



VIRGINIA EPISCOPAL SCHOOL
CURRICULUM GUIDE

HONOR SYSTEM

"On my honor; I have neither given nor received any help on this paper; nor am I aware of any breach of the Honor Code."—the Virginia Episcopal School Pledge, signed by students on all school assignments, tests, and examinations.

The Jeffersonian ideal of each person striving to lead a well-balanced life is part of the VES tradition. When the school was founded in 1916, Dr. Robert Carter Jett envisioned a place where education would "consist in drawing out of man that which is noblest and finest in him." Today, the aim of VES is the same.

VES is a small community. Living so closely together, adults and students rely upon each other to act responsibly and honestly. The student-run Honor System is identical to the Honor Code that Jefferson established for the University of Virginia. Quite simply, it states that lying, cheating, and stealing are unacceptable. Everyone who enrolls at VES signs this pledge.

COURSES OF STUDY ENGLISH

ENGLISH

From their experience in English, students should develop discerning tastes in literature. They should gain understanding of the evolution of letters in their own culture and something, too, of literature in translation. Students should become adept at expressing thoughts in written and oral communication in a manner that is clear, precise, stylistically mature, and honest.

ENGLISH 9

Literature in all genres—poetry, short story, novel, essay, drama—is examined. Work includes vocabulary building, grammar, usage, and composition. A structured program gives almost equal attention to reading, grammar and usage exercises, and writing.

Representative titles: *Warriner's English Composition and Grammar, Building an Enriched Vocabulary, Understanding Fiction, The Acts of King Arthur, Julius Caesar, Romeo and Juliet, The Odyssey, and Designs in Poetry.*

ENGLISH 10

The course includes a formal review of the traditional approach to grammar, usage, and punctuation in relation to syntax and composition skills. In writing, the emphasis is on organization, structure, and expression of ideas through assignments in critical,

analytical, and expository papers. Compositions are assigned on a weekly or biweekly basis. The literary genre—short stories, novels, poetry, and drama—are studied in depth. Composition assignments frequently correlate with the readings. Vocabulary assignments and quizzes are part of the teaching patterns.

Representative titles: *Building an Enriched Vocabulary, Warriner's English Composition and Grammar, Introduction to the Poem, Alice in Wonderland, Great Expectations, Macbeth, The Merchant of Venice, Catcher in the Rye, Ethan Frome, Lord of the Flies, Their Eyes Were Watching God.*

ENGLISH 11 HONORS ENGLISH 11

Important and representative works from American literature are studied through close critical reading. Works are presented chronologically to better demonstrate the close interplay between forces of history and artistic expression. Equal emphasis is placed on the development of writing skills. Essay assignments are sequenced an average one every seven class days. Assignments concentrate on thematic focus and various strategies for developing ideas clearly and cogently.

Representative titles: *Death of a Salesman, As I Lay Dying, Daisy Miller, The Great Gatsby, Huckleberry Finn, Sula, The Sun Also Rises, Moby Dick, The Scarlet Letter, The Captive, A Streetcar Named Desire, All the Pretty Horses, English Creek.*

ENGLISH 12

Literary selections are made primarily from the Western tradition, some in translation. Works are grouped by genre in part, thematically on occasion. The approach focuses on close textual analysis. Each work merits a student's careful attention, personal involvement, and thoughtful response.

Essays are assigned frequently—four each trimester, on average. Some assignments are critical and analytical in intention. More frequently, the subject for a composition is drawn from students' personal experiences.

Emphasis upon vocabulary remains constant. The importance of words underpins all the work of the course.

Representative titles: *Oedipus Rex, Antigone, A Man for All Seasons, A Doll's House, Hamlet, The Metamorphosis, Fathers and Sons, Madame Bovary, Light in August, Othello, Into the Wild, In Cold Blood, Age of Innocence, The Assistant, King Lear, Sound and the Fury, Razor's Edge, Absalom, Absalom.*

A.P. ENGLISH

Students enrolled in the course have demonstrable verbal strengths. The work of the course requires keen analytical skills for reading in-depth certain classical works of prose and poetry; and a student must have composition skills for writing critically about works of literature. AP students read additional texts, write more critical papers, and work on specifically selected in-class assignments in preparation for the nationwide examination offered each May.

