salem SA academy
CHARTER SCHOOL

Program of Studies

REACH for College!

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Mission

Salem Academy Charter School is a public school enrolling 300 students in grades six through twelve. The school's mission is to educate the City of Salem's diverse student population. Through a unique integration of college-preparatory classes with service to the community, the school graduates **informed, articulate,** and **proactive** individuals of strong character.

Learning Goals

Salem Academy's learning goals are the primary output in the school's mission statement and they are articulated in the school's cross curricular standards (below). When students graduate, they should not only be informed (know information and have skills), but also be articulate (able to talk, think about, and present what they know), and be proactive (able to take a position and act on what they have learned). Salem Academy Charter School's learning standards and benchmarks are designed to support students in achieving these learning goals through each course that they complete.

Informed

1. Students will be able to read a wide range of texts from various subject areas with accuracy, fluency, comprehension, and stamina.

2. Students will know the basic terms, symbols, concepts, and principles of mathematics, humanities, languages, and science.

3. Students will understand and be able to use appropriate learning strategies, tools, technologies, and equipment.

Articulate

1. Students will be able to write clearly and effectively across disciplines and genres.

2. Students will be able to discuss what they are learning by asking and responding to questions.

3. Students will be able to present to a variety of audiences, with the aid of various supportive media, and for different purposes.

Proactive

1. Students will be able to apply academic knowledge and skills in their daily lives.

2. Students will be able to pose questions or hypothesis and design and carry out research models in order to answer questions or solve problems.

3. Students will be able to evaluate information in order to form their own positions on issues.

Assessment and Grading

At Salem Academy, students are assessed on their academic achievement. This assessment or "grading" is not done in a traditional manner. Instead of assigning grades from "A" to "F" in a course, Salem Academy assesses students (on a scale of 1 to 4) based on their academic progress toward specific objectives within each course.

How does it work? In each course at Salem Academy, there are clear academic objectives, called benchmarks, which outline what students need to know and be able to do when they finish the course. We recognize that all of our students have different experiences, styles and interests and that they do not all learn at the same pace. Therefore, teachers assess students when they begin a unit or course to determine how much students already know; they then continue to monitor student progress throughout the course. Teachers find out specifically what students have learned and on what they need to spend more time. With this information, they can support students in the efforts to gain proficiency in the benchmarks for a given course.

Students receive scores every time they are assessed on a given benchmark. Their final calculated score (or grade) demonstrates their level of proficiency at the end of a trimester or course. This score is not necessarily an average as in traditional grading systems, but rather an indication of the student's level. Marks are calculated based on a complex algorithm which assumes that students learn over time and therefore weights assessments later in the year higher unless a student does not show progress. If there are fewer than three assessments for any given benchmark, the scores are averaged. In order to "pass" a course, students must demonstrate that they are "knowledgeable" (scoring a 3 or a 4) in at least 70 percent of the benchmarks. The general rubric for scoring is shown below.

#	Performance Level	Description
	N/A	No judgment can be made about students' ability to understand topic or perform skill.
1	**Performing as a Novice**	Limited understanding of content; limited ability to perform skills.
2	**Progressing**	Beginning understanding of content; beginning ability to perform skills.
3	**Knowledgeable**	Basic understanding of content; demonstration of skill.
4	**Accomplished**	Nuanced understanding of content; high fluency in performing skills.

Why this approach? We believe that traditional grading approaches do not provide sufficiently accurate or detailed information to parents/guardians, students, teachers and school administrators. Researchers have found that grades often assess not only academic achievement, but effort, behavior, attendance and other factors as well. Further, teachers weigh assignments differently, some factoring tests more heavily and others homework assignments so that a student with the exact same scores in a class may be given different final grades by two different

teachers. Perhaps the most critical reason for not using a traditional grading system is that it does not identify specific areas in which students are struggling and in which they are proficient. A "C" in science does not show whether a student is having difficulty with the concepts behind photosynthesis, if s/he has not yet mastered the process of designing an experiment, or if s/he has learned both well but has failed to participate in class. Detailed and accurate information about student performance allows Salem Academy teachers and staff to tailor instruction to the needs of its students.

What about effort and behavior? At Salem Academy, we put a tremendous emphasis on the importance of student effort and behavior. We believe that it is essential for students to be assessed in these areas and to receive feedback in the form of praise, recognition, or consequences for their behavior. However, we do not want to confuse these factors with academic achievement. We believe that it is unfair to students to "pass" them from one course to another because they have demonstrated high effort and responsibility if they have not yet learned the content and skills that they need. Likewise, it is unreasonable to insist that a student repeat academic material that s/he has already learned, simply because s/he has not yet learned to be responsible or cooperative. Our assessment system does not de-emphasize the importance of social behavior and development; rather, feedback on the social aspects of students' experiences at Salem Academy is provided through the teaching and reinforcement of our REACH norms.

