



CHARLOTTE
LATIN
SCHOOL

UPPER SCHOOL
Course Catalogue

2011-2012

TABLE OF CONTENTS

GRADUATION REQUIREMENTS	2
PLANNING CONSIDERATIONS	2
A COURSE LOAD THAT IS RIGHT FOR YOU	3
IMPORTANT NOTE: "Do I have the time for all of this?"	
GPA INFORMATION	
GENERAL INFORMATION	3-4
COURSE OFFERINGS AT A GLANCE	4-7
ENGLISH	7-10
MATHEMATICS	11-13
HISTORY	14-18
SCIENCE	18-21
COMPUTER SCIENCE	23-24
MODERN/CLASSICAL LANGUAGES	24-28
PERFORMING ARTS: DRAMA	28
PERFORMING ARTS: MUSIC	29-30
VISUAL ARTS	30-32
PHYSICAL EDUCATION	32-33
OTHER COURSES	33-34
GRADE LEVEL PLANNING CHARTS	36-39
GRADUATION REQUIREMENT WORKSHEET	40

2011-2012 Course Catalogue

Charlotte Latin School
9502 Providence Road
Charlotte, North Carolina 28277
704.846.1100 www.charlottelatin.org

Charlotte Latin School is an independent, non-sectarian, college preparatory school serving 1383 students in transitional kindergarten through grade twelve. The school is accredited by the Southern Association of Colleges and Schools and is recognized by the North Carolina Department of Public Instruction as a legal private school. Charlotte Latin School is a member of the National, Southern, and North Carolina Associations of Independent Schools and the National Association of Colleges and Schools.

Located on 122 wooded acres in Charlotte, North Carolina, Charlotte Latin School creates an environment of learning and living that is mentally stimulating and physically renewing. Since its founding in 1970, Charlotte Latin has established a reputation as the community's academic leader. Each of our divisions (lower, middle, and upper) has been named as a Blue Ribbon School of Excellence. Charlotte Latin School was the youngest school in the nation to be awarded a chapter in the Cum Laude Society.

Students at Charlotte Latin explore the world around them by participating in a hands-on community service program that is encouraged but not required. Community service is a cornerstone of the Charlotte Latin experience. The program reaches into the surrounding community, providing the opportunity for service to others and leadership training. Students design, manage, and staff an after-school program for an inner-city public elementary school through Seigle Freedom School; work with pre-school children at a day care facility run by the Thompson Child and Family Focus Center; provide tutoring and mentoring for children in Charlotte Emergency Housing; assist in programs for children with disabilities through the Allegro Foundation, Misty Meadows, and the Autism Foundation of the Carolinas; and tutor both elementary and middle public school students whose primary language is Spanish. Charlotte Latin has a close relationship with both Habitat for Humanity in Charlotte as well as with Habitat International. Charlotte Latin students contributed more than 14,000 hours to the greater Charlotte community during the past school year. Those who accumulate 150 hours of service during their Upper School careers are inducted into the Charlotte Latin School Service Society toward the end of the senior year.

Our curriculum is enhanced by a Study Abroad Program that allows students to live and study with families in other countries. An International Exchange Program sponsoring students from one of Latin's eight sister schools in Europe, Asia, Africa, and South America to study at Charlotte Latin and live with host families rounds out this unique experience for our students and community.

Attracting students throughout the metropolitan area, Charlotte Latin is a school where families of diverse backgrounds, races, religions and nationalities share common values, practice mutual respect, and reach for academic excellence. The foundation of the Charlotte Latin culture is built on an honor code that embraces the motto "**Honor Above All**". The honor code, initiated and supported by students, seeks to promote personal responsibility and a community of mutual trust. The Honor Code, which is designed to equip students with sound ethical decision-making skills, is an essential part of character education at Charlotte Latin.

GRADUATION REQUIREMENTS: A minimum of twenty-one credits is required for graduation.

ENGLISH - 4 credits

MATH - 4 credits

MODERN/CLASSICAL LANGUAGES - 3 credits in the same language (must be through the third level course; 4 units encouraged)

SCIENCE - 3 credits to include Conceptual Physics, Chemistry, and Biology

HISTORY - 4 credits including World History I, World History II, and US History

PHYSICAL EDUCATION - 1 credit (no more than 2 units may be counted toward the 21 graduation credits)

ADDITIONAL ELECTIVES - 2 credits

It is the student's responsibility to ensure that each year's schedule incorporates the number of courses by department appropriate to meet all graduation requirements.

PLANNING CONSIDERATIONS

- Each student must take **six courses each semester**, four of which must be in academic subjects (English, math, science, history, modern/classical languages).
- Only courses taken in Upper School count toward graduation requirements.
- No more than two credits of physical education may count toward the twenty-one credits required for graduation.
- Courses designed as "Honors" (H) are accelerated and require stronger background and more intensive preparation than other courses. They will be labeled as "Honors" courses on the transcript.
- Courses labeled "AP" are Advanced Placement courses designed to prepare students for the College Board Advanced Placement examinations. They are the equivalent of college level courses, and taking the Advanced Placement examination is required for completion of the course.
- In order to enroll in an Honors or AP course, a student **must** be recommended by the department. A student who petitions the Head of the Upper School for admission to such a course without departmental recommendation will remain in the course for at least one semester.
- A student may receive credit only once per academic course. If a student repeats an academic course for which credit has been granted, the grade will be reflected on the transcript and calculated in the GPA, but the credit will not be counted as one of the twenty-one credits required for graduation.
- A year-end grade below C- in any academic course may necessitate summer school or another form of remediation, including repetition of the entire course.
- It is strongly encouraged that each student have internet access at home as many classes have on-line texts, web-based assignments, and other on-line technology.
- Some electives are offered on condition of a minimum viable enrollment.

A COURSE LOAD THAT IS RIGHT FOR YOU

IMPORTANT NOTE: “Do I have the time for all of this?”

In planning your educational program, you should challenge yourself by taking a strong and varied course load with a mixture of required and elective courses. We are confident that you will want to gain as much from your school experience as your abilities permit. It is true that colleges are impressed with students who extend themselves academically by taking extra courses and advanced courses for which they are qualified. It is not wise, however, to overextend yourself. Before making your final course selection, you should consider your entire school involvement, including athletics, service commitments, class offices, and other extracurricular activities. Please seek advice from your teachers, advisor, and counselors. Be sure that you have examined your curricular progression through your senior year before making your final selection for this year's course load.

If you choose to take courses labeled “Honors” or “Advanced Placement,” we strongly suggest that you take no more than two or three of these courses in a single year. The School cannot entertain requests for schedule changes from students who ignore our placement recommendations and will not consider doing so until after first semester. In all such cases, the grade earned will remain on the student's transcript. The teacher recommendations are reliable indicators for any individual course under consideration. Budget, staffing, and scheduling are carefully planned to accommodate what you tell us you want, the first time you tell us. All of us know the waste that occurs when “our eyes are bigger than our stomachs”. The same is true when you approach the scheduling smorgasbord. Choose wisely, and consider the cumulative impact of all your commitments at school. Avail yourself of all appropriate advisory and counseling expertise when considering this big picture.

GPA INFORMATION

Charlotte Latin School computes GPAs (grade point averages) on a 4.0 scale for all Upper School students. These GPAs are calculated from grades received in courses taken at CLS during grades nine through twelve, in addition to any Honors courses taken during the Middle School years. Both Honors and AP courses use a 5.0 scale in determining the grade point average.

Grades for courses in the academic areas of computer science, English, modern/classical languages, history, mathematics, and science are used to determine a student's academic GPA. Grades for Leadership, Psychology, Speech and Debate, Sports Medicine, and Music Theory are included in the academic GPA calculation. Grades from other elective courses, such as Newspaper, P.E., Performing Arts, Visual Arts, and Yearbook, are not used to compute the academic GPA. The SAT review course and Digital Electronics are on a Pass/Fail basis.

GENERAL INFORMATION

A registration form for your grade level may be found on MyLatin. The form must be printed out; completed; signed by you, your parents, and your advisor; and returned to your advisor no later than **Friday, APRIL 15**.

We require that you carry six courses each semester, four of which must be academic

(English, mathematics, history, science, modern/classical languages, or a course from the academic GPA list above). If you include a one-semester course as one of your choices, be sure to select one for each semester. Under rare circumstances, a student may make written request to the Head of the Upper School for a five-course load. However, we strongly discourage a five-course load, because the student will have two free periods plus lunch per day. Our knowledge of human nature and experience with students indicate that more than one “free” period usually decreases efficiency.

Please remember in planning a curricular progression that your ideal schedule has to intersect reality. Certainly one factor in that intersection has to do with planning one’s time management, as discussed elsewhere in this publication. Your selection also has to be informed by individualized guidance, including teacher recommendations. Your advisor will certainly offer opinions and perspective, but in the case of anything which is non-standard (i.e. other than one each of English, Math, Science, History, Foreign Language, elective, free period, and lunch) one will do well to be sure that the departure from the norm has been reviewed by one of the following: Head of Upper School, Dean of Students, or your CLS college counselor. PLEASE BE ADVISED ALSO THAT THE SCHOOL DOES NOT GUARANTEE THE AVAILABILITY OF ELECTIVES OR OF DOUBLINGS (ALSO CONSIDERED ELECTIVES IN SUCH A SCENARIO) WITHIN ANY DEPARTMENT, AND THAT THE ACCOMMODATION OF AN UNUSUAL SCHEDULE REQUEST IN ONE YEAR DOES NOT GUARANTEE THAT SUCH A REQUEST CAN BE MET IN SUBSEQUENT YEARS. It is impossible for the School to satisfy each student with an ideal or perfect schedule, however much we will try to accommodate every reasonable request.

