourage students to grow from literal to figurative thinkers capable of experiencing life and themselves through the power of reading, writing, listening and speaking. Recognizing that making this transition is the key to students becoming more effective learners, the work done for this class develops the ability to interpret and respond to multi-layered texts in a variety of genres and media. The essential themes examined include identity; culture and community; social justice; and conflict, adversity, change and transition. Students explore a variety of reading and writing genres, including realistic fiction, dystopia, short stories, poetry, expository writing, persuasive writing, research writing, literary analysis, and creative writing. Integral to our reading and writing, developmentally appropriate spelling, grammar and vocabulary are also taught and reinforced.

### **English Grade 8: Who am I? Answers to the Question in Literature**

Eighth grade English is a reading and writing intensive class. In-class writing and journal writing are exercised to make a smooth transition into the five-paragraph essay. Students develop writing skills such as the creation of strong theses, developed paragraphs with specific supports and logical conclusions. Expository and creative writing grow out of the literature discussions and analysis. Through creative writing prompts, students are encouraged to experiment with developing their own literary voice. As we move through the writing process, students begin to identify their own personal strengths and improve on their weaknesses. Grammar, vocabulary, and spelling are enhanced by challenging students to look closely at the assigned reading. Participation is essential to exploring and challenging one's self on a regular basis. Cooperative group work, discussion, in-class writing, peer editing, and presenting are all used to develop critical reading and writing skills.

### **English 9 College Prep/English 9 Honors--- World Literature for Ninth Graders**

English Seminar exposes ninth graders to a variety of texts and voices from around the world. The course engages students in universal themes and literary tropes such as the conflict between good and evil, the journey of the hero, coming of age in crisis, and the difference between fate and free will. At the same time, the reading selections revolve around the formation of foundation questions that will guide the course of study throughout the year. These questions complement the other coursework of a freshman including biology, world history, art, and language, thus allowing a humanities approach. Students study novels, plays, short stories, poetry, works of nonfiction, and artwork as they develop their critical thinking, reading and writing skills. Students study vocabulary in context in addition to supplemental workshops on grammar and design. The class is centered on writing and discussion in both high and low stakes situations. Students will write in a journal and learn the writing process at the upper school level. Typically, students will write one major writing piece per trimester, including a research essay in MLA format.

### **English 10/English 10 Honors Creating the World**

These English courses focus on a humanities approach to analyzing literature and honing literacy skills. Through the thoughtful consideration of essential questions, students explore common themes in literature and the social sciences such as industrialism, colonialism, revolution, modernity, and globalism to develop a more meaningful understanding of what they read and how literature connects to other disciplines. A wide variety of texts, genres, discussion techniques, research and writing skills help the students to construct personal and authentic reading experiences, and to communicate their ideas in clear, thoughtful and creative ways. At the CP

and Honors levels, students are challenged and supported according to their needs and abilities, and are consistently encouraged to question, connect, analyze, synthesize and express their understanding of literature. In addition, at the Honors level, students will explore the themes in greater depth using additional materials to support more independent critical thinking.

### *English in grades 11-12*

Juniors and Seniors take many English classes together and may choose from a selection of courses to meet their four year sequence of English classes for graduation.

### **English 11/ English 12**

Students enrolled in 11/12 CP discover wonderful opportunities to refine their compositional performances. Class members focus on important elements of writing, particularly grammar, essay structure, and paragraph development; participate in writing workshops and produce formal papers. Students also strengthen critical reading and thinking skills by discussing classic texts including *Othello* and *Hamlet* in alternate academic years. One highlight of the spring is creating in the IDEAS Lab a model of a character, symbol, or scene from one of the books, writing a description of it, and presenting the project to the class.

### **English 11H / English 12H (Honors)**

English 11/12 Honors is a course which assumes students have solid reading and expository writing skills; therefore, the level of texts read, deconstructed, and analyzed are challenging and, in some cases, lengthy. The writing for the course encompasses both expository and creative genres. The focus is to hone student's writing, reading and presentation skills so that they are prepared to communicate their thoughts and views of literature and the world around them. They are encouraged to explore and create in other genres as well. The methods of instruction include seminar discussion, lectures, one on one writing tutorials, revision, group exploration and presentation.

**Prerequisites:** Teacher recommendation and/or an exemplary performance in English II/IV Honors. ( no more essay test)

### **Advanced Placement English Literature Grade 11**

Advanced Placement English Literature delves deeply into the techniques and themes of iconic, challenging pieces of literature: novels, plays and poetry. The two-fold purpose of the course is to prepare students for the English Literature examination administered by the Educational Testing Service in May of each year and to hone sophisticated reading and writing skills. Writing and critical thinking of a high order are expected. The methods of instruction include seminar discussion, lectures, one on one writing tutorials, revision, and practice of the AP exam formatted essays.

**Prerequisites:** Teacher recommendation and an exemplary performance in English II Honors. ( no more essay test)

### **Advanced Placement English Language & Composition Grade 12**

This rigorous course focuses on the rhetorical analysis of non-fiction, fiction, film, and current events. Students will learn to identify an author's purpose and the use of rhetorical strategies in texts ranging from classical writings to contemporary works. Students are introduced to analytical tools designed to develop levels of questioning at the factual, inferential, and analytical tiers of knowledge, which ultimately provides them with mastery in the highest forms of analysis, synthesis, and argument. Through their reading, students will then learn how to craft their own style and voice in their composition writing of various lengths and complexities as well as peer edit and review. Students will be able to write effective prose at a first-year college level as well as take the AP Language exam.

**Prerequisites:** Successful performance in AP English Literature or Honors English 11 with strong teacher recommendation

**Department: Mathematics**

The Middle School math program has three main components. The arithmetic component is designed to build basic skills and expand their applications. The two other components incorporate basic skills in algebra and geometry. Math 5 utilizes the Holt McDougal Mathematics program to help the students enhance their problem-solving skills. In Grade 6, students take Pre-Algebra. In Grade 7, students take Algebra IA or Algebra I Honors. In Grade 8, students will take Algebra I or Algebra I Honors. This opens up a range of future possibilities for students.

Starting in Middle School, all students are taught to use the graphing calculator. They are required to purchase an appropriate graphing calculator to use in the classroom and at home.

All students are required to complete the following three courses of mathematics for graduation: Algebra I, Geometry, and Algebra II, and it is highly recommended that students continue their study of mathematics beyond Algebra II. Enrollment in a mathematics course during all four years of high school is strongly encouraged.

**Math 5**

Building upon concepts and skills taught in Lower School, Math 5 paves the way from elementary math to a more concrete study of sophisticated math. Students will gain an in-depth understanding, fluency with skills, and confidence in problem solving. They will have the opportunity to explore concepts through daily classwork and challenging examples, and then hone their understanding of the concepts more deeply through math journals, labs, games, and projects. Topics of study include: whole numbers, geometry, algebra, decimals, fractions, proportional relationships, integers, measurement, and probability. Critical thinking skills will continually be enhanced throughout the year, and the students will complete many application-based problems that are specific to topics being learned.

**Textbook:** Holt McDougal Mathematics Course 1

**Pre-Algebra, Grade 6**

This course builds upon arithmetic concepts and skills and is designed to ease the transition from arithmetic to algebra. The properties of integers are studied first and then expanded to include rational numbers and real numbers. Students explore the concepts of solving multi-step equations and inequalities, performing operations with fractions, and simplifying expressions using exponent properties. They study rational numbers, ratios, proportions, probability, and percent, as well as graphing in the coordinate plane. Additional topics that are included in the course are squares and square roots, the Pythagorean Theorem and its applications, probability and statistics, and properties of triangles and quadrilaterals. Problem solving strategies, communicating mathematically, and utilizing mental math are stressed throughout the year. Students master these topics through a variety of ways while developing note-taking skills, their ability to express in words their processes and conceptual understanding, a variety of projects and labs, and more formal assessments like tests and quizzes. The Pre-Algebra course challenges students to enhance their critical thinking skills in order to promote further analytical and mathematical thought. Graphing calculators and computer technology are used extensively to enhance the mastery of concepts in the curriculum.

**Algebra I / Algebra I (Honors) Grades 7, 8, or 9**

Algebra I integrates algebraic skill development with the broader framework of developing concepts. Functions and relations (including linear, quadratic, polynomial, and exponential) are used as a main theme in this study of algebra. Application-based problems are introduced throughout the curriculum. Graphing calculators and computer technology are integrated into topics to assist in understanding and visualizing statistics and data, linear equations, and other algebraic functions. An introduction to radicals is the concluding topic of Algebra I.