ENGLISH TOPICS

This trimester course provides reinforcement of basic grammar and usage as well as some SAT verbal skills. It is designed for those sophomores, juniors, and seniors whose grades and standardized test scores indicate a need for additional instruction. All sophomores and all new juniors are given a placement test in the first trimester to determine their levels of mastery of certain strategic areas of English. Students whose scores reflect a need for additional work are required to enroll in the course.

PUBLIC SPEAKING

This one-term elective, open to juniors and seniors, emphasizes the development of oral communication skills. The course centers on reading, writing, and delivering speeches for a variety of situations ranging from persuasive and informative speeches to sales presentations. The goal of the course is to help students become more comfortable with speaking in public situations.

FINE ARTS

DRAMA HISTORY

The historic background and organizational components of theatre are examined within the context of its role as an art form that has influenced mankind since its origins. A fundamental approach to theatre is taken through the use of vocal and physical exercises, improvisations, and basic scene work. Technical aspects such as directing, choreographing, costume, set, and light design are

examined through class projects and discussions, and attendance of live theatre performances. Class participation is essential in the understanding and appreciation of this material.

MUSIC HISTORY

An overview of music's development from the Middle Ages to the present including the major composers and their masterworks along with the social and cultural environment of the times. This course is the Music Department's primary offering to satisfy the music requirement for graduation.

MUSIC THEORY 1

This music course is open to students who have an intense interest in learning the fundamentals of music theory. The course acts as a prerequisite to Advanced Placement Music Theory.

A.P. MUSIC THEORY

Advanced Placement Music Theory is an intense full year class focused on mastering listening, reading, and writing skills. After a review of Music Theory I, the course continues with score study, dictation, and sight reading. The instructor's permission is required before registration.

GLEE CLUB

The group meets three days a week for rehearsals and performs at weekly chapel services and special events on and off campus. A full year's participation in Glee Club earns students two fine arts credits that count toward satisfying the graduation

requirement. An informal audition is required. Interested students should register with their advisor and then see the instructor about an audition.

INSTRUMENTAL ENSEMBLE

Private lessons can be arranged for interested students. For further information, contact the Director of Music. Additional fee.

**STUDIO ART
A.P. STUDIO ART**

The content of this course varies from term to term, depending upon the level of interest and talent within the class. Media such as oil, watercolor, silk screen, and ceramics may be covered. An Advanced Placement Section is available for qualified students.

ART HISTORY

This course examines the evolution of art and its place in our society. The course consists of lectures, slide presentations, and field trips to area museums and galleries.

GRAPHIC DESIGN

This secondary course in information science focuses on the creation and manipulation of art and design on the computer. It is offered as part of the art curriculum and is considered a Fine Art elective. Using an advanced graphics package, CorelDraw!, students are introduced to the concept of computer-assisted design. Students work on projects ranging from blueprint creation to user-designed clip art. An emphasis

is placed on how to import art into documents. This one-trimester course uses the advanced technologies of the scanner and CD-ROM. A final project is required.

VIDEO PRODUCTION

This course is designed to introduce students to the basic concepts of video production. It will include basic shooting and editing techniques, shot set-up, lighting, audio recording, and exporting the final product to the web. In addition, students will gain an appreciation for the exploding technology in the realm of video production and the various outlets where video production can be used.

ADDITIONAL COURSE

Drama Performance

FOREIGN LANGUAGES

The Department of Foreign Languages seeks to instill in each student a love of language and foreign culture. Our approach is enthusiastic and demanding. The department strives to fulfill two main goals: to instill the basic structures and vocabulary of the languages, and to acquaint students with the culture, history, and customs of the country. In addition to exposure to the language and culture through reading and classroom activity, students are encouraged to take advantage of trips and study abroad.

FRENCH 1

In the first year, students master elementary listening, speaking, reading, and writing skills necessary for simple human communication in practical, day-to-day situations. The course stresses active student use of the language through frequent speaking and writing exercises.

FRENCH 2

This intermediate French course is a continuation of French 1, building listening, speaking, reading, and writing skills.

FRENCH 3

As the student goes beyond the school's two-year requirement, greater importance is placed on developing and improving communication skills in all four areas. Grammar lessons from the first two years are reviewed in greater depth, adding more complex material. Various sources are used, including radio broadcasts, traditional texts, films, a short novel, periodicals, and material pulled from the World Wide Web.

