



# HIGH SCHOOL COURSE CATALOG

## 2017-2018



*Excellence in Islamic Education, Academics, Tahfeez, Aadaab, and Akhlaq, so that we become the school of choice for parents in New Jersey.*

An-Noor Academy's high school program is aligned with New Jersey Student Learning Standards and meets New Jersey graduation requirements. It provides students with a rigorous academic program and a strong foundation in Quran, Arabic, and Islamic knowledge. The high school program prepares students rigorously for college and the real world and enriches their learning experience with a wide range of electives, honor courses, and Advanced Placement classes.

**An-Noor Academy's Graduation Requirements (145 credits)**

- Quran Studies (16 credits)
- English (20 credits)
- Mathematics (20 credits)
- Social Studies (20 credits)
- Science (20 credits)
- Arabic/World Languages (16 credits)
- Islamic Studies (8 credits)
- Health & Physical Education (15 credits)
- Electives (10 credits)

## Course Sequence

The following is a typical list of courses available in each grade level:

Grade 9	Grade 10	Grade 11	Grade 12
English I	English II	American Literature	Literature and Composition
Geometry	Algebra II	Pre-Calculus	Calculus
Biology	Chemistry	Physics	Science Electives
World History	US History I	US History II	Social Studies Electives
Arabic I	Arabic II	Arabic III	Arabic IV or 2 <sup>nd</sup> world language elective
Quran Studies I	Quran Studies II	Quran Studies III	Quran Studies IV or Islamic Studies elective
Islamic Studies I	Islamic Studies II	Islamic Studies III	Islamic Studies IV or Islamic Studies elective
Health & Physical Education I	Health & Physical Education II	Health & Physical Education III	Health & Physical Education IV
Electives	Electives	Electives	Electives

## Volunteering Requirement

High school students are required to complete 50 hours of volunteering per year, which translates into approximately one hour of volunteer work per week. In addition to boosting their social skills and increasing their awareness of local organizations and issues, high school students who volunteer may have an advantage over their peers when preparing for college. By volunteering, they put into action many Islamic teachings, dedicate time and effort to noble causes, gain new skills, and build their resumes. Please contact the Guidance Counsellor for any questions regarding volunteering.

## Research Projects

All high school students will take part in several, short multi-disciplinary research projects to build research skills in a cumulative manner. Students will be able to apply and transfer library research and note taking skills to compose a multi-paragraph essay based upon an identified set of essential questions or enduring understandings, as determined by teachers. This will be taken through the formal writing process and incorporate media and technology skills.

## **ENGLISH**

A regular English course is equivalent to five credits.

### **English I –Developing Literary Aptitude**

Students will be able to ascertain the skills required for thoughtful literary inquiry and analysis. Students will be able to utilize the writing skills learned through in-depth analysis of grammatical structures to write cohesive, comprehensive, and thought-provoking essays, papers, and presentations. Students will cover literary devices from Ancient Greece, Civil War, Diverse Perspectives, Depression Era, Developing Realism, Modernism, and beyond. It is a survey course that covers literature of different time periods and countries and is organized by theme. Writing compositions and improving analytical skills will be emphasized in this course. The teachings of English I encompass the appreciation of literature, foundation of research skills and continued emphasis on writing skills including vocabulary, review of basic elements of grammar, review of paragraph structure and basic literary analysis. Major projects include oral presentations, PowerPoint presentations, speeches, and debates on various topics ranging from presenting in the narrative format to the latest current even or hot topic. Projects also include authoring periodic essays analyzing literature as well as up to two research papers. Students will also explore important questions of ethics and professional standards as well as the importance of having a clear mission, a deliberate tone, and articulated goals for student publications. Several themes weave through the texts and activities of the ninth grade curriculum: coming of age stories, the hero's journey as recounted in various eras and cultures, and the tensions between self and community.

### **English II – Literature across the Global Experience**

Students will demonstrate listening, speaking, writing, and reading skills through a variety of works using a variety of literary works. They will be able to analyze what they read and to improve their reading, speaking, listening, viewing, and writing skills. This course covers a review and extension of grammar and literary terms from 9th grade. Students develop skills in vocabulary, punctuation, and correct usage. Composition projects cover the process of prewriting, writing, and publishing. The literature read includes novels, short stories, poetry, plays and non-fiction. Themes covered include Romanticism, Social Justice, Universal Struggles Realism, Philosophy, Psychology, and Colliding Cultures. In the tenth grade, students explore a variety of literary genres, including the novel, the play, the short story, the poem, and the essay. Texts are discussed both as literary forms and as art, psychology, and philosophy. Writing will be emphasized, with review of grammar, syntax, and sentence structure as needed, as students work to construct analytical essays with clear, well supported thesis statements. Close reading of texts will be accompanied by critical analysis in both writing and discussion. Clear, forceful exposition of literary criticism and other purposes will be the goal of the writing component.

### **English III – British and American Literature**

This course engages students in the careful reading and in depth analysis of British and American literature. Students will read and analyze works of British and American literature that reflect the rich and

diverse history of the Western world. As students progress through centuries of literature in a loose chronological arrangement, they will see how British and American literature has been shaped by concerns, values, and ideas that have intrigued, delighted, and challenged people throughout time. Throughout the course, poetry, short stories, novels, drama, and nonfiction provide opportunities for critical writing, creative projects, and online discussions. Students will demonstrate listening, writing, and reading skills through a variety of devices using a variety of works. Students will be able to ascertain the skills required for thoughtful literary inquiry and analysis. Students will be able to utilize the writing skills learned through in-depth analysis of grammatical structure to write cohesive, comprehensive, and thought-provoking essays, papers, and presentations.

### **English IV – Literature and Composition**

In this Honors English course, students study the literature in depth and write analytical and expository essays. Close analysis of poetry is a major part of this course. Students are immersed in novels, plays, poems, and short stories from various periods. This course also engages students in the careful reading and in-depth analysis of literature. This course also gives students the practice and helpful critique skills necessary to evolve them into flexible writers who can compose in a variety of modes and for a variety of purposes. Composition will emphasize the expository, analytical, and argumentative writing that forms the basis of academic and professional communication. The course asks students to examine the techniques of various writers closely. Students read and write daily using a variety of multimedia and interactive activities, interpretive writing assignments, and discussions. The course places special emphasis on reading comprehension, structural and critical analyses of written works, literary vocabulary, and recognizing and understanding literary devices.

## **MATHEMATICS**

A regular mathematics course is equivalent to five credits.

### **Geometry**

This course consists of a study of geometry integrated with a review of skills from Algebra 1. Students see the development of Euclidian proofs through the study of congruence and similarity, attain a working knowledge of trigonometry as it applies to right triangles, and apply area and volume to practical use. Using classical and modern construction techniques, students will investigate and learn properties that proofs verify. Students will see how geometry relates to the physical world, through problem settings and potential projects involving design, architecture, construction, archaeology, etc.

### **Honors Geometry**

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. The class includes a more sophisticated study of all of the topics of the Accelerated Geometry class. The faster pace also allows for an in-depth study of the first

chapter of the Algebra II curriculum. Placement is based on a minimum of B grade in previous year's math course or math placement test for new students, and department approval.

### **Algebra II**

This course provides the essential concepts and skills of algebra and the study of functions that are needed for the further study of mathematics. Topics include linear and quadratic, higher polynomial, rational, exponential, and logarithmic functions. If time permits, additional topics might include probability and sequences and series. Placement is based on academic achievement in previous math classes and department approval.

### **Honors Algebra II**

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. The class includes a more sophisticated study of all of the topics of the Accelerated Algebra 2 class. The faster pace also allows for an in-depth study of trigonometry: circular functions, graphing, and identities are all included. Requirements: Placement is based on a minimum of B grade in previous year's math course or math placement test for new students, and department approval.

### **Pre-Calculus**

Pre-calculus continues the study of functions begun in Algebra II. Elementary functions are revisited in greater depth, and an emphasis is placed on properties and transformations of graphs. Polynomial, rational, exponential, and logarithmic functions and their graphs are studied thoroughly. Additionally, trigonometry is covered in depth. Students review the basic trigonometric functions in preparation for discussions about the unit circle, trigonometric graphs, trigonometric formulas and identities, and applications of trigonometry. Requirements: A minimum of C grade in Algebra II.

### **Honors Pre-Calculus**

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. This course uses limits to continue the study of polynomial, rational, exponential, logarithmic, and trigonometric functions. The faster pace allows the class to begin the study of differential calculus. If time permits, additional topics may include sequences and series, conics, and matrices. Requirements: Placement is based on a minimum of B grade in previous year's math course or math placement test for new students, and department approval.

### **Calculus**

This course provides a numerical, graphical, and analytical introduction to the study of calculus. Functions are revisited before expanding upon the theory of limits in order to develop the concept of the derivative and the definite integral. The definition of the derivative and the Fundamental Theorem of Calculus form the basis to study the mechanics of derivatives, anti-derivatives, and definite integrals.

Applications that focus on real world situations are emphasized. Technology is used throughout. While this course gives a sound foundation for the study of calculus in college, it is not intended as preparation for the advanced placement test. Requirements: a minimum of C grade in Pre-Calculus.

### **AP Calculus**

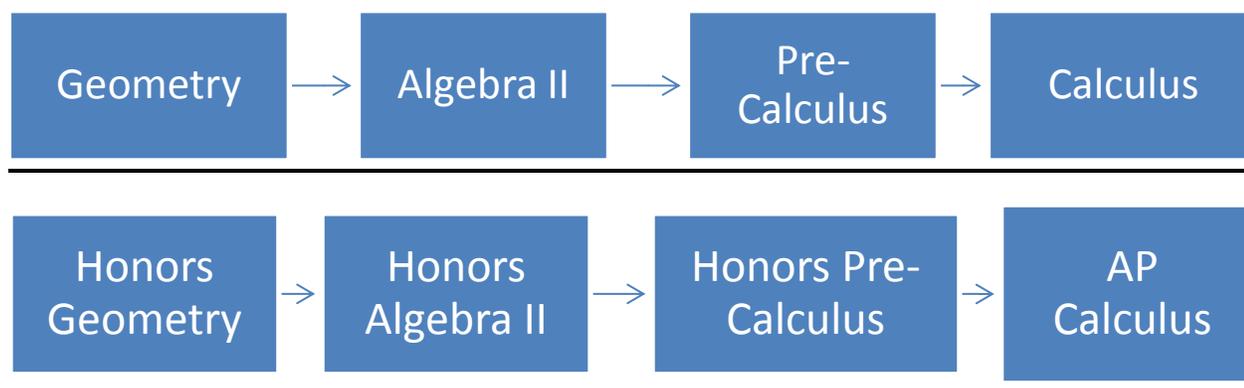
AP Calculus is a college-level course in differential and integral calculus for students who intend to achieve advanced standing in college calculus. The BC level is for the most able student. This course follows closely, but is not limited to, the guidelines of the Advanced Placement Calculus AB syllabus. Following a short review of functions, trigonometry, and graphing, the concept of a limit and the definition of the derivative are introduced. The theory and techniques of differential calculus are developed and applied to topics including optimization techniques, related rates, and the study of change in physics, economics, and life science models. Numerical approximation methods and integration techniques are applied to the contexts of areas, volumes, and curvilinear motion. The distinctions between antiderivatives, definite integrals, and improper integrals are addressed. The students are expected to take the AP Calculus exam at the end of the course. Requirements: A in Pre-Calculus, B in Honors Pre-Calculus, and departmental approval.

### **AP Statistics**

This course is the equivalent of a one semester course of college freshman statistics. It closely follows the recommendations of the College Board. Topics include linear regression and correlation, sampling and experimentation, probability, and normal, binomial and geometric distributions. The course also includes inferential statistics such as confidence intervals and hypothesis testing for proportions and means and chi-squared tests. The students are expected to take the AP Statistics exam at the end of the course. Requirements: A in Pre-Calculus, B in Honors Pre-Calculus, and departmental approval.

### **Mathematics Sequence**

In college prep sequence, students take Geometry in 9<sup>th</sup> grade, Algebra II in 10<sup>th</sup> grade, Pre-calculus in 11<sup>th</sup> grade, and Calculus in 12<sup>th</sup> grade. In Honors sequence, students take Honors Geometry in 9<sup>th</sup> grade, Honors Algebra II in 10<sup>th</sup> grade, Honors Pre-calculus in 11<sup>th</sup> grade, and AP Calculus in 12<sup>th</sup> grade.



## **SOCIAL STUDIES**

A regular social studies course is equivalent to five credits.

### **World History**

World History at the ninth grade level is a survey course that gives students the opportunity to explore the emergence of the First Global Age and the methods of and motivations for exploration and conquest resulting in increased global interactions, differing patterns of trade, colonization, and conflict among nations. This course will examine the ideas developed during the Renaissance, Scientific Revolution, Reformation, and Enlightenment that led to political, economic, and cultural changes that have had a lasting impact. This course will cover the impact of the Industrial Revolution was a consequence of technological innovation and expanding economic activity and markets, resulting in massive population movement, urbanization, and the development of complex economic systems. In addition, the themes of nationalism, imperialism, industrialization, and militarism contributed to an increase in economic and military competition among European nations, the Ottoman Empire, and Japan, and led to World War I. Upon completion of the course, the student will be able to demonstrate the complexity and failure of the Treaty of Versailles, the impact of the global depression, and the expansionist policies and actions of Axis nations, which are considered as major factors that resulted in World War II.

### **United States History I**

This course traces how the North American Colonial societies adapted European governmental, economic, and cultural institutions and ideologies to meet their needs in the New World. In addition, the student will become familiar with the war for independence being a result of growing ideological, political, geographic, economic, and religious tensions resulting from Britain's centralization policies and practices. It will also examine how the United States Constitution and Bill of Rights were designed to provide a framework for the American system of government, while also protecting individual rights. Debates about individual rights, states' rights, and federal power shaped the development of the political institutions and practices of the new Republic will also be covered. While the course moves through progressive reforms, the United States involvement in World War I affected politics, the economy, and geopolitical relations following the war. The course will conclude in the 1920s, which is characterized as a time of social, economic, technological, and political change, as well as a time of emerging isolationism, racial and social tensions, and economic problems.

### **United States History II**

This course will cover the Great Depression and how it resulted from government economic policies, business practices, and individual decisions, and it impacted business and society. In addition, the New Deal programs had a lasting impact on the expansion of the role of the national government in the economy. This course will examine the United States participation in World War II as an Allied force to prevent military conquests by Germany, Italy, and Japan.

Furthermore, the domestic and military policies during World War II continued to deny equal rights to African Americans, Asian Americans, and women. This course will also cover Cold War tensions between the United States and communist countries which resulted in conflict that influenced domestic and foreign policy for over forty years. Exploration of the Civil Rights movement marked a period of social turmoil and political reform, resulting in the expansion of rights and opportunities for individuals and groups previously discriminated against. Discussion of differing views on government's role in social and economic issues led to greater partisanship in government decision making and the increased economic prosperity and opportunities experienced by many masked growing tensions and disparities experienced by some individuals and groups will also be addressed. The conclusion of the course will cover contemporary United States, international policies, and becoming a part of the interconnected global society.

### **SCIENCE**

A regular science course is equivalent to five credits.

#### **Biology**

Biology is devoted to the study of living things and their processes. This course provides an opportunity for students to develop scientific process skills, laboratory techniques, and an understanding of the fundamental principles of living organisms. Students will explore biological science as a process, cell structure and function, genetics and heredity, evolution from an Islamic perspective, diversity of living organisms and their ecological roles, and an introduction to animal structure and function. This course will provide students with practical scientific skills and a deeper understanding of the how biology impacts their lives today. This course requires a lab.

