



# ACADEMIC COURSES

## 2011 - 2012

This is a comprehensive list of all courses offered at North Lake High School. Not all courses are offered every quarter.

# INTRODUCTION

North Lake High School provides students with the opportunity to recover credit through teacher directed and computer on-line learning courses such as Education 2020. North Lake High School Graduates must successfully complete twenty two (22) credits of course work to receive a high school diploma.

The courses described in this handbook are aligned with the Michigan Merit Curriculum and the Michigan High School Standards and Benchmarks.

All graduates must complete the following:

## Graduation Requirements through the Class of 2015

English – Language Arts	4.0 credits
Health and Physical Education	1.0 credits
Mathematics	4.0 credits
On-Line Learning Experience	0.5 credits
Science	3.0 credits
Social Studies	3.0 credits
<u>Visual, Performing, Applied Arts</u>	<u>1.0 credits</u>
Required Course Total	16.5 credits
+	
<u>Electives</u>	<u>5.5 credits</u>
Total Required	22.0 credits

## Graduation Requirements beginning with the Class of 2016

English – Language Arts	4.0 credits
Health and Physical Education	1.0 credits
Mathematics	4.0 credits
On-Line Learning Experience	0.5 credits
Science	3.0 credits
Social Studies	3.0 credits
Visual, Performing, Applied Arts	1.0 credits
<u>World Languages</u>	<u>2.0 credits</u>
Required Course Total	18.5 credits
+	
<u>Electives</u>	<u>3.5 credits</u>
Total Required	22.0 credits

# **COMPUTERS**

## **COMPUTERS**

This course deals with Computer programs and applications. It will be a comprehensive look at various everyday programs used in society. It will combine personal skill and creativity to complete assignments. It will look at software, including but not limited to, Microsoft Word, Excel, Power Point, web-based programs and the Internet. The students will be asked to show proficiency on the computer and all the programs studied.

# **ENGLISH**

## **ENGLISH LANGUAGE ARTS 9A & 9B**

This course will be an in-depth look at literature that guides students in finding their self and place within society. Students will be expected to read and analyze various works of literature and write responses to these works. The students will also learn ways English is used in today's society and show proficiency in real world applications of English. They will learn the Writing Process, vocabulary and spelling. They will be asked to relate literature to "real life" situations and experiences.

## **ENGLISH LANGUAGE ARTS 10A AND 10B - AMERICAN LITERATURE**

The courses are designed to further support student development in all five of the language arts areas: reading, writing, speaking, listening, and viewing. The focus of this class will be on American Literature. A wide variety of literary and informational text will be read and analyzed. While each unit of study has anchor readings that relate to the theme, it is understood that each unit will be supplemented with additional novels, poems, short stories, essays and film clips relating to the theme.

## **ENGLISH LANGUAGE ARTS 11A AND 11B - BRITISH LITERATURE**

The course will be dealing with British Literature. It will look at the different times of Britain and the historical, social and technical view of British Literature. The students will be asked to read and discuss the literature and various literary elements within them. In addition to reading British Literature, students will be expected to analyze and write about the literature, relate the historical and social views to the readings and compare or contrast to current situations in the world. They will be asked to relate literature to "real life" situations and experiences.

## **ENGLISH LANGUAGE ARTS 12A & 12B – WORLD LITERATURE**

This course will be dealing with world literature. It will be a chronological exploration of literature from around the world. It will be an unbiased look at the historical, social and technical view of various pieces of literature. The students will be asked to read and discuss the literature and literary elements within them.

## **CREATIVE WRITING**

This course will be dealing with creative writing in literature, as well as creating creative writing pieces. The students will be asked to read and discuss the literature and various literary elements within them. In addition to the readings, students will be expected to analyze and write in various styles of creative writing showing the literary elements. They will be asked to relate creative writing to "real life" situations and experiences. This course will combine interpretive, analytical and critical thinking for class discussion and writing.