**FRENCH 4 & 5 OR
A.P. FRENCH—
LANGUAGE
OR LITERATURE**

Qualified students may take fourth and fifth level classes in French which stress advanced grammar, composition, and conversational skills along with introductory reading in the history of Francophone literature.

When appropriate, the fourth and/or fifth level French classes may serve as Advanced Placement courses designed to prepare students for successful completion of the Advanced Placement French Language and/or Advanced Placement French Literature program.

Regardless of the nature of the courses, a variety of textual, audiovisual and computer resources are utilized to develop student competencies in listening, speaking, reading and writing the foreign language.

LATIN 1

Latin 1 gives students a working knowledge of the language, an awareness of the relationship between Latin and English, and an appreciation for the culture in which the language flourished. The course focuses upon basic grammar, vocabulary, and etymology and includes readings on Roman history, culture, and geography.

LATIN 2

A review of the first year's grammar and vocabulary precedes the study of new grammar and vocabulary. The course includes a study of Roman history, and Latin readings are taken from mythology, history, and culture.

LATIN 3

Latin grammar and vocabulary are reviewed along with Roman history and the lives of Roman authors. The readings include mythology and the works of Caesar and Pliny.

LATIN 4

Selections from Sallust, Cicero, and Ovid are read along with a study of the lives of the authors and the period of history in which they wrote. A comprehensive review of Latin grammar and vocabulary is undertaken.

A.P. LATIN

This course is offered only in years when there are students with sufficient interest and preparation. It involves comprehensive reading and study of the books of Virgil's Aeneid required for the Advanced Placement exam.

SPANISH 1

Students receive an introduction to the Spanish language and Hispanic cultures. The aim is to help students acquire a solid foundation of knowledge in Spanish grammar and vocabulary utilized in listening, speaking, reading, and writing.

SPANISH 2

Speaking and listening proficiency continues as the students' understanding of grammar, idioms, and a more specialized vocabulary deepens. Emphasis is also placed on reading and writing skills as students study Hispanic cultures in greater depth.

SPANISH 3

The goal of Spanish 3 is to help students acquire language proficiency while reviewing and broadening their grammar foun-

ation. There is an emphasis on real communication in Spanish through the use of dialogues, role-playing, and creative written work. At this level, the student will also be introduced to Hispanic literature.

**SPANISH 4 & 5 OR
A.P. SPANISH—
LANGUAGE
OR LITERATURE**

Qualified students may take fourth and fifth level classes in Spanish which stress advanced grammar, composition and conversational skills along with introductory reading in the history of Spanish literature.

When appropriate, the fourth and/or fifth level Spanish classes may serve as Advanced Placement courses designed to prepare students for successful completion of the Advanced Placement Spanish Language and/or Advanced Placement Spanish Literature program.

Regardless of the nature of the courses, a variety of textual, audiovisual and computer resources are utilized to develop student competencies in listening, speaking, reading and writing the foreign language.

HISTORY

Through rational thought and focused thematic expression, the History Department seeks to help students understand the historical context of the world around them and the forces that act upon it.

Students in the lower levels receive instruction in basic academic skills. Students in the two upper levels apply those skills to questions in United States and modern European histories. Classes are based on readings in primary and secondary documents and feature lectures, discussions, seminars, and student presentations of academic papers.

ANCIENT AND MEDIEVAL HISTORY

Open to freshmen and sophomores, this is a survey course that emphasizes class discussion and expository writing, as well as such study skills as notetaking, outlining, and using study sheets. Films, projects, and primary and secondary sources supplement the text.

Ancient History examines the origins of Western Civilization from approximately 3500 B.C. to the fall of Rome in the fifth century A.D., including cultural traditions of the ancient Middle East, Egypt, Greece, and Rome.

Medieval History is a general survey of Europe from the fall of Rome to the beginning of the Renaissance. The Germanic kingdoms, Byzantium and Islam, Charlemagne, Norman England, the development of the Christian Church, medieval life, and the Crusades are all examined.

Ancient and Medieval have been split into separate, complimentary courses offered in alternating years. Students may take either or both when appropriate.

Text: *Ancient and Medieval Worlds*, Howe and Howe

GOVERNMENT

Open to freshmen and sophomores, this is a general survey of local, state, and national governments. It focuses primarily upon the United States Constitution, the rise and development of the two-party system, the rights and duties of citizens, and the distinctions among modern political theories and systems. Qualified students may take the Advanced Placement test, based upon the recommendation of the instructor.