Promotion Standards and Graduation Requirements

Salem Academy is committed to ensuring that all students graduate as informed, articulate and proactive individuals with strong character, prepared to succeed in college. Therefore, we insist that all students meet strict promotion standards and graduation requirements. Salem Academy Charter School's graduation requirements were determined after carefully examining the skills and courses that students need to enter and succeed in college.

Promotion Standards for Grades Six through Eight

All students in grades six through eight complete a rigorous course of study designed to prepare them for the challenges of upper grades' courses and then for college. All students are required to take courses in the five Academic Core areas.

According to Salem Academy policy, students must be proficient in at least 70 percent of the benchmarks for a particular course (i.e. obtain a grade of at least 70 percent) in order to pass. If students do not reach proficiency in one class, they may be eligible to advance a grade level upon the successful completion of summer work. Students also need to earn proficiency in service learning every year in order to advance to the next grade. If students do not meet proficiency in more than one academic course, they are retained in their current grade.

As a general guideline, if a student does not reach proficiency (70 percent) in two courses, but scores at or above 60 percent in those courses, s/he may enroll in summer school courses and demonstrate proficiency in order to move to the next grade. Summer tutoring and classes are completed at the expense of the family. Salem Academy may be able to assist in identifying a tutor or summer course, but the school is not responsible for arranging these services.

Service learning is an integral part of studies at Salem Academy Charter School. Students must pass their service-learning courses in order to advance to the next grade. If students do not pass their service learning courses they may be retained or may be obligated to log service hours over the course of the summer.

Students must pass Choice Blocks. Students must take two Physical Education classes and two Fine and Performing Arts classes each year to pass from one grade to the next. Students must also take and pass health classes.

Promotion Standards and Graduation Requirements for Grades Nine through Twelve

<u>Promotion Standards</u>

Students in grades nine through twelve have similar promotion standards to those students in grades six through eight. However, promotion is based primarily on the number of credits and the distribution of credits that they earn. Therefore, if a student earns proficiency in four Academic Core courses, but will not meet graduation requirements if promoted, s/he will be retained. If a student only earns proficiency in three Academic Core courses, but is still projected to meet graduation requirements, s/he may advance to the next grade. It is important

that students keep in mind not only the number, but also the distribution of credits which they need to advance and to graduate.

If a student scores at or above a 60 percent in one or more of his/her courses, s/he may be eligible to take a summer course or receive tutoring over the summer to demonstrate proficiency in the course material. Summer tutoring and classes are completed at the expense of the family. Salem Academy may be able to assist in identifying a tutor or school, and in providing benchmark reports and books for tutoring, but the school is not responsible for arranging these services. Please see appendix for more information on summer school.

Graduation Recommendations

Salem Academy encourages all students to challenge themselves every year by taking the most rigorous classes available to them and by following their interests within and outside of the classroom. In order to best prepare for their post-secondary experiences, we recommend that all students take and earn credits in all five Academic Core subjects every year.

Graduation Requirements

Salem Academy requires that all students earn at least **60 credits** in addition to **6 credits** of service learning (for a total of **66 credits**) between grades 9 and 12 in order to graduate. One full-year equivalent course (meeting 5 days a week throughout the year) yields three credits. Current Choice Block classes earn .75 credits. Students have the potential to earn a total of 72 credits in four years if they earn credit for 6 full-year equivalent courses each year. Students must also earn an additional 6 credits (1.5 per year) in service-learning for a total of 78 possible credits in four years.

Credits in a full-year course	3
Credits in a Choice/Extensions	.75
Possible Credits (without service)	72
Required Credits (without service)	60
Required Service credits	6

Salem Academy Charter School requires that all students earn credits across Academic Core subjects in order to adequately prepare for college. The school dictates the credit distribution of a total of 59 credits (48 Academic Core, 3 physical education, 1.5 health, 2.25 fine and performing arts, and 6 service-learning) out of students' required 66 credits which they need to graduate. Seven of the 66 required credits may be elected by students. Distribution requirements are detailed below and a chart is included in the appendix.

English – Salem Academy requires all students to earn 12 credits in English between grades 9 and 12 (e.g. take and pass four full-year equivalent classes).

Foreign Language - Salem Academy requires all students to earn 9 credits in foreign language between grades 9 and 12 (e.g. take and pass three full-year equivalent classes). See Exceptions section.

History and Social Sciences - Salem Academy requires all students to earn 9 credits in history and social science courses between grades 9 and 12 (e.g. take and pass three full-year equivalent classes). Students must take United States history.

Mathematics - Salem Academy requires all students to earn 9 credits in mathematics between grades 9 and 12 (e.g. take and pass three full-year equivalent classes).

Science - Salem Academy requires all students to earn 9 credits in science courses between grades 9 and 12 (e.g. take and pass three full-year equivalent classes). One course must be a life science and one course must be a physical science.

