**University School**

**Course Listings**

**2013-2014 SY**

**Please note that AP Tests cost approximately $100 per test**

**ENGLISH SELECTIONS: (4 CREDITS REQUIRED)**

**English 9, 10, 11, 12:** Skill mastery in literature, grammar, vocabulary, and composition will be the focus of our grade-level English classes. Upper level courses will expect students to apply grammatical concepts in the context of written work. **Prerequisite: Students must pass the year of English to proceed to the next level. At the English 9 level students will be required to take the State of Tennessee EOC exam. Their score will count as twenty five percent of the course grade. At the English 10 level students will be required to take the State of Tennessee AYP EOC exam. Their score will count as twenty five percent of the course grade. At the English 11 level students will be required to take the State of Tennessee EOC exam. Their score will count as twenty five percent of the course grade.**

**Advanced English 9, 10:** For student’s demonstrating above average ability in English, focuses on both writing and literature. The honors classes should expect that the amount of study, reading, writing, research, analysis, and preparation which they will be expected to do will be on a more advanced level than that of the general English classes. **At the English 9 level students will be required to take the State of Tennessee EOC exam. Their score will count as twenty-five percent of theie course grade.**  **At the English 10 level students will be required to take the State of Tennessee AYP EOC exam. Their score will count as twenty-five percent of their course grade.**

**English 11 – Advanced Placement-Language and Composition:** AP Language and Composition “engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer’s purposes, audience expectations, and subjects, as well as the way genre conventions and the

resources of language contribute to effectiveness in writing.\*” Students are required to take the AP exam. **Up to 6 hours of college credit may be available at some colleges based on AP Test performance.**

**English 12 – Advanced Placement-Literature and Composition:** AP Literature and Composition “engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work’s structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone.\*” A senior research project is required and AP preparatory materials are used. Writing college level essays is emphasized. Students are required to take the AP exam. **Up to 6 hours of college credit may be available at some colleges based on AP Test performance.**

**Media Literacy ½ Credit/ semester :** An exploration of a variety of media formats, including television, film, magazines, newspapers, and literature and their impact on the values and ideas of popular culture. Students will read two books during the semester. **Elective only.**

**Creative Writing ½ Credit/semester:** Open for any student who wants to discover and explore their unique writing voice with a concentration on poetry and drama . **An academically rigorous course. (Grades 11-12). Elective only.**

**Literature of World Religions ½ Credit/semester:** An in-depth examination of the sacred texts and traditions of Buddhism and Taoism, Confucianism, Hinduism and Islam. **An academically rigorous course. (Grades 11-12). Elective only. College level text.**

**Journalism/Yearbook 1 Credit:** Students will focus on the design, layout, and timelines of professional publishing. **Prerequisite: Application and selection committee interview.**

**MATH SELECTIONS: (4 CREDITS REQUIRED)**

**Algebra I:** This is the first course in algebraic concepts. Students will be given two assessments to determine readiness for Algebra I and upon completion of Algebra I students will take the State of Tennesse AYP EOC exam. A student must pass the AYP EOC exam to be eligible to graduate. **This is a required course. Students will be required to take an Algebra I AYP EOC exam, and their score will count as twenty five percent of the course grade.**

**Geometry:** Students will investigate properties of plane and solid figures as well as aspects of coordinate geometry. **Prerequisite: Algebra I . This is a required course.**

**Algebra II:** An advanced study of algebraic concepts. This course is required. **Prerequisite: Algebra I and Geometry. Students will be required to take the State of Tennessee EOC exam. Their score will count as twenty-five percent of the course grade.**

**Advanced Algebra:** Advanced Algebra with Trigonometry is an advanced mathematics course that extends algebraic concepts and applications and that develops trigonometric functions and applications. Through meaningful problems and appropriate technologies, students will study a variety of radical, rational, polynomial, exponential, circular and logarithmic functions. Students earning less than 90% in Algebra II will be recommended to take this course before Pre-Calculus.