COURSE OFFERINGS AT A GLANCE

Y=Year S=Semester Q=Quarter H=Honors AP=Advanced Placement

English

English 9: World Literature (Y)

English 10: Composition (Y)

English 11: American Literature (Y)

English 11: American Literature (H) (Y)

English 12: Electives (S)

British Literature in the Twentieth Century

The British Romantic Tradition

Early British Literature: Heroic Archetypes

Shakespeare and Film

English 12 (AP): English Literature and Composition (Y)

Mathematics

Algebra I (Y)

Algebra IB (Y)

Second half of two-year course

Geometry (Y)

Geometry (H) (Y)

Algebra II (Y)

Algebra II/Trigonometry (H) (Y)

Advanced Functions & Trigonometry (Y)

Precalculus (Y)

Precalculus (H) (Y)
Introduction to Calculus (Y)
Discrete Math (H) (Y)
Statistics (AP) (Y)
Calculus (AP) (AB or BC) (Y)

History

World History I (Y)
Required of Grade 9 students and new sophomores without history credit
World History II (Y)
Required of Grade 10 students
United States History (Y)
Required of Grade 11 students not enrolled in US History AP
United States History (AP) (Y)
For Grade 11 students
European History (AP) (Y)
Elective for Grade 12 students
United States Government (AP) (Y)
Elective for Grade 12 students
Economics (S)
Elective for Grade 12 students
Art History (S)
Elective for Grades 11-12
Human Rights (S)
Elective for Grades 11-12
U.S. and the World in the 21st Century (S)
Elective for Grades 11-12
World Religions (S)
Elective for Grades 11-12

Science

Conceptual Physics (Y)
For Grade 9 and new students
Advanced Conceptual Physics (Y)
For Grade 9 and new students by recommendation
Chemistry (Y)
Chemistry (H) (Y)
Chemistry II (AP) (Y) Extended lab periods
Biology (Y)
Biology (H) (Y)
Biology (AP) (Y) Extended lab periods
Physics (H) (Y)
Physics C (Mechanics) (AP) (Y) Extended lab periods
Anatomy and Physiology (S)
Elective for Grade 12 students
Engineering (Y)
Elective for Grade 12 students
Environmental Science (Y)
Field Geology I (Y) Special off-campus offering for Grades 10-12
Field Geology II (Y) Special off-campus offering for Grades 11-12

Computer Science

Computer Applications (S)
Media Development with Technology (S)
Web Site Design (S)
Computer Programming (S)
Graphical Computer Projects (S)
Computer Science (AP) (Y)
Computer Topics (Y)

Modern/Classical Languages

French I,II,III,IV(H),V(H) (Y)
French Language (AP) (Y)
Greek I,II,III,IV(H) (Y)
Latin I,II,III,IV(H),V(AP) (Y)
Spanish I,II,III,IV,IV(H),V(H),V(AP) (Y)

Performing Arts: Drama

Theater Lab (Y) Elective for Grades 9-12
Technical Theater I (S) Elective for Grades 9-12
Technical Theater II (S) Elective for Grades 9-12

Performing Arts: Music

Concert Choir (Y) Elective for Grades 9-12
Concert Band (Y) Elective for Grades 9-12
String Ensemble (Y) Elective for Grades 9-12
Music Theory I (Y) Elective for Grades 10-12
Music Theory AP (Y)

Visual Arts

Art Studio I (Y)
Art Studio II (Y) Prerequisite: Art Studio I
Art Studio III (Y) Prerequisite: Art Studio II
Art Studio IV (Y) Prerequisite: Art Studio III
Visual Arts – Painting (Q1,2,3,4)
Visual Arts – Drawing (Q1,2,3,4)
Visual Arts – Mixed Media (Q1,2,3,4)
Visual Arts – Portfolio (Q1,2,3,4)

Physical Education

Physical Education/Health (Y)
Required of all ninth graders, can be taken for a full credit
daily or every-other-day for a half credit
Introduction to Sports Medicine (S)
Fall elective for Grades 10-12; enrollment limited
Fitness Challenge (S)
Semester elective for Grades 10-12

Other Courses

Speech and Debate (Y)

Elective for Grades 9–12; enrollment limited

Psychology (S)

Fall elective for Grade 12; enrollment limited

Leadership for the 21st Century (S)

Spring elective for Grade 12; enrollment limited

Newspaper (*Hawk Eye*) (Y)

Enrollment limited by selection following application process

Yearbook (*Eyry*) (Y)

Enrollment limited by selection following application process

Digital Electronics (Q)

Pass/Fail course

SAT Review (S)

Fall elective for Grades 11-12

Pass/Fail course; enrollment limited

ENGLISH

The English Department strives to develop in each student strong reading, writing, and critical thinking skills and to provide an intellectual framework that encourages students to consider a wide range of ideas and human experiences. Literature courses introduce students to masterworks of the American, British, and world literary canons in the cultural contexts that make literature accessible, meaningful, and relevant. Composition skills support literary analysis at all levels, in conjunction with original, non-literary writing that considers themes and issues relevant to the literature or drawn from students' responses and personal experiences.

English 9: World Literature

This course introduces students to the concept of literature as an expression of cultural tradition and identity through exploration of ancient and contemporary works from the world canon. While reading literature from many continents over many ages, students will strengthen and expand their skills in reading comprehension, literary analysis, and expository, creative, and argumentative writing. Assigned readings will span the basic genres: mythology, novel, short story, poetry, and drama. In composition, students will work on the formal essay of literary analysis, practice in-class writing assignments, narrate a meaningful personal experience, and create short descriptive pieces. The curriculum also includes grammar practice and a weekly vocabulary program.

English 10: Composition

This course enhances students' skills in literary analysis and provides intensive practice in essays employing non-literary rhetorical modes. Students write for many purposes and toward many audiences, learning and practicing rhetorical approaches suited to each. Most of their compositions reflect students' original choices on individually selected topics. Vocabulary development and review of grammar and usage rules supplement the writing instruction. The bulk of the reading first semester consists of essays that provide models for the students' works. During second semester, students read a novel and a Shakespearean comedy and research sources for their position paper and persuasive speech.

English 11: American Literature

This survey course covers great authors and great works in the literary movements comprising the American canon from 1830-the present. The readings represent all major genres, including the novel, short story, poetry, drama, and essay. Building on rhetorical and composition skills practiced in tenth grade, the writing component expands students' expertise through the addition of extensive practice in research. Students hone their critical thinking and independent reading and analytical skills through multiple short research projects that culminate in a full-length research paper.

English 11 Honors: American Literature

[Open to juniors recommended by the English Department.]

This survey course in major authors and works of the American canon is intended for students who possess a genuine interest in a challenging and rigorous study of literature and composition. This honors course will provide intensive practice in critical reading, literary analysis, and research. The reading and writing components will be more demanding than in regular English 11, both in amount and in level of difficulty, and students will be expected to demonstrate enthusiasm and insight through active class participation.

English 12 AP: Literature and Composition

[Open to seniors recommended by the English Department.]

AP Literature and Composition focuses on in-depth literary analysis of both canonical and contemporary works of western culture. Students are required to demonstrate college-level mastery in both their class discussion and written work, preparing them for success on the AP examination in the spring. Drama, fiction, and poetry ranging from ancient Greece to Renaissance England to 20th century America comprise the reading list.

NOTE: As an Advanced Placement Course, English 12 AP requires discipline and maturity from its students. Because an AP class is equivalent to a semester of college English, the reading load in this course is much heavier than in other English classes, and the works studied are demanding. At this level, writing assignments assume strong analytical skills, sound mechanics, and competent style. Students should carefully consider their level of commitment to the course of study and their interest in English as a discipline before enrolling. In order to ensure a student's academic and personal success in the AP course while maintaining the integrity of a rigorous program, the English Department recommends students for this course based on the following three criteria:

- a strong and consistent record in English (A- or better);
- a strong and consistent overall academic record;
- teacher recommendation based on past excellence in writing and class discussions.

NOTE: English 11 Honors is not a requirement for English 12 AP.

English 12: Electives

The following electives are semester courses open only to seniors.

British Literature in the Twentieth Century

Defined primarily by two catastrophic world wars and the demise of the British colonial empire, English literature in the 20th century reflects the changes, doubts and uncertainties of the modern age. Beginning with the prose and poetry of the post-Victorian era, the course

The honor code, initiated and supported by students, seeks to promote personal responsibility and a community of mutual trust.



presents a body of literature that charts the social and psychological upheavals of the first half of the 20th century and registers the diversity offered by newly emancipated English-speaking colonies and the establishment of a commonwealth of nations. In moving from the modern era to the postmodern, the course will offer works of major authors from England and abroad, reflecting the best of the poetry, fiction and drama of the age.

The British Romantic Tradition

The Romantics are visionary explorers and idealistic rebels who guide us to perceive ourselves and the world anew. They remind us that there is more to this world than first meets the eye and enchant us with the notion that we share a mysterious unity with the natural and supernatural realm. The hurried, materialistic world is made of many voices, but the Romantic tradition is made of those who listen to the voice of intuition, celebrate individuality and autonomy, and stand in opposition to tyranny and oppression. As we survey the art, music, and literary genres of the tradition from the end of the 18th century to today, students analyze and adopt texts as models of inspiration for their own reflective works in various modes of literary and artistic composition.

Early British Literature: Heroic Archetypes

Selfless heroes and treacherous villains, demanding gods and vengeful monsters, enchanted castles and golden halls, fiery lakes and bloody battlefields, swords and claws, magic and miracles: history and myth meet in these landscapes and characters of Early British Literature. This chronological study of the first several centuries of British Literature follows the changing nature and role of the hero as he moves from the Anglo-Saxon times of the first English epic, through the Romantic knight of chivalric quests, up to the emotional and social complexities of Shakespearean protagonists of history and tragedy. As we examine the ancient stories that have shaped the language of our daily discourse, thought, and culture, we will also look at the ways these timeless works survive in later genres such as poetry, film, and comic books. Representing the best of us confronting the worst of times and situations, these archetypes of heroism both warn and inspire still today.