Algebra I Honors includes the entire Algebra I curriculum at a more enhanced cognitive level. Additional topics include a more comprehensive study of radicals, as well as a study of rational expressions and a more

in-depth look at functions and their graphs. Students are expected to maintain and utilize a high level of critical thinking skills.

**Prerequisite:** Pre-Algebra, and recommendation by the department for honors level

### **Algebra IA Grade 7**

Algebra IA is the first year of a two-year Algebra I course. Students in this course will complete the first half of the Algebra I curriculum.

**Prerequisite:** Completion of PreAlgebra

### **Algebra IB Grade 8**

Algebra IB is the second year of a two-year Algebra I course. Students in this course will complete the second half of the Algebra I curriculum.

**Prerequisite:** Completion of Algebra 1A

### **Geometry / Geometry (Honors) Grades 8, 9, or 10**

Geometry offers the student a comprehensive study of two-dimensional Euclidean geometry. The language of geometry, polygons, and circles are studied in depth. The understanding of proof is an objective of the course. Additional topics of study are: area of plane figures, constructions (where applicable), transformations, and right triangle trigonometry. Algebraic and geometric concepts are reviewed in tandem to reinforce their mathematical connections. Applications are studied throughout the curriculum. Graphing calculators are used where appropriate.

Geometry Honors includes the entire Geometry curriculum, with a much more extensive study of proof. Students are expected to maintain and utilize a high level of critical thinking skills.

**Prerequisite:** Algebra I, plus departmental recommendation for honors level.

### **Algebra II / Algebra II (Honors) Grades 9, 10, or 11**

Algebra II reviews, sustains, and extends the knowledge of the real number system introduced in Algebra I. Polynomials, factoring, and graphing are discussed and explored in depth. Mathematical models are utilized in the discussion of coordinate geometry, problem solving, and in the detailed study of linear and quadratic functions. Also included is the study of irrational and complex numbers, fractional exponents, systems of equations, matrices, logarithms, and rational equations. Graphing calculators and computer technology are integrated into the course to assist in the understanding of solutions of equations and functions.

Algebra II Honors includes the entire Algebra II curriculum, as well as units on trigonometric functions and conic sections. Students are expected to maintain and utilize a high level of critical thinking skills.

**Prerequisites:** Algebra I and Geometry, plus departmental recommendation for honors level

### *Math Electives*

### **Precalculus (College Prep or Honors) Grades 10, 11 or 12**

Precalculus offers the student a comprehensive study of algebraic and transcendental functions. The course is constructed to aid students in developing their proficiency in algebraic techniques and in strengthening their understanding of the underlying concepts. Real-life problems, many using real data, are integrated throughout the curriculum. As appropriate, the graphing calculator is utilized to augment student understanding of the mathematical concepts.

**Prerequisites:** Successful completion of Algebra I, Geometry, and Algebra II, with teacher recommendation and permission of the Department Chairperson for the honors level.

**Financial Algebra (College Prep) Grades 11 or 12** *(offered alternate years depending on enrollment)*

Financial Algebra is an elective math course for any junior or senior who has already completed the required math sequence. It covers some extremely important real-life topics, including financing a car, applying for a mortgage, balancing a checkbook, or paying off credit card debt. The students apply prior algebraic knowledge to real-life skills, such as managing a monthly budget. Numerous practical algebraic functions are explored throughout the course, equipping students with various problem-solving skills needed to make smart economic decisions in life.

**Prerequisites:** completion of Algebra I, Geometry, and Algebra II.

**Statistics/Statistics Honors Grades 11 or 12** *(offered alternate years depending on enrollment)*

The primary aims of this elective course are (1) a basic understanding of statistical concepts for use in daily life and (2) use of statistical concepts and methods to facilitate study and research in other disciplines. Some of the topics covered in this course are basic probability, tree diagrams, mean, median, mode and range, standard deviation, permutations and combinations, box and whisker plots, the Normal Distribution, and measures of variability.

**Prerequisite:** Completion of Algebra I, Geometry, and Algebra II.

**Advanced Placement Statistics Grades 11 or 12**

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses

**Prerequisite:** Completion of Algebra I, Geometry, and Algebra II, and permission of the department.

**Calculus Honors, Grades 11 or 12**

This course is perfect for a student who would like to continue on in the Calculus curriculum after PreCalculus, but is not interested in taking an AP class. The topics include an in-depth study of functions: algebraic, trigonometric, exponential, and logarithmic. Students investigate the concepts of limits and continuity, integration, and differentiation. Differential calculus and its applications to curve sketching, maximum and minimum problems, velocity, acceleration, and related rates of change are also explored in depth.

**Prerequisite:** Successful completion of the Algebra I, Geometry, and Algebra II sequence, and permission of the department.

**Advanced Placement Calculus AB Grades 11 or 12**

This is the first of two Advanced Placement mathematics courses. The topics include the study of functions (algebraic, trigonometric, exponential, logarithmic, limits and continuity), differential calculus (and its application to curve sketching, maximum and minimum problems, velocity, acceleration, related rates of change), and integral calculus (with its application to area between curves and volumes of a solid of revolution).

**Prerequisites:** Completion of PreCalculus Honors with a strong academic performance and permission of teacher and approval of department chair.

**Advanced Placement Calculus BC Grades 11 or 12**

This course is the second of two Advanced Placement courses. Advanced applications are applied to all the topics covered in Calculus AB. Additional topics covered are: infinite series, differential equations, improper integrals, L'Hopital's Rule, partial fractions, parametric equations, polar coordinates and vectors in a plane.

**Prerequisites:** Completion of Calculus AB or PreCalculus Honors, with a strong academic performance and permission of teacher and approval of department chair.



**Multivariable Calculus and Linear Algebra, Grade 12**

The purpose of the course is for students to extend what was learned in AP Calculus AB, and advance their experiences with the mathematical world. Students will discuss limits, continuity, differentiation, and integration in higher dimensions, and they will study functions of two or more variables. Topics include vectors and matrices, parametric curves, partial derivatives, and double and triple integrals.

**Prerequisites:** Successful completion of AP Calculus AB, teacher recommendation, and permission of the department.

### ***Department: World Languages***

The principal goal of the World Language Department is to instill a love of language and an appreciation of the cultures beyond these languages. We encourage our students to achieve an excellent level of communication in speaking and in writing at the end of their third year requirement. Students may continue their study of language beyond the Advanced Placement level. Listening comprehension, speaking, reading, and writing are the traditional skills that are stressed throughout the world language experience. Exchange programs and trips abroad may be offered as further enrichment.

The middle school program offers students the opportunity to study Spanish in 6<sup>th</sup> grade. They may choose to continue to study Spanish or choose French in 7<sup>th</sup> and 8<sup>th</sup> grade and sometimes may be able to continue with two languages (based on their individual skills).

In Upper School, students need to complete through level III of one language: Spanish, French or Arabic. Courses are offered at the college preparatory and honors level and AP classes are offered in each language. The World Languages Department encourages students to pursue their studies beyond the three year requirement and/or to start another language.

### ***French***

#### **French I**

This is an introductory level course. For students who are experiencing foreign language instruction for the first time, this is a fundamental course which allows those students the opportunity to learn cooperatively. Awareness of and appreciation for the French speaking community and its culture are among the ultimate objectives of instruction.

#### **French II and French II Honors**

This course expands upon concepts presented in French Level I. Much more emphasis will be given to structure and verb tenses; new vocabulary acquisition will be a constant goal as will development of conversational ability. Awareness of and appreciation for the French speaking community and its culture are among the ultimate objectives of instruction.

**Prerequisite:** Successful completion of level I or teacher recommendation.

#### **French III and French III Honors**

French III emphasizes primarily the development of speaking skills with continuous work on listening comprehension, reading and writing skills. Students will increase their vocabulary and grammar skills so as to be able to converse more readily in French. Awareness of and appreciation for the Francophone world is a crucial objective of instruction at all times.

Class is conducted in the target language with the exception of grammatical explanations.

#### **French IV/French IV Honors**

This is an advanced proficiency course which serves to refine both oral and written communication skills with current and relevant vocabulary presented through authentic literary readings from France and the Francophone world. Literature texts are discussed and analyzed in the target language. French IV focuses on the more sophisticated grammatical structures of the language. Internet resources are used to enhance student learning.

### **Advanced Placement French Language and Culture**

AP French is a college-level course, which culminates in the Advanced Placement Examination sponsored by The College Board. Students who are successful in this course achieve fluency in the four disciplines of understanding, speaking, reading, and writing French.

**Prerequisites:** French IV Honors with strong academic performance and the permission of the teacher and recommendation of the department chairperson.