Physical Education and Health – Salem Academy requires all students to earn 3 credits in physical education, .75 credits per year between grades 9 and 12. Students must take physical education every year. Students also need to earn 1.5 credits in health.

Fine and Performing Arts – Salem Academy requires all students to earn 2.25 credits in fine arts courses between grades 9 and 12.

Service Learning – Salem Academy requires all students to earn 6 credits in service learning between grades 9 and 12 including their Final Form Service Thesis (1.5 credits each year). These credits are earned outside of the regular schedule, but typically within the school day.

MCAS

All Salem Academy students are required to take all mandated MCAS assessments and must earn passing scores as specified by the MA Department of Elementary and Secondary Education.

Enrollment Requirement

All students at Salem Academy Charter School are required to be enrolled on a full time basis. Students must enroll in six full-year equivalent courses each school year. In grade 12, students may choose to enroll in five full-year equivalent courses if they have met all of their graduation requirements to date. Students may be given permission to enroll in fewer than six courses if they have a schedule conflict or for other extenuating circumstances.

Exceptions to Graduation Requirements

Salem Academy Charter School has the responsibility to provide a challenging program that adequately addresses the particular strengths and weaknesses of the student. At times it is necessary to design alternative programs and/or make some modification to graduation requirements. Please see below.

Foreign Language - In certain circumstances, students may be excused from the foreign language requirement or the requirement may be modified (e.g. English Language Learners, students with disabilities). In these cases, students are required to earn at least 9 credits in alternative courses (e.g., English Learning Center, Special Education Learning Center).

Grades Six through Twelve Course Offerings

This program is not meant to be exhaustive, but rather to indicate the courses that are regularly offered by Salem Academy Charter School in the five Academic Core subjects. Courses may be offered in the future which do not appear in the course offerings listing. Listings of courses in the areas of Physical Education and Health, Fine and Performing Arts as well as Technical and Creative Arts are distributed separately.

The chart below contains a general listing of courses by grade. This chart is a helpful overview, but is not meant to indicate the only path that students can or do follow. All students are placed into math and Spanish courses based on their skill level. They advance accordingly, with some students beginning their language sequence earlier than others. Students who do not take Spanish class are enrolled in a Learning Center.

General Course Offerings Chart					
Grade	**Science**	**History and Social Sciences**	**Language/ Spanish**	**Mathematics**	**English Language Arts**
6	Earth Science	World Geography	Learning Center OR Intro Spanish	Math 6	Grade 6 ELA
7	Life Science	Early Civilizations	Spanish 1A OR Learning Center	Math 7	Grade 7 ELA
8	Physical Science	World History I	Spanish 1B or Learning Center	Math 8	Grade 8 ELA
9	Biology (CP/H)	World History II (CP/H)	Spanish I or Spanish II	Math I (CP/H)	Grade 9 English (CP/H)
10	Chemistry (CP/H)	U.S. History I (CP/AP)	Spanish II or Spanish III	Math II (CP/H)	Grade 10 English (CP/H)
11	Physics (CP/H)	U.S. History II (CP/AP)	Spanish III or Spanish IV	Math III (CP/H)	AP English Language AP English Literature Grade 11/12 English (CP/H)
12	Environmental Science/AP Biology	AP Government, Civics and Economics	Spanish IV, Advanced Spanish or AP Spanish Language	Business Math AP Calculus AP Statistics	

English Language Arts

Grade Six English Language Arts
This English Language Arts class focuses on developing skills students need to read, write, and communicate with accuracy and fluency. This course will have a particular emphasis on genre study; students will read and analyze a wide variety of literature, including short stories, novels, poetry, fiction, nonfiction, and plays. Writing skills will be taught with a focus on the process approach and using writing to communicate with clarity and for a variety of audiences and purposes. The theme, important to both literature and applicable to the students' lives, is change.

Grade Seven English Language Arts
This English Language Arts class builds on the skills introduced in grade six with an additional emphasis on preparation for the thematic studies that lie ahead in high school English Language Arts. Students begin developing critical thinking skills by discussing more advanced elements including mood, tone and theme, and figurative language and symbolism.

The curricula for grades eight through twelve will trace the parallel evolution of mankind and literature through the ages as it mirrors human maturation. Each course will have essential questions based on that theme which will be relevant both to the study of literature and to the life of the developing adolescent.

Grade Eight English Language Arts – "Origins"
This course explores the origins and purpose of literature and the human need for expression by comparing world mythology, including Greek and Roman works and epics such as *The Odyssey*, with epics, myths and folktales from a variety of cultures. This focus provides the underpinnings for all other literature through high interest texts. One Essential Question: Why did vastly different civilizations create the same elements in their stories? High achieving students may sit for the National Mythology exam in March.