**Pre- Calculus:** Investigates higher order algebraic functions, their solution, and graphs of these functions. Additionally, the course will cover circular trigonometry

relationships**. Prerequisite: Algebra I and II, and Geometry with a recommended 90 average or higher in Algebra II.**

**AP Calculus AB:** An introduction to the concept of the limit, leading to differentiation and integration. This course also investigates techniques of differentiation and integration. **Prerequisite: Precalculus with a recommended B average or higher. AP Exam is required. Students may also opt to take the BC exam. Up to 8 hours of college credit may be available at colleges based on AP Test performance.**

**SCIENCE SELECTIONS: (4 CREDITS REQUIRED)**

**one credit must be a life science and one a physical science**

**Biology I:** A study of the characteristics of life, the interrelationships of different organisms, the diversity of life and the genetic basis of life. **Corequisite: Algebra I or Geometry. Students must take a Biology I AYP EOC Exam that will count as twenty-five percent of their grade.**

**Physical Science:** This course provides a general foundation in the major concepts of physics and chemistry. **This course is designed for students who need to strengthen math and science skills before entering Chemistry.**

**Environmental Science:** A challenging high school course thatplaces emphasis on environmental issues that are more socially and liberal arts oriented. **Prerequisite: Biology and Chemistry.**

**Advanced Placement Biology:** A course designed for the motivated college-bound student. The course is divided into three areas of study; ecology (populations), molecular/cellular and the adaptations of life forms. Classes start at 7:00 A.M. one day per week. **Prerequisite: Biology I, Chemistry I, and teacher approval. Students are required to take the AP exam. Up to 8 hours of college credit may be available at some colleges based on AP Test performance.**

**Physics:** Advanced investigation into the relationship between matter and energy and how they interact. The following major areas will be investigated: Mechanics, Thermodynamics, Waves and Sound, Light and Optics, Electricity and Magnetism, Atomic and Nuclear Physics. Hands-on laboratory investigations and observations of demonstrations will be a part of the course. Problem solving skills will be emphasized. **Prerequisites: Biology & Chemistry Co-requisite: Advanced Algebra, PreCalculus, or AP Calculus**

**Chemistry I:** An investigation into the major concepts of inorganic chemistry. Atomic structure, chemical reactions and equations, the periodic table, elements, and chemical bonding, stoichiometry, acids and bases will be explored. Hands-on laboratory activities and demonstrations are a significant part of the course. Students will be required to take the State of TN EOC exam for this course and their score will count as twenty five percent of their course grade. **Prerequisite: Biology I, Recommended Co-requisite: Algebra II.**

**Anatomy & Physiology:** Human Anatomy and Physiology is a college preparatory laboratory science course that consists of an in-depth study of all of the body systems that maintain homeostasis from anatomical, physiological, and histological perspectives. Students explore the body through an inquiry approach. **Prerequisites:** **Biology I and Chemistry I**

**Advanced Placement Chemistry:** The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students who receive credit for this during high school will have the opportunity to take more advanced science courses as freshmen or to take other courses of interest because their lab course requirement will be completed. In addition to covering college level chemistry topics, students are required to complete a laboratory component that is equivalent to that of a typical college course. Students will be required to come to school at 7:00 a.m. one day each week in order to complete labs. Furthermore it is assumed that students will spend at least five hours each week completing independent study. **Prerequisites: Chemistry I and Algebra II. Students are required to take the AP Exam. Up to 8 hours of college credit may be available at some colleges based on AP Test performance.**

SOCIAL STUDIES SELECTIONS: (3 CREDITS REQUIRED)

**World Geography:** Using the perspectives of several disciplines, students will examine the influences of geography on why and how nations and cultures live as they do. **Recommended for Freshmen. World History or World Geography is required.**

### World History: The world from Renaissance through the Twenty-first Century will be studied. The global development of man is followed through the major historical eras. Special emphasis will be placed on the unique cultures found throughout the world. World History or World Geography is required.