## *Spanish*

### **Spanish 5**

Emphasis will be placed on oral proficiency; however, students will also be reading and producing limited writing. The general goal of this course is to continue to familiarize students with the spoken language (a continuation of the Fourth Grade program). Students will engage in simulations, projects, and activities that will place them in real-life situations and reinforce the subject matter. This one-year program will prepare students for entry into Spanish 6. There will be some overlap of material learned in fourth grade for review and to allow for new students to experience the language.

### **Spanish 6**

Emphasis will be placed on oral proficiency; however, students will also be reading and producing limited writing. The general goal of this course is to continue to familiarize students with the spoken language (a continuation of the Fourth and Fifth Grade programs). Students will engage in simulations, projects, and activities that will place them in real-life situations and reinforce the subject matter. This one-year program will prepare students for entry into Spanish 7. There will be some overlap of material learned in fourth and fifth grades for review and to allow for new students to experience the language.

### **Spanish 7**

This course for Middle School students is an introduction to the traditional high school Spanish Level I curriculum. It is for students in the 7<sup>th</sup> grade who are beginning or continuing their study of Spanish. Instruction emphasizes development of listening comprehension, speaking, reading, and writing skills in Spanish with a primary focus on oral proficiency. Students will engage in simulations, projects, and activities that will place them in real-life situations and reinforce the subject matter. An awareness of and appreciation for the Spanish speaking community is a supreme objective of instruction at all times. Materials include written text, short novels, live audio and online resources.

### **Spanish 8**

This course for Middle School students is an introduction to the traditional high school Spanish Level II curriculum. It is geared towards students who did well in Spanish 7 during the course of the previous year. Instruction emphasizes development of listening comprehension, speaking, reading, and writing skills in Spanish with a primary focus on oral proficiency. Students will engage in simulations, projects, and activities that will place them in real-life situations and reinforce the subject matter. An awareness of and appreciation for the Spanish speaking community is a supreme objective of instruction at all times. Materials include written text, short novels, live audio, and online resources.

### **Spanish I**

This course is for students who have not had Spanish or for those students who experienced difficulties in Spanish 7. The topics covered will be those included in the traditional high school curriculum for introductory Spanish. Instruction emphasizes development of listening comprehension, speaking, reading, and writing skills in Spanish with a primary focus on oral proficiency. Students will engage in simulations, projects, and activities that will place them in real-life situations and reinforce the subject matter. An awareness of and appreciation for the Spanish speaking community is a supreme objective of instruction at all times. Materials include written text, short novels, live audio, and online resources.

### **Spanish II and Spanish II (Honors)**

This is a one-year course that expands upon concepts learned in Spanish 8 or Level I. Much more emphasis will be given to structure and verb tenses; new vocabulary acquisition will be a constant goal as will development of conversational ability. More emphasis will be placed on strengthening the reading and writing skills. Further appreciation of Spanish cultures will be a motivating force. Materials include texts, workbooks, audio, readers, and computer programs. The honors program includes increased vocabulary and strong emphasis on listening and speaking skills.

### **Spanish III**

Spanish III emphasizes primarily the development of speaking skills with continuous work on listening comprehension, reading and writing skills. Students will increase their vocabulary and grammar skills so as to be able to converse more readily in Spanish. Awareness of and appreciation for the Spanish speaking community is a supreme objective of instruction at all times.

### **Spanish III (Honors)**

This course expands upon concepts learned in Spanish I and in Spanish II. Reading and writing skills will increase to a much higher level of sophistication as students learn to deal with opinions, ideas, and concepts. A keen understanding of grammar will be encouraged. Vocabulary applications will reach new limits. Class is conducted in the target language with the exception of grammatical explanations.

### **Spanish IV**

Spanish IV aims to motivate students to use language creatively through engaging, student-centered role-playing, conversation starters, problem solving tasks and content-based activities. Students practice key language functions such as persuading, obtaining information, responding to requests, expressing preference and giving commands. Students will be exposed to current events and discussions of same will be held. Class is conducted primarily in the Spanish with the exception of some grammatical explanations.

### **Spanish IV (Honors)**

This course is an elective for students who have excelled in Spanish III (Honors). Spanish IV (Honors) primarily stresses sophisticated development of reading skills in Spanish. Students read literature by prominent Latin American and Spanish authors. In addition, writing skills are brought to a sophisticated level. Authentic materials from the media and the Internet serve as an integral part of the course curriculum. Spanish is spoken in class with the exception of some grammatical explanations.

### **Spanish Language and Culture (Spanish V) (*enrollment depending*)**

This course is an elective for students who have completed Spanish IV and are interested in continuing to perfect their communication skills in both speaking and writing. Students will review basic grammar and expand their vocabulary. Speaking, reading, and writing will all be stressed. Admission to this course is based on a good level of performance in Spanish IV and teacher recommendation.

### **Advanced Placement Spanish Language**

AP Spanish Language is a college-level course, which culminates in the Advanced Placement Examination sponsored by The College Board. Students who are successful in this course achieve fluency in the four skills of listening comprehension, speaking, reading comprehension, and writing in Spanish.

**Prerequisite:** Spanish IV Honors with strong academic performance and the permission of the teacher and recommendation of the department chairperson.

**Advanced Placement Spanish Literature** (*enrollment depending*) AP Spanish Literature is a college-level course, which culminates in the Advanced Placement Examination sponsored by The College Board. This course is offered to students who have already taken the AP Language course. This course requires an intensive study in Spanish Literature.

**Prerequisites:** AP Spanish Language with strong academic performance and the permission of the teacher and recommendation of the department chairperson.

### *Arabic*

#### **Arabic Language and Culture I**

This introductory course starts with learning the Arabic alphabet and focuses on the reading, writing, listening and speaking of Modern Arabic. It also explores cultural topics from the regions where Arabic is spoken.

#### **Arabic Language and Culture II**

This course continues the introduction to Arabic. The goal is to engage with the Arabic language by studying and exercising speaking skills in Modern Standard Arabic (MSA) and Levantine dialect, by studying and exercising reading and writing skills in MSA and by exploring relevant cultural traditions. Students also research modern life in the Arab world.

#### **Arabic Language and Culture III**

Students continue to use language for communication in "real life" situations. Students are asked to communicate in oral and written form, interpret oral and written messages, show cultural understanding when they communicate, and present oral and written information to various audiences for a variety of purposes.

#### **Arabic Language and Culture IV**

This course will continue to reflect the emphasis of Arabic III on Modern Standard Arabic. Students will continue to build on the skills and strategies acquired for all listening, reading, speaking, writing and culture modalities. In addition to increased vocabulary repertoire, a greater emphasis will be placed on grammatical accuracy, thus providing a firm base to deal with more complex sentence structure, and larger spoken and written texts dealing with topics of general and daily interest.

#### **World Language and Culture Across the Curriculum**

WLCAC courses aim to infuse world languages across the curriculum in order to complement and deepen the understanding of international cultures for each student outside the traditional language classroom. Classes are taught in English but actively incorporate intercultural perspectives. Each trimester of the proposed class will focus on one of the three traditional world language areas offered at SRDS.

### ***Department: Social Sciences***

The purpose of the study of history and the social sciences is to help students understand themselves and their relationships to history and culture through an investigation of the varieties of the human experience. The History and Social Sciences Department curriculum emphasizes a world perspective, which asks students to appreciate the global connectedness that has existed for most of human history. The curriculum in the middle and upper schools provides opportunities for students to investigate many areas of this experience: intellectual, aesthetic, religious, philosophical, political, economic, social, and psychological.

In the history and social sciences program for grades five through twelve, each course builds on certain skills students have acquired in previous grades. For example, students learn to analyze critically both primary and secondary sources. There is a strong emphasis in all courses on developing students' abilities to express themselves clearly and logically, both verbally and in writing. Many courses use art, literature, and music to enrich understanding.

In the Upper School, students are required to complete three year-long courses: Foundations in World History, Modern World History or A.P. European History, and United States History. In addition to these required courses, the department offers a number of electives in history and the social sciences. Qualified students may also enroll in various Advanced Placement courses. In addition, students interested in contemporary domestic and international issues can become involved in related extracurricular activities often supported by the department.

### **Humanities Core: The Ancient World Grade 5**

As the fifth grade year begins, students strengthen their map skills by focusing on the Americas. Students are exposed to a variety of maps and use map features to read, interpret, and make connections and comparisons. Next, they plunge into the ancient world, as they extend their knowledge learned in fourth grade. The focus is on Egypt, Greece, and Rome. By pondering certain Essential Questions, the students examine how ancient daily life styles, government, religion, architecture, arts, education, language, and recreation impact and influence present day societies.