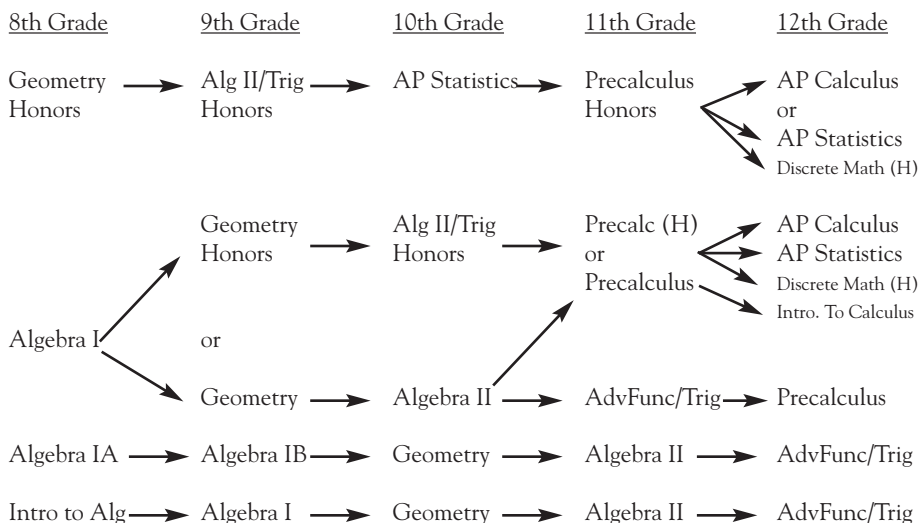
Shakespeare and Film

“Plays are meant to be heard and seen. They are not to sit on the page and be dissected.” This course will examine in depth several works of the Bard, focusing on language as literary art, the ethical dilemmas posed in the works, and the additional considerations implied in filmed depictions of the plays. Covering comedy, history, and tragedy, we will view the film work of Lawrence Olivier, Orson Welles, Franco Zeffereilli, Al Pacino, and Kenneth Branagh, among others.

MATHEMATICS

The goal of the Mathematics Department is to develop our students' mathematical understanding so that they may succeed in college and later on in their professions. The curriculum is based on a broad understanding of principles and applications in traditional math fields. A wide range of courses and electives is offered to meet the individual needs of students. Four years of Upper School mathematics are required for graduation.

Course Sequencing



There are several ways students can take more advanced mathematics courses:

- Students may take Algebra II and Geometry simultaneously, with teacher recommendation.
- Students can move, based upon a teacher recommendation, from a non-honors to an honors course.
- After completing Algebra II, some students will be recommended by their math teachers to move to Precalculus instead of following the more usual progression to Advanced Functions/Trigonometry. Approved summer work in Trigonometry may be required.

Parents are encouraged to discuss any issues or concerns regarding their child's math placement with the current math teacher or with the chair of the Upper School math department.

Algebra I

Algebra I is a review of pre-algebra skills and includes the study of various topics in algebra in the context of investigations and problem solving. The topics include linear equations and inequalities, solutions of systems of equations, graphing, data analysis, variation equations, and modeling real world problems.

Algebra IB

Algebra IB includes the second half of the traditional Algebra I course with additional time for review topics and investigations. The topics include linear equations and inequalities, manipulating algebraic expressions, factoring, solving quadratic equations, graphing, and problem solving.

Geometry

Geometry provides a thorough introduction to classical Euclidean geometry and emphasizes the deductive reasoning process. The course includes a study of lines, angles, triangles, circles, polygons, solid figures, and how they are related. It uses the concepts of coordinate geometry, proofs, congruence, similarity, area, volume, and transformations to analyze the different topics.

Geometry (Honors)

[Open to students recommended by the department.]

Honors Geometry covers the topics of geometry in greater depth and includes additional topics from logic, symbolic logic, and transformational geometry.

Algebra II

Algebra II is a continuation and extension of the skills and concepts developed in Algebra I. It includes a study of real and complex numbers, linear equations and inequalities, factoring and its applications, systems of equations, functions, graphing, rational and irrational expressions, quadratic equations, exponential and logarithmic functions, conic sections, elementary probability, sequences and series, and applications of the above to problem solving.

Algebra II/Trigonometry (Honors)

[Open to students recommended by the department.]

Algebra II/Trig includes Algebra II and an introduction to trigonometry. The additional topics are right-triangle trigonometry, solving non-right triangles, circular functions and their properties, graphing, and applications of the above to problem solving.

Advanced Functions and Trigonometry

This course is designed for students who have completed Algebra II. The course provides further development of advanced algebraic concepts and trigonometry. Topics include coordinate geometry, conic sections, equations and inequalities, functions, trigonometry, graphs, exponents and logarithms, vectors, complex numbers, sequences, series, polynomials, and probability.

Precalculus

This course is designed for students who have completed Advanced Functions and Trigonometry or Algebra II/Trig (Honors). It is an applications and calculator lab-based course. Topics include applications of trigonometry, advanced algebra, analytic geometry, exponential and logarithmic functions, vectors, matrices, linear transformations, systems of equations, and problem solving.

Precalculus (Honors)

[Open to students recommended by the department.]

Precalculus Honors, designed for students with very strong mathematical ability, is a thorough preparation for college level mathematics courses, including calculus. It focuses on

trigonometry, advanced algebra, and analytic geometry. It includes a study of number systems, algebraic and circular functions, trigonometry and its applications, sequences, series, limits, exponents, logarithms, vectors, matrices, linear transformations, systems of equations, and conic sections. It also includes the first two units of AP Calculus.

Introduction to Calculus

[Open to Seniors.]

This course is sequential to the Precalculus course that most students typically take as juniors. The course is designed to allow time for review of the more challenging Precalculus topics as well as an introductory study of topics from calculus. Those topics from calculus include functions, limits, techniques of differentiation and integration of functions, and applications of these techniques. Students in this course will not take the AP Calculus exam. Prerequisite: Precalculus.

Discrete Math (Honors)

[Open to Seniors recommended by the department.]

Discrete Math is a study of discontinuous functions and topics which are not part of the regular curriculum, such as: voting theory, fair division, apportionment, circuits, networks, scheduling, the four-color problem, cryptography, game theory, symbolic logic, spiral growth in art and nature (including gnomonic growth), Fibonacci numbers in nature, and the golden mean. This course is an honors course and is designed for the senior math student who has successfully completed precalculus or a higher level math course. It may be taken in conjunction with an AP math course.

Statistics (AP)

[Open to students recommended by the department.]

The purpose of the Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students examine five broad conceptual themes:

1. Exploring Data: Observing patterns and departures from patterns.
2. Planning a Study: Deciding what and how to measure.
3. Anticipating Patterns: Producing models using probability and simulation.
4. Describing Patterns.
5. Statistical Inference: Confirming models and making predictions.

Note: Students must take the AP exam which carries one-half unit of AP credit.

Calculus (AP-AB)

[Open to students recommended by the department.]

Calculus is equivalent to most first year college calculus courses and prepares the student for the AP Calculus-AB exam, which is required for any student taking this course. Topics include functions, limits, differentiation of several classes of functions, integration methods, application, analytic geometry, fundamental theorems of calculus, and various special topics.

Calculus (AP-BC)

[Open to students recommended by the department.]

This course contains all of the topics of AB Calculus and includes sequences, series, parametric equations, and vector analysis. The course prepares students for the required AP Calculus-BC exam.

HISTORY

The History Department seeks to give students a broad understanding of the sweeping changes marking the human experience. The study of history serves as “citizenship training” for students in a democratic society, linking the struggles, triumphs, and tragedies of the past with the issues of the present. The History Department offers a balanced curriculum containing lessons in political models, economic systems, social movements, and human values in a complex world. The curriculum emphasizes a broad survey of world history in grades nine and ten, while moving toward more specific examinations of United States, European, and global history in grades eleven and twelve.

The study of history develops and refines reading, writing, and thinking skills. Each history course emphasizes the following college preparatory tasks: critical thinking, reading for understanding, effective discussion, scholarly research, and writing with depth, precision, and clarity.

Graduation Requirements

1. All students must complete the World History curriculum.
2. All students must complete a year-length course in United States history.
3. Students are required to complete a minimum equivalent of four full years of history credit in the Charlotte Latin Upper School.

World History I

[Required of all ninth graders and new tenth graders who do not have a history credit.]

While Europe provided the basis for American democracy, the rapid globalization of the world's economy and its information resources necessitates a multi-national historical perspective. In World History I, ninth graders examine the following broad themes: political systems and their underlying philosophies, war as an agent of change, the rise of international relations and economic interdependence, and the importance of cultural and social developments. The course surveys events from the dawn of ancient civilizations to the revolutionary changes marking the world in the early nineteenth century.

World History I assists students in the development of college preparatory skills, including note taking, critical reading and writing, and research.

World History II

[Required.]

The World History II course is the completion of the World History cycle for freshmen and sophomores. The course focuses on the nineteenth and twentieth centuries.

The communication, technological, and transportation innovations of the last century have created an ever-shrinking world. As members of a world community, students must understand the history, culture, and faith traditions of their neighbors. The World History II course emphasizes the transformation from a pre-industrial society to “modernity” and change resulting from the interactions between world civilizations. The Industrial Revolution of the nineteenth century created a ripple effect that permeated the Americas, Africa, and Asia. The result has been an interaction between world societies, social revolutions, cultural developments, the emergence of nation-states, and international conflict.

Each history course emphasizes the following college preparatory tasks: critical thinking, reading for understanding, effective discussion, scholarly research, and writing with depth, precision, and clarity.



United States History

[This course or US History AP is required after completion of the World History curriculum.]

This course examines key issues in American political, social, and economic history. United States History emphasizes advanced college preparatory skills such as essay writing, research, critical thinking, and discussion. A major research paper project is required during the second semester. Topics covered during the first semester include: the American Revolution and the shaping of the Constitution, the Early Republic, the Sectional Conflict, the Civil War, and Reconstruction. Topics covered during the second semester include: Industrialization, Progressivism, the emergence of the U.S. as a world power, the World Wars and the Great Depression, the Cold War, postwar American society, and foreign relations in the post-Cold War world.

Advanced Placement History Course Requirements

AP History courses at Charlotte Latin School are open to juniors and seniors who have demonstrated exceptional interest and ability in history. A student intending to take an AP history course must receive a recommendation from a current history teacher, indicating that the student is prepared to take on college-level work.

United States History (AP)

[Open to students recommended by their World History II teachers.]