Text: *American Government*, Hardgrave

UNITED STATES HISTORY A.P. UNITED STATES HISTORY

Required of all juniors, this intensive review of American history covers the period between the founding of the Jamestown Colony in 1607 and the election of Bill Clinton in 1992. A traditional political and diplomatic interpretation of U.S. history is offered without neglecting recent scholarship in social and cultural history. An advanced placement section is available for qualified students.

Text: *The American Nation*, Garraty

AP Texts: *America: A Narrative History*, Tindall and Shi

American Political Tradition, Hofstadter

MODERN EUROPEAN HISTORY A.P. MODERN EUROPEAN HISTORY

This survey of Europe from approximately 1400 through 1990 gives seniors an overview of political and diplomatic events as well as social, cultural, and intellectual trends. Topics examined in detail include the Renaissance, the Reformation, the Scientific Revolution, the Enlightenment, the French Revolution, the Industrial Revolution, the development of the modern nation-states, and the rise of totalitarian societies. The course offers an advanced placement section for qualified students.

Texts: *Civilization in the West*, Kishlansky, Geary, O'Brien

Images and Interpretations, Sherman, Vol. I & II

AP Text: *A History of Western Society*, McKay, Hill, Buckler

ECONOMICS

Open to seniors and qualified juniors, this is an introduction to basic economic principles: supply, demand, cost, price, economic indicators, business practices, and the role of the consumer. Both classical and modern economic theory and comparative economic systems are studied.

Text: *Introduction to Economics*, Gordon and Dawson

RUSSIAN CIVILIZATION

Seniors and qualified juniors may take this course on a term or annual basis. It is an introduction to Russian history, literature, art, language and geography from the origins of the Russian people through the period of Mikhail Gorbachev.

Texts: *From Russia to Russia*, Vaillant and Richards

The Complete Prose tales of A.S. Pushkin, Aitken

The Book of Russian Short Stories, ed. Richards

Heart of a Dog, Bulgakov

ADDITIONAL COURSES

History of an OAS Country
Money Management
U.S. History
for International Students

MATHEMATICS

The mathematics program is designed to provide the skills and concepts a student needs to prepare for future study in college. The gifted program offers students an opportunity to study Advanced Placement Calculus or Advanced Placement Statistics. Others may choose to complete their high school work with regular Calculus, Statistics, or Analysis. Electives are also offered for juniors and seniors who have an interest in business or the social sciences.

Graphing calculators are used in all year-long courses. By the time students finish Algebra 2-Trigonometry, they will have mastered the use of the graphing calculator. Many choose to work in the school's computer laboratory. Ultimately, the concepts acquired in all of these courses generate a level of excitement about the power of mathematics. The skills learned will aid the students throughout their lives.

ALGEBRA 1

The goal of the course is to train a student to read a problem, describe it in a sentence, translate the sentence into algebraic symbols, and then solve the resulting equation or inequality.

Students learn the components of equations and inequalities, including real numbers and polynomials (and four operations on each), special products, and factoring. Also studied are four operations on algebraic fractions, solving fractional equations, slope and equations of a line, graphs of

relations and functions, square roots and radicals, solving quadratic equations, and solving systems of first-degree equations.

GEOMETRY

Originally, geometry was the first system of ideas that assumed a few simple statements and used them to derive more complex ones. Such a deductive system is developed in this course, using direct and indirect proofs. Special emphasis is placed on inductive reasoning and the creation of original theorems.

In mid-year, the course emphasis shifts toward the application of algebraic principles to geometric figures. As soon as the Pythagorean Theorem is developed, numerical answer problems take the place of proofs. A brief introduction to trigonometry allows the use of formulas such as the area of a regular polygon in terms of sine and cosine.

HONORS GEOMETRY

The study of Honors Geometry encompasses more than its definitions, postulates, and theorems. It includes experiences and activities that allow the student to finish the course with an understanding of the value of geometry in their lives. Students will learn to reason analytically. The process of formal proof is emphasized early in the course, and direct and indirect proofs are investigated extensively. Proofs include such topics as parallel and perpendicular lines, congruent triangles, parallelograms, and geometric inequalities. The

emphasis then shifts to applications. Topics include circles, right-triangle trigonometry, coordinate geometry, areas, and volumes. Late in the year, a project is assigned that deals with construction and locus.