Grades Nine and Tenm– "Adolescent Rebellion I" (College Preparatory or Honors)
This course is designed to provide a foundation for the increased literacy and comprehension expectations in students' high school years. Students will explore themes related to the adolescent journey into adulthood through texts such as *Speak* and *To Kill a Mockingbird.* In addition, the writing component will focus on introducing critical analysis essays and is designed to align student writing with high school expectations.

Grades Eleven and Twelve - "Adolescent Rebellion II" (College Preparatory or Honors)
After examining the rebellious child, American Literature, in Adolescent Rebellion I, students will turn their attention to the parent, British Literature. In this class students will study the Titans of British literature in order to understand their immense influence on the Western World. The class will focus on connections between literary periods and understanding authors and their works as products of their age. This course will have a particular emphasis on the genres of poetry and drama and seek to develop more sophisticated levels of critical thinking.

Grades Eleven and Twelve - AP English Literature and Composition
This rigorous, **college level** course takes the same area of focus, Adolescent Rebellion-Part II, but with more emphasis in critical analysis of literature. Through the close reading of selected texts, students will deepen their understanding of the use of language to provide meaning, as well as thoroughly analyzing each work's structure, style, and themes. Writing is an integral part of the course and will focus on the critical analysis of literature and will include expository, analytical, and argumentative essays. This

course prepares students for the Advanced Placement examination given in May by the College Board. All students who enroll in the course are expected to take the AP exam.

Grades Eleven and Twelve - AP English Language and Composition
This rigorous, **college level** course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. The overarching objective of this class is to teach students to write effectively and confidently in their college courses across the curriculum and in their professional and personal lives. The course emphasizes the expository, analytical, and argumentative writing that forms the basis of academic and professional communication. Students will learn to read primary and secondary sources carefully, to synthesize materials from these texts in their own compositions, and to cite sources using MLA conventions. This course prepares students for the Advanced Placement examination given in May by the College Board. All students who enroll in the course are expected to take the AP exam. Students who enroll in this course are expected to take the AP exam in May.

History/Social Studies

World Geography
Sixth graders systematically study the world outside of the United States and North America by addressing standards that emphasize political and physical geography and the five themes of geography: location, place, human interaction with the environment, movement, and region. Students learn geography around the world continent by continent, and study critical issues in the world today.

Early Civilizations
River Valley Civilizations and the Major Civilizations of the Americas In Early Civilizations, students will learn about and compare the characteristics of civilization, and learn about many of the earliest human societies. Students will evaluate the first river valley civilizations of Mesopotamia, India. Students will watch these civilizations grow and evolve over time, and see how China and India go on to power the world's economic and intellectual development in the Ancient and Medieval worlds. Students will also examine the major native civilizations of the Americas: the Aztec, the Inca, and the Maya, and examine their encounters with European civilizations.

World History I: Europe in the Ancient and Medieval Periods
World History I will focus on the origins of European Civilization, beginning in the Classical world of Greece and Rome. Students will examine the origins of Democratic and Republican government, and see how the Roman civilization spread across Europe, bringing with it language, technology and culture. Students will discover how dramatically European civilization changed after the collapse of the Roman Empire, and see how people in the Middle Ages tried to bring order to the post-Roman chaos. Students will learn about the religion of Islam, and see how it spread and built an empire in the early Medieval period. Later, students will see the transition from the Middle Ages into the Early Modern age with the beginning of the Renaissance, and will see the birth of new types of Christianity during the Protestant Reformation.

World History II: The Modern World, Exploration, Imperialism and Revolutions.
In World History II, students will examine the transition from the Medieval world into the Modern world. The major topics of this course will include Exploration, Colonization, Imperialism, and major global revolutions. Students will begin the course with a review of the Renaissance and the spread of Humanism and Protestantism. They will then examine the reasons Europeans sent explorers to different parts of the globe, and investigate how this led to colonization of these areas, and what this meant for the native peoples they encountered. Later, they will see how these colonies lead to the creation of global empires, and how new ideas of nationalism lead to competition and conflict between European nations. Students will examine how the climate of Europe dramatically changes during and after the French Revolution. Finally, students will examine how Nationalism and the ideals of the French Revolution spread across the world and come into conflict with Imperialism, leading to anti-colonial movements and communist revolutions. Students will be expected to demonstrate their understanding both through in-class assessments as well as writing assignments supported by independent research.

US History I: The Revolution through Reconstruction 1763 – 1877
In US History I, ninth grade students examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students study the basic framework of American democracy and the basic concepts of America government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War, and Reconstruction.

AP United States History I
The Advanced Placement program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials of United States history. This course will focus specifically on issues in United States history from the colonial period to post-Civil War Reconstruction. The purpose of this course is to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those made by introductory college survey courses. Our use of primary sources and articles will help students understand how historians go about constructing and defending analyses. Students will learn to develop their own interpretations of history and express and support them in discussion and writing.