AP United States History is designed to develop students' analytical skills and factual knowledge of American History. The course provides preparation for intermediate and advanced college courses. In addition to reading various college-level historical interpretations, students examine a wealth of primary documents, maps, statistics, and pictorial evidence of America's past. Students learn to provide sophisticated written analysis of the central themes and relevant documents of United States history. Classroom activities include lecture/discussions, simulations, and research projects. All students enrolled in this course are required to take the Advanced Placement United States History Examination.

European History (AP)

[Open to seniors who are recommended by their eleventh grade history teachers.]

The Advanced Placement course in European History traces the basic narrative of events and movements in European history from 1300 to 2000. This involves a study of the unfolding events, including an analytical understanding of the "change over time" principles involved. This course focuses on four broad themes: the political evolution of nations and diplomacy, the intellectual and cultural developments as they influenced and reflected the changing European society, economic forces that shaped the maturation and progression of European nations, and the changing social structure and traditions of the European community. In keeping with the college preparatory philosophy of AP courses, students are responsible for their own learning and are expected to work both cooperatively and independently. To this end, student-led discussions, supported by lecture, are an integral and regular element of this class. Additionally, this course includes an intensive reading and writing component with particular emphasis on primary source analysis and historical interpretation. All students enrolled in this course are required to take the Advanced Placement European History Examination.

United States Government and Politics (AP)

[Open to seniors who are recommended by their eleventh grade history teachers.]

This course is equivalent to a college introductory course in American government and

politics. It is designed to give students a critical perspective on the United States political system. Students examine the historical background and fundamental principles of the United States Constitution. Other segments of the course include detailed studies of the three branches of government, political institutions and special interests, the role of political parties, public opinion, voter behavior, and civil rights issues. Students enrolled in the course are required to take the Advanced Placement United States Government and Politics Examination, which carries one-half unit of AP credit.

Semester Electives

The history semester electives are open to seniors not enrolled in an AP history course. Juniors in AP US History and seniors who are in Government or European AP may also register for history electives, schedules and class enrollments permitting. Priority is given to those not also enrolled in an AP course.

Economics: Economic Concepts and Personal Finance

[Open to seniors only.]

This course introduces the basic concepts of the American capitalist system. Economic concepts covered include: supply and demand theory, fiscal and monetary policy, the business cycle, and banking. The personal finance unit presents the fundamentals of money in our private lives. This unit contains discussions on personal budgets, investments, and the use of credit. The course uses a mixture of textbook readings, handouts, and current articles. The format is interactive, using simulations, worksheets, student presentations, and local field trips.

Art History

Art acts both as a mirror of reality as well as a medium of idealism. It often provides historians with glimpses into the social, political, economic and religious happenings of the time in which it was created. This survey course will provide students with the opportunity to analyze critically works of art within the context of historical evidence and interpretation. We will explore various art mediums and movements from around the globe including Greek sculpture, African masks, Japanese paintings, and Gothic architecture. Students will be expected to participate in class discussions as well as write reaction papers.

Human Rights

This semester course begins with an introductory survey of human rights concepts, including the historical foundations and nature of rights, the roots of inequality, stereotyping and racism. From this foundation, students participate in a debate on “universal” rights and then move into dialogue concerning core human rights documents, the role of states, the United Nations and non-governmental agencies in the human rights movement. Finally, this course exposes students to a variety of human rights issues, including genocide, eugenics, apartheid, the rights of women and children, and methods of combating human rights violations.

The United States and the World

Many scholars claim that the twentieth century ushered in more change than any previous time in world history. The tumultuous events of our time—war, terrorism, economic problems, the environment, and the effect of technology indicate that this century may rival the last in determining the fate of humanity. Against the backdrop of an unsettled Middle East, the war on terror, and changing international economic and political systems, this course examines the role of the United States in the world today. We begin, however, by examining the evolution of the United States as a global power throughout the twentieth

century, up to its emergence as the world's sole superpower in the 1990s. There is an old adage — “A society that does not know where it has been cannot know where it is going.” This will be our guidepost as we proceed this semester.

World Religions

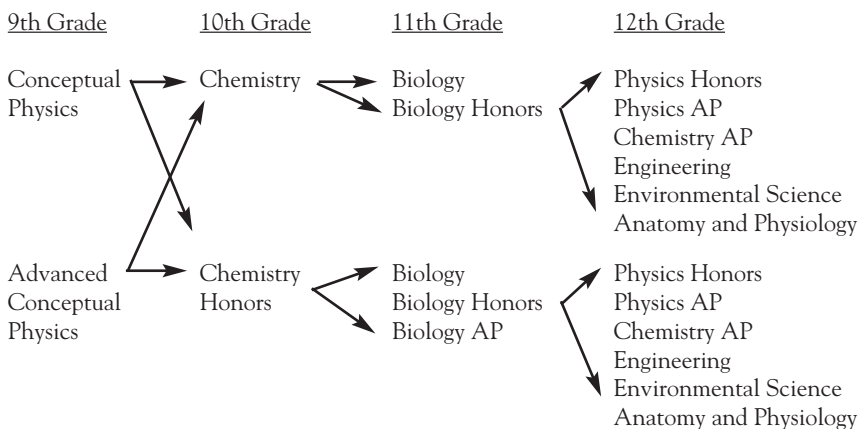
In this era of instant communication and an ever-shrinking world community, it is vital that students develop an understanding of both our Western tradition and of non-Western cultures. One of the primary foundations for all civilizations is religion. Understanding one's own faith and those practiced by others provides an understanding of the mind and soul of peoples and cultures. The study of world religions offers a glimpse into today's complex world, permitting students to view events and actions from multiple perspectives. This semester course examines the history, tenets, beliefs, and holy writings of the major world religions including Judaism, Christianity, Islam, Hinduism, and Buddhism.

SCIENCE

Charlotte Latin School's science program is designed to expose students to a range of scientific disciplines that will enable them to be responsible, informed citizens, and to allow them to pursue further studies in those areas of science in which they are most interested. In fulfilling the requirement of three years of science courses, students become active, confident questioners, problem-solvers, and experimenters. Three years of Upper School science are required for graduation; a fourth year of science is strongly encouraged.

All science courses include laboratory activities that are closely associated with classroom work. Classes meet five single periods each week, unless otherwise noted in the course description. Enrollment in an Honors or Advanced Placement course requires prior approval by the instructor, who will consult with a student's previous science and/or math teachers. Only highly motivated students with above average ability and aptitude in science and mathematics should consider these courses.

Science Course Sequencing



Conceptual Physics

[Offered to freshmen and new students.]

The basic principles and theories of physics are studied from a qualitative and quantitative perspective. The topics covered in the first semester include the atomic nature of matter (elements, atoms, molecules, etc.), states of matter (solid, liquid, gas, and plasma), heat (temperature, heat, and expansion), heat transfer, change of phase, and thermodynamics. The topics covered in the second semester include vibrations and waves, sound, light, color, reflection and refraction, lenses, diffraction and interference, electrostatics, electric fields and potential, electric current, electric circuits, and magnetism. Problem solving, critical thinking skills, and data analysis are stressed through homework, WebAssign (web-based homework via the Internet), computer simulations, and laboratory assignments. No prerequisites.

Advanced Conceptual Physics

[Offered to new students and freshmen who are recommended for Honors Geometry or higher.]

The basic principles and theories of physics are studied from a qualitative and quantitative perspective. Major topics covered include scientific methods, structure of matter, solids, liquids, gases, heat and temperature, wave motion, sound, optics, electricity and magnetism and modern physics. This course emphasizes a conceptual understanding with a strong emphasis on mathematics, critical thinking skills, and data analysis. Problem solving and communication skills are stressed through WebAssign (web-based homework via the Internet), informal presentations to the class, and laboratory assignments. Prerequisites: Algebra I and teacher recommendation.

Chemistry

[Offered to sophomores.]

This course presents the fundamental principles and concepts of chemistry: stoichiometry, nomenclature, atomic structure, elementary quantum theory, chemical bonding, molecular structure, kinetic theory, types of chemical reactions, properties of gases, liquids, solids and solutions, and chemical equilibrium. Laboratory work emphasizes quantitative measurement and develops investigative techniques and ability to interpret results. No prerequisites.

Chemistry Honors

[Offered to sophomores with teacher recommendation.]

This course covers the same topics as Chemistry, but at a deeper level and at a faster pace. Major emphases are thermodynamics and atomic structure.

Chemistry II (AP)

[Offered to seniors with teacher recommendation.]

This course is designed to be the equivalent of the general chemistry course taken during the first year of college. Students in this course should attain a depth of understanding of fundamentals in such areas as thermodynamics, equilibrium, kinematics, and electrochemistry. This course should contribute to the development of the ability to think clearly and to express ideas, orally and in writing, with clarity and logic. Students will develop competency in the normal laboratory skills of a college course, including use of instrumentation such as the pH meter and the spectrophotometer. Extended periods are included three times each week. Students must take the Advanced Placement Chemistry Exam for course credit. Prerequisite: Chemistry or Chemistry (H).

Biology

[Offered to juniors.]

This course develops a series of major themes, including the understanding of scientific inquiry, energy transformation, information flow, homeostasis, evolution, ecological interdependence, structure and function, heredity, the biological basis of behavior, and unity and diversity in living things. Prerequisite: Chemistry.

Biology Honors

[Offered to juniors with teacher recommendation.]

This course will cover the same topics as Biology, but at a deeper level and at a faster pace. Prerequisite: Chemistry.

Biology (AP)

[Offered to juniors with teacher recommendation.]

This course has the same objectives as a general biology course at the college level. It covers three broad areas: (1) molecules and cells, (2) individual organisms, and (3) populations. Extended periods are included three times each week. Students must take the Advanced Placement Examination for course credit. Prerequisite: Chemistry.

Physics Honors

[Offered to seniors with teacher recommendation.]

This survey course provides students with a basic knowledge of the physical world. The ideas of physics are presented from a conceptual standpoint, progressing to mathematical analysis and problem solving. Major topics covered include motion and its causes, conservation laws, mechanical and electromagnetic waves, electromagnetism and topics of modern physics. Videos augment lectures and demonstrations. Laptop computers serve as a laboratory tool (both Data Studio and LoggerPro are used). Corequisite: Precalculus.