**Economics ½ credit/semester:** A hands-on experience in economic decision making and a survey of how the business community operates. **Recommended for sophomores. This is a required course.**

**Government ½ credit/semester:** The political process of the United States government on the national, state, and local levels will be examined. **Recommended for sophomores. This is a required course**.

**US History 1 credit:** Surveys the cultural background of the United States from Reconstruction to the Present. **Recommended for Juniors. This is a required course. Students will be required to take the State of Tennessee EOC exam and their score will count as twenty-five percent of the course grade.**

**AP US History:** AP US History is a challenging course that is meant to be the equivalent of two introductory college courses.  It is a two-semester survey of American history from the age of exploration and discovery to the present.  Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed.  **World History and government are recommended as pre-requisite courses but not required. Students are required to take the AP exam.** **Up to 6 hours of college credit may be available based on AP Test performance.**

**Contemporary Issues ½ credit/semester:** “The rest of the story,” An interactive, hands-on experience class that focuses on current and 20th century issues. **Elective only.**

**Personal Finance 1/2 semester credit:** Personal Finance is designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. **This is a required course.**

**PHYSICAL EDUCATION SELECTIONS (1.5 CREDITS REQUIRED)**

**Lifetime Wellness I:** A course covering physical fitness, nutrition, family life, safety, first aid, and AIDS education. **This is a required course.**

**Physical Education II /Weightlifting 1/2 or 1 Credit:** Designed for students serious about physical fitness or as fulfillment of PE requirement. **Prerequisite: Lifetime Wellness I**

# FOREIGN LANGUAGE SELECTIONS: (2 CREDITS REQUIRED)

**(Two years in one language is required)**

**French I:** An introduction to the French language and culture. Examines basic vocabulary and grammatical structures within the four skill areas: listening, speaking, reading, writing. Emphasis is on acquisition of listening and speaking skills.

**French II:** A continuation of the study of the French language and culture with an introduction to more complex grammatical structures and vocabulary. Greater emphasis on accuracy and reading and writing skills. **Prerequisite: French I**

**French III:** Examines advanced grammatical structures and vocabulary. Emphasis is on accurate self-expression in French, both in written and oral forms. Cultural studies include an introduction to the history and literature of France. **Prerequisite: French I and II**

**French IV:** Advanced study of French language, culture, and literature.  **Prerequisite: French I, II, and III**

**Spanish I:** An introduction to the Spanish language and culture. Examines basic vocabulary and grammatical structures within the four skill areas: listening, speaking, reading, writing. Emphasis is on acquisition of listening and speaking skills.

**Spanish II:** A continuation of the study of the Spanish language and culture with an introduction to more complex grammatical structures and vocabulary. Greater emphasis on accuracy and reading and writing skills. **Prerequisite: Spanish I**

**Spanish III:** Examines advanced grammatical structures and vocabulary. Emphasis is on accurate self-expression in Spanish, both in written and oral forms. Cultural studies include an introduction to the history, the arts and literature of Spanish speaking cultures. **Prerequisite: Spanish I and II**

**German I:** An introduction to the German language and culture. Examines basic vocabulary and grammatical structures within the four skill areas: listening, speaking, reading, writing. Emphasis is on acquisition of listening and speaking skills.

**German II:**. A continuation of the study of the German language and culture with an introduction to more complex grammatical structures and vocabulary. Greater emphasis on accuracy and reading and writing skills. **Prerequisite: German I**

**FINE ARTS SELECTIONS (1 CREDIT REQUIRED)**

**Visual Art I:** Basic techniques will be explored relating to drawing, painting, sculpture, and printmaking. Basic media will be explored including pencil, pastel, charcoal, ink, watercolor, acrylic paint and clay. Design elements and principles relating to composition, color, and perspective, are also introduced.