#### **Chemistry**

In this course, students will be able to know basic properties and principles of matter and energy; demonstrate a knowledge in the use of the scientific method and proper laboratory technique; develop mathematical skills as related to chemistry; and understand the importance of scientific knowledge in the everyday world. The course covers the following topics: atomic and molecular structures; periodic table; chemical bonds; stoichiometry, gas laws and properties; acids and bases; solutions; chemical thermodynamics; reaction rates; chemical equilibrium; organic chemistry, and nuclear Processes.

#### **Physics**

This course is a laboratory-based science class in which students will study the fundamentals of the physical world of matter, energy, basic mechanics and particle physics. Students will gain an understanding of energy and its forms as well as conservation, be able to explain and calculate speed, velocity, distance, and acceleration. It covers vectors, friction, motion in 2 and 3 dimensions, Newton's Law, projectile motion, Kepler's Law, Law of Universal Gravitation, and Nuclear decay.

### **AP Biology**

This course is the equivalent of a first year-college biology course and follows a syllabus approved by the College Board. The four “Big Ideas” are cellular processes, energy and communication, genetics and information transfer, and interactions. The AP Biology investigative labs are produced by the College Board. These labs lead to student-directed inquiry-based investigations. A lab notebook will contain the information necessary for making formal collaborative lab reports. Students will be able to apply math skills that have been acquired in their mathematics courses, including graphing, modeling, and statistical analysis. Students are expected to take the AP Biology exam at the end of the course. Requirements: Successful completion of biology and chemistry, and permission of the department.

### **AP Chemistry**

This course is the equivalent of a first year-college chemistry course. It follows a rigorous syllabus approved by the College Board and requires students to do a significant amount of work outside of the classroom. Laboratory experiences reinforce the quantitative nature of the course and utilize highly analytical pieces of equipment and glassware with an emphasis on inquiry-based investigations. Students are expected to have a strong mathematical background with an emphasis on good problem solving abilities. Students are expected to take the AP Chemistry exam at the end of the course. Requirements: Successful completion of chemistry; concurrent enrollment in Honors Pre-Calculus or higher; and permission of the department.

### **ARABIC**

A regular Arabic course is equivalent to four credits.

#### **Arabic I**

Arabic I is a course in which elementary principles of listening, speaking, reading and writing are taught by the constant use of Arabic in the classroom. Good pronunciation and building a functional vocabulary are stressed, working toward the goal of proficiency in the language. Culture and the use of technology are integrated into the program. Students must participate in class activities using the target language.

#### **Arabic II**

Arabic II further develops the basic language skills with emphasis on communication, thus enabling students to apply what they have learned. The functional use of the target language is stressed. Additionally, the study of regional language and differences and the use of technology are integrated into the program. Instruction is primarily in the target language and students must participate in classroom activities using the target language.

### **Arabic III**

In Arabic III, students are given the opportunity to further develop the language skills learned in Arabic II and I. Students continue to make functional use of Arabic through the use of authentic materials. In addition, students discuss and write about open-ended topics in the target language. Instruction is primarily in Arabic. Students should expect that the teachers and classmates would use Arabic almost exclusively in class.

### **Arabic IV**

Students in Arabic IV should be comfortable communicating exclusively in the target language. The students discuss reading selections and write about open-ended topics. Instruction is primarily in Arabic and students are required to use the target language almost exclusively in class. Arabic VI is optional for seniors.

## **ISLAMIC STUDIES**

A regular Islamic Studies course is equivalent to two credits.

### **Islamic Studies I**

Islamic Studies I focuses on Iman, Tawhid, Day of Judgment, Al-Qadar, and putting faith into action. Students study the significance and rulings of Hajj, Prophet's Farewell Khutbah, purification (Ghusl), and Muslim Code of Dress. They learn about the four Rightly Guided Khulafaa (Abubakr As-Sideeq, Omar Ibn Al-Khattab, Othman Ibn Affan, and Ali Ibn Abi Talib). Students will analyze hadeeth Hadeeth of Jibreel and learn the Adab of giving advice, etiquette of argumentation, and art of listening.