AP Physics C (Mechanics)

[Offered to seniors with teacher recommendation.]

This course prepares students for the C level Advanced Placement Examination in Mechanics. Its aim is to develop the student's ability to interpret physical information, analyze phenomena and problems, use basic mathematical reasoning, and perform experiments. Major topics covered include motion in one and two dimensions, Newton's Laws, work, power, and energy, systems of particles and linear momentum, circular motion, rotation, oscillations, and gravitation. Videos augment lectures and demonstrations. Laptop computers serve as a laboratory tool (both Data Studio and LoggerPro are used). Extended periods are included three times each week. Students must take the Advanced Placement Examination for course credit. Corequisite: Calculus.

Anatomy and Physiology

[Offered to seniors.]

This semester course, offered in both fall and spring, enables students to develop an understanding of human anatomy and physiology by exploring the structure and function of vertebrate tissues and organ systems. The course consists of both lectures and labs. Students in anatomy labs use plastic anatomical models as well as clay and wire models which they create themselves, and dissect preserved organisms. Physiology labs include the use of Pasco probes that enable students both to observe and to quantify physiological processes occurring

in their own bodies. The course is appropriate for students with an interest in human medicine. Prerequisites: Chemistry and Biology.

Engineering

[Offered to seniors.]

This lab course provides an opportunity for students to apply what they have learned in math and science classes to solve exciting challenges and participate in unique competitions. For example, students will study aeronautical engineering by designing, constructing, and flying model airplanes in indoor air races or students may spend a Saturday soaring in a sailplane. Later during the year, students will study mechanical engineering by testing and modifying go-karts both in the lab and at the track. Students will have the opportunity to work with engineers and technical professionals to gain a better understanding of using math and science to solve real world problems. This class will meet daily as well as several Saturdays each semester. Students should expect homework and tests. Prerequisites: Completion of three science courses or permission of the instructor.

Environmental Science

[Offered to juniors and seniors.]

This is an introductory, field-based course that will allow students to explore the interrelatedness of human beings and the environment. Environmental problems and policies will be studied in the context of the following four topical areas: air quality, water quality, climate change, and population growth. This course has a lab component that will focus on developing observational skills and learning the natural history of the local ecosystem (including identifying trees by leaf and bark and identifying birds by sight and sound). In addition, the class will spend time studying the water quality of the stream and lake here on our campus, investigating the environmental footprint of the school, and conducting a survey of our 36-acre forest. These studies will involve the use of environmental monitoring equipment, water quality tests and real time GIS data collected by the USGS. Students can expect class time to consist of traditional lecture, discussion, lab exercises, and numerous outdoor activities. They will keep a field notebook, prepare numerous reports, and should expect traditional tests and quizzes. Prerequisite: Chemistry.

Field Geology I

[Offered to sophomores, juniors, and seniors.]

The course consists of six full-day Saturday trips to geospots within four hours of Charlotte, plus a weekend trip to the rocks and caves of Sewanee, TN. Course work will include projects and worksheets in the field, short tests, and a paper pertaining to the required spring break trip to the Hoover Dam/Grand Canyon area. This is a demanding course, of which the additional cost is approximately \$900.

Field Geology II

[Offered to juniors and seniors.]

Similar to Field Geology I, which is the prerequisite for Field Geology II. Additional cost of this course is approximately \$900.

Note: Taking Field Geology I or II is purely additive to an already full schedule and does not factor into the required six period course load required of all students.

The goal of the Science Department is to encourage students to become active, confident questioners, problem solvers, and experimenters.



COMPUTER SCIENCE

Computer Applications

This one-semester introductory computer elective for Grades 9-12 is available spring or fall semester. It is recommended as a first course for computer science and will include introductory computer vocabulary, history, and operations of personal computers. This course will cover the basics of computing with Windows XP as its operating system, design and layout techniques for desktop publishing, computer graphics, multimedia, and the Internet. Students will use Microsoft Office XP Professional Edition to learn word-processing, spreadsheet creation and manipulation, PowerPoint presentations, Access database management, Movie Maker CD advertising media, and creating digital short stories. The course will cover Internet topics including hardware and software requirements for PCs, using web browsers for searching, and learning HTML to create web pages.

Media Development with Technology

This one-semester, hands-on course, available fall or spring, will introduce uses of digital technology and graphics with cameras, CDs, DVDs and scanners. Students will work on projects to develop multimedia presentations and edit and design graphics with Adobe Photoshop for the web with an emphasis on development of critical thinking, communication, and technical skills. No prerequisites.

Web Site Design

In this one-semester course students will be challenged by creating XHTML compliant web pages using Adobe Creative Suite, which is a powerful multimedia suite consisting of Adobe Photoshop, Adobe Dreamweaver CS5, Adobe Fireworks CS5, Adobe Illustrator CS5, Adobe Flash CS5, Adobe Flash Catalyst CS5, Adobe Bridge CS5, Adobe Acrobat 9 Professional, and Adobe Contribute CS5. Students will learn elements and principles of design to create and manipulate graphic photos to be displayed in various page layouts using static and data-driven content. The data-driven content will be created using ASP, XML, and PHP. Students will also learn to design and create web sites using Joomla, the most popular Content Management System used by many web developers and Fortune 500 companies. Prerequisite: Computer Applications.

Computer Programming

This one-semester course, available in one or both semesters, dependent upon enrollment, will cover an introductory set of programming commands and introduce the use of proper Object Oriented Programming techniques. Problem solving skills will be developed using current technology. The emphasis will include basic concepts such as declaring data types, performing arithmetic operations, performing conditional checks, looping and executing specific code based on the result of a condition. The course will cover an introduction to designing and implementing Object Oriented classes. Students will spend a significant amount of time on the computer developing original programming solutions to problems involving data manipulations. This course is a prerequisite for Advanced Placement Computer Science. Prerequisite: Computer Applications.

Graphical Computer Projects

Learn to program a computer by creating 3-D animated movies and interactive graphics projects. This is an introductory course in which students will use Alice, a software programming package, for creating animation in small virtual worlds with 3-D models in Pixar

and Disney animation style. The emphasis of this course is hands-on labs, with some lecture/presentation. Although designed for the novice programmer, more advanced students would also benefit by developing their problem solving and logic skills which are required for the projects. This is a one-semester course. Prerequisite: Computer Applications.

Computer Science AP

This one-year course will follow the College Board curriculum published for the 2011-2012 exam, of which Java is the specified language. Students must be prepared to spend additional time outside of the regularly scheduled class time to work on programming assignments.

Prerequisite: Computer Programming.

Computer Topics

This one-year course is for students who have completed AP Computer Science. It will cover a variety of topics including programming with C++ and Java, networking, website programming, data structures and hardware. Prerequisite: Computer Science AP.

MODERN/CLASSICAL LANGUAGES

Students benefit from learning a second language in a number of practical and individual ways. In studying another language, whether modern or classical, a student develops knowledge of another culture, which provides a point of reference for expanding knowledge of one's own culture. The advantages of language study also include enhanced communication skills, increased competence in English, and a marketable skill in a variety of professions. To attain the goal of reasonable proficiency, it is essential to have a long sequence of language study. While the beginning levels of language provide a working vocabulary and basic knowledge of the language, intermediate and advanced levels refine and pursue in more depth the various skills necessary for communication. Advanced courses are based more on content, with a wide range of contemporary topics and the traditional study of literature.

Charlotte Latin students are required to complete successfully the study of a classical/foreign language through the third year level, with at least three years to be completed in the Upper School. To ensure the proficiency level demanded by most colleges and universities and to be viable candidates for competitive admissions, students are strongly advised to enroll in advanced courses and to remain in the discipline through twelfth grade. Recognizing the value of immersion in the culture and language being studied, the CLS Modern/Classical Language Department strongly recommends participation in our exchange programs.

In modern/classical language courses, a grade of C- or higher is required to advance to the next course level, with the exception of Spanish IV Honors and all AP courses. When grades are below these standards, a student must attend summer school in that subject, engage in an approved tutorial program, participate in a study abroad program, or repeat the course the following year. If the grade is "F", the summer course must be taken in a credit granting summer school program, or the course must be repeated the next year.

To be in Spanish IV Honors, a student must have at least a B+ in Spanish III, show outstanding motivation and participation, and have the recommendation of his or her current teacher.

To advance from Honors to AP in any language, a student is required to have at least a B- and the recommendation of the teacher.

FRENCH

French I

This course is designed to help the student build a solid foundation in French vocabulary and grammar in order to develop skills in reading, writing, listening, and speaking. Practical vocabulary topics include description, family/house, school, leisure activities, destinations, clothes, and food. Cultural topics include French youth, regions of France, and Francophone geography.

French II

The course continues development of all four skills (listening, speaking, reading, and writing) through increased emphasis on reading and writing. Vocabulary is developed thematically. Both grammar and vocabulary are embedded in the media resources accompanying the textbook. Students encounter the francophone world through a variety of topics.

French III

In this intermediate course, which continues to emphasize oral/aural skills, students read a variety of texts, including a major literary work, and write more extensively. Grammar structures include the study of all major tenses.

French IV (Honors)

Through thematic readings and a thorough review of grammar, much emphasis is given in this course to developing self-expression. Students are asked to verbalize their ideas and reactions to the readings by participating in class discussion and by writing compositions. Extensive vocabulary building and the application of advanced grammar structures, both in speaking and writing, are important components of this course. The course includes the study of a full-length literary work, films, short stories, and contemporary topics.

French V (Honors)

Fifth or sixth year students take this course, where the emphasis is on self-expression through French films, dialogues, vocabulary development, grammar review, and literature. Second semester focuses on contemporary culture and regions in France, including the study of food and cooking, both as a practical skill and as a reflection of culture.

French Language (AP)

In this advanced course for students with excellent ability, the emphasis is on a balanced approach to learning all four skills through literature, composition, conversation, and aural/oral work. Grammar, vocabulary, and stylistic problems are treated as they arise in selected readings, as well as through systematic review in the texts. Students gain much practice in conversation, aural comprehension, and literary discussion. The use of readings, recordings, and group work is frequent and varied. This class ultimately prepares the student for the AP Language exam, which is required to receive credit for the course. Minimum enrollment required.

GREEK

Greek I

This course introduces students to the Attic dialect of ancient Greek. Highly motivated students will be successful. Greek I is open to all students in their third year of modern/classical languages as a supplement, not as an alternative, to a second language. To be considered for this class, students must have the support of their primary language teacher. The permission of the instructor is required, as is minimum enrollment.

Greek II

The nature of the class is like that of Greek I. The year begins with substantial review of forms and vocabulary. The goal of the class is to prepare students for a basic course in Attic prose during the freshman year of college. The permission of the instructor is required, as is minimum enrollment.

Greek III

This course continues to refine students' knowledge of Greek grammar and syntax, and so is a continuation of Greek I and II. The focus, however, shifts to the reading and study of fifth century BC Attic writers, such as Xenophon, Plato, and Herodotus. This course requires great dedication of students. The permission of the instructor is required, as is minimum enrollment.

Greek IV (Honors)

Emphasis in this course is placed upon accurate translation, appreciation for style and figures of rhetoric, and command of grammar, syntax, and vocabulary. English to Greek composition is a regular feature of the course. The literature covered is at the teacher's discretion. The permission of the instructor is required, as is minimum enrollment.

LATIN

Latin I

This course introduces students to the basic Latin grammar and begins to build their ability to read Latin texts. Cultivation of basic vocabulary and techniques of derivation and transference between Latin and English are also of primary importance. The study of the Latin language provides a basis for discussing Greco-Roman art, history, culture, mythology, and their impact on Western culture. A highlight of this level for students is membership in the Junior Classical League and competition at the state tournament and Fall Forum.

Latin II

This course completes students' study of the basic topics of Latin grammar. Also emphasized are vocabulary, art, culture, and history. Again, the emphasis on analysis and transfer between Latin and English shapes the process. Complex sentence structures are introduced with increasing frequency.

Latin III

This course completes students' education in the grammar and vocabulary necessary to read Latin prose authors and offers opportunity to read original texts. There is a survey of Roman literature, including letters and orations of Cicero, Pliny's letters, Ovid's *Metamorphoses*, and Martial's *Epigrams*. The emphasis in this transitional year balances analysis of forms and vocabulary with focus on literary styles, figures of speech, and rhetorical devices.

Latin IV (Honors)

The cultural milieu of Augustan Rome is the backdrop for readings throughout the year. In the first semester, students encounter Rome's most delightful poet, Ovid, through selected readings from his *magnum opus*, "The Metamorphoses." Students learn about the rhetorical, metrical and cultural conventions of epic poetry, its vocabulary and literary tradition. In second semester, the AP portion of book one of Vergil's watershed epic, "The Aeneid," is read for pleasure and for understanding. Throughout the course, vocabulary, grammar, syntax, and reading speed are cultivated both in the poetic genre and in weekly prose compositions and readings at sight.

Latin V (AP)

This course prepares students for the Advanced Placement Latin: Vergil examination which is required for course credit. The course follows the outline of the College Entrance Examination Board, with students reading for pleasure and understanding the selections from books 2-12 found on the AP syllabus. Students examine the relevant issues in prosody and criticism, and are expected to translate accurately and write critically about the poems under study.

SPANISH

Spanish I

The study and application of the four basic language skills – listening, speaking, reading, and writing – along with the development of cultural awareness are the foundations of this course. The student learns grammar fundamentals, topical vocabulary, and accurate pronunciation within authentic situations while acquiring an appreciation of Spanish and Latin American cultures.

Spanish II

The student continues to develop the basic language skills. There is a more thorough study of vocabulary, grammar, and verb tenses. Much emphasis is placed on reading and writing, but there is also great importance placed on a student's development in speaking the language. Reinforcement is provided through multi-media activities.

Spanish III

This course is a study of topical vocabulary and idiomatic expressions. There is a review of all grammar previously studied. Selected readings, oral presentations, listening comprehension activities, and compositions further develop oral and written expression.

Spanish IV

This course provides an enhancement of the language skills learned in previous levels of Spanish. Throughout the process of refining the ability to communicate in Spanish, the student will continue to apply and expand grammar concepts and vocabulary. The reading of Hispanic literature and the study of conversational topics are additional tools for increased comprehension and communication. The course encourages greater appreciation of the many cultural strands of the Hispanic peoples.

Spanish IV (Honors)

This course is a comprehensive review and expansion of grammar and vocabulary as well as a refinement of the four language skills. Historical, cultural, and journalistic excerpts along with representative Hispanic short stories challenge students to comprehend oral and written expression at a higher level. Composition writing is emphasized.

Spanish V (Honors)

This course further refines the student's oral proficiency, listening comprehension, and writing skills. Advanced grammar and vocabulary are studied in the context of literature, with selections from many of the best-loved Spanish and Latin American writers.

Spanish V (AP)

This course is designed for the dedicated, well-motivated language student who can understand spoken and written Spanish at a very sophisticated level. The student must be able to speak and write Spanish accurately and proficiently. In preparation for the required AP Language Examination, this course offers new challenges in vocabulary acquisition, communicative proficiency, and reading comprehension. There is a demanding review of advanced grammatical structures. Selected readings from Spain and Latin America provide literary and cultural insights.

PERFORMING ARTS: DRAMA

Opportunities for involvement in drama and musical productions exist throughout the school year.

Theater Lab

[Open to students in Grades 9-12.]

Theater Lab introduces students to the art of acting, directing, and playwriting. Students will learn contemporary acting techniques, which focus on character building through monologues, scenes, and improvisational activities. Additionally, students will have the opportunity to explore the craft of directing and to build skills in characterization, casting, blocking, rehearsal, and performance. Classmates will collaborate with each other in script writing and build skills in dialogue and dramatic structures. Guest artists will be invited to work with students in workshops. All levels of experience are welcome. Advanced students will be held to higher expectations and be assigned additional projects. Theater Lab is a full-year course.

Technical Theater I

This semester elective is offered to students who are interested in the backstage workings of the theater. Other aspects of the entertainment industry will be included as well. Students will be introduced to theater and scenery composition, audio, lighting, props, and stage direction. They will learn definitions, systems, materials, and hardware. In order to gain practical experience, students are required to work backstage for one theatrical production each semester, which will entail working each night of production week as well as for the performances. Enrollment is limited.

Technical Theater II

This semester elective is a continuation of Technical Theater I. The student's technical knowledge will be further challenged as he/she learns to design scenery, lighting and audio, and implements these skills for one or more of the productions during the semester. In order to gain practical experience, students are required to work backstage for one theatrical production each semester, which will entail working each night of production week as well as for the performances. Enrollment is limited. Prerequisite: Technical Theater I.

PERFORMING ARTS: MUSIC

The Music Department provides students the opportunity to pursue a range of performance and non-performance musical activities. Involvement in performing ensembles is a full-year commitment, and attendance at concerts is required. Major trips for large ensembles may be planned as circumstances warrant; participation on such trips is typically required.

An extensive program of private study on musical instruments, piano, and voice is available at an additional charge to CLS students during and after school and in the evening. Experts in each area are brought to the School, and students can sign up for lessons at times mutually agreeable to student and teacher. These students are involved in recitals and other appropriate presentations throughout the year. No credit is granted.

Concert Choir

This full-year course is a performance-oriented class open to anyone who loves to sing. It is composed of the largest group, the *Concert Choir*, the *Men's and Women's Ensembles*, and the *Chamber Singers*, a group selected from *Concert Choir* participants by audition. These combined groups present two major concerts a year. The first of the two concerts, produced during December, often features a major or minor choral work, usually accompanied by an instrumental ensemble; the second is a spring concert with a variety of music. In addition, the smaller groups perform at a limited number of appropriate school and community functions. The class will explore a wide range of four- to eight-part literature in a variety of musical styles and historical periods. Proper vocal performance techniques will be taught. Music theory is also incorporated into the classroom, with a concentration in sight-reading and ear training, as well as notation and key signatures. Singing *a cappella*, especially in Chamber Singers, is also developed. The entire ensemble will participate in choral festivals and/or competitions. Students will have the option to audition for NC Honors Chorus and for individual solo opportunities for various concerts.

Concert Band

Concert Band is a full-year course open to all students with previous sequential study on a band instrument. The students should be able to perform at their grade level of ability. Students will be given the opportunity to develop their technical ability and musical understanding through the study and performance of music literature in a wide range of styles. Original band works and transcriptions of major works will be studied. The ensemble will perform two major concerts and, in addition, present appropriate school and community concerts. Individuals will be encouraged to participate in regional and All-State Honors ensembles.

String Ensemble

Participation in the String Ensemble is open to all students with previous sequential study on violin, viola, cello, or bass. The students should be able to perform at their grade level of ability. Music of all periods will be studied in this full-year course. Students will combine with advanced wind players to perform some orchestra literature. Students will perform in appropriate settings in the School, including two concerts each year, and are given the opportunity to play solos with the Ensemble when appropriate. Individuals will be encouraged to participate in regional and All-State Honors ensembles.

Music Theory I

[Open to students in grades 10-12.]

Music Theory I is for anyone who would like to know more about music. Extensive music reading ability is not required. Students will learn how to read, write and understand how music works. The course will be an asset to any student who plans to study music in college. Topics covered include: note reading, rhythmic values, sight singing; rhythmic, melodic, and harmonic dictation; key signatures, scales and modes, meter, chords and inversions, four part writing, non-chord tones, roman numeral analysis, jazz and figured bass notation, cadences, phrase structure and simple forms.

Music Theory AP

The course continues Music Theory I topics. This class is for serious music students to prepare for college theory and/or to expand their musical knowledge. The course deals with the technique of written composition, ear training, form, analysis, part-writing and the physics of sounds. Prerequisite: Music Theory I or at least two years of prior formal and sequential study in music as well as a thorough knowledge of the system of musical notation. The Advanced Placement exam in Music Theory is required. Minimum enrollment is required.

VISUAL ARTS

The Visual Arts Program helps students gain an understanding of fundamental art and design concepts through two- and three-dimensional problem solving. Students experiment with line, shape, color, balance, and composition. Although the primary focus is on studio art, art history is integrated into the program. **Art Studio I-IV are full-year courses.**

Art Studio I

This course teaches the basic principles and elements of art and how to use various media effectively. Instruction gives students experience in developing unique images through drawing, painting, mixed media, construction, design, printmaking, and sculpture. Each student works individually with the teacher. No prerequisite.

Art Studio II

An advanced course, Art II covers all the same areas of instruction as Art I. Creative use of imagery and media is encouraged with more emphasis on refining skills. Prerequisite: Studio Art I.

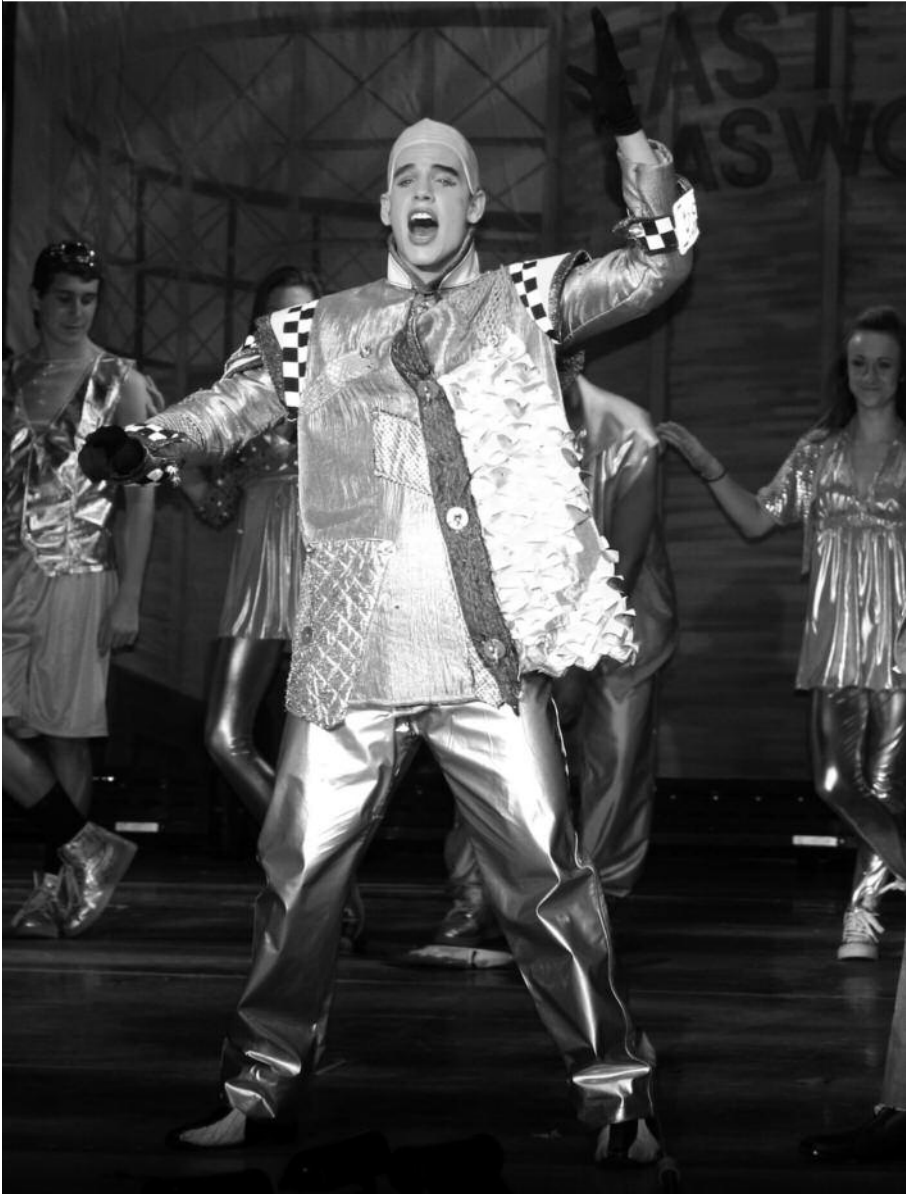
Art Studio III

This is an individualized art course that allows the student to begin specializing in areas of particular interest. Expectations are high, and students will develop portfolios of their work. Prerequisite: Studio Art II.

Art Studio IV

Art IV is a highly individualized art course in which self-motivation and independence are encouraged. Expectations for well-developed, finished artworks are very high. Uniqueness of image, student involvement in finding and developing subject matter, and work ethic are stressed. Presentation skills (matting and mounting) and portfolio development are also key elements of Art IV. Prerequisite: Studio Art III.

Opportunities for involvement in drama and musical productions exist in all three seasons of the year.



Visual Arts – Quarter Courses

The Visual Arts Department offers an afternoon studio course each marking period. On the successful completion of two marking period courses, a student will be able to earn one semester credit in the Visual Arts. Students may accrue credits for one or more years of studio art credit, and the courses may be taken over the period of several years. These courses are intended for the motivated, serious student artist who wishes to develop the breadth and scope of his or her body of work. The courses are not open to freshmen due to enrollment constraints. The courses will be team taught by the members of the Charlotte Latin Visual Arts Department, where instructors will work on their own artwork alongside the students, affording a unique glimpse into professional creative processes. The meeting time is ideal for visiting artists and a variety of enrichment opportunities for the student serious about the Visual Arts. Be sure that you will be able to attend each class, as making up work for an absence will be twice as hard as for a normal length class. Also note: taking afternoon courses does not entitle the student an additional free period during the day; they are purely additive to an already full schedule. Classes meet Tuesday and Thursday from 3:15 until 5:30. Class size is limited. Prerequisite: Art I or teacher recommendation for those new to the Visual Arts.

PHYSICAL EDUCATION

All students at Charlotte Latin are required to earn one year of Physical Education credit or its equivalent. This may be achieved by taking Physical Education every day in ninth grade for a full credit, or by taking it every other day for a half credit. If students choose to take P.E. every other day, they can receive the remaining half credit by taking another P.E. class in grades ten through twelve or they may have the remaining half credit waived by participating on a CLS athletic team during any one season in Upper School.

Physical Education/Health

[Required for students in Grade 9.]

The purpose of the ninth grade Physical Education class is to promote lifelong physical fitness by exposing students to a variety of cardiovascular and strength training activities, as well as to lifetime and team sports. Ninth grade classes differ from middle school classes in that they are co-educational and students have more opportunities to choose the activities in which they will participate. Students sign up for activities in three-week units, and activities that are popular are offered regularly to give every student a chance to be involved in the unit they prefer. Examples of activities are floor hockey, badminton, yoga, archery, dance, personal fitness and table tennis. In addition, there are required health education components in the course, including Prime For Life Under 21, an alcohol risk reduction program for adolescents.

Introduction to Sports Medicine

[Open to students in Grades 10-12.]

This fall semester course for which students in grades ten through twelve earn one-half P.E. credit is an introduction to the field of athletic injuries and athletic training. This course will allow individuals to learn in both the classroom and the laboratory setting (athletic competitions). Students will become familiar with topics such as acute and chronic injury management, taping protocols, rehabilitation of the injured athlete, steroids, and athletic nutrition. Each student will have a mandatory attendance requirement at laboratories to

complete the course successfully. After completion of the course, students will be able to form educated opinions about the field of athletic training as an educational/professional career pursuit. Enrollment is limited.

Fitness Challenge

[Open to students in Grades 10-12.]

This half-credit semester course is for those students who seek a challenging fitness program. This instructor-directed class will meet five times per week and will include cardiovascular, flexibility, speed and resistance training. Students will be asked to prepare goals for each semester and will be graded on their active participation, effort and improvement as judged by the instructor. This is an ideal course for those who are looking for a challenging off-season fitness regime or who hope to learn alternative and creative exercise options to help them achieve their fitness goals.

OTHER COURSES

Speech and Debate

[Open to students in Grades 9-12.]

Speech and Debate develops public speaking and debate skills. Students refine diction, articulation, enunciation, and projection skills while applying more advanced techniques of public speaking. The development of researching, argumentation, questioning, and rebuttal skills is stressed. Students exhibit personal responsibility through independent learning as they specialize in at least one area of focus (event) as well as team/collaborative responsibility as they hone skills of evaluation and analysis of performances through the participation in required, in-class assignments. Students are expected to participate in several local and state level Speech and Debate (Forensic) competitions per semester. This is a full-year course and the grade is calculated as part of the student's Academic GPA. Prerequisite: permission of the instructor.

Psychology

[Open to students in Grade 12.]

This introductory course examines human behavior using the textbook, outside readings, field experiments, and individual student research. The works of Freud, Skinner, and Maslow are explored, along with those of other major contributors to the field of psychology. Students review and discuss personality, human development, intelligence, learning, and psychological disorders. This one-semester course is offered to seniors in the fall. Enrollment is limited.

Leadership for the Twenty-First Century

[Open to students in Grade 12.]

Beginning with a classical look at leadership, including the works of Plato, Machiavelli, Hobbes and Locke, this course will explore the complexities and challenges of leadership in a variety of fields. The study will include a profile of several prominent world leaders of the twentieth century, examining how they differed in style and philosophy, and the components of leadership they shared. This interactive course will feature guest speakers, films, an experiential leadership project, and will draw from textbook readings, articles, simulations, and student presentations. The course is designed to be both practical and theoretical, with an emphasis on helping students identify their own leadership potential. This is a spring semester elective course for seniors. Enrollment is limited.

Newspaper – Hawk Eye

[Open to students in Grades 10-12.]

Journalism is a non-academic full-year elective offered to students in grades ten through twelve who are interested in publishing the school paper, *The Hawk Eye*. Meeting daily, the class emphasizes reporting skills, article writing, editing, and layout. The course is offered to students in grades ten through twelve who qualify through an application and/or interview process.

Yearbook – Ery

[Open to students in Grades 10-12.]

In this full-year course, students develop a variety of publication-related skills in the areas of graphic design, page layout/design, desktop publishing, photography and digital imaging, interviewing, and copy writing/editing. Students use these skills to produce the School annual, the *Ery*. The course is offered to students in grades ten through twelve who qualify through an application and/or interview process.

Digital Electronics

[Offered to students in Grades 10-11.]

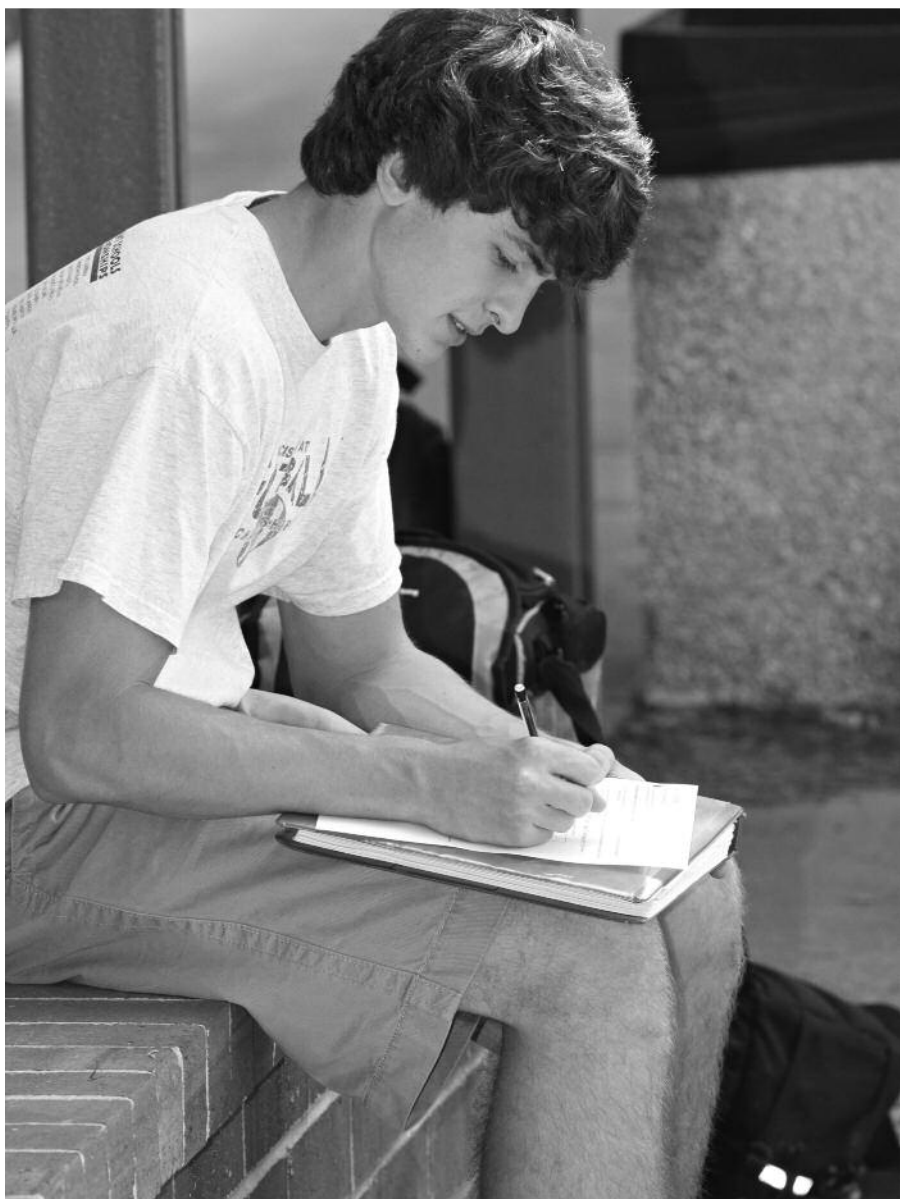
This hands-on, minds-on program is designed to encourage students interested in careers in engineering and technology. A curriculum developed by the Infinity Project is employed. Students design, build and repair electronic devices like cell phones, Xboxes, and robots. The class meets after school on Thursdays from 3:30 – 6:00. Students may enroll in this course during any two of three twelve-week periods during the Fall, Winter, and Spring. Each class is graded as pass/fail. Students will earn a half course credit if they successfully complete two of the three trimesters offered in any one academic year. Digital Electronics will not be counted as one of the six courses required in a school day; it is purely additive to a full schedule. (Students: please register for Digital Electronics Fall/Winter, Digital Electronics Winter/Spring, or Digital Electronics Fall/Spring.) Corequisite: Algebra II.

SAT Review

[Open to students in Grades 11-12.]

This course will focus on strategies and techniques used to improve students' scores on the SAT. Students will take diagnostic tests to determine their strengths and weaknesses on each section of the test. The class will review general strategies for standardized test taking as well as concepts needed to improve scores in the math, critical reading, and writing sections of the SAT. In addition, this course will incorporate hands-on practice; students will complete real SATs and use on-line resources and SAT software as needed. This is a Pass/Fail course. Enrollment is limited. Offered fall semester only.

It is the student's responsibility to ensure that each year's schedule incorporates the number of courses by department appropriate to meet all graduation requirements.



Required Courses

9th

English	Math	History
World Literature	Algebra I Algebra IB Geometry Geometry Honors Algebra II/Trig Honors	World History I

Science	Language	PE/Health
Conceptual Physics Adv Conceptual Physics	French I, II Latin I, II Spanish I, II	PE Every Day PE Every Other Day

Elective Courses

(must choose one)

Arts	Computer	Other
Art Studio I Concert Band Concert Choir String Ensemble Theater Lab Technical Theater I, II	Computer Applications Computer Programming Graphical Projects Web Site Design Media Development	Speech and Debate Additional Language

Required Courses

10th

English	Math	History
Composition	Geometry Geometry Honors Algebra II Algebra II/Trig Honors Adv Functions & Trig Statistics AP	World History II
Science	Language	PE/Health
Chemistry Chemistry Honors	Next in Sequence	Fitness Challenge or Sports Medicine to fulfill P.E. requirement

Elective Courses

(must choose one)

Arts	Computer	Other
Art Studio I, II Visual Arts Elective* Concert Band Concert Choir String Ensemble Music Theory I Theater Lab Technical Theater I, II	Computer Applications Computer Programming Graphical Projects Web Site Design Media Development Computer Science AP	Speech and Debate Newspaper Yearbook Digital Electronics* Field Geology I* Add'l Core Academic
*does not count as sixth course		

Required Courses

11th

English	Math	History
American Literature American Literature (H)	Algebra II Algebra II/Trig Honors Adv Functions & Trig Precalculus Precalculus Honors Statistics AP	United States History United States History AP

Science	Language	PE/Health
Biology Biology Honors Biology AP	Next in Sequence	Fitness Challenge or Sports Medicine to fulfill P.E. requirement

Elective Courses

(must choose one)

Arts	Computer	Other
Art Studio I, II, III Visual Arts Elective* Concert Band Concert Choir String Ensemble Music Theory I Music Theory AP Theater Lab Technical Theater I, II	Computer Applications Computer Programming Graphical Projects Web Site Design Media Development Computer Science AP Computer Topics	Speech and Debate Newspaper Yearbook Digital Electronics* SAT Review Field Geology I, II* Addt'l Core Academic

*does not count as sixth course

Required Courses

12th

English	Math	History
English 12 AP 20 th Cent. Brit. Lit. British Romantic Tradition Early British Lit. Shakespeare & Film	Adv Functions & Trig Precalculus Precalculus Honors Introduction to Calculus Statistics AP Discrete Math Honors Calculus AB AP Calculus BC AP	European History AP US Gov't & Politics AP Economics Art History Human Rights World Religions US & the World

Science (not required, but highly encouraged)	Language (not required, but highly encouraged)	PE/Health
Biology AP Chemistry AP Physics Honors Physics AP Anatomy and Physiology Environmental Science Engineering Field Geology I, II*	Next in Sequence	Fitness Challenge or Sports Medicine to fulfill P.E. requirement

Elective Courses

(must choose to equal 6 units)

Arts	Computer	Other
Art Studio I, II, III, IV Visual Arts Elective* Concert Band Concert Choir String Ensemble Music Theory I Music Theory AP Theater Lab Technical Theater I, II	Computer Applications Computer Programming Graphical Projects Web Site Design Media Development Computer Science AP Computer Topics	Speech and Debate Psychology Leadership Newspaper Yearbook Anatomy and Physiology SAT Review Field Geology I, II Addt'l Core Academic

*does not count as sixth course

GRADUATION REQUIREMENT WORKSHEET

The following are the courses in Grades 9-12 required for graduation from Charlotte Latin School. A graduating student must have at least twenty-one units of course credit earned in Grades 9-12 and must take at least six credits per year. A year course is worth one unit; a semester course is equal to one-half unit.

- English 4 units
- Mathematics 4 units
- Modern/Classical Languages 3 units in the same language (must be through the third level course; 4 units encouraged)
- Science 3 units (to include Conceptual Physics, Chemistry, and Biology)
- History 4 units (to include World History I and II and US. History)
- Physical Education 1 unit (no more than 2 units may be counted toward the 21 graduation credits)
- Computer Science
- Visual & Performing Arts
- Electives

to achieve a total of at least 21 units for graduation

Course Discipline	9 th	10 th	11 th	12 th	Total
ENGLISH (4 UNITS)					
MATH (4 UNITS)					
MODERN/CLASSICAL LANGUAGES (3 UNITS)					
SCIENCE (3 UNITS)					
HISTORY (4 UNITS)					
P.E. (1 UNIT)					
COMPUTER SCIENCE					
FINE ARTS					
OTHER					
Must total 21 units for graduation:					

NOTES

CHARLOTTE LATIN SCHOOL

Upper School Office
9502 Providence Road
Charlotte, NC 28277
Phone: 704.846.1100
Fax: 704.846.1712
www.charlottelatin.org