

# **NOBLE LEADERSHIP ACADEMY**

Course Catalog

# Table of Contents

1. [Graduation Requirements](#)
2. [Grading Scale](#)
3. [Sample Coursework Plan](#)
4. [Arabic](#)
5. [English](#)
6. [History](#)
7. [Islamic Studies](#)
8. [Math](#)
9. [Physical Education](#)
10. [Quran](#)
11. [Science](#)

## Graduation Requirements

Credits must be earned in the following areas to fulfill the graduation requirements of Noble Leadership Academy.

Course Area	Credits per course	Credits Total
Arabic	3	9
English	5	20
History	5	15
Islamic Studies	2	8
Math	5	20
Physical Education	2	8
Quran	4	16
Science	5	15
Totals		111

### Grading Scale

Letter Grade	Percent Grade	GPA Scale
A+	97-100	4.0
A	93-96	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	65-67	1.0
E/F	Below a 65	0

## Sample Coursework

Sample 9th Grade Year Coursework	Sample 10th Grade Year Coursework
Survey of Literature Geometry Chemistry World History Arabic I Islamic Studies I Quran I Physical Education	American Literature Algebra II Biology United States History I Arabic II Islamic Studies II Quran II Physical Education
Sample 11th Grade Year Coursework	Sample 12th Grade Year Coursework
British Literature Precalculus Physics AP US History Arabic III Islamic Studies III Quran III Physical Education	AP Literature Calculus Anatomy and Physiology Civics and Government Islamic Studies IV Quran IIII Physical Education

## Arabic

*The mission of Noble Leadership Academy's Arabic Department is to develop the language skills necessary for students to read, write and speak the Arabic language. Furthermore, we want to foster a love of learning the language of the Quran so that students may read fluidly and think deeply about the word of Allah (SWT).*

*Arabic at Noble Leadership Academy is taught as a second language and is divided into 9 levels, each level breaking down the language acquisition objectives. Upon entering Noble, students will be tested and placed in the appropriate level. Students are expected to improve at least half a level each school year. We do not give honors, accelerated or regular distinctions for language learners as we expect all students to advance based on their own abilities for language acquisition. Levels progress backwards from Level 9: Basic Novice to Level 1: Advanced Proficient*

### **Arabic Level 9:**

Students placed in Level 9 are considered novices in the Arabic Language. In this course, students will learn the shapes and sounds/ pronunciations of all the Arabic letters. Students will also learn about diacritical marks, nasalization of letter sounds, elongation of letters, stressed sounds, voiced and voiceless LAM sounds at the beginning of words.

### **Arabic Level 8:**

Students placed in Level 8 are considered developing novices in the Arabic Language. Building on the skills learned in Level 9, students will continue to read words and sentences, expand their language vocabulary and begin learning basic grammar rules such as parts of speech, verb tenses, sentence types. Students will understand the 7 letters that change the diacritics of the word they precede, use articles, and differentiate between feminine and masculine nouns. Students will also learn to count from 1- 50 in Arabic.  
Textbook Used: I Love Arabic 3

### **Arabic Level 7:**

Students placed in Level 7 are considered high novices in the Arabic language. Students will be able to hold dialogues using curriculum vocabulary. Students will continue developing their grammar and syntax skills by learning to conjugate past tense verbs with both masculine and feminine pronouns, understanding the components of a verbal and nominal sentence,

understanding the use for masculine and feminine words, and demonstrative pronouns. Students will also be able to assign grammatical functions for words in a sentence, and count from 1-100 in Arabic. By the end of this course, students will be able to write a complete paragraph independently and recite 3 poems in Arabic.

Textbook Used: I Love Arabic 4

### **Arabic Level 6:**

Students placed in this level are considered low intermediate language learners. In this level, students will continue developing their reading and speaking skills using a more advanced curriculum. Students will continue developing their writing skills and expand their vocabulary. In grammar, students will understand singular and plural nouns, plural types and their grammatical forms, how to conjugate verbs with pronouns, how to use appropriate adjectives.

Textbook Used: I Love the Arabic Language 5

### **Arabic Level 5:**

Students placed in Level 5 are considered middle-intermediates in the Arabic Language. In addition to building their reading, speaking and vocabulary skills, students will build on their grammar knowledge. Students will understand how to identify and utilize demonstrative and relative pronouns. Students will also learn Kana, Inna & other words that change the grammatical markings and functions of a nominal sentence and how to conjugate present tense verbs. By the end of this course, students will be able to write a two paragraph essay in Arabic.