### **Islamic Studies II**

Islamic Studies II provides students with opportunities to learn differences between Fate and fatalism, between Divine knowledge and human knowledge, and the concept of death in other religions. Students learn about gender relations in Islam, position of women in Islam, the five legislative rulings, prohibition of gambling and lottery, and lawful and unlawful in food and drinks. In Islamic history, students study the Golden Age and how Islam spread to the three continents. In hadeeth, students study about creation and destiny. In Akhlaq, they learn about Adab of seeking knowledge, Adab of reciting the Quran, and spiritual purification.

### **Islamic Studies III**

Islamic Studies III students study the branches of Iman, signs of creation in the universe, and Afterlife in other religions. They learn about Hudud (limits set by Allah and Rasulollah), basics of Islamic Banking, human rights in Islam, and history of Islamic legislation. In history, they study the Ottoman Empire, the colonization of the Muslim world, and Muslim minorities. Two hadeeths about innovation and advice are included. Students study Islamic da'wah techniques, and how to face contemporary challenges.

## **Islamic Studies IV**

Islamic Studies IV begins with the study of Ihsan, Allah's creation vs. the theories of evolution, and scientific proofs of Iman. Students learn about marriage in Islam, Fiqh of contemporary issues, and the role of Ijtihad. They study Islam in America, Muslim organizations, Muslims in media, and American Muslim experience after 9/11. Students study the Hadeeth about eating good things and address ethical issues in science research, morality and politics, and professional work ethics.

## **QURAN STUDIES**

A regular Quranic Studies course is equivalent to four credits.

### **Quran Studies I**

In Quran Studies I, students learn Makharij Al-Horoof (Articulation points of Arabic letters), recite Surah Al- Anbia and Surah Al-Hajj with Tajweed rules, memorize the prescribed Surahs. They learn the Tafseer of Surahs, the occasion of revelation of Surat At-Tahrim, and make connections between the teachings in the Surahs and their real life.

### **Quran Studies II**

In Quran Studies II, students learn Makharij Al-Horoof (Articulation points of Arabic letters), recite Surah Al- Muminoon and Surah An-Noor with Tajweed rules, memorize the prescribed Surahs. They learn the Tafseer of Surahs, the occasion of revelation and Fiqh of Surat At-Talaq, and make connections between the teachings in the Surahs and their real life.

### **Quran Studies III**

In Quran Studies III, students learn Sifat Al-Horoof (Characteristics of Arabic letters), recite Surah Al-Furqan and Surah As-Shuara with Tajweed rules, and memorize the prescribed Surahs. They learn the Tafseer of Surah Attaghabon, its occasion of revelation, and make connections between the teachings in the Surahs and their real life.

### **Quran Studies IV**

In Quran Studies IV, students learn Sifat Al-Horoof (Characteristics of Arabic letters), recite Surah An-Naml and Surah Al-Qasas with Tajweed rules, memorize the prescribed Surahs. They learn the Tafseer of Surah Al-Munafiqun, its occasion of revelation, and make connections between the teachings in the Surahs and their real life.

## **HEALTH & PHYSICAL EDUCATION**

Students are required to complete 3.75 credits of Health & Physical Education each high school year. Students in Physical Education develop movement skills in diverse physical activities that include rhythmic movement, games, sports, and cardiovascular exercises. Lifelong health and physical fitness is supported through challenging units of study that are developmentally and age appropriate. Students develop personal fitness goals and track progress towards attaining those goals over time to ensure an individual focus on achieving and maintaining a healthy lifestyle that supports physical activity, analytical skills, team-building skills, goal setting, and self-assessment.