US History II: Reconstruction through the Present
In U.S. History II, tenth grade students analyze the causes and consequences of the Industrial Revolution and America's growing role in international relations. Students study the goals and accomplishments of the Progressive movement and the New Deal. Students also learn about the various factors that led to America's entry into World War I and World War II, as well as the consequences of World War II for American life. Finally, students study the causes and course of the Cold War, important economic and political changes during the Cold War, such as the Civil Rights movement, and recent events and trends that have shaped modern-day America.

AP United States History II
In this course, students will analyze the causes and consequences of the Industrial Revolution and America's growing role in international relations, culminating with the rise of the United States to a position of global power and influence following the two world wars. This course is a rigorous, college-level course that will build on previous knowledge and skills learned in AP US History I. Students will be assessed frequently on the skills and knowledge necessary for success on the AP exam. Any students who enroll in this course are expected to complete the AP US History Exam in May.

World History II: 1500 – Present (College Preparatory or Honors)
In World History II, students study the rise of the nation state in Europe and the economic and political roots of the modern world, including the Industrial Revolution, 19th century political reform in Western Europe, and European imperialism in Africa, Asia, and South America. They also examine the causes and consequences of the great military and economic events of the past century, including World War I, the Great Depression, World War II, the Cold War, the Russian and Chinese revolutions, the rise of nationalism, and the continuing persistence of political, ethnic, and religious conflict in many parts of the world.

AP United States Government and Politics
This course will prepare students for the Advanced Placement exam in United States Government and Politics. It will provide students with an analytical perspective on government and politics in the United States. The course includes both the study of general concepts used to interpret US government and politics and the analysis of specific examples. Students will study various institutions, groups, beliefs, and ideas that constitute US government and politics. This course is a rigorous, college-level course. Any students who enroll in this course are expected to complete the AP History Exam in May.

US Government and Economics
In this course, students will study the purposes, principles, and practices of American government as established by the United States Constitution. Students are expected to understand their rights and responsibilities as citizens and how to exercise these rights and responsibilities in local, state, and national government. They will also examine the allocation of scarce resources and the economic reasoning used by government agencies and by people as consumers, producers, savers, investors, workers, and voters.

Language

Learning Center
Learning Centers are offered to support students at all grade levels in skills such as English language development, mathematics, reading and homework/organization support.

Introduction to Spanish
Introductory Spanish is a course aimed at establishing students' readiness for future systematic Spanish studies. Students will learn various basic skills related to geography and culture of Spanish speaking countries, vocabulary and expressions related to the body, food, clothing, family and more in a fun, interactive environment. The course is project-based and it places emphasis on vocabulary and communication. Students move on to Spanish 1A in the next year with the necessary tools to succeed in Salem Academy's challenging Spanish curriculum.

Spanish 1A
Introductory Spanish is a course designed to promote Spanish language acquisition at a basic level, which will enable the beginner to communicate in the target language, as well as to acquire a foundation for further development of proficiency in later courses. The course emphasizes communication and most class time is devoted to providing comprehensive input. Students are encouraged to use the language as they gain vocabulary and confidence within a safe, supportive environment. Students will learn vocabulary and grammar related to greetings and introductions, classroom objects, academic classes and schedules, telling time, community activities and locations, weather and seasons, family, cultures and traditions from Spain, Mexico and Florida. In addition, students will begin to develop reading and writing skills in Spanish.

Spanish 1B
The course Spanish 1B is intended to introduce students to the fundamentals of Spanish. Emphasis will be placed on pronunciation, basic grammatical structures, vocabulary, culture, and basic conversations. The course will also offer an elementary approach to listening, reading comprehension and writing. Students will be offered a variety of tools and techniques to assist them in gaining the necessary basic skills and confidence needed to acquire a foreign language. Supplementary materials will be used in addition to the Ven Conmigo 1 book. This course is intended for students with little background in Spanish (one year of middle school-level Spanish or the equivalent). Students will learn to use vocabulary and grammar related to talking on the phone, food, directions, clothing, celebrations, feelings, moods, and physical conditions, vacation and future plans, cultures and traditions from Ecuador, Texas, and Puerto Rico.

Spanish II
Spanish II builds on the language foundation formed in Spanish 1A/1B or Spanish I and broadens students' exposure to the language under the five main standards of the Massachusetts Foreign Language Curriculum Framework (communication, cultures, comparisons, connections, communities). With an intensive focus on speaking, writing, reading and listening in Spanish, students will explore the topics of leisure, vacation time and community. Students will refine their knowledge of present tense conjugations and will begin to express themselves in the past tense (preterite). Students will express themselves in written and verbal Spanish via essays varying in length and complexity, dialogues, skill exercises, presentations, conversations and performances. Spanish language moves now from the more concrete functions of their first years of Spanish study, to more abstract and sophisticated communication functions, advanced study of Spanish grammar and more complex and challenging reading, writing and conversation. Students will learn to use complex descriptive language, describe problems and discuss solutions, converse about current events, ask for and give directions, and discuss feelings and opinions. Communication will be primarily in Spanish.