## DRAMA

This course will be dealing with drama as literature and aspects of theater. It will examine various plays from classical to modern times. The students will be asked to read, interpret and discuss the plays and the literary elements present within them, including, but not limited to, plot, setting, themes and characterization. They will also be asked to relate common themes to “real life” experiences and situations. In addition to the plays, students will also be expected to analyze and write about the plays, create and perform skits and scenes illustrating the literary elements discussed and the technical aspects of theater. There will also be a section on creating all aspects of theater, including set design, costuming, make-up, sound and lighting. The students will research and participate in creating a production. This course will combine interpretive, analytical and critical thinking for class discussion and writing.

## ENGLISH FUNDAMENTALS

This course will be a thematic approach to literature and writing. It will look at different styles of literature and writing. The students will be asked to read and discuss the literature and various literary elements within them. The student will be expected to participate in discussion. In addition to reading literature, students will be expected to analyze and write about literature and/or current topics and compare or contrast to current situations in the world. They will be asked to relate literature to “real life” situations and experiences. This course will combine interpretive, analytical and critical thinking for class discussion and writing.

## MODERN LITERATURE

This course will look at the different areas and genre of Modern Literature and the historical, social and technical view that created and influenced Modern Literature. Students will be asked to read and discuss the literature and various literary elements within them. In addition to reading Modern Literature, students will be expected to analyze and write about the literature, relate the social views to the readings and compare or contrast to current situations in the world. They will be asked to relate literature to “real life” situations and experiences. This course will combine interpretive, analytical and critical thinking for class discussion and writing.

## MYTHS & LEGENDS

This course will be dealing with Mythology, Fables and Legends. It will be a comprehensive look at the mythology, fables and legends of different cultures. It will look at the oral and literary traditions of cultures including, but not limited to Greek, Roman, Native American and Egyptian. It will compare/contrast the different myths and legends. It will look at the different cultures and how they relate to the historical, social and technical view of myths, fables and legends. The students will be asked to read and discuss the literature and various literary elements within them. In addition to the readings, students will be expected to analyze and write about the literature, relate the historical and social views to the readings and compare or contrast to current situations in the world. They will be asked to relate literature to “real life” situations and experiences. This course will combine interpretive, analytical and critical thinking for class discussion and writing.

## PUBLICATIONS I & II

This course will involve understanding the fundamentals of producing a school newspaper and a yearbook. The student will learn the basics of, including, but not limited to, researching materials, article writing, copy editing, layout and design, photography, and conducting interviews. They will be asked to relate the in-class

assignments to “real life” situations and experiences. It will require a combination of personal skill and creativity to complete assigned tasks. Various techniques and software will be used to compile the newspaper and yearbook. There will be team assignments as well as individual assignments. The students will be asked to show proficiency on the computer and in completing coursework.

### THE RENAISSANCE

This course will be dealing with the Renaissance time period and the Middle Ages. It will be a comprehensive look at the life and times of the people living during the medieval and renaissance era. It will combine literature, history, art, music and architecture from the time. In addition to the readings, students will be expected to analyze and write about the materials, complete projects, relate the historical and social views to present time, present and participate during in-class discussions and activities.

### SHAKESPEARE

This course will be dealing with the works of William Shakespeare. It will look at the life and times of William Shakespeare and the historical, social and technical view of Shakespeare. The students will be asked to read and discuss the plays and various literary elements within them. Students will be expected to analyze and write about them, relate the historical and social views to the readings and compare or contrast to current situations in the world. They will be asked to research and understand the language of Shakespeare.

### WRITING WORKSHOP

This is a writing intensive course. It will cover all aspects of writing, including but not limited to, grammar, proofreading, editing, essay writing, poetry, short story and the research paper. You will also be writing for and creating the newspaper as one of your ongoing assignments.

## **SCIENCE**

### ATMOSPHERES & OCEANS

This course will cover the composition, structure and properties of the earth’s atmosphere. Students will be introduced to meteorology, the study of atmospheric phenomena and they will explore various types of severe weather. Different types of climate will be studied, specifically why different climates occur and how they are classified. Finally, this course will study the oceans and explore the formations of ocean floor features such as ridges and trenches.