ALGEBRA 2-TRIGONOMETRY

This course is for 10th-graders who plan to take Calculus at VES and for 11th-graders who do not intend to take a high school calculus course.

The year begins with a review of four operations on polynomials, special products, and factoring; four operations on algebraic fractions; solving fractional equations, slope and equations on lines, graphs of relations and functions, exponents, square roots and radicals; and solving systems of first-degree equations. Next, the complex number system is introduced to provide solutions for all quadratic equations. The year ends with some new topics, including systems of second-degree equations, conic sections, and exponential and logarithmic functions with an emphasis on calculator use. Twenty percent of the course is dedicated to trigonometry, stressing equations, identities, and applications of the trigonometric functions.

HONORS ALGEBRA 2-TRIGONOMETRY

This course is offered as the second in our honors series and is designed for the math student who has shown superior aptitude and interest in mathematics. The first term offers a review of essentials

while emphasizing formal proofs based on these concepts. The student is then introduced to linear and polynomial functions as well as systems of equations in more than one variable. An emphasis is placed upon graphing these functions. Complex numbers are discussed as well as exponents, logarithms, and the properties of matrices. The year concludes with a thorough introduction to trigonometric functions, their graphs, and applications. Graphing calculators are used in this course.

MATH ANALYSIS

Pre-Calculus is taught to seniors and juniors who have successfully completed Algebra 2-Trigonometry. The course covers systems of numbers; circular functions; linear and quadratic expressions (including conic sections); polynomial, special exponential, and logarithmic functions; and the algebra of matrices. Applications are used in business and the social sciences as well as in the physical science. The year concludes with a study of limits of sequences and series to provide a smooth transition into Calculus.

HONORS ANALYSIS

Juniors and seniors who have completed Algebra 2-Trigonometry and who have demonstrated excellent mathematics ability are eligible for this course, which is a prerequisite for Advanced Placement Calculus.

In the first term, the emphasis is on mathematical reasoning and proof with concentration on general functions and their properties. Other areas covered include series and sequence, complex numbers, exponential and logarithmic functions, trigonometry, conic sections, matrices, and vectors. These topics are related with the idea of functions and limits as preparation for AP Calculus. Graphing calculators are an essential part of this course.

MATH TOPICS

This trimester course is offered to seniors as preparation for the mathematics section of the Scholastic Aptitude Test (SAT). Problems taken from arithmetic, elementary algebra, and geometry are presented in the same multiple-choice setting used on the SAT. After the SAT is taken in early November, the remainder of the course is devoted to preparation for the Level 1 Mathematics Achievement Test.

CALCULUS

A less demanding course than AP Calculus in terms of scope and degree of difficulty of the problems assigned, this course begins with the concepts of functions, limits, and continuity. The class then moves into derivatives followed by integrals. The techniques and applications of differentiation and integration are taught for polynomial, exponential, logarithmic, and trigonometric functions. Graphing calculators are used extensively.

A.P. CALCULUS

This rigorous one-year course prepares students for the College Board Advanced Placement Examination so they may begin their college mathematics at the second-year level. It covers the differentiation and integration of polynomial, exponential, and trigonometric functions. These applications of derivatives and integrals are also studied: velocity, acceleration, area, and volume, as well as techniques of integration. Graphing calculators are extensively used in this course and required on the AP Test.

ESSENTIALS OF MATHEMATICS

This trimester course is offered to those students who need continued development of basic algebraic skills. The course is designed to reinforce those skills needed to be more successful in algebra and geometry. The material covered ranges from the four operations on rational numbers to a comprehensive review of solving elementary equations in one variable. This class is taken in conjunction with a full-year mathematics class.

STATISTICS

Students who wish to take elementary statistics are not required to have a strong mathematics background but should have completed Algebra 2-Trigonometry. The course concentrates on application rather than formal theory. Statistical concepts used in making predictions, decisions, and inferences are taught.

A.P. STATISTICS

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. To understand everything from medicine to politics to sports, a citizen today must be statistically literate. This course is equivalent to a one-semester, introductory, non-calculus based college course in statistics. Students will have the opportunity to take the Advance Placement examination for possible college credit.