### **Humanities Core: Introduction to World Geography Grade 6**

Extending their study of the Ancient World from 5th grade, students will explore the empires in Africa, Asia, and Latin America. A thematic approach will allow the 6th graders to understand what made empires thrive and decline by making connections in the fields of geography, government, history, economics, and culture. We will use these themes as a framework for studying the world – its people, environments, cultures, and their interaction with one another. Students examine issues and ideas that apply in their own backyards and on the other side of the planet. They look into the past, observe the present, and speculate about the future. The study of geography extends beyond maps, and the sixth grade geography course prepares students to be global citizens. Students utilize technology and traditional sources of information to research and gather data to analyze and apply theories to draw conclusions, growing as critical thinkers in examining the “global village”.

### **United States History: Government and Civics Grade 7**

The main goal of the seventh grade social studies is to give students an appreciation and understanding of the significance of people, places and events that relate to the unique history of the United States. We cover the time period from the colonial era through the present day, focusing on civics, government, and connecting these themes to current events. Other themes to be explored include: identity; culture and community; social justice; and conflict, adversity, change and transition. Students will continue to read and take notes from a variety of sources (primary and secondary), participate in cooperative exercises, research and synthesize information, write descriptively and analytically, and articulate thoughts through formal public speech and debate. Interdisciplinary connections and learning are encouraged and practiced.

### **Modern World History Grade 8**

Foundations in History introduces ninth graders to the essential questions and themes for understanding world history, and lays the groundwork for future courses in the SRDS history curriculum. Guided by the curriculum established by *World History for Us All*, there are three principal questions on which students focus throughout the year: How has the changing relationship between human beings and the physical and natural environment affected human life from early times to the present? Why have relations among humans become so complex since early times? How have human views of the world, nature, and the cosmos changed? Students also concentrate on seven key themes that touch upon politics, economics, technology, social structure, and spiritual life and moral codes. Just as important, FH emphasizes the learning of those skills that will be used throughout the upper school history curriculum. These skills include writing the expository, comparative, and analytical essays; reading and evaluating primary and secondary sources; articulating ideas in debates and in extemporaneous formats. Additionally, this course, in collaboration with the English and IT departments, promotes information literacy and acquaints students with social science research skills.

### **Foundations in World History: A Big History Approach Grade 9**

Most of history begins with the written record, but a study in Big History challenges students to consider 13.8 billion years of events, beginning with the Big Bang. This interdisciplinary approach will lead students through the impact that science, geology, and anthropology have had on our understanding of historical events. Students will analyze these developments by honing their writing skills and focusing on evidence, logic, intuition, and authority. Document based writing will attempt to answer essential questions such as how does a new theory become accepted and why is it necessary to look at something from close up and far away. The comprehensive approach to history will lay the foundation for students to work their way through subsequent history classes at Saddle River Day School.

### **AP Human Geography, Grade 9**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. AP Human Geography will provide our most advanced freshmen with an opportunity to shine beyond an "Honors" label. This course is designed to mirror college level Human Geography and allows for Advanced Placement credit with success on the AP exam in May.

**Prerequisite: Permission of the Department**

### **World History Grade 10**

This course examines the history of the world from the Agricultural Revolution to the present. Along the way, students learn to think like historians -- to analyze historical evidence from multiple perspectives, to test historical claims, and to challenge historical narratives. World History digs deeper into the themes and content introduced in the 9th grade Big History Project. Students will continue to develop their critical reading, analytical writing, research, and discussion skills -- all while learning to love history.

### **United States History Grade 11**

This eleventh-grade course provides a survey of United States history from before colonial times to the present. It focuses on those issues and themes that have emerged to shape American culture, politics, and policies, both foreign and domestic. Since these issues and themes did not happen in a vacuum, there is also an emphasis on presenting American history within a global context and as part of a larger world history. Meanwhile, the course emphasizes skills in critical analysis that require students to locate, evaluate, and integrate different kinds of historical data. Students then present their findings through debates, frequent essays, and other assessments. There is a required research paper.

### **Advanced Placement United States History Grade 11**

This college-level course in American history traces the development of American culture from before the first contacts of Native Americans with Europeans to the modern era. Readings from primary and secondary sources, as well as class discussions, offer students the opportunity to delve deeply into the political, social, and economic values of American society as they evolved over time. There are frequent analytical and document-based question essay assignments, as well as a required research paper. Students are required to take the A.P. national examination in May.

**Prerequisite:** Strong academic performance and the permission of the teacher and recommendation of the department chairperson.

### *Social Science Electives*

#### **Psychology Grades 11 or 12**

This year-long course offers straightforward explanations of the basic themes of psychology, while focusing on psychology's relevance to the individual. Selected topics include neuroscience, learning, memory, personality, and psychological disorders, all with a focus on gender and culture.

#### **Philosophy and Ethics, Grades 11 or 12**

The purpose of this course is to enhance the SRDS community through open discussion about some of the most profound questions of humanity. Students will read, analyze, and assess the ideas of many of the greatest thinkers in the history of the world. Through oral and written expression, they will explore complicated questions, look past simplistic answers, and develop an understanding and appreciation for the inherent complexity of life.

#### **Middle Eastern Studies, Grades 10-12**

In 2011, thousands of Egyptians gathered to demand the fall of their nation's dictatorial regime as a part of what would later come to be known as the Arab Spring. This unrest spilled across borders, escalating to armed conflict in Syria where, at the U.N.'s last estimate, over 11 million Syrians have been forced to flee from their homes. The goal of this yearlong course is to better understand the Middle East through the lenses of history, politics, culture, religion, and art. This course will emphasize independent research of primary and secondary sources to investigate the lived experience of people involved. These experiences will include, among others, those of Egyptian revolutionaries, Syrian refugees, American soldiers, and Israeli civilians. We will investigate a variety of media (movies, books, sermons, blog posts, etc.), communicate via Skype with people who have relevant first-hand experience, synthesize the stories we encounter, and share our findings with the larger Saddle River community. Each student will be responsible for choosing areas of focus to investigate from multiple perspectives and using multiple lenses. Students will practice the skills of research, discussion, and presentation and, in doing so, learn more about a much-misunderstood region of our world.

#### **Advanced Placement Macroeconomics Grade 11, or 12**

AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

**Prerequisite:** Strong academic performance, proficiency with graphing and the permission of the teacher and recommendation of the department chairperson.

#### **Advanced Placement European History, Grade 10, 11, or 12**

This course is offered as an elective to eleventh and twelfth grade students who wish to pursue the rigors of an advanced placement course in European History. The scope of the course extends from the emergence of



“modern” Europe in the 1400’s (the Renaissance) to the present day (the end of the Cold War and after). The course focuses on the study of the interaction of political, economic, social, religious, cultural, and intellectual factors that best explains the historical narrative of European history. Emphasis is placed on developing the student’s skills concerning the interpretation of primary sources, which is an important part of this course and the national examination as well. Numerous readings in texts and secondary materials as well as historiographical essays make up the bulk of assignments. Research and writing skills are honed through various types of projects. Students are required to take the national exam in May.

**Prerequisite:** Permission of the Department

### **Advanced Placement World History Grade 10, 11, or 12**

The AP World History course focuses on developing students’ understanding of world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

**Prerequisite:** Strong academic performance and the permission of the teacher and recommendation of the department chairperson.

### **Advanced Placement Psychology**

AP Psychology is an introductory college-level psychology course. Students cultivate their understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations as they explore concepts like the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology.

**Prerequisite:** Psychology, and permission of the department.

## ***Department: Science***

The science department's courses are designed to be comprehensive as well as diverse in order to meet the needs of every student. Middle School science begins to take the students deeper into the specific topics of human biology, life science, earth science and conceptual physics. In the Upper School, three years of laboratory science are required for graduation. In all cases, biology, and chemistry are required for graduation and physics is strongly recommended as the third lab science. Three advanced placement science courses are offered for those students who demonstrate an extremely high aptitude in science.

### **Science 5**

In fifth grade science students will take a hands-on, discovery approach to learning 21st century skills in a laboratory setting. The inquiry-based curriculum fosters critical thinking skills and creative problem solving. During the course of the school year topics will come from each of the following categories, earth science, life science, and physical science. Students will investigate the interactions in an ecosystem and learn how a change in the interactions can upset the ecosystem. Next, students move on to an introduction to physical science as they learn how to identify physical properties and changes of matter. Students will finally journey to space and learn about the solar system and how interactions between our sun and moon affect things around our planet such as seasons, day vs night, and phases of the moon.

### **Science 6**

In sixth grade science students continue to discover and problem solve as they explore an integrated curriculum of earth, life and physical science. Topics in physical science include forces and motion and students will understand how forces affect our daily lives through Newton's Laws of Motion. Students will then explore simple machines and how these help make our lives easier. Life Science topics focus on the human body systems and how the systems interact with one another to perform daily functions. Students end the year learning about the history of the Earth and how the movements of plates cause several natural events such as earthquakes, volcanic eruptions, and tsunamis and how changes in the earth's geography continue to affect our planet.