Spanish III
Spanish III is an advanced Spanish course for students who have completed Spanish II, who are native Spanish speakers, or who have otherwise demonstrated proficiency in skills covered in Spanish I and II. In this course, students will extend their knowledge of the language considerably. They will be able to communicate verbally with adequate fluency, they will be able to read books at an appropriate level in Spanish, and to write essays, stories and work-related documents in Spanish. Most communication in the classroom will take place in Spanish. The first part of the course will give students the opportunity to revisit some Spanish II content in an extended manner. The second part of the course will begin preparing students to enroll in AP Spanish in the future. Among the topics covered in the course are: Summer travels, health and fitness, past and future, at the table, legends, art and music, friendship, communication, problems, solutions and consequences, jobs and careers. While Spanish I and II have a decisive emphasis on communication, Spanish 3 emphasizes communication, grammar, reading and writing equally, in order to prepare students for advanced study at college level and for the work place.

Spanish IV
In Spanish IV, the focus continues to be on speaking, writing, reading and listening, but there is particular emphasis on reading and writing through the study of Spanish and Latin American short stories and other texts. History and cultural topics in art, literature and music are important elements in the course. Students will be prepared to take the SAT II in Spanish by the end of this course. Students will continue to perfect their reading and writing skills, acquire the ability to make oral presentations in fluent Spanish, analyze works of literature and increase their language fluency. Class is conducted entirely in Spanish and students are expected to express personal viewpoints around topics of discussion. Grammar objectives learned in previous years will be reinforced through intensive use in the context of reading, writing and conversation. This course begins the preparation for the Spanish Advanced Placement examination.

Spanish V
Spanish V is a course designed to build on the higher reading, writing, speaking and listening skills that students began to acquire during Spanish 4, as well as to develop students' ability to transfer higher order thinking skills to the target language. Students will fine tune their grammar control as well as their use of appropriate vocabulary in context. The course's curriculum is designed to provide spiraling of grammar concepts learned during previous years while maximizing opportunities for students to be exposed to authentic reading and audio sources intended for native Spanish Speakers. Students who take advanced Spanish may choose to continue on to AP Spanish the following year, giving themselves two years of preparation before taking the AP Spanish Language examination.

AP Spanish
AP Spanish is designed for students who wish to pursue a comprehensive program which emphasizes using the language as a tool for reading, discussing, and thinking critically about a variety of literary and journalistic works. Students are expected to write their reactions to literature as well as their own original poems and stories. Oral presentations dealing with a number of socio-cultural topics are an integral part of the course. This course expects a high level of independent learning and accuracy from the student. This rigorous, college level course prepares students for the Advanced Placement examination given in May by the College Board. All students who enroll in the course are expected to take the AP exam.

Mathematics

Salem Academy's math courses are organized into topical units and lessons that align with the Massachusetts Curriculum Framework 2011 (Common Core State Standards for Mathematics). Within this framework, students receive thorough preparation in mathematics for college and for careers. Students receive regular formal and informal assessments which are used to monitor student progress and inform instruction. Teachers present mathematical concepts and methods, guide students through practice, and provide opportunities for students to work independently or in small groups. Real-world applications are integrated into all courses to ensure that skills are placed in a useful and practical context. Students complete daily homework, giving them an opportunity to practice skills and concepts. Lower School courses are organized primarily by grade level. Students have the opportunity to challenge themselves through honors courses which provide additional depth and a faster rate of learning in grades seven and eight. Upper School courses are integrated in design, reflecting the approach typically seen internationally, consisting of a sequence of three courses, each of which includes Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability standards. Upper School honors courses provide instruction in a greater number of concepts and skills at a greater depth and a faster rate than college preparatory courses. In the fourth year of mathematics, students have the option to take an Advanced Placement course or to focus on mathematical skill preparation. Teachers in every course, emphasize the learning of eight standards for mathematical practice shown below which are essential in the development of problem-solving skills.

Standards for Mathematical Practice
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for an express regularity in repeated reasoning.

Math 6

In sixth grade mathematics, instructional time focuses on four critical areas: (1) connecting ratio and rate to whole number multiplication and division, and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. The foundational skills in this course are essential to students for future math courses and therefore all students in grade six must complete this course.

Math 7

In seventh grade, instructional time focuses on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

Honors Math 7
In seventh grade, instructional time focuses on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

In Honors Math 7, students will learn at a faster pace and will focus in more depth on mathematical skills. Students will be recommended for this course based on a combination of internal and external student achievement as well as the student's demonstrated commitment to hard work.