RELIGION

Coming to know who we are, to understand the meaning of our lives and what is our destiny, these vital tasks are at the heart of religion. To that end, VES requires that all students take two courses in religion, one of which must be in Bible. There are also a variety of electives which offer the student the opportunity to explore Christianity in greater depth, to examine the ethical teachings of one's faith, and to weigh the beliefs and traditions of other faiths.

OLD TESTAMENT

This course is an introduction to the major genres of the Hebrew Scriptures; the Patriarchs, Writings, Histories and the Prophets. Its viewpoint is primarily literary and didactic. While the emphasis is on the stories of Genesis and the legendary kings of Israel, the Psalms and minor prophets are discussed as far as time allows. This course is open to 9th and 10th graders, and others by permission.

ADVANCED OLD TESTAMENT

The content of the course is the development of the concept of monotheism with emphasis on the major themes of Hebrew scripture. The medium of this study is James Michener's Novel, *The Source*. This course is intended to be a significant building block in the overall college preparation experience. The discipline of Theology provides the opportunity to think and write in new and challenging intellectual categories. Students will study the tension of faith in culture. As another illustration, their study will involve dealing with the manner in which revelation and faith are modified as they are communicated by the community.

NEW TESTAMENT

This is a discussion of representative works of Christian Scripture, including The Gospel of Mark, The Acts of the Apostles, and one of the Epistles of Paul. Students will become familiar with the social and religious world of First Century Palestine, as well as with the stories and themes of Jesus and his followers. A research paper interpreting a parable is required. This course is intended for 11th and 12th grade students.

WORLD RELIGIONS

It is a surprise to some that most of the world is not Christian. But what then do they believe? This course examines the major religions of the world: Christianity, Buddhism, Judaism, Hinduism, and Islam, among others. Major ideas of each religion will be studied in the context of their respective cultures and histories. A major research paper and field visits to places of worship are required.

SCIENCE

The Science Department is housed in a “state-of-the-art” facility that includes four laboratory classrooms, and a science lecture hall. Through the offering of a wide range of scientific subjects, the Science Department strives to give students a basic understanding of humankind’s relationship to the natural and technological environments. The varied science curriculum provides the background necessary for students to rise to the challenge of college science courses, and it provides a solid foundation for general success in the modern world. Through the emphasis on experimental design techniques and original research projects, the students are challenged to problem-solve and think creatively. In many of the laboratory experiences, students will learn how to work together as part of a lab team.

The importance of science in everyday life is highlighted whenever possible. The use of computers is integrated into each full-year class and students have the opportunity to

access the Internet. Laboratory experiments integrate the use of computer hardware for data collection and analysis in both lab and field settings. The science curriculum is enhanced by field trips to the surrounding area, and an active Science Club provides additional extracurricular programs. Through the endeavors of science students, VES has received the “Steward of the Environment” award, which recognizes Virginia Episcopal School as the top high school in the area for its environmental-awareness programs. A minimum of two laboratory sciences must be completed for graduation and are required as the prerequisite for advanced placement courses.

BIOLOGY

This introductory course, in which students embark upon a study of living things, requires a background in physical science. The underlying principles of biology that are investigated throughout the year include cells, genetics, evolution, plants, animals, and ecology as major topics. Further investigation is carried out in the laboratory, where the students can come to a deeper understanding of the many aspects of biology in a hands-on fashion.

CHEMISTRY

The exciting world of matter, its reactions, changes, and properties, is explored in the classroom as well as in the laboratory in this introductory course. The course begins with an in-depth look at experimental design and safety. Measurement and problem-

solving techniques are then studied. The students move on to study historical and modern viewpoints of the atom. Chemical formulas and equations are analyzed, followed by an investigation of the gas laws, periodic table, chemical bonding, equilibrium, solutions, and acids and bases. In the laboratory, students gain hands-on experience with a variety of equipment, instruments, and chemicals to underscore the concepts covered in class. Students will also spend time learning the procedures for developing an experiment, and completing a research paper.

HONORS CHEMISTRY

This course is designed to introduce strong math and science students to the fundamental facts, concepts, and laboratory skills involved in chemistry. Students investigate the relationships among atoms, molecules, and ions. They also study stoichiometry, the properties of gases, thermochemistry, periodicity of elements, bonding in liquids and solids, and the kinetic properties of solutions. The course incorporates elements of problem solving as students learn the concepts of experimental design. Each student selects a topic to investigate and performs research on that topic both in the laboratory and in the library. A research paper and oral report are presented as part of a science project. A goal of the course is to fully prepare students to move on to the Advanced Placement course in Chemistry.