Textbook Used: I Love the Arabic Language 6

### **Arabic Level 4:**

Students who place into Level 4 Arabic are considered high-intermediate in Arabic proficiency. Building on their knowledge of previous language skills, this levels objectives are to teach students how to arrange events and people in the correct order, how to indicate possession and addition, to identify and use words with both fixed and variable endings, identify and use separate and attached pronouns and to identify and use verb scales and formations. Students will also be proficient enough in the language to begin translating from Arabic to English and vice versa.

Textbook: I Love the Arabic Language 5

**Arabic Level 3:**

Students placed in Level 3 Arabic are considered low- advanced language learners. By this point, students should be proficient in reading, writing and speaking the Arabic Language. In this course, students will review important grammar skills and come to understand more complex ideas such as formations of objects to show intent, definite and indefinite pronouns and verb formations and their scales. By the end of this course, students will be able to write 3 or more paragraph essays. They will also be able to translate 2-3 paragraphs from Arabic to English and vice versa.

Textbook Used:

**Arabic Level 2:**

Students placed in Level 2 Arabic are considered middle-advanced language learners. They have a strong grasp of the Arabic language and are able to read, speak and write it comfortably. In this course, students will continue to learn more complex syntactic structures and grammar rules such as stating the state of actions in a sentence and using classification and specificity when writing. Students will engage in different writing activities and will be able to give oral presentations and have discussions in Arabic. Students will also be translating texts from Arabic to English and vice versa.

Textbook used:

**Arabic Level 1:**

Students in Level 1 Arabic are considered highly advanced in their proficiency. This level will focus on developing their writing and speaking skills as students will be expected to write and deliver their own sermons, speeches and essays. They will explore ideas and thoughts in the language and will work on translating more classical texts into English.

Textbook Used:

## **English**

*The mission of Noble Leadership Academy's English Department is to foster a love of reading and appreciation for good writing; furthermore, we want our students to better understand their commitment to be effective readers and writers. In our student centered classrooms, we guide our students to communicate effectively, access information by various means, think critically and problem solve creatively.*

### **Survey of Literature: College Prep**

This is a theme-related, literature-based, integrated course which provides heterogeneously-grouped students with an opportunity to become familiar with a wide range of literary forms, themes, cultures, and periods while developing proficiency in the use of grammar/usage and mechanics in their compositions. Emphasis is placed on distinguishing aspects of the various genres and elements of literature, with a concentration on short story fiction, poetry, and drama. Students analyze various works of literature through oral discussion and written compositions. The basic tools needed for writing are introduced, including writing a thesis/claim statement, making an outline, cited sources, paraphrasing resource materials using the MLA format. Additionally, teachers emphasize grammar and vocabulary development.

### **Survey of Literature: Honors**

This is a theme-related, literature-based, integrated course which provides students with an opportunity to become familiar with a wide range of literary forms, themes, cultures, and periods while developing proficiency in the use of grammar/usage and mechanics in their compositions. Emphasis is placed on distinguishing aspects of the various genres and elements of literature, with a concentration on short story fiction, poetry, and drama. Students analyze various works of literature through oral discussion and written compositions. Outside reading novels are also required for this course. Students will produce various types of compositions and research projects using technology. The basic tools needed for research writing are introduced, including writing a thesis/claim statement, making an outline, locating resources, preparing a works cited page, paraphrasing resource materials and documenting sources using the MLA format. Additionally, teachers emphasize vocabulary development.

### **World Literature: College Prep**

This is a theme-related, literature-based, integrated course which provides students with an opportunity to become familiar with a wide range of literary forms, themes, cultures, and periods while developing proficiency in the use of grammar/usage and mechanics in their compositions. Emphasis is placed on distinguishing aspects of the various genres and elements of literature, with a concentration on short story fiction, poetry, and drama. Students analyze various works of world literature through oral discussion and written compositions. Students will produce various types of compositions and research projects using technology. Students will write narrative, expository and argumentative essays, as well as short research pieces. Additionally, teachers emphasize standardized test preparation and vocabulary development.