### BIOLOGY 1

Basic biological concepts will be covered including cell structures, cell functions, the five kingdoms and classification systems. Students will observe and perform lab activities related to the above areas of study.

### BIOLOGY 2

This course covers the Earth’s changes through time. Areas to be studied include life’s diversity, evolution, viruses, bacteria, protists, fungi and plants. Students will participate in various lab and group activities.

## CHEMISTRY A and B

The basic concepts related to the study of chemistry are explored and applied using basic formulas and simple activities. Some of the areas of study are the scientific method, properties, classification and structure of matter, periodic law, atoms and bonding and chemical reactions.

## ENVIRONMENTAL SCIENCE

This course studies the Earth's biosphere and ecological interactions. Topics covered will include the changing environment, matter and energy in the world biomes. Students will participate in a variety of group activities related to the above topics.

## ANATOMY

This class will cover genetics through a presentation of the work of Gregor Mendel. Meiosis is also introduced and discussed. Students will learn about the structure of DNA, how it is replicated and the processes of transcription and translation are explained. Mendelian patterns of heredity and the principles of genetics as applied to humans are covered. The second part of this class focuses on the organs and systems of the human body and how they interact with one another.

## PHYSICAL SCIENCE

The basic concepts related to the study of physics are explored and applied using basic formulas and simple activities. Some of the areas of study are the scientific method, motion, forces, fluids, simple machines, heat, electricity and magnetism.

## PHYSICS

This course will focus on Michigan's Physics science content expectations including: the nature and practice of scientific inquiry, motion of objects, forces and motion, and forms of energy and energy transformations. Students will learn that physical principles allow understanding in other sciences and everyday experiences (e.g. heat exchanges in the atmosphere as they relate to weather, pressure and temperature differences causing different geological formations, radiation of electromagnetic energy and how it affects photosynthesis, the behavior of light and the eye, electricity, electromagnetic waves and your cell phone, nuclear fission and power plants, atomic structure and chemical reactions).

# **SOCIAL STUDIES**

## AMERICAN GOVERNMENT

This course will cover our democratic heritage, our structure of government, how democratic institutions function, how different economic systems view the purpose of government and what contributes to good citizenship. At the end of the course, students will be able to recognize how politics are important to our lives, understand how a bill becomes law, the branches of government and their purposes, improve reading skills, understand political vocabulary and understand how economics mirror different views of government.

## ECONOMICS

Economics is about making choices. Consider how changing economic circumstances might affect the student's lifestyles. By the end of the term, students will be able to discuss the basic economic problems faced by consumers in American society, discuss how businesses make economic decisions, discuss ways people invest money to save

for the future, and discuss how economic policy affects the individual, state, nation and world.

### MICHIGAN HISTORY

This course will cover exploration and early settlements; the growing years; the versatility of what Michigan has to offer; the growth of the auto industry and industrialization; the state government and its functions; basic information about Michigan locations, highways and how to read a map. Upon completion of this course, the student will be able to understand how Michigan became what it is today; recognize the various functions of state governments, geographical influences and effects of change; draw conclusions on current events and past history as they relate to everyday sources; realize his/her personal contributions to society; understand the elements in Michigan favorable to the growth of industrialization; know the geographical locations of at least 20 major areas; share a sense of pride in their state; know basic Michigan locations; know how to read a map.

### SOCIOLOGY

This course will provide students with an examination of the basic concepts, principals and methods central to the study of sociology. This class will meet three major roles: to teach students to think like a sociologist, to help students develop a sociological imagination and to help students understand and appreciate the diversity in social life by exposing them to data from a wide variety of cross-culture and historic sources.

### WORLD HISTORY & GEOGRAPHY A/B

This two semester course will focus on the emergence of man, the spread of humans through the planet. Emphasis will be on non-European cultures and religions and how the geography of the region affected the civilization the culture of the society. "A" will cover from classical Greek to the Age of Exploration; "B" will cover the discovery of America to the present.

### US HISTORY and GEOGRAPHY A

This course will survey the development of the US from Pre-Columbian American to Appomattox, focusing on Native American societies, Age of Exploration, colonial development, The Revolution, sectional differences, the causes leading to the Civil War and Reconstruction. Upon completion of this course, the student will be able to list the major physical regions of North America; describe the way of life of early Native Americans; order the steps by which the 13 English colonies became independent; describe the reasons for European exploration; identify the major events influencing American expansion.

### US HISTORY and GEOGRAPHY B

US History B traces the development of the US from 1865 focusing on Industrialization, Americans movement from isolation to world leadership, the Depression and WWII. It will survey the development of the Cold War, the reform movements of the 50's and 60's, Korea and Vietnam, different ethnic groups and the continuing expansion of civil and human rights. Upon completion of this course, the student will be able to demonstrate knowledge of people, events, ideas, institutions and historical movements; use visual aids such as charts, graphs, maps and photographs; demonstrate knowledge of cultural diversity and unity in American society; construct meaning by reading and gathering, interpreting, analyzing, synthesizing and evaluating information; compare and contrast the development of different regions of the United States; demonstrate a knowledge of cause and effect in historical situations. The student will be able to

demonstrate a knowledge of cause and effect in historical situations; develop an informed and reasoned commitment to human rights and equal dignity to all people; demonstrate knowledge of cultural differences between the generations of the 60's; use visual aids, such as charts, graphs, maps and photographs; compare and contrast a free society from a totalitarian one; demonstrate knowledge of the historical consequences of committing American forces throughout the world.

### GLOBAL GEOGRAPHY

This course will cover the physical and cultural geography of the world. Using the five themes of geography, students will be able to think spatially about their surroundings. There is an emphasis on the increasing connectedness of people and places due to the influence of globalization on world trade, travel, communication, culture, and natural environment.

## **ARTS/VOCATIONAL**

### BEGINNING DRAWING

This course will form an introduction to drawing and painting and present a thorough guide for the beginner through the use of line, texture, value color shape and space. Media in drawing includes use of pencil, pen and ink, pastels and charcoal. Painting focuses on composition in oil, pastels, watercolor, acrylic and tempera. Students will interpret through observation, various landscape and still life subjects. Aesthetics in art history will be introduced through the use of slides and videos. Included are critiques of professional and student work.

### INTERMEDIATE DRAWING

Anticipating that students will continue in this mode of inquiry, Intermediate Drawing will include deeper and more extensive exploration in this discipline. Each term builds a growing sophistication in the execution of drawing and painting, knowledge of the history of art as a means for individual expression applied to the individual student's course of study.

### ART 1 & 2

An introduction to the elements and principles of design, elementary drawing and color. Students will intentionally use art material and tools effectively to communicate ideas, create artwork that uses organizational principles and functions to solve specific visual arts problems and reflect upon the characteristics and assess the merit of one's personal artwork.

## **MATHEMATICS**

### \* PRE - ALGEBRA IA & IB (Calculator allowed)

A comprehensive program in first-year algebra is developed for students who are not mathematically oriented. Students learn basic algebraic concepts and apply them to expressions, equations, and functions.

(\* This course is only offered through the Education 2020 on-line learning system and is limited to students who receive prior permission from the principal and/or math teacher and who are 2008 or 2009 graduates.)

### ALGEBRA IA & IB (Calculator allowed)

A comprehensive first-year algebra program that is designed to meet current state benchmarks.

Algebra 1A provides the foundations for functions and linear equations.

Algebra 1B (prerequisite – successful completion of Algebra 1A) examines polynomials, nonlinear functions, and data analysis. (Mandatory for graduates of 2011 or later)

### GEOMETRY A and B

Prerequisite: Algebra IA. An informal approach is used to recognize geometric figures and apply concepts. Students learn to draw conclusions by practicing skills, applying theorems and postulates, experimenting and reasoning from given facts without writing formal proofs.

### ALGEBRA IIA & IIB

Prerequisite: successful completion of Algebra IA & IB. A comprehensive program in second-year algebra developed for students who are mathematically oriented. Students use expressions, equations, functions and other algebraic concepts to solve problems and practice skills. (Calculator allowed)

## **HEALTH**

### HEALTH I

The course is designed to help students examine their lifestyles, select goals and make plans to achieve and maintain optimum health. Health I focuses is on the areas of mental and social health including self-esteem, stress and building healthy relationships. It also includes studies relating to nutrition and digestion.

## **Education 2020 Curriculum**

### **ELECTIVES:**

**Strategies for Academic Success—EL1087** A one semester comprehensive study skills and strategies course designed for high school and middle school students. The learning environment has changed and E2020 has responded by creating a course designed with the online student in mind. The course begins with an individualized assessment that evaluates student strengths and weaknesses in topics such as time management, note taking, online learning environment skills, and strategies for remembering key information. The Diagnostic Profile for each student can be used to assign all course topics or used for customization of specific topics for student instruction or remediation. Within the course, students receive real-world activities to further enhance learning, while utilizing newly learned skills and strategies in the E2020 learning environment.

**Career Skills – EL1122** Intended to be an upper level high school one-semester course, Career Skills introduces students to a wide variety of career choices, by exploring the skills and steps required in obtaining optimum professional and financial success. Units include, assessing one's goals and attributes, exploring possible career opportunities and any accompanying skills necessary, preparing career documents (ex: cover letter, resume, applications, etc.), the job-search process, interviewing, work ethic, interpersonal relationships at work, professional communication, time management, and personal economic responsibilities.

**Computer Applications – EL1083** A two-semester course intended for middle or high school students to explore important concepts of practical real-world computer usage. This course differs from traditional computer applications courses; it is designed using a unique two-pronged approach that targets both concepts and applications. Some examples of topics include; accessing the World Wide Web, exploring system software and hardware, and wireless vs. wired communications and input, output, and storage devices. In addition, students participate in practical application activities which provide practice in word-processing, desktop publishing, spreadsheets, databases and presentations in an environment designed to meet the needs of any skill level. Activities are interesting, engaging and skills-rich to help students develop competencies and skills needed for today's workplace.

### **ENGLISH / LANGUAGE ARTS:**

**Language Arts 9—LA1091** This is a two-semester course that focuses on a variety of text: literary, expository, and informational. Each unit in the course contains different lessons: Skills, Literary/Expository, Informational, Communication, Grammar, and Writing lessons. This course covers literary skills such as Plot – flashback and foreshadowing, Setting – time and sequence, Characterization - dialogue, Theme – universal theme, Style – figurative language, and Narrator – different types. Units

include topics such as: Literary Analysis-Poetry; Autobiographies, Essays and Personal Accounts; and World Literature, theme is origin myths. Students also learn classics such as Homer's *The Odyssey* and William Shakespeare's *The Tragedy of Romeo and Juliet*. Informational Text reading skills are taught using consumer, workplace, technical, and public documents. Writing Lessons cover The Writing Process and also include a Research Workshop. Essay topics in the course include Business Letter, Research Paper, Literary Analysis Essay, Persuasive Essay, and Personal Narrative Essay.

**Language Arts 10—LA1092** This is a two-semester course that focuses on preparing students for success on state exit exams. Each unit contains: Skills Lessons which prepares students to learn skills necessary for standardized testing; Informational Lessons which introduce students to real-life topics that connect to the literary text; Communication Lessons, topics include Debate, Analysis of Formal Speech, Visual Media Analysis, and Mass Media and Public Opinion; Grammar Lessons, topics include Subject-Verb Agreement, Modifiers, Active and Passive Voice, Main and Subordinate Clauses, and Sentence Structure; and Writing Lessons, essays are taught using the Writing Process, topics include Autobiographical Narrative Essay, Persuasive Essay, Descriptive Essay, Expository Essay, and Letter to the Editor. Unit topics include: Literary Analysis of Poetry; Evaluate and Clarify Expository Text; World Literature – theme Social Responsibility; Legends, Epics, and Myths – *Antigone*, *The Sword and The Stone*; Drama – Shakespeare's *The Tragedy of Julius Caesar*; and Reading Comprehension – Informational text.