**Visual Art II:** Advanced art and design techniques, concepts, and media will be explored relating to drawing, painting, printmaking, sculpture, art technology, art aesthetics, and art history. Students will work on in-depth portfolio and sketchbook projects.

**Prerequisite: Visual Art I**

**Visual Art III:** This is an in-depth, independent art study course. To assist any art college or art career-bound students, we will work on individual projects and develop a professional art portfolio. **Prerequisites: Visual Art I and II. Conference required before acceptance into this class.**

**Visual Art IV** The course curriculum is concentrated around communication/advertising design and graphic design projects created on the computer. Students use Adobe Photoshop and Adobe Illustrator to create their projects. **Prerequisites: Visual Art I, Technology I**

**Theater Arts:** Students will work to know more about theater through reading, study, and performance experiences. Students will learn good performance techniques, which will include the effective use of body language, proper voice and diction, and the discipline of focus and concentration. Performance will include pantomime, oral interpretation, duo-interpretation, storytelling and solo acting.

**Instrumental Music** Advanced instruction on a band or orchestral instrument. Ensemble playing and performance will be emphasized. Scheduled performances are a part of the grade for this class. **Prerequisite: A conference and audition is required before acceptance into this class.**

**Vocal Music:** This course introduces students to choral singing. Proper vocal technique is stressed. The group gives several public performances. Uniform purchase is required.

**UH Singers 1 credit**: This course is designed for advanced choral students. Public performance is emphasized. **Audition is required.**

**Music Appreciation:** Students will study the music and lives of major European and American composers throughout history.

**TECHNOLOGY SELECTIONS: (1 CREDIT REQUIRED)**

**Technology I (Personal Computing)**: This course is divided into four parts. The first part is a nine-week concepts unit. This unit will teach the usage of Word 2007, Excel 2007, Power Point 2007, Access 2007, proper usage of E-Mail, Movie Maker, and Internet usage. The other three parts of the course will provide introduction foundations in Web Page Design (the HTML Language), the programming language Visual Basic, and the graphics software Adobe Photoshop. These three parts are designed to provide students with a chance to explore possible technology fields in which they could pursue in college and career.

**Graphics in Technology (1/2 Credit):** This course explores the graphic software tools in Adobe CS3. The course provides the students with an exciting opportunity to explore many upper level techniques of Photoshop CS3 and an introduction to Flash CS3. Students will apply these software tools to various types of business and web page applications. **Prerequisite: Technology I**

**Computer Programming (Intro to AP) (1/2 Credit):** This course is designed to parallel the first course taught in most college computer science programs. The students will gain a working knowledge of the language Visual Basic. They will learn how to utilize the 5 Steps of Problem Solving through the development of challenging yet interesting computer programs. This course gives students that have an interest in a computer science college major a quality foundation in the primary programming language taught in many colleges. This course will also serve as an introduction to AP Computer Science. **Prerequisite: Technology I**

**AP Computer Science A: “**AP Computer Science A is both a college-prep course for potential

computer science majors and a foundation course for students planning to study in other technical fields such as engineering, physics, chemistry, and geology. The course emphasizes programming methodology, procedural abstraction, and in-depth study of algorithms, data structures, and data abstractions, as well as a detailed examination of a large case study program.

Instruction includes preparation for the AP Computer Science A Exam. In teaching this course, my reward comes when students can apply the programming tools they have learned to real-life examples on their own. Computer science is more than just programming. Students should leave my class with a clear understanding of Java and the ability to adapt to any new programming language that they are taught in college. I want them to have the confidence to tackle any problem-solving obstacles they encounter.\*\*”

**ELECTIVE SELECTIONS**

**Driver’s Education ½ credit:** Student will learn how to become safe drivers. There are thirty (30) hours of book instruction and six (6) hours of driving instruction. This class has limited space, and therefore selection will be made through attendance screening and academic performance records to meet state standards. **All driving and classroom sessions will be arranged after school and during Intersession. Supply Fee: $200.**