### **World Literature: Honors**

This is a theme-related, literature-based, integrated course which provides heterogeneously-grouped students with an opportunity to become familiar with a wide range of literary forms, themes, cultures, and periods while developing proficiency in the use of grammar/usage and mechanics in their compositions. Emphasis is placed on distinguishing aspects of the various genres and elements of literature, with a concentration on short story fiction, poetry, and drama. Students analyze various works of literature through oral discussion and written compositions. Outside reading novels are also required for this course. Students will produce various types of compositions and research projects using technology. Students will create a writing portfolio which aims to

### **American Literature: College Prep**

This course focuses on the chronological study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological context and the relevance of period structures in American literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. While expository writing is the focus in American literature, the students will also demonstrate competency in a variety of writing genres: narrative, argumentative, and expository. The student will engage in research, timed writing, and the writing process.

### **American Literature: Honors**

This course focuses on the chronological study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological context and the relevance of period structures in American literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. While expository writing is the focus in American literature, the students will also demonstrate competency in a variety of writing genres: narrative, argumentative, and expository. The student will engage in research, timed writing, and the writing process. Students in the Honors section will be expected to go further in the chronological American literary movements.

### **British Literature: College Prep**

This course focuses on the study of British literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. While the continued focus is expository writing in British literature, the student will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The students will engage in research, timed writing, and the writing process. Students will also be instructed in language and writing skills. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes.

### **British Literature: Honors**

This course focuses on the study of British literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. While the continued focus is expository writing in British literature, the student will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The students will engage in research, timed writing, and the writing process. Students will also be instructed in

language and writing skills. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. Students in the Honors section will be expected to go further in the chronological British literary movements.

### **Advanced Placement Literature & Composition**

The course focuses on an intensive study of representative works from various literary genres and periods. The focus is on the complexity and thorough analysis of literary works. The students will explore the social and historical values that works reflect and embody. The textual detail and historical context provide the foundation for interpretation: the experience of literature, the interpretation of literature, and the evaluation of literature. Writing to evaluate a literary work involves making and explaining judgments about its artistry and exploring its underlying social and cultural values through analysis, interpretation, and argument (e.g. expository, analytical, and argumentative essays). The writers will develop stylistic maturity: strong vocabulary, sentence variety, and effective use of rhetoric to maintain voice. An AP syllabus will be submitted and approved by the College Board.

Text: Various Novels & Poetry.

## History

*Insert mission statement*

### **World History: College Prep**

The World History and History of the Modern World courses bring history alive through a carefully developed chronological and thematic approach, which provides the student with a firm grasp of the sweep of Western and Non-Western history. This survey of World History provides comprehensive coverage of historical events, facts and concepts with coverage from Ages of Enlightenment and Revolutions through the Globalization of the Modern World.

### **World History: Honors**

#### **United States History I: College Prep**

This is the first half of a two-year sequence. This survey course follows a flexible chronology, which broadly covers the panorama of our nation's development over a period of three centuries from colonization and settlement through the Reconstruction.

#### **United States History I: Honors**

This is the first half of a two-year sequence. This survey course follows a flexible chronology, which broadly covers the panorama of our nation's development over a period of three centuries from colonization and settlement through the Industrial Revolution. Honors students will be required to engage in the historical skills necessary to connect and analyze historical events. Students in the Honors track will be well positioned to transition to AP US History in their Junior or Senior year.

#### **United States History II: College Prep**

This is the second half of a two-year sequence. It deals with the major events which have shaped and molded our nation in the 20th and 21st centuries. The survey examines the ever-changing political scene, as well as social and economic developments. It pays particular attention to world affairs, major wars, and contemporary problems and conflicts both internal and external, an understanding of which is a prerequisite to their solution.

#### **United States History II: Honors**

This is the second half of a two-year sequence. It deals with the major events which have shaped and molded our nation in the 20th and 21st centuries. The

survey examines the ever-changing political scene, as well as social and economic developments. It pays particular attention to world affairs, major wars, and contemporary problems and conflicts both internal and external, an understanding of which is a prerequisite to their solution.

### **Advanced Placement United States History**

This course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with problems and material in United States History. This program will prepare students for intermediate and advanced college courses by making demands upon them equivalent to those of full year introductory college courses. Students will learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. The Advanced Placement United States History course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present ideas clearly and persuasively in essay format. The Advanced Placement course will provide students with knowledge of primary sources, including documentary material, maps, statistical tables and pictorial and graphic evidence of historical events. They will learn to express themselves with clarity and precision and to cite sources and credit the phrases and ideas of others.