**Language Arts 11—LA1093** This two-semester course's main emphasis is American Literature. The course is structured chronologically by time period and literary era. Each unit contains introductory lessons that set the stage for the student to understand the background and historical events that impacted American literary and expository text. Topics include: Origins 2000 BC -1620; Slave Narratives; Puritan Style and Sermon; Romanticism and Transcendentalism; Realism; The Harlem Renaissance; Modernism; and Contemporary Literature. Authors represented include, Benjamin Franklin, Patrick Henry, Frederick Douglass, Chief Joseph, Edgar Allan Poe, Emily Dickinson, Walt Whitman, Henry David Thoreau, Nathaniel Hawthorne, Kate Chopin, Willa Cather, F. Scott Fitzgerald, Langston Hughes, Zora Neale Thurston, Martin Luther King Jr., Amy Tan, and Judith Ortiz Cofer. The course also contains a World Literature unit with stories from The Middle East, India, Japan, and Argentina. The course is rounded out by including Informational, Communication, Grammar, and Writing Lessons throughout each unit.

**Language Arts 12—LA1094** This is a two-semester British Literature based course. The course is organized by chronological time period that includes: Anglo-Saxon and Old English Period: 449-1066; The Medieval Period: 1066-1485; The Renaissance 1485-1660; 17th & 18th Centuries (Restoration & Enlightenment): 1660-1798; Romantic Period 1798-1832; Victorian Period: 1832-1901; and Modern Period: 1901-1950. Each unit contains an introduction to the time period using a timeline and background lecture that discusses the philosophical, political, religious, ethical, and social influences of each time period. Authors represented include Homer, Chaucer, Boccaccio, William Shakespeare, Francesco Petrarch, Mary Wollstonecraft, Queen Elizabeth I, Percy Bysshe Shelley, Elizabeth Barret Browning, Robert Browning, and Virginia Woolf. The course also contains a World Literature unit with stories from India, Europe, China, and Spain. The course also includes Informational Lessons, Communication lessons, Grammar Lessons, and Writing Lessons.

## **LANGUAGES:**

**Spanish 1 - EL959** Created to be a two-semester course for high schools students that allows for an individualized development of the Spanish language through the study of the core grammatical structures and the vocabulary necessary for elementary communication. Spanish I also provides students with an introduction into the traditions and customs of Spanish-speaking people across the world.

**Spanish II - EL960** A two-semester course designed for students who have successfully completed Spanish I. High-frequency, thematic, and contextualized vocabulary is presented in each unit. Grammar is presented through structured practice and takes the student through open-ended communication. Homework Help accompanies the practice to help students achieve mastery of the concepts. Real-life conversation activities are presented. Activities also encourage open communication to enable students to utilize the Spanish they have acquired. Cultural readings in the target language are presented in both text and audio format so that students are exposed to the Hispanic culture from around the world.

## **MATHEMATICS:**

**Algebra I—MA1101** This is a two-semester course that solidifies topics such as real numbers and probability, provides an in-depth coverage of writing, solving and graphing equations and inequalities, functions and their graphs, graphing linear, exponential and quadratic equations, solving systems of equations and inequalities, quadratic equations and functions, radical and rational expressions and equations, and graphing translations, including rotations, dilations, and reflections.

**Geometry—MA1102** This is a two-semester hands-on and lecture-based course that features an introduction to geometry, including reasoning and proof and basic constructions. Students are taught how to organize and meld geometrical and algebraic concepts through writing, analyzing and using proofs. An in-depth coverage of triangle relationships (similarity and congruency) and quadrilaterals enables a student to further hone such concepts as surface area and volume, circles and transformations. Trigonometry is given due credit with topics including tangent ratios and the Laws of Sine and Cosine. Students are introduced to specific geometry topics, such as Golden Connections, Taxicab Geometry, Fractals and Topology.

**Algebra II—MA1103** This is a two-semester course serving as a perfect extension of MA880. This course covers advanced algebraic concepts such as trigonometry, statistical analysis, and permutations and sequences and series. Students learn to manipulate and use matrices in various formats to determine data relationships. Functions are given center stage in this course, delving into function types such as polynomial, logarithmic, quadratic, exponential and rational and periodic. Upon completion of MA882, students will have the necessary and vital skills needed to experience success in state standardized tests and national exit exams.