Math 8
In eighth grade, instructional time focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

Honors Math 8
In eighth grade, instructional time focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. In Honors Math 8, students will learn at a faster pace and will focus in more depth on mathematical skills. Students will be recommended for this course based on a combination of internal and external student achievement as well as the student's demonstrated commitment to hard work.

Math I
In Math I, students will learn the topics previously studied in Algebra 1 and Geometry with particular emphasis placed on solving situations using math in the real world. The focus of the course is on linear and exponential relationships and equations. In Math I students will: (1) extend understanding of numerical manipulation to algebraic manipulation; (2) synthesize understanding of function; (3) deepen and extend understanding of linear relationships; (4) apply linear models to data that exhibit a linear trend; (5) establish criteria for congruence based on rigid motions; and (6) apply the Pythagorean Theorem to the coordinate plane.

Honors Math I
In Honors Math I, students will learn at a faster pace and will focus in more depth on mathematical skills from the Math I course as well as an introduction to trigonometry. Students will be recommended for this course based on a combination of internal and external student achievement as well as the student's demonstrated commitment to hard work. This course provides a first step for grade nine students to reach an Advanced Placement course in grade 12.

Math II
The topics in Math II cover skills previously taught in Algebra II and Geometry. The focus of the course is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Math I. Instructional time will be devoted to five critical areas: (1) extend the laws of exponents to rational exponents; (2) compare key characteristics of quadratic functions with those of linear and exponential functions; (3) create and solve equations and

inequalities involving linear, exponential, and quadratic expressions; (4) extend work with probability; and (5) establish criteria for similarity of triangles based on dilations and proportional reasoning.

H Math II
In Honors Math II, students will learn at a faster pace and will focus in more depth on mathematical skills from the Math II course. Students will be recommended for this course based on a combination of internal and external student achievement as well as the student's demonstrated commitment to hard work.

Math III
In Math III, students integrate and apply the skills that they have learned in Math I and II or in Algebra, Geometry and Algebra II. Instructional time will focus on four critical areas: (1) apply methods from probability and statistics to draw inferences and conclusions from data; (2) expand understanding of functions to include polynomial, rational, and radical functions; (3) expand right triangle trigonometry to include general triangles.

H Math III
Honors Math III will include all mathematics concepts through Pre-Calculus necessary for students to enter AP Calculus. Students will be recommended for this course based on a combination of internal and external student achievement as well as the student's demonstrated commitment to hard work.

AP Calculus
Students should have a strong background in math before entering this course and are required to take Algebra I/II, Geometry and Pre-Calculus or H Math I/II/III in order to enroll in the course. Calculus AB is the equivalent of a college-level course in calculus. Topics include derivatives of algebraic functions and applications of differential calculus, integration and applications of the definite integral, methods of integration, and slope fields. Students seeking to enter science and engineering fields are strongly encouraged to take AP Calculus. Graphing calculators are required and used throughout this course. All students are expected to take the AP exam in May.

AP Statistics
Students should have a strong background in all previous math and English language arts courses before entering AP Statistics. They are required to take Algebra I/II or Math I/II, and honors English in order to enroll in the course. AP Statistics is the equivalent of a one-semester introductory college course in statistics. Topics include data analysis, randomized sampling methods and experimental design, probability, and statistical inference. The course is encouraged for a variety of students due to its applicability in various professional fields ranging from all science and engineering disciplines to any form of research such as marketing and advertising. Graphing calculators are required and used throughout this course. All students are expected to take the AP exam in May.

Business Math
The study of business math focuses on the core academic skills useful in the professional work environment and throughout life. Students will develop the computational skills needed to solve business and consumer-related problems with emphasis on estimating answers, using valuable shortcuts, speed, and accuracy. Specific topics will include check and bank records, calculating pay, taxes, credit cards, budgeting, saving, investing, insurance, probability and statistics, as well as SAT preparation. The use of the calculator and Excel are integrated throughout the course.

Science

Earth Science
Sixth grade students will study the planet we call home, Earth. They will become scientists and together break down this large planet into smaller pieces that are easier to understand. Throughout the school year they will perform numerous hands-on projects and investigations. Major areas of study include: Earth's History, Planetary Science, and Weather.

Life Science
Seventh grade students will be introduced to the living world. Throughout the year students will discover that all living things, despite their complexity, share the same basic characteristics. They will understand that all organisms are composed of cells and that all living organisms carry out all the life processes. They will recognize that both living and nonliving things interact within ecosystems, and that they depend on each other for survival. They will examine biological evolution and adaptations of organisms, and they will develop an understanding of the relationship between traits and heredity. Students will also study the form and function of a most remarkable machine, their own bodies.