PHYSICS

This course is designed to teach the fundamental principles and theories of physics covering the fields of mechanics, thermodynamics, waves, electricity, and nuclear physics. These concepts are introduced through demonstrations and personal experiences and are taught in the context of their application in the explanation of everyday phenomena. The course not only shows the students how things work and how to solve basic physics problems but also gives them deeper conceptual understanding of the derivation and application of these principles. The proof and use of these concepts are taught through experimentation in the laboratory. Also, the students take field trips in order to gain experience in different applications of physics and for the opportunity to apply their physics knowledge.

HONORS PHYSICS

Students enrolled in the Honors Math program are eligible to take Honors Physics. The course includes an overview of mechanics, optics, electromagnetism, and special relativity on a more mathematically detailed level than the regular physics course. A combination of rigorous problem-solving sessions and hands-on laboratory exercises prepare students for first-year college physics.

ENVIRONMENTAL SCIENCE

The overall objective of Environmental Science is to describe the environmental constraints that humankind confronts, and to show the courses of action that may be taken in order to cope successfully with them. A deeper understanding of, and appreciation for nature is developed through discussions regarding ecological principles, population, conservation, pollution, natural resources, and other issues. The laboratory section of the course is geared toward each student's developing problem-solving skills and working as part of a research team. The class is complemented by field trips to surrounding natural resource areas and on campus.

A.P. BIOLOGY

The syllabus is structured in accordance with the mandate of the College Board and is designed to be the equivalent of an introductory college course in biology. Students are provided with the conceptual framework, factual knowledge, and analytical techniques to deal critically with the rapidly changing science of biology. As the students meet this primary goal, they will be properly prepared for the Advanced Placement Examination in the spring.

A.P. CHEMISTRY

Advanced Placement Chemistry reviews the concepts covered in the introductory chemistry course and then delves deeper into each topic. New subjects are also introduced and explored. The course is

designed to be similar to a first-year college chemistry course in the laboratory as well as in the classroom. A goal of the course is to prepare each student for success on the Advanced Placement Examination.

TERM ELECTIVES

LIFE ISSUES

The main objective of this trimester-based course is to provide insightful information and facts on complex issues that confront adolescents in everyday life. The focus is on three specific areas of study, namely a unit on Self-Discovery, a Sex Education unit, and finally a Drug/Alcohol unit. The student develops an understanding of the evolving nature and characteristic problems of adolescence. Furthermore, the course is designed to help enhance the overall development and well-being of each student, increasing his or her self-esteem and supporting the choice of a healthy lifestyle.

INTRODUCTION TO SPORTS MEDICINE

In this trimester-based elective course, students study the following aspects of Sports Medicine: human anatomy, biomechanics, mechanism of sports injury, conditioning for the prevention of athletic injuries to the male and female athlete, protective taping, nutrition, and prevention of specific injuries. The area of Sports Medicine is undergoing rapid growth and is an important factor for today's student athletes

in helping them prepare for their sport. The students also learn how to prepare a rehabilitation program for a specific injury and to assess the nutritional requirements for a game in any given sport.

COMPUTER & INFORMATION SCIENCE

COMPUTER APPLICATIONS

Computer Applications is a general introduction to the micro computer and productivity applications. This course is required for all 9th and 10th graders. Students will learn how to use the micro computers and are introduced to keyboarding, word processing, spreadsheets, data bases, graphics, the Internet, electronic mail, and computer ethics. Additionally, students learn the components of micro computers, network scanners, color and laser printers, and other input/output devices. An emphasis is made on current information technology terminology.

ADVANCED COMPUTER APPLICATIONS

Advanced Computer Applications is an elective course that offers students the opportunity to explore a wider variety of computer applications. Some of the topics are: HTML, Web page design, digital imaging, digital video, and multimedia presentations.

A.P. COMPUTER SCIENCE A

Students completing the Pascal Programming course and showing strong interest in computer programming may elect to take A.P. Computer Science. This full-year course is only offered when a sufficient number of students qualify for the criteria of an advanced placement course. The computer science advance placement course focuses on data structures in the language of the Pascal. Students scoring a 4 or better in the advanced placement exam are given credit at most colleges. Prerequisite: permission from the Computer Science Department Chairman.