## **SOCIAL STUDIES:**

**Economics—SC1117** Designed as a one-semester high school course, students will analyze the aspects of both the current American economy and the global economy as a systematic entity. The primary topics summarized in this course include the primary principles of economics, aspects of microeconomics, business and labor, monetary

principles and banking, fundamentals of macroeconomics, government and its role in the economy, and conventions of current global economies.

**Government–SS1110** Designed as a one-semester high school course, students will examine all facets of American government from its formation to its present-day role as a global power. Topics discussed include: The foundations of American government, participating in government, the legislative branch, the executive branch, the judicial branch, civil liberties and law, state and local government, and global, political, and economic systems.

**World History–SS1108** Designed as a two-semester high school course in which World History is presented to students as an integrated study of the political, economical, and social aspects of history. Topics covered include pre-history, the Nile and the Fertile Crescent, the Indus Valley, China's ancient civilizations, early American civilizations, Greece and Rome, the Middle Ages, the Crusades, African civilizations, East Asia, Renaissance and Reformation, the Global Age, Absolutism, Enlightenment and revolution, The Industrial Age, The Age of Revolutions, industrial nationalism, the New Imperialism, World War I and its aftermath, Fascism and dictatorship, the holocaust and World War II, origins of the Cold War, and conflict and cooperation in the modern world.

**U.S. History–SS1109** Designed as a two-semester high school course, students will examine the political, social, and economic aspects of American history from early colonization to the present-day. Topics covered include European colonization, early settlements, the colonies and colonial society, English mercantilism, Native American conflict, the founding fathers, the Declaration of Independence, the Constitution, starting a nation, the Bill of Rights, Westward expansion, the War of 1812, the industrial revolution, early elections, states' rights, population and sectionalism, women's rights, slavery, the Civil War, Reconstruction, the Far West, Manifest Destiny, Native Americans, American industry, elections, foreign acquisitions, industrialization, labor, immigration, the progressive movement, American expansionism, Populism, World War I, women's suffrage, the Great Depression, U.S. occupations and World War II, the Red Scare, the Korean War, civil rights, the Vietnam War, America's role as a modern world leader after WWII, the Clinton years, the 9/11 attacks, the Bush Presidency, and America in the 21st century.

## **SCIENCE:**

**Biology–SC1115** This two-semester high school course covers an in-depth view of biological science concepts. A brief section of biochemistry leads into an overview of ecology and the interactions of the environment and populations of living organisms. A comprehensive section on cellular biology and genetics exposes students to biology on a small scale that leads to the theory of evolution and the history of life on earth. The remainder of the course explores the complexity and variety of life on earth with sections devoted to simple organisms, plants, invertebrates and vertebrates as well as human biology.

**Chemistry–SC1116** Designed as a two-semester high school course, Chemistry-SC758 covers the foundation for the composition, structure and reactions of matter. Beginning with a discussion of scientific measurements and general properties of matter, a good deal of the course covers the structures of the atoms, the periodic table, types of bonds and equations. Other topics involve students in states of matter,

reactions and the energy involved in chemical change. Sections on organic chemistry are also included as well as a brief overview of nuclear chemistry. This course requires students to have a solid foundation in math as calculations and conversions are basic components of chemistry.

**Physics –SC1117** An upper-division, two-semester high school course, Physics-SC759 provides the foundation for an understanding of the laws that govern the concepts of motion and energy. This course relies on the use of mathematics to represent and illustrate different phenomena, so students need to have a strong math background to be successful. Major themes on this course include mechanics, states of matter, waves and light, energy and magnetism and modern physics.

**Health – EL1118** Designed as a two-semester course for high school students. Health immerses students in knowledge spanning all aspects of health education pertinent to students' immediate world, their future, and that of society as a whole. Topics examined include character development, the varying facets of mental health, stress and its resulting consequences, family relations, emotional development, sexuality, functions and development of the human body, and overall physical well-being.