### **Science 7: Physical Science**

Science in 7th grade is a hands-on, inquiry based approach to understanding the nature and structure of matter and the interactions of matter and energy. The focus of the curriculum is on the application of Physical Science principles and developing 21st century skills. During the first half of the year, students explore topics that include the atomic structure of matter and how matter changes physically and chemically, and the organization and use of the periodic table. STEM projects such as building boats and creating superheroes are highlights of the first trimester. The second half of the year focuses on how matter interacts with energy. Topics include forces, and motion; and the concept of energy: how it is transferred, and how the amount of useful energy in a system decreases over time, resulting in the need for energy sources. Projects include building race cars, roller coasters and solar powered devices.

### **Science 8: Applied Science**

The curriculum for 8th grade science centers around an understanding of the natural and physical world in which we live. Real world connections are made as students explore topics in Physical Science, Life Science, Chemistry and Engineering. The hands-on, project based curriculum allows them to engage in lab activities and design projects which will not only enhance their skills in communication, collaboration, critical thinking and creativity, but will help prepare them for the rigors of upper-school science.

### **Biology (College Prep / Honors) Grade 9**

Biology focuses on the study of life from an evolutionary and sociological perspective. The students will explore selected topics through lectures, experiments, and inquiry based activities. A basic appreciation of

biological science is emphasized through real life examples wherever possible. Topics covered may include, but are not restricted to evolution, ecology, genetics, cell structure, and cell processes.

The honors level course is a molecular approach to biology. Course material will cover a wide range of biological topics, using a molecular thematic approach, essential for a comprehensive understanding of general biology. Students will learn and be able to apply the scientific method through the development and conduction of laboratory investigations.

### **Chemistry (College Prep / Honors) Grade 10**

Chemistry focuses on the study of natural processes from a physical and observational perspective. Students explore selected topics through investigation, experimentation, and inquiry-based activities. Chemistry is emphasized through real life examples wherever possible. Topics covered may include, but are not restricted to; stoichiometry, periodic properties, reactions in aqueous solutions, nomenclature, solutions, and gases.

The Honors Chemistry course studies the nature of change as it relates to chemistry and the world, using both qualitative and quantitative methods of analysis through problem solving, experimental design and cooperative group learning activities. Specific topics include matter; electron configuration; bonding; gas behavior; mole concept; stoichiometry; redox reactions; acid-base; equilibrium; and solutions.

**Prerequisites:** Chemistry CP – Biology and Alg I. For Chemistry Honors, completion of Biology or Biology honors AND completion or concurrent enrollment in Algebra II or Algebra II Honors with teacher recommendation and permission of the Department Chairperson.

*Science Electives* - these classes meet the science graduation requirement if taken for a full year

### **Physics (College Prep / Honors) Grades 11 or 12**

This course is designed to introduce students to a detailed, analytical study of the physical world. Precise and accurate measurement methods are utilized during observations to describe or interpret general laws of nature. Theoretical and higher mathematical concepts and skills are also used to reach this understanding of the laws. The theme underlying the course is the development of a conceptual understanding of the physical world, and using problem-solving skills to further that understanding. Students find that, rather than making the material less accessible, equations and formulae can be used to increase understanding.

**Prerequisites:** Biology, Chemistry, Alg II for college prep level. For honors level, at least concurrent enrollment in Precalculus or higher and permission of the Department Chairperson.

### **Environmental Science Honors, Grades 11 or 12**

Environmental science is a comprehensive science elective applying the fundamentals of biology, chemistry and physics to challenges facing the environment today. The course is taught using case studies to illustrate scientific topics. It is a lab science course that delves into the impact of humans on our environment. We study the effects and try to find ways to alleviate some of the negative consequences in our own lives. Students will engage with current environmental science topics across the curriculum. A heavy writing course, we use art, economic principles, historical background and science to explore different topics.

**Prerequisite:** Biology, Chemistry, Algebra II and teacher recommendation

### **Forensic Science/Honors Forensic Science Grades 11 or 12 (yearlong)**

Forensic science is the application of science to criminal and civil laws. This course will study relevant scientific and technological principles and techniques that are used to solve crimes. Topics in this course are arranged to integrate scientific methodology with actual forensic applications. The course will include a wide variety of laboratory methods and forensic cases to give students valuable opportunities for interactive hands-on experiences and to develop problem-solving and critical-thinking skills.

**Prerequisite:** Biology, Chemistry, completion or concurrent enrollment in Algebra II

### **Human Anatomy and Physiology Honors, Grades 11 or 12**

Anatomy and Physiology focuses on the structure and function of the various organ systems within the body and on the mechanisms for maintaining homeostasis within the human body. The curriculum will lay a solid foundation for understanding organ systems, and its emphasis on the brain will give the course a more modern perspective. The neuroscience component will feature a brain dissection and will highlight how the anatomy of the brain has been used to deduce its many functions. The class will discuss how the brain functions normally, under the influence of drugs, and in instances of disease.

### **Engineering and Design, Grades 11 or 12**

This project based course provides each student with an overview of the fields and methods of engineering and introduces skills basic to the field of engineering. After an introduction to the steps of the Engineering design process in the first term, students will explore disciplines in Civil, Mechanical, Aerospace and Bioengineering. They will apply the engineering design process and applicable scientific principles to design projects throughout the year.

**Prerequisite:** Biology, Chemistry, completion or concurrent enrollment in Algebra II

### **Astronomy and Space Science, Grades 11 and 12 (trimester long or yearlong)**

Students in high school develop understanding of a wide range of topics in Astronomy and Space Science that build upon science concepts from middle school through more advanced content and practice. The course will focus on the nature of what is and is not understandable about the universe through historical and current observations of the universe. Conceptual ideas such as why stars shine, the history of the solar system, and the fate of the universe are discussed. Students will be expected to meet once per trimester outside of class for observing.

**Prerequisite:** Biology, Chemistry, completion or concurrent enrollment in Algebra II

### **Advanced Placement Biology Grades 11-12 (*alt years with AP Chemistry*)**

The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. This course is offered to students who have successfully completed a basic or honors level course in high school biology and high school chemistry. The course covers three general areas of study: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. Students are required to take the AP Biology National Exam in May.

**Prerequisites:** Biology, Chemistry and strong academic performance and the permission of the teacher and recommendation of the department chairperson.

### **Advanced Placement Chemistry Grades 11-12 (*alt years with AP Biology*)**

The Advanced Placement Chemistry curriculum is a rigorous curriculum designed to prepare students for the Advanced Placement Examination in chemistry. Students study the structure, properties, and composition of matter and how it reacts through the application of chemical theories using chemical principles and mathematics to predict the outcome of experimentation. This course will develop the student's critical thinking and problem solving skills through laboratory investigations.

**Prerequisites:** Biology, Chemistry, Physics, Precalculus and strong academic performance and the permission of the teacher and recommendation of the department chairperson.

### **Advanced Placement Physics C: Mechanics Grades 11-12**

This course is designed for students with a strong interest in a career in physics, physical science, or engineering. It is a rigorous calculus-based physics course that prepares students for the Advanced Placement Physics C: Mechanics Exams. Topics include kinematics, linear and rotational dynamics, gravitation, and oscillations.

**Prerequisites:** Biology, Chemistry, Physics, Precalculus and strong academic performance and the permission of the teacher and recommendation of the department chairperson.

These electives are in the science department but do not meet the graduation requirements of a full-year laboratory science.

### **Middle School Coding**

The middle school coding classes are offered to all students and grants them the ability to work with software that allows them to learn the basic processes involved in computer science. Students will work with various programs that require them to organize and structure blocks of code. Students will have the chance to create games, animated movies, control robots, and other objects that require programming.

### **Computer Science I and II (each are yearlong courses)**

These computer science courses provide students with an introductory level understanding of computer programming. Students learn the fundamentals of program design and programming languages. Projects are assigned for each topic that allow students to gain and develop proficiency at planning, writing and executing programs. In Computer Science II, students continue to explore new programming languages and encounter increasingly sophisticated programming challenges.

### **Computer Science Principles**

Computer Science Principles is a course that teaches the principles, big ideas, and practices of computer science. The goal is to ensure that all students are introduced to the broad spectrum of these that make up the essence of computer science. This course enables students to experience the creative and intellectual possibilities—the“beauty” of computing through their participation. Students will become proficient in the computational thinking practices that are embedded within this curriculum.