### **Civics and Government:**

The American Government & Politics will require that the student learn facts and concepts and understand typical political processes in order to gain a thorough and systematic comprehension of United States government. Further, the student will learn to use specific information to evaluate and critique general propositions about government and politics. Topics include: What are Politics? Constitutional Beginnings Federalism The U.S. Congress The American Presidency The U.S. Supreme Court Civil Rights and Liberties

## **Islamic Studies**

*The mission of Noble Leadership Academy's Islamic Studies department is to foster a love of Allah (SWT) and His messenger, Prophet Muhammad (SAW) through an in depth study and understanding of Allah's divine guidance. In our discussion based classrooms, we foster critical thinking and deep understanding on how to live morally and spiritually upright lives that are pleasing to Allah (SWT).*

### **Islamic Studies I:**

This course will delve into 4 facets of Islamic Knowledge: Aqeedah/ Belief, Akhlaq/Manners, Fiqh/Jurisprudence and Islamic History. Students will delve into a fundamental understanding of Islam by exploring the following essential questions: What is Aqeedah? What does Islam mean? Who is Allah? What is Tawheed? Students will understand the tenets of Faith and Belief in Islam, explore the role of Ibadah, study the qualities and manners of a believer. Students will be introduced to the idea of Islamic Fiqh and Aklaq and will learn about the history of creation by studying the story of Adam and Eve as well as the early prophets.

Textbook Used: Islamic Studies I

### **Islamic Studies II:**

This course will delve into 4 facets of Islamic Knowledge: Aqeedah/ Belief, Akhlaq/Manners, Fiqh/Jurisprudence and Islamic History. Students will explore the role of revelation and prophethood in understanding how to live a moral and guided life. Students will understand how belief should lead to ibadah: acts of worship such as *prayer, zakkah, hajj, fasting*. Students will also understand the role of *tawba* and *istighfar* in their lives. Students will explore manners of a Muslim and will understand that Islam promotes gender equality and allows for the exploration of personal identity within Islamic boundaries. Students will also study the life of Prophet Muhammad (SAW)

Textbook Used: Islamic Studies 10

### **Islamic Studies III:**

This course will delve into 4 facets of Islamic Knowledge: Aqeedah/ Belief, Akhlaq/Manners, Fiqh/Jurisprudence and Islamic History. Students will learn about the tenets of faith and belief, as well as explore important Islamic manners such as developing healthy friendships and developing a relationship

with the masjid. Students will also learn about history of the Muslim Ummah after the death of the Prophet Muhammad (SAW).

Textbook Used: Islamic Studies 11

#### **Islamic Studies IV:**

This course will delve into 4 facets of Islamic Knowledge: Aqeedah/ Belief, Akhlaq/Manners, Fiqh/Jurisprudence and Islamic History. In this course, students will understand the prerequisites of faith and that judgements of the mind are three parts; intellectual necessity, impossibility and possibility. They will also explore more deeply the tenets of Eman/Faith. In Fiqh, they will explore the role of *ijtihad*, *hudud* and *taqlid* in understanding Islamic jurisprudence. They will also learn about the history of the Abbassid and Ummayid Empires.

Textbook Used: Islamic Studies Grade 12

## Math

*The mission of the Noble Leadership Academy Math Department is to create an environment which empowers students to become confident, competent, problem solvers. It is our goal for students to engage in the learning of mathematics that will challenge them to be independent learners and develop sound reasoning, problem-solving, and critical thinking skills necessary to compete in a global society.*

**\*\*\*8th Grade Algebra I:** All students in 8th grade will complete an Algebra I course. New students will be expected to take the course before they matriculate at Noble Leadership Academy.

### **Geometry: College Prep**

This course is offered to 9th and 10th graders. The formal study of the principles of logic forms the basis for the deductive development of geometry as a mathematical system. Plane and spatial relationships, intuitively studied in earlier grades, are developed as part of a mathematical system. This is accomplished by the application of logic and deductive reasoning to undefined terms, defined terms, postulates and previously proven theorems. The basic rules of logic for conditional statements are also studied. The core of the geometry program is the traditional Euclidean plane geometry enriched by the addition of space geometry, transformational geometry, and coordinate geometry. Algebraic skills are further developed by the application of geometric principles to the solution of numerical exercises. Problem solving is emphasized. Exploratory hands-on activities are often used, including exposure to explorations of geometric concepts using the computer.

Prerequisite: Algebra I.