Intro to Physical Science
Eighth grade students will have an exciting overview of the principles behind both chemistry and physics. During the first half of the year, students will develop scientific investigation skills. They will learn about the properties of matter such as: density, melting and boiling point, law of conservation of mass, solubility, chromatography, elements and the periodic table, and chemical reactions. Over the second half of the year, students will learn about heat, energy, and motion by using interactive software and a variety of building and research projects.

Biology (College Preparatory)
College Preparatory Biology encompasses the study of the structure of organisms and how they function. Major topics of this course include the biochemistry, cell biology, heredity, evolution, human anatomy, and ecology. The course includes a range of perspectives about the living world: it delves into both molecular biology and the interactions of organisms in their environment. This course is designed with a strong focus on interactive lectures, note-taking, laboratory exercises, and classroom discussions with applications to everyday life experiences.

Biology (Honors)
Honors Biology has a structure and content similar to that of CP Biology. However, it is a more rigorous course that goes into greater depth of detail, requires more abstract thinking, and incorporates more independent reading assignments. This course prepares students for taking college-level biology and to develop laboratory skills for conducting lab-based and field-based research. Honors Biology is recommended for students who plan to take the SAT Subject Test in Biology.

Chemistry (College Preparatory)
The objective of this college preparatory chemistry class is to prepare students for taking college-level chemistry and to analyze real life issues involving chemistry. By the end of the course students should be able to understand what matter is, what happens during a chemical reaction, what affects the rate of chemical reactions, and how chemistry impacts the student's life on a daily basis.

Chemistry (Honors)
The objective of this honors level chemistry class is to prepare students interested in science careers for taking college-level chemistry and to develop laboratory skills for conducting lab-based research. Students will begin to analyze real life issues involving chemistry. By the end of the course students should be able to demonstrate an understanding of: the properties of matter, atomic structure and nuclear chemistry, the periodicity of the periodic table, chemical bonding, chemical reactions and stoichiometry, states of matter, kinetic molecular theory, thermochemistry, solutions, rates of reaction, and equilibrium, acids and bases and oxidation-reduction reactions. In addition, students will demonstrate scientific inquiry skills and mathematical skills appropriate for a high school inquiry-based science class.

Physics (College Preparatory)
This course is designed to present topics in mechanics, electricity, magnetism, and waves. It will be taught using a concept-based approach while simultaneously integrating the student's mathematical background in order to develop a meaningful physics foundation. The program will be supported by an interactive laboratory environment where students will gain hands-on experience with the concepts being studied.

Physics (Honors)
Honors physics is a fast-paced math-based physics course. Student must have successfully completed math through Math II and be enrolled in either Math III or Calculus. Students are expected to be active and independent learners who read successfully for information from a high-level high school text. Honors Physics differs from CP Physics in that students are expected to take increased responsibility for their own learning and be capable of understanding material quickly and with minimal help. Problem assignments and tests, while not requiring calculus, are more challenging and require the ability to analyze and synthesize complex information.

Environmental Science (College Preparatory)
The goal of the Environmental Science course is to teach students about the interrelationships of the natural world and give them the skills to think critically about environmental problems and the tough decisions surrounding them. Through analysis of current literature and independent research, students will become aware of global environmental issues and identify various points of view surrounding these issues. Students will use regular laboratory and field experiences to learn about local ecosystem dynamics.

AP Biology
The goal of the AP Environmental Science course is to provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Topics of study include: interdependence of Earth's systems; fundamental principles of ecology; human population dynamics; renewable and nonrenewable resources; environmental quality and degradation; environment and society; trade-offs and decision making. This is a rigorous college level course. Students are expected to take the AP exam.

Appendix

Credit Distribution Requirements for Graduation Chart

Subject	Credits	Required	Recommended
English	12	• 4 full-year equivalent courses	
History and Social Sciences	9	• 3 full-year equivalent courses • U.S. history course	• 4 full-year equivalent courses
Language	9	• 3 full-year equivalent courses	• 4 full-year equivalent courses
Mathematics	9	• 3 full-year equivalent courses	• 4 full-year equivalent courses
Science	9	• 3 full-year equivalent courses • 1 physical science course • 1 life science course	• 4 full-year equivalent courses
Physical Education/Health	4	• 2 credits of P.E., one course each year (.75 credits) • 1 credit of health	
Fine and Performing Arts	2.25	• 2.25 credits of Fine and Performing Arts	
Service Learning	6	• 1.5 credits per year • Final Form Service Thesis	
MCAS		• 10 grade Math • 10 grade ELA • H.S. Science/Tech/Eng	

Summer School

Salem Academy offers summer school courses at the school in July based on the school's academic benchmarks. However, students also have the option of enrolling in summer school courses through other public school districts. If students enroll in summer school courses outside of Salem Academy, they **must earn a B in the course OR pass a Salem Academy final** in order to get credit at Salem Academy. Please contact our main office if you are interested in exploring summer tutoring possibilities.