**Prerequisites:** Computer Science I

### **Advanced Placement Computer Science Principles**

AP Computer Science Principles is a course that teaches the principles, big ideas, and practices of computer science culminating in completing the APCSP exam. The goal is to ensure that all students are introduced to the broad spectrum of these that make up the essence of computer science. This course enables students to experience the creative and intellectual possibilities—the“beauty” of computing through their participation. Students will submit two performance tasks defined and required by the AP, and participate in the exam at the end of the year.

**Prerequisites:** Computer Science I

### **Advanced Placement Computer Science A**

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

**Prerequisites:** AP Computer Science Principles

## ***Department: Arts***

The mission of the Saddle River Day School Arts Department is to provide each student with the opportunity to experience the enrichment, fulfillment, and joy that producing and experiencing art brings to human life. Over the course of an SRDS education, each student will explore many types of artistic expression, and each student will be given the opportunity to excel in a chosen artistic discipline.

### ***Performing Arts - Theater, Instrumental and Choral Music***

SRDS has a dynamic and diverse instrumental music program that provides a solid foundation of the skills needed to play an instrument and to perform with it in an ensemble. Instruction begins in the Lower School, continues through the Middle School, and culminates with our students participating in our Upper School Band, Jazz Ensemble, String Ensemble, and Guitar Ensemble.

The choral program is designed to provide the opportunity for each student in grades pK-12 to learn the proper vocal techniques and skills needed to perform various vocal repertoire. Special emphasis is placed on learning rudimentary skills such as proper air support, proper resonance, sight-reading, audible acuity, blending, style, and showmanship. Participation in an SRDS choir provides opportunities for the students to express their personal creativity, build their self-esteem, learn self-discipline, and master a variety of skills which can be applied to their lives both on and off the stage.

### **Upper School Acting** (a series of trimester long courses taken individually or yearlong)

A trimester long course meeting three periods per week. Students register for as many or as few trimesters as they wish. The class is project-based, with a live or recorded performance given each trimester to demonstrate the work of the trimester. Trimester 1 covers the fundamentals of acting including exposure to and practice of different techniques and schools of acting. Trimester 2 is split between: 1. The exploration of the difference between tragedy and comedy and the specific techniques used therein. 2. Improvisation in both pure “improv” groups and within traditional stage and film acting. Trimester 3 is devoted to musical theater. The students learn the history of American Musical Theater as it evolved from earlier popular art forms, and explore the various fundamental techniques of stage acting and dancing that are the essential building blocks of musical theater performance.

### **Music Theory I**

Students who wish to further their musical education by ensuring their knowledge of the fundamentals of music should register for Music Theory. The topics of the class include note and rhythmic notation, key signatures, time signatures, scales, modes, chords, and elementary musical forms.

### **Music Theory II**

Students who have completed Music Theory I or have passed the SRDS music theory proficiency test may register for Music Theory 2. The topics of the class include harmonic analysis, four-part harmony of melodies, counterpoint, elementary composition and arranging, chord construction and analysis, and chord/scale relationships. The techniques studied are based on the common practice period in classical music as well as those of modern jazz and popular music.

**Prerequisite:** Completion of Music Theory I, and permission of the department chair.

### **Music Theory III**

Those students who have completed Music Theory II or have passed an advanced music theory placement test may register for Music Theory III. In Music Theory III, the students follow a rigorous course of review of theory fundamentals, and throughout the year they have weekly ear-training assignments. Simultaneously, the students complete a series of projects developed by the teacher while carefully considering each student’s artistic path. Examples of possible projects include in-depth composition, arranging, and orchestration assignments, 18th-century counterpoint studies, and analysis of orchestra compositions. Successful completion

of MT3 prepares a student for college music theory entrance examinations for both classical and jazz/pop disciplines.

**Prerequisite:** Completion of Music Theory II, and permission of the department chair.

### **Fifth Grade Band and Strings**

All fifth grade students learn to play a woodwind, brass, string or percussion instrument which they play in the Fifth Grade Band or String Class. In addition to their ensemble rehearsal, each student receives lessons with other students on the same or similar instruments. The Band and String Class play two concerts each year.

### **Middle School Choirs Grades 5 - 6 and 7 – 8**

There are two Middle School choirs: one for students in grades 5 and 6 and one for grades 7 and 8. Rehearsal time is spent learning the different pieces, establishing proper vocal techniques and gaining fundamental musical knowledge. The concert pieces include arrangements of selections from Broadway shows, current popular songs, classical choral pieces and pieces written for student choirs. The students are encouraged to take part in the programming process of performances. The choir performs at least two concerts each year.

### **Sixth Grade Band**

Woodwind, Brass, and Percussion students in the sixth grade may join the Sixth Grade Band. The group continues the laying of a solid foundation of musical skills that was started in the Fifth Grade Band. More complex pieces of music are explored and the students develop the techniques necessary to play in The Middle School Band (Grades 7-8)

### **7th and 8th Grade Band Grades 7-8**

Middle School students who have played a woodwind, brass, string or percussion instrument for at least one year may register for 7th-8th Grade Band. The repertoire of the group includes classic and contemporary music written for middle school students well as arrangements of popular music and large-ensemble jazz selections. The band performs at least two concerts each school year.

### **Middle School Strings Grades 6,7,8**

Middle School students who have played the violin, viola, cello, or bass violin for at least one year may join The Middle School Strings. The repertoire is primarily classical music, with some pop/jazz pieces played occasionally.

### **8th Grade Theater Arts**

Eighth Grade students may register for 8th grade Theater Arts. In this course, the students study the many elements of a theater production, including set design and building, lighting design and operation, stage management, as well as acting and directing. This class can fulfill an eighth grade student's performing arts requirement. The class meets twice per week.

### **Upper School Band Grades 9 – 12**

Students who play a woodwind, brass, or percussion instrument may register for Upper School Band. The repertoire of the group includes classic and contemporary works for chamber orchestra and concert band as well as pops and large-ensemble jazz selections. The concert selections include pieces by composers such as James Swearingen, Duke Ellington, and Ludwig van Beethoven. The band performs at least two concerts each school year.

### **Concert Choir Grades 9 – 12**

The Concert Choir is open to all students in grades nine through twelve. The concert pieces include classical choral repertoire, arrangements of selections from Broadway shows, and current popular songs. Through the preparation of the concert pieces, the students learn vocal production techniques (such as proper air support),

audible acuity in pitch, and musical notation reading skills. Each individual student is responsible for learning their own voice part and their progress is monitored by a series of small ensemble “note checks” throughout each term. The choir performs at least two concerts each year.

### **Jazz Ensemble Grades 9 – 12**

Jazz Ensemble is open to students who play any instrument proficiently and wish to learn the art of jazz improvisation. All instruments are welcome, including piano, guitar, bass, drums, and all brass, woodwind and string instruments. The ensemble learns primarily classic jazz tunes by artists such as Duke Ellington, Thelonius Monk, Horace Silver and Charlie Parker. Each student learns how to improvise over the chords of the tunes the ensemble learns. The ensemble performs at least two concerts each school year.

### **Guitar Ensemble Grades 9 – 12**

Those students who wish to learn the fundamentals of guitar playing as well as those students who have advanced guitar skills may register for Guitar Ensemble. Members of the ensemble learn to play written melodies and chords on the guitar, they learn the fundamentals of improvisation, and they perform pieces written for multiple acoustic guitars. The concert pieces are arranged to incorporate the skills of both advanced and beginner students. The concert selections include arrangements of pieces by composers such as J.S. Bach, Francisco Tarrega, Tito Puente, and songs by popular rock bands. The ensemble performs at least two concerts each school year.

### **US String Ensemble Grades 9 – 12**

Upper School String Ensemble is open to students who play violin, viola, cello, bass, or piano. The ensemble learns repertoire primarily written by pillars of classical music, such as Bach, Mozart, Beethoven, Telemann and Schubert. The ensemble performs at least two concerts each school year.

### **Rebel Tones Grades 9-12**

This choir is geared toward those students who wish to experience singing in a small choir that performs advanced jazz, classical, popular, and frequently acapella repertoire.

### ***Visual Arts - Studio and Graphic Arts***

The visual arts are a means to gain personal satisfaction through individual accomplishment in the creation of images and forms. The program is solidly based on a respect and understanding of where students are creatively, what they require from their work, and the means to move them from one developmental stage to another as they become more expressive, inventive, and perceptive. The program focuses on artistic creation as the central component throughout, with perceptual and reflective elements growing out of the students’ active involvement with materials and processes. Through expressive/creative experiences, students become familiar with such facets of artistic thinking as; the ability to formulate problems and create multiple solutions, the ability to pursue a project over time, the willingness to solve problems inventively, the ability to take risks, and finally to reflect critically on one’s own work. Students develop a way of thinking that functions beyond the studio into other areas of the curriculum.

The program focuses primarily on the uniqueness of the individual, fostering and valuing the specific expressive qualities and interests of each student as she/he progresses through K - 12. Collaborative work exists, but its goals are secondary to the individual.

### **Art Grade 5**

The visual arts require students to participate in art production, creating imagery or objects by means of drawing, painting, printmaking, and sculpture. Throughout the year, Fifth grade students will develop an enhanced understanding of the elements of art; Line, Shape, Color, Value, Form, Texture, and Space. And the principles of design; Balance, Contrast, Emphasis, Rhythm, Movement, Pattern and Unity. Art activities will



focus on expanding their knowledge of these elements & principles while engaging the students in a experience that will not only be rich in itself, but lead to personal growth. Projects involve the students in imagining, exploring, reasoning, and inventing while experimenting with a plethora of materials and technique. Students will create artwork inspired by art history, diverse cultures, and their perceptual awareness of their environment. Fifth grade meets for art class twice a week, and their artwork is exhibited in the school wide art show at the end of the year.

### **Graphic Design 5**

Fifth grade students will build a foundation of graphic design. After being introduced to the basic functions of a Mac computer and the safe usage of the internet, the students produce imagery through project based learning, using design programs including Adobe Photoshop, a photo manipulation and digital painting program, and Adobe In Design (a design and layout program). Some photography and the use of existing photographs is incorporated into the class projects, and the students learn to manipulate digital images by using a variety of software applications. Project ideas include digital painting, art parody, self -portraits, manipulation of art history, logo and poster design, book making, advertising, textile design and packaging. The students are introduced to historical and modern day artists, and all projects reinforce the student's knowledge of the elements of art and principles of design. The overall goal of the graphics course is to enhance student's critical thinking skills and confidence by exposing them to the unlimited possibilities that digital art has to offer.

### **Art Grade 6**

The grade six Art course continues to build upon and reinforce basic skills learned throughout the Lower School Art Program. The elements and principles of design are the building blocks of art study. These concepts will be expanded on as the students grow through a variety of projects, techniques and materials presented. The students will learn about a number of artists, styles and cultures throughout the middle school years. This class meets twice a week. The students will receive a numerical grade based on a point system.

### **Graphic Design 6**

In the Graphic Arts course sixth grade students will build the foundations for graphic design. They are introduced to the basic functions of the Macintosh computer, the safety of the Internet, and working back and forth between programs. We use the programs Adobe Photoshop, Photobooth, Microsoft Word, and stock photography websites. Students use a range of programs, in order to create diverse projects involving poster designs, book covers, print advertisements, color masking, photo retouching, corporate identity and packaging design. Students are introduced to historical and modern day artists. In this program students learn the principles and elements of design. Students learn the importance of sketching their ideas on paper first before starting to design on the computer. Some projects will also be integrated with their visual arts class.

### **Art Grade 7**

This class meets twice a week. The course takes the students through a creative experience by the use of a variety of media. They will explore and experiment with basic art elements and principles and they will develop artistic skills through the systematic introduction to 1) the sensory properties of objects - color, line, shape; 2) the format properties of design - balance and rhythm, harmony; 3) the technical properties of tools and materials, 4) the expressive properties of moods, feelings, and ideas; and 5) the introduction of technology as a tool to generate art. The students will receive a numerical grade.

### **Graphic Design 7**

In the Graphic Arts course seventh grade students will build the foundations for graphic design. They are introduced to the basic functions of the Macintosh computer, the safety of the Internet, and working back and forth between programs. We use the programs Adobe Photoshop, Photobooth, Microsoft Word, and stock photography websites. Students use a range of programs, in order to create diverse projects involving poster designs, book covers, typography booklets, print advertisements, color masking, photo retouching, corporate

identity and packaging design. Students are introduced to historical and modern day artists. In this program students learn the principles and elements of design. Students learn the importance of sketching their ideas on paper first before starting to design on the computer. Some projects will also be integrated with their visual arts class.

### **Art Grade 8**

This course is the culmination of the middle school art program. Through creative experiences, students become familiar with such facets of artistic thinking as: the ability to formulate problems and create multiple solutions, the ability to pursue a project over time; the willingness to solve problems inventively, the ability to take risks, and finally to reflect critically on one's own work. Students develop a way of thinking that functions beyond the studio into other areas of the curriculum. The students are required to keep a sketchbook and will receive a numerical grade.

### **Graphic Design 8**

In the Graphic Arts course eighth grade students will enhance their graphic design skills. They will improve their Macintosh computer skills, knowledge of safely using the Internet, and working back and forth between programs. We use the programs Adobe Illustrator, Adobe Photoshop, Photobooth, Microsoft Word, and stock photography websites. Students use a range of programs, in order to create diverse projects involving poster designs, CD booklets, type and vector portraits, magazine covers, print advertisements, photo retouching, corporate identity and packaging design. Students are introduced to historical and modern day artists. In this program students learn the principles and elements of design. Students learn the importance of sketching their ideas on paper first before starting to design on the computer. Some projects will also be integrated with their visual arts class.

### **Studio Art (Introductory)**

Art making integrates the emotions and intellect. The creative problem solving experience is a model for real life and work situations. Art provides an alternative and generates satisfaction in a process creating personal growth. The art process at Saddle River is creative, intellectual, and technological. These students explore basic fine arts techniques: drawing in many media, painting, sculpture, color theory, composition, informal perspective, and the elements of art and design. Students have the opportunity to show their work in an all school art show at the end of the year.

### **Art Major**

This course is recommended for the serious art student. It aims to strengthen basic skills in drawing and painting while incorporating lessons in art history. Students will be expected to experiment and complete work in various two and three-dimensional media. This course concentrates on the mastery of new skills and the appreciation of previously learned material to the execution of more complex problems involving design, techniques, expression and creativity. Student work is evaluated individually on its own merit with some use of critiquing and portfolio review.

**Prerequisite:** Permission from the teacher and department chair is required to take this course.

### **Portfolio Art (Honors)**

This course will help serious high school students prepare a portfolio for college admission. Focus is on individuality. This course includes the development of ideas, drawing and painting techniques, composition, presentation and documentation. Each student will produce a 20-piece portfolio for admission to an art school. They will photograph their artwork to present slides or prints where required. At least half of the portfolio should show drawing from life and include a variety of media and examples of original and creative problem solving. A well-filled sketchbook is also an important element. Supplemental courses are encouraged at local colleges and community art centers to enhance the student's body of work. Each fall a visit is scheduled on

campus with art college representatives. The students will be able to interview and have their portfolios critiqued by the representatives.

**Prerequisite:** Permission from the teacher and department chair is required to take this course.

### **Graphic Design I: Grades 9-12**

In this course, students are introduced to the basics of graphic design. This course is suitable for students new to graphic arts or those who have taken classes previously. Students will learn how to successfully navigate industry applications such as Adobe Photoshop, Adobe Illustrator, and Adobe Indesign. They will face the challenge of real-world projects, which may include corporate identity, portraits, print advertisements, packaging design, multi-media imagery, editorial design, book design, as well as graphic pieces for school functions. They gain a basic foundation of the history of graphic design and create artworks in the style of well-known graphic designers. Students are introduced to the d.school model of the design thinking process as well as a collaborative design team approach to project management.

**Prerequisite:** Studio Art or 3 years of graphic and studio art in middle school and recommendation of the teacher and department head.

### **Graphic Design II Grades 9-12**

This course is an extension of Graphic Design I. Students continue to refine and conceptualize their ideas using the industry standards of Adobe Photoshop, Adobe Illustrator, and Adobe Indesign. They must be able to work independently and generate their own concepts for projects at this level. Graphics II furthers the focus on the critical role of typography in graphics arts. Using the d. school design thinking model, students create a prototype for a product that solves a problem which they identify and then work on branding, 3D packaging design, and print advertisements. They will learn how to build upon their presentation skills by working with professionals when relevant, with an increased importance on meeting deadlines. Students continue to study layout design and vector art creation and projects may include design contests, digital illustration, packaging design, signage, advertising, type portrait, textile design, corporate identity, and product design. If time permits, the students will be taken on a field trip such as to a museum, design agency, animation company, or advertising firm.

**Prerequisite:** Graphic Design I and recommendation of the teacher and department head.

### **Graphic Design III Grades 10-12**

Graphic Design III is an advanced continuation of projects using Adobe Photoshop, Adobe Illustrator, Adobe InDesign, and time permitting, 3D printing for three-dimensional design. Students will continue to use the d. school design thinking model to solve problems and are expected to approach projects more confidently and independently using a “blue sky approach.” Students are given real-world experience through collaborative learning with professionals, and a curriculum rich in art history and interdisciplinary subject matter. They will learn how to work with a variety of real world experts and develop print and digital media which may include architectural perspectives, sections or plans; mood boards, logos, and animations for projects developed in conjunction with professionals or in response to issues that they identify. Students will continue to experience the importance of the design process from start-to-finish; concepts and sketches, design stage, and production, and will develop fluency in their ability to conceptualize and then materialize. Projects in this course will vary each year based on student interests and the availability of real world experts, though the skills and expectations of the course will remain the same. If time permits, the class will be taken on a field trip such as to a museum, design agency, animation company, or advertising firm.

**Prerequisite:** Graphic Design II and recommendation of the teacher and department head.

### **Graphic Design IV**

In Graphic Design IV students continue to use industry standards such as Adobe Illustrator, Photoshop, and InDesign to solve design problems and communicate visually using the d.school model of the design thinking process. Adobe applications are used in innovative ways and students are expected to demonstrate fluency as

some projects require the use of more than one application in order to be successfully completed. Since Graphics IV is the culminating class of the Graphics program, students who take this course are expected to be highly motivated and independent workers. The class is run like a design firm, and students will collaborate with professionals in various fields to build their agency as designers. Students are expected to be able to articulate why a design works based on the elements and principles of art, and to give and receive constructive feedback in order to reiterate their work. Graphics IV are expected to be leaders in the graphics program by providing support to other students in our program. Students will be introduced to a variety of designs and designers to inspire their work, such as architectural perspectives and established graphic artists. Projects may include the creation of architectural perspectives, sections and plans; branding for both print and digital media, layout design, effective project presentation, digital animations, and signage for the needs of our community. This course culminates in an independent study project of the student's choice which should communicate, in part, what the student felt was most meaningful during their design experience at our school.

**Prerequisite:** Graphic Arts III and recommendation of the teacher and department head.

### **Digital Photography**

Students are introduced to the fundamentals of digital photography through a blend of history, theory, hands-on work, and peer review. The course explores the history of photography, the basic features of modern DSLRs, the elements of composition, lighting and design, and the use of post-processing software to maximize visual impact. Class time will be used to learn and discuss the technical requirements of digital photography and to process images in the Adobe environment and to review and critique professional and student work.

### **Videography/Broadcast Journalism**

This class introduces video broadcasting and film production through a theory based, hands-on approach. It provides instruction and training in pre-production, production and post production phases of project development. Students will work on both single camera and multi camera productions, and will have the opportunity to work in the production studio with multi-camera, live programming. Students will produce public service announcements, mini documentaries, interviews, commercials, Music Videos and News Programs.

### **Advanced Videography**

Advanced Video Production is a hands-on course focusing on traditional production roles such as director, producer, camera operator, editor and screenwriter. Students will build on their knowledge and experience from Videography class. They will develop more sophisticated and complex productions incorporating new camera and post-production techniques. Students will create pitches, storyboards, split scripts, production schedules and shot sheets in the pre-production phase. They will cast, shoot, direct and produce their various film projects and then edit, color correct, sound design and export their finished videos. Students will produce various projects of various lengths and topics depending on their interest. They may also plan and execute an online or digital film fest.

**Prerequisite:** Completion of Videography and Broadcast Journalism.

### **Advanced Videography Practicum**

In this course students will continue learning and practicing the techniques of video and television production. More advanced camera and editing techniques will be covered. Students will continue working on directing, producing and screenwriting techniques. Students may choose a variety of projects to create including a short fictional film, a documentary, mockumentary, video yearbook, etc.

**Prerequisite:** Completion of Advanced Videography

***Department: Physical Education and Health and Counseling***

The general aim of physical education is to aid in the maximal development of each student's mental, emotional, physical, and social competencies through the media of selected physical activities. These activities, selected as to need and value, shall help each student find a pattern for living, which will serve them well today and in their future. Furthermore to give each student a sense of enjoyment and appreciation of sport as it relates to their emotional health.

**Health Grade 5**

The grade five Health course aims to introduce the students to a basic knowledge and understanding of the world of health as it pertains to this age group. The lessons attempt to remove any misconceptions and misinformation as well as to instruct the student in correct and appropriate subject matter.

**Health Grade 6**

The grade six Health course aims to introduce the students to a basic knowledge and understanding of the world of health as it pertains to this age group. The lessons attempt to remove any misconceptions and misinformation as well as to instruct the student in correct and appropriate subject matter.

**Health Grade 7**

The grade seven Health course aims to assist the student in developing a broader knowledge and understanding of the world of health as it pertains to this particular age group. The lessons attempt to expand the comprehension of the subject matter.

**Health Grade 8**

The grade eight Health course aims to assist the student in developing a broader knowledge and understanding of the world of health as it pertains to this particular age group. The lessons attempt to expand the comprehension of the subject matter.

**Health Grade 9**

The grade nine Health course aims to assist the student in developing a broader knowledge and understanding of the world of health as it pertains to this particular age group. The lessons attempt to expand the comprehension of the subject matter.

**Health Grade 10**

The grade ten Health course aims to expand upon the student's knowledge, understanding and ability to make personal decisions. The goal is to allow the student to improve his/her knowledge and understanding in order to be able to make decisions based on factual, accurate information.

## ***Core Enrichment Courses***

### **Digital Citizenship, Grade 5**

Digital Citizenship focuses on the quality of habits, actions and consumption of patterns that impact the ecology of digital content and communities. Students in 5th grade begin the year by reviewing the Honorable Use Policy and discussing the responsible ways to use technology in our every day lives. Throughout the year, we discuss current events covering new technology, ethics, social media and more. In the fall term, they write and produce 3-5 minute Book Talks. These include summaries, often a scene from the book and a review. Students plan their video using scripting and storyboarding tools, collaborate with their peers to cast the roles and edit their work using iMovie. They must cite their sources, include green screen, voice-over, graphics, copyright-free music and credits. During the Winter term, students participate in a Mystery Skype with another school in the U.S. as part of their study of geography. They use Code.org and Scratch in December as part of Computer Science week and use SketchUp to design a model of an Egyptian structure. As part of their humanities study, they will make a model using modern materials or 3D printing. In the Spring, fifth graders get experience with digital photography, robotics and programming as well as Tinkercad and 3D printing.

### **Digital Literacy, Grade 6**

Digital Literacy focuses on the ability to use information and communication to find, evaluate, create and communicate information, requiring both cognitive and technical skills. Students in Digital Literacy are learning that there are various ways to learn new things as well as different strategies to do so. Humans are constantly learning and relearning, designing and redesigning. Sixth graders are encouraged to explore their own learning process. Reflection and evaluation are important parts of this process. Throughout the year, the sixth graders will design an independent project based on something they have always wanted to learn. After creating an elevator pitch and project plan, they use various resources and modes of data collection to get to work. They practice using different sources to gather information (book, website, interview). Through writing, photos and videos, students practice keeping track of their own progress. They keep a digital journal with video and photos to keep track of their progress/process. The final project includes creating a video tutorial to teach others what they have learned. They will practice research, communication, problem-solving and critical-thinking skills while exploring how technology and digital information can be utilized in meaningful ways. They present their final project and tutorial video in the STEAM Expo in the Spring.

### **Digital Fluency, Grade 7**

A digitally fluent person can decide when to use specific digital technologies to achieve their desired outcome. In seventh grade, students use the design thinking process to solve a problem they have identified. First, they must develop an understanding of the problem and define it. Then through brainstorming, research, data collection, designing prototypes, testing and reiterating, they will design a solution.

### **Research and Writing**

*Mandatory full-credit major course for 9th grade*

This course builds the skills necessary for writing a long-form research paper. Topics include research questions, keyword research, organization, thesis writing, bibliographic style, and the revision process from rough draft to final paper. Students will be guided through the entire process from initial topic to final draft in the first trimester, and given a bit more independence in each subsequent term. In all, every student will complete three full-length research papers by the end of the year, and they will be prepared with all the skills and practice needed to tackle any future research papers.

### **Sophomore Seminar**

The Purpose of the Sophomore Seminar is to provide all Sophomores with the necessary skills and support to put forth their best academic work while at SRDS. Additionally, the program seeks to provide the tools for those

Sophomores who are developmentally ready to engage with the college process. Using resources like YouScience and Coursera, and through frequent written reflection, students can better understand how best they learn and what they might be passionate about. Through intentional instruction of introductory Cognitive Learning Theory, and deliberate practice of thinking about their own thinking, students will better understand themselves as learners, and develop a greater sense of self-advocacy.

### **College Counseling Workshop (CCW)**

CCW is designed for juniors and seniors in order to help facilitate the many steps of the college process. Students meet once per week during a designated open period to meet with the college counselor and work on interviewing skills, essay writing, and the college applications.