## **ELECTIVES** (possible titles for 2017-2018; subject to change)

The high school administration will strive to offer students a wide range of required and elective courses that would help them acquire the skills necessary to thrive and succeed in this age of digital, market, and environmental accelerations. Unless otherwise noted, electives are 0.5 credit and semester-based. These are some examples of possible electives.

### **Family and Consumer Science (required)**

In this one-semester course, students develop skills and knowledge to help them transition into adult roles within the family. They learn to make wise consumer choices, prepare nutritious meals, contribute effectively as part of a team, manage a household budget, and balance roles of work and family. They gain an appreciation for the responsibilities of family members throughout the life span and the contributions to the well-being of the family and the community. A requirement for graduation, students may elect to take this course during junior or senior year.

### **Economics**

The purpose of this course is to give students a thorough understanding of the principles of economics. Students learn how fundamental decisions about the four factors of production—land, labor, capital, and entrepreneurship—are made. Topics include basic economic concepts, the law of supply and demand; saving, borrowing, and spending; the Federal Reserve System and the money supply; and the role of government in promoting greater efficiency and equity in the economy. This is a two credit-course.

### **Psychology**

This course introduces students to the study of human behavior and mental processes. The main topics covered are the history of and approaches to the field of psychology, including research methods, biological bases of behavior, sensation and perception, consciousness, learning, cognition, motivation and emotion, development, personality, testing and individual differences, physiological disorders, abnormal behavior and treatments, and social psychology. The course will enable students to explore how psychologists think and will expose them to the critical thinking and compassion that the field of psychology brings to the human condition. Psychology is a two credit-course.

### **Forensic Science**

This course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions. Prerequisites for Forensic Science are at least two years of high school science including Biology (or equivalent). Chemistry is highly recommended.

### **Astronomy**

This course introduces students to the study of astronomy, including its history and development; basic scientific laws of motion and gravity; the concepts of modern astronomy; and the methods used by astronomers to learn more about the universe. Additional topics include the solar system; the Milky Way and other galaxies; and the sun and stars. Using online tools, students examine the life cycle of stars, the properties of planets, and the exploration of space.

### **Anatomy & Physiology**

Anatomy and Physiology introduces the basics required for the study of the human body and its functions. Students will receive a general introduction to life functions, the terminology, and phonetic pronunciations used to describe body parts and their locations as well as an overall review of human development and body processes. This course also includes wide variety of classroom activities that help to maintain a high level of interest and participation. These include labs, demonstrations, guest presenters, audiovisual materials, and open discussion of topics that are pertinent and of interest to students. Requirements: Completion of biology and chemistry, or permission of the department. This is a two-credit course.

### **Environmental Science**

The purpose of the Environmental Science elective is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems (both natural and human-made), to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental Science is an interdisciplinary lab science; it embraces a wide variety of topics from different areas of study. Incorporating primarily the disciplines of chemistry, physics and biology, using fieldwork experience, engaging in projects, and using a team approach to problem solving, the course intends to spark students' interest in the environment and enable students to apply the sum of their science experience. Requirements: Completion of biology and chemistry, or permission of the department. Environmental Science is a two-credit course.

### **Introduction to Usul al Fiqh**

This course concentrates on the history, indicators and methodological principles of Islamic jurisprudence (fiqh). It describes the origin and development of Islamic legal theory. It traces the efforts made by the leading Muslim legal theorists in explaining the ways that human mind can interact with the Revelation. Likewise, it focuses on the methods of reasoning adopted by various schools of jurisprudence to expound the Islamic law. The course also discusses theories on the objectives of Shari`ah (Maqasid al-Shari`ah) and emphasizes the need for Ijtihad and its role in harmonizing the requirements of the Muslim's contemporary life with the imperatives of the Qur`an and Sunnah.

### **Introduction to the Sciences of Hadith**

This course introduces students to the history of origins, development, transmission, dissemination and collection of Hadith literature. Students will study the methods of hadith criticism (Jarh wa Ta`deel), the types of technical terms (mustalahat al-hadith); the reporters of hadith (rijal al-hadith); and the role of technology in preserving the science of hadith.