Textbook:

### **Geometry: Honors**

This course is offered to students in 9th and 10th grade who have demonstrated superior ability in mastering the concepts of Algebra I. The core of the Geometry Honors course is traditional Euclidean plane geometry enriched by the addition of space geometry. Plane and spatial relationships studied in earlier grades are further developed as part of a mathematical system, including polygons and circles. This is accomplished through the application of inductive and deductive reasoning to undefined terms, postulates and previously proven theorems. Two column proofs are emphasized

throughout each concept explored. Algebraic skills are further developed by their application within the context of geometry.

Prerequisite: Algebra I with a B+ or higher and Teacher Recommendation. .

Textbook:

### **Algebra II: College Prep**

This course is offered to students in 9th and 10th grade who have successfully completed Algebra I. A higher level of maturity is required in extending work done in Algebra I. Graphing calculators are used for analysis, visual study and interpretation. Algebraic techniques are emphasized together with applications, transformations and analysis. The number system is extended to include irrational and complex numbers. Equation solving techniques are extended to include systems of equations, and quadratic equations with irrational and complex roots. Radical, logarithmic, polynomial and exponential functions are also graphed and analyzed. Students learn both algebraic and calculator methods for solving problems. Students formalize the approach to Arithmetic and geometric series and sequences.

Prerequisite: Algebra I

Textbook:

### **Algebra II: Honors**

This is an honors level algebra course offered to students in 9th and 10th grade who have demonstrated superior ability in Geometry Honors and/or Algebra I. Topics studied in the regular Algebra II curriculum will be extended and explored in greater depth. Algebraic techniques are emphasized together with applications, transformations and analysis. The number system is extended to include irrational and complex numbers. Equation solving techniques are extended to include systems of equations, and quadratic equations with irrational and complex roots. Radical, logarithmic, polynomial and exponential functions are also graphed and analyzed. Students learn both algebraic and calculator methods for solving problems. Students formalize the approach to Arithmetic and geometric series and sequences. In addition, the following topics are introduced: rational and logistic growth functions, probability and basic combinatorics.

Prerequisite: Algebra I with a B+ or higher and Teacher Recommendation.

Textbook:

### **Precalculus: Honors**

This is an honors level course offered to 11th graders. It provides an essential background for students planning to take Calculus. Topics will include:

complex numbers, graphs of polynomials, polynomial, linear and absolute value inequalities, exponential functions, logarithmic functions, parametric equations, sequences, series, limits, slope of a curve and derivatives of polynomial functions. Series and sequences will be used to develop the concept of limits.

Prerequisite: Algebra II

Textbook:

### **Calculus: Honors**

This honors course will apply derivatives and the indefinite and definite integrals and are investigated with an emphasis on science and business applications. The four major concepts to be mastered in this course are limits, derivatives, definite integrals and indefinite integrals. Students will use algebraic methods for differentiation and integration, numerical and graphical procedures will be investigated on functions they have encountered in the course preceding calculus. Use of a graphing calculator is expected.

Prerequisite: Pre-Calculus

### **Advanced Placement Calculus**

This is an advanced placement course offered to students who have demonstrated a thorough knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry and analytic geometry (rectangular and polar coordinates, equations and graphs, lines and conics). The properties of algebraic, trigonometric, exponential, logarithmic and piecewise-defined functions are studied. These functions plus limits and continuity are studied and applied to the differential and integral calculus. Applications of the derivative plus the indefinite and definite integrals are investigated numerically, algebraically and graphically. Use of a graphing calculator is expected.

Prerequisite: Precalculus and Teacher Recommendation.

Textbook:

## **Physical Education**

*The mission of Noble Leadership Academy's physical education program is to teach students to live active and healthy lifestyles. Through guided activities and regular physical benchmarks, students are encouraged and guided to improve their physical health and to understand the role physical fitness has on emotional well-being.*

Physical Education is a course that will include a variety of physical activities, individual physical fitness testing. This course will aim to provide every student with a wide variety of physical activities and challenges that will contribute to the development of their physical, cognitive, and affective well-being. Students will go through a progression of skill sets that work to build their physical skill, strength and coordination. Students will also learn key components of maintaining proper nutrition and eating habits.

### **Physical Education I:**

This course is designed to help students develop physical literacy through the application of health and skill-related concepts of fitness while engaging in lifelong physical activities. Students will explore physical literacy concepts through the cognitive, affective and psychomotor domains. Students set short- and long term fitness goals based on physiological assessments. Students will use movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a variety of selected activities.