ADDITIONAL COURSES

Website Design
Computer Graphic Design

COLLEGE ACCEPTANCE

Recent Graduates have been accepted at:

- Appalachian State University
- Auburn University
- Austin Peay University
- Birmingham-Southern University
- Brevard College
- Bridgewater College
- Carnegie Mellon University
- Clemson University
- College of Charleston
- College of William and Mary
- College of Wooster
- Colorado State University
- Converse College
- Cornell University
- Davidson College
- Dickinson College

Drexel University
 Duke University
 East Carolina University
 East Tennessee University
 Elon College
 Emerson College
 Emory & Henry College
 Emory University
 Furman University
 George Mason University
 George Washington University
 Guilford College
 Hampden-Sydney College
 Indiana University of PA
 James Madison University
 Kenyon College
 Louisiana State University
 Loyola-Marymount University
 Lynchburg College
 Lynn University
 Mary Baldwin College
 Mary Washington College
 Massachusetts Institute
 of Technology
 New York University –
 Tisch School of Drama
 North Carolina State University
 Ohio State University
 Plymouth State College
 Presbyterian College
 Queens College
 Randolph-Macon College
 Rhodes College
 Roanoke College
 Rollins College
 Salem College
 Sarah Lawrence College
 Savannah College of Art
 & Design
 Southern Methodist University
 Texas Tech
 The Citadel
 Tulane University
 United States Naval Academy
 University of Alabama
 University of Arizona

University of Colorado
 at Boulder
 University of Dayton
 University of Denver
 University of Georgia
 University of Kentucky
 University of Mississippi
 University of Montana
 University of North Carolina
 at Asheville
 University of North Carolina
 at Chapel Hill
 University of North Carolina
 at Wilmington
 University of Notre Dame
 University of Pennsylvania
 University of the South
 University of Tennessee
 at Knoxville
 University of Vermont
 University of Virginia
 University of Wisconsin
 at Madison
 Vanderbilt University
 Virginia Commonwealth
 University
 Virginia Military Institute
 Virginia Polytechnic Institute
 Wake Forest University
 Washington & Jefferson College
 Washington & Lee University
 Washington College
 Wellesley College
 Wesleyan University
 West Virginia University
 Wofford College
 Worcester Polytechnic Institute

SAMPLE ACADEMIC SCHEDULES

9TH GRADE

English 9
 Algebra I, Geometry (H),
 or Algebra II-Trig (H)
 Ancient History
 Biology
 Spanish, French, or Latin (I-III)
 Computers
 Old Testament
 Studio Art, Drama, Glee Club
 or other Fine Arts courses (AP)
 Life Issues

10TH GRADE

English 10
 Algebra I, Geometry (H),
 Algebra II-Trig (H), or
 Analysis (H)
 Medieval History or
 Government
 Biology, Chemistry (H), or
 Environmental Science
 Spanish, French, or Latin (I-IV)
 Computers (AP)
 Old Testament/Advanced Old
 Testament
 Studio Art, Drama, Glee Club,
 or other Fine Arts courses (AP)
 Life Issues

11TH GRADE

American Literature (H)
 Geometry (H), Algebra II-Trig
 (H), or Calculus (AP)
 U.S. History (AP)
 Biology (AP), Chemistry (H)(AP),
 Physics (H), Environmental
 Science
 Spanish, French, or Latin
 (I-V)(AP)

Computers
 New Testament or other
 Religion courses
 Studio Art, Drama, Glee Club,
 or other Fine Arts courses (AP)
 Life Issues

12TH GRADE

European Literature (AP)
 Algebra II-Trig (H), Analysis
 (H), Calculus (AP), or
 other Math
 European History (AP)
 Chemistry (H)(AP), Physics (H),
 Environmental Science
 Spanish, French, or Latin
 (II-V)(AP)
 Computers (AP)
 New Testament, or other
 Religion courses
 Studio Art, Drama, Glee Club,
 or other Fine Arts courses (AP)
 Life Issues

*(H) Honors section available
 (AP) Advanced Placement
 section available*

Students must complete courses in Fine Arts and Religion for graduation.

In addition to the above, elective courses are available in Art, Drama, Economics, Essentials of Mathematics, AP Computers, Public Speaking, Religion, Russian Civilization, Sports Medicine, and Statistics.