### **Readings in Islamic Texts**

Reading and surveying the texts of prominent classical Muslim scholars in the fields of Iman, Seerah, history, ethics of disagreement, etc. In the absence of translations, original Arabic texts are explained in English with reference to relevant later works. Selected works by contemporary Muslim thinkers on issues pertaining to Islamic thought and contemporary challenges will be studied critically.

### **Fine Arts**

The fine art electives develop both students' hands-on and creative thinking skills. The art electives provide opportunities for students to develop their aesthetic skills through the study of drawing, painting, ceramics, collage, printmaking, and other art media.

### **C++ Programming**

This course teaches students to use problem-solving skills involving full-code examples to demonstrate how and why to apply programming concepts while using C++. Programming exercises strengthen student understanding of program design. Students will walk through the stages of Input, Output, Problem Analysis, and Algorithm Design to illustrate key concepts.

### **2D Animation**

In this half credit/one semester course, students will learn the tools to conceptualize and bring animation ideas to life. 2D animation creates movement in a two-dimensional artistic space. Using a variety of software and design programs, students will transform their creative notions into reality through designing, defining, and completing a variety of digital design projects, including creating their own websites.

### 3D Modeling

3D Modeling helps those students who interested in career fields like virtual reality, video game design, marketing, television and motion pictures, or digital imaging. Students will gain a deeper understanding of graphic design and illustration through using 3D animation software, drawing, photography, and 3D construction to create virtual three-dimensional design projects, This course will help develop the skills needed to navigate within a 3D digital modeling workspace while rendering 3D models, and is a good introduction careers in the fast-growing field of technology and design.

### Grade Distribution and GPA Scale

Scale %	Grade	College Prep	Honors	AP
94 – 100	A	4.0	4.5	5.0
90 – 93	A-	3.7	4.2	4.7
87 – 89	B+	3.3	3.8	4.3
83 – 86	B	3.0	3.5	4.0
80 – 82	B-	2.7	3.2	3.7
77 – 79	C+	2.3	2.8	3.3
73 – 76	C	2.0	2.5	3.0
70 – 72	C-	1.7	2.2	2.7
67 – 69	D+	1.3	1.8	2.3
63 – 66	D	1.0	1.5	2.0
60 – 62	D-	0.7	1.2	1.7
0 – 59	F	0.0	0.0	0.0

### College Admissions Tests

#### SAT

Most colleges and universities accept the SAT test as a college entrance examination. The new SAT is available in March 2016. It includes a Reading Test, Writing and Language Test, and a Math Test. The SAT has an optional essay component, which some colleges will require. The SAT is offered several times a year. Most students take the SAT for the first time during the spring of their junior year and a second time during the fall of their senior year. For the SAT Subject Tests, most students take them toward the end of their junior year or at the beginning of their senior year. In general, you should take

tests such as World History, Biology E/M, Chemistry or Physics as soon as possible after completing the course in the subject.

Registration deadlines for the new SAT Test and SAT Subject Tests are approximately five weeks ahead of the test dates. Registration information is available with the Guidance Counselor. You may also register on line at *www.collegeboard.com*. There is a fee for taking the SAT but you may qualify for a fee waiver. Check with the Guidance Counselor for eligibility and fee-waiver application.

### **Free SAT Practice from Khan Academy**

Khan Academy provides free and personalized practice program for SAT takers at *www.khanacademy.org*

### **ACT**

Most colleges and universities accept the ACT test as a college entrance examination. The ACT is a standards-based educational and career planning tool that assesses students' academic readiness for college. The ACT (plus Writing) includes a set of four multiple-choice tests which cover English, Mathematics, Reading, and Science, as well as a Writing section. Registration deadlines for ACT Tests are approximately five weeks ahead of the test dates. Registration information is available with the Guidance Counselor. You may also register on line at *www.act.org*. There is a fee for taking the ACT but you may qualify for a fee waiver. Check with the Guidance Counselor for eligibility and fee-waiver application.