### **Physical Education II:**

This course is designed to help students develop physical literacy through the application of health and skill-related concepts of fitness while engaging in lifelong physical activities. Students will explore physical literacy concepts through the cognitive, affective and psychomotor domains. Students set short- and long term fitness goals based on physiological assessments. Students will use movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a variety of selected activities.

### **Physical Education III:**

This course is designed to help students develop physical literacy through the application of health and skill-related concepts of fitness while engaging in lifelong physical activities. Students will explore physical literacy concepts

through the cognitive, affective and psychomotor domains. Students set short- and long term fitness goals based on physiological assessments. Students will use movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a variety of selected activities.

**Physical Education IV:**

This course is designed to help students develop physical literacy through the application of health and skill-related concepts of fitness while engaging in lifelong physical activities. Students will explore physical literacy concepts through the cognitive, affective and psychomotor domains. Students set short- and long term fitness goals based on physiological assessments. Students will use movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a variety of selected activities.

## Quran

*The mission of Noble Leadership Academy's Quran department is to foster a lifelong love, understanding and appreciation of the word of Allah. In our student-centered classroom, students work at their own pace to first read fluidly, memorize and then to understand the Quran, surah by surah, from chapter 30 to chapter 1. We hope to help our students complete the memorization of the Quran by the time they graduate.*

Quran classes will be individualized with students building on their work year to year. On the transcript, the course will be listed based on their matriculation year. For example, Quran I is for freshman, Quran II is for sophomores, Quran III is for juniors and Quran IV is for seniors. However, there is no set curriculum for each grade level or standard of accomplishment. Goals are set by the teacher with consultation from the student and progress is reported through traditional numerical grades, based on whether students meet the expectations set.

## Science

*The mission of the Noble Leadership Science Department is to create knowledgeable, scientifically literate problem solvers. By fostering a spirit of inquiry, nurturing our students' curiosity, and bringing current, relevant and real-world science into the classroom experience, we prepare our students to become educated citizens capable of comprehending and analyzing global issues.*

### **Chemistry: Honors**

This is a course for 9th graders that comprises a study of the composition of substances and the changes they undergo. The course is designed to give the student an understanding of the fundamental principles of inorganic chemistry through the development of chemical laws and theories. Emphasis is placed upon the relationship of atomic structure and bonding to the physical and chemical properties of substances. Topics include stoichiometry, chemical reactions, atomic orbitals and the gas laws. The mathematical foundation of modern chemical theory is emphasized.

Prerequisites:

Textbook Used:

### **Biology: Honors**

This is a tenth grade honors course, which investigates the underlying principles of life science. Laboratory work is stressed with an emphasis on student initiated and designed experimentation to investigate, test hypotheses and develop concepts. Areas of study include the skills and techniques of biology, heredity and DNA, organisms through time, human biology, ecology, and bacteriology and viruses

Prerequisites:

Textbook Used:

### **Advanced Placement Biology**

This is a second year of Biology taught at the college level. Areas of study include the diversity and organization of life, metabolism and biochemistry, responsiveness and behavior, reproduction and heredity, evolution and ecology. The course is laboratory-oriented with emphasis on the relationship between structure and function, microbiology, and the use of the scientific method.

There is provision for individual research work. This is a 10th grade elective designed to prepare students to pass the Advanced Placement Exam in Biology.

Prerequisites:

Textbook Used:

**Physics: Honors**

This is an honors level physics course for 11th graders that combines general principles of physics and their applications with an emphasis on technology. The course will take a thematic approach to physics highlighting such topics as energy sources and uses, transportation, electricity at work and information technology. The class will stress a deeper mathematical approach to concepts and problem solving. Additional topics such as induction, alternating currents, semiconductors, laser and transistors will be introduced. Labs will include open-ended investigations on the above topics.

Prerequisites:

Textbook Used:

**Anatomy & Physiology: Honors**

This is a full year honors elective for grade 12 students that deals mainly with the human body and its related functions. To understand the human body, it is necessary to understand how its parts are put together and how they work in conjunction with one another. The course will begin with a review of the cell, the levels of organization (from cell to organism), anatomical terminology, an overview of the ten body systems, and a brief look into tissue systems and organization. After this foundation has been laid, the following individual systems will be looked at in more detail: (1) Body Covering and Framework (2) the Muscular System and Kinesiology, (3) the Nervous System (4) the Endocrine and Cardiovascular Systems, (5) the Digestive and Renal Systems and (6) the Reproductive System.

Prerequisites:

Textbook Used: