

Life Preparatory Academy High School

Description of Academic Courses



❖ High School Core & Honors Core Courses*

➤ *English Language Arts*

- **English 101:** This is a comprehensive survey course emphasizing vocabulary, literature, and the basics of writing. Several genres are studied including short stories, the novel, oral reading and speech. Typical literature for this class would include *Across Five Aprils* and *The Bronze Bow*.
- **English 201:** This course works on the further refinement of communications skills, grammar, vocabulary, and how to use these skills in real life. The Abeka vocabulary book for that level is utilized as well as *Tom Sawyer*, *The Hiding Place* and Shakespeare's *Julius Ceasar*.
- **English 301:** This course will look at literature and language through a Christian worldview. Abeka's vocabulary book appropriate for this level as well as daily oral language practice in proper usage is emphasized. Literature studied at this level include *The Diary of Ann Frank* and *Flowers for Algernon*.
- **English 401:** This is the standard capstone high school course to prepare students for work in Advanced Placement and college level courses. Vocabulary concentrating on Latin and Greek roots is studied as well as continued practice on daily oral language for usage. Grammar at this level concentrates on the proper usage of clauses and phrases such as gerund phrases, participial phrases, and proper use of infinitive phrases. Literature at this level includes the study of classic dramas such as Shakespeare's *Hamlet*. Novels include *To Kill a Mockingbird* and *Huckleberry Finn*.
- **Honors English 501:** This class emphasizes writing skills including essays and the steps culminating with the production of a full-length research paper. Literature for this level includes *A Tale of Two Cities* by Charles Dickens and other appropriate writings.

➤ *Mathematics*

- **Pre-Algebra:** The Pre-Algebra course is to serve as a bridge between elementary mathematics and Algebra. This course will build a foundation of algebraic concepts through the use of

technology, manipulatives, problem solving, and cooperative learning. Students will learn to utilize the graphing calculator in appropriate situations. Concepts include algebraic expressions, linear equations, polynomials, factoring, inequalities, geometry, statistics, and graphing. Students will learn to utilize the graphing calculator in appropriate situations. Problem solving, reasoning, estimation, and connections between math and everyday applications will be emphasized throughout Pre-Algebra. This course is designed to prepare students for Algebra I.

- **Algebra I:** The first class in algebra emphasizes study of the language of Algebra and gaining fluency at working with numbers and variables. Concepts studied include order of operations, commutative & associative properties, distributive properties, and graphing linear equations. Prerequisite: Pre-Algebra or the requisite skills and fluency in mathematics.
- **Geometry:** Geometry is a comprehensive survey course studying the basics tools of geometry including constructions, proofs, and applications with algebra. These tools are applied to triangle congruence and similarity, right angle trigonometry, area, surface area and volume, quadrilaterals and circles. Prerequisite: Algebra I
- **Algebra II:** This course is a continuation of algebraic and geometric concepts developed in Algebra I and Geometry. Students will review solving equations, inequalities, and graphing functions. The students will continue their foundation of functions, use symbol and manipulation to simplify and solve, connect algebra and geometry, study conic sections, work different methods for solving system of equations, matrices, quadratic, square root, rational, exponential and logarithmic functions. Students will continue to build on this foundation as they expand their understanding through other mathematical experiences. Prerequisite: Algebra I, Geometry
- **Honors Pre-Calculus:** Reviews algebra basics before studying polynomial and rational functions and graphs, and exponential/logarithmic functions and graphs. Introduces basic trigonometry, then analytic trigonometry, and finally trigonometry applied to non-right angled geometry. Studies systems of equations and matrices and determinants to conclude. Prerequisite: Algebra II, Geometry

- **Honors College Algebra:** This course is a functional approach to algebra that incorporates the use of appropriate technology. Emphasis will be placed on the study of functions, and their graphs, inequalities, and linear, quadratic, piece-wise defined, rational, polynomial, exponential, and logarithmic functions. Prerequisite: Algebra II
- **Honors AP Calculus:** AP Calculus is the Most Challenging Class offered at Life Prep Academy. This course prepares the student for the AP calculus BC test. Studies limits and continuity of functions, then derivatives, including implicit differentiation. Applies differentiation to curve sketching and optimization problems. Studies indefinite and definite integrals including integration techniques such as partial fractions and parts, and approximations to integrals. Studies first order differential equations, and sequences and series. Prerequisites: Algebra II and either Pre-Calculus, College Algebra or equivalent

➤ **Sciences**

- **Earth & Space Science:** Students will learn about the earth's form, structure, systems, and the forces that change them over time. This is a multimedia course with frequent use of graphics, photographs, and video resources. Topics covered include Meteorology, Geology, and Astronomy.
- **Biology:** As a continuation of the earlier Life Science class from middle school previous year, students will learn about the living world around us. Main topics include botany, human anatomy and physiology, and microbiology as they affect human health and function.
- **Chemistry:** In this class, the students are introduced to the periodic table, ionic and covalent compounds, and chemical equations. Studies the mole and stoichiometry, and reaction dynamics including enthalpy, entropy, and equilibrium. Studies the states of matter, and concludes with study of acid and bases, and oxidation and reduction reactions. Prerequisite: Algebra I
- **Honors Chemistry:** Students in honors Chemistry will do all work in regular Chemistry and also will be required to complete required lab work assigned with Honors Chemistry. Materials covered include: Matter and energy, Atoms and moles, The periodic table, Ions and ionic compounds, Covalent compounds, The mole and chemical composition, Chemical equations and

reactions, Stoichiometry, Chemical thermodynamics, States of matter and intermolecular forces, Gases, Solutions, Chemical equilibrium, Acids and bases, Oxidation and reduction.

Prerequisite: Algebra I and Physical Science or Earth Science

- **Physics:** This course introduces topics from all areas of physics including mechanics (kinematics and dynamics, energy and rotational dynamics), thermodynamics, waves and optics, and electricity and magnetism. Prerequisite: Algebra I, Algebra II (recommended)

➤ ***Social Studies***

- **World History:** World History is a survey course overviewing the history of the human race starting from the Cradle of Civilizations in Mesopotamia, Egypt, Persia, Greece, Rome, the Middle Ages, the Renaissance, and modern civilization. Emphasis is on the religions, politics, wars, technology, and institutions that have shaped the world into what it is today.
- **World Geography:** This course is a study of physical and human geography designed to help the student understand and relate to global context in a modern world. There is an emphasis on the cultural aspects of geography in a regional study format.
- **U.S. History:** American history begins with the colonies over two centuries before the United States declared its independence from Great Britain. It then follows through the battle for independence, the industrialization of the country, and into the 20th Century. This course will examine the major social, economic, and political trends throughout these eras.
- **AP U.S. History:** It is often said, “Those who do not know history are destined to repeat it.” AP U.S. History is an in-depth look at various topics in American history using original source materials, and examining these topics from a number of different points of view. Students will examine different scenarios and compare the assessment of these at the time they occurred and with the retrospect of looking at the consequences of these events. Students will then look at various analogues and synthesize applications of these going forward with current events.
- **U.S. Government:** U.S. Government studies the fundamentals, mechanics, and realities of all levels of government which impact those of us living in the United States on a daily basis. It compares

our government with other governments around the world and the official interactions with the international community.

- **Economics:** Economics concentrates on both macroeconomics and microeconomics, investigating these concepts looking at the mechanics and theory behind all levels from household purchases to the stock market. Topics include personal and public finance, budgeting, banking, debt, credit, and interest. Students will also study various economic systems found around the globe.

❖ **Elective & Enrichment Courses**

- **Ethics (0.50 credit, one semester):** This is a survey course consisting of an introduction to the history of ethical theory and its application to current social issues. It will integrate major philosophical positions in ethics with issues relating to these theory as well as promoting a practical application through personal decision making. The second half of the course will focus on the aspects of good and evil in this current world. The course is taught from a traditional judeo-christian viewpoint.
- **Business Ethics (1 credit):** Taught from a practical applications standpoint, this course introduces ethical concepts, then uses real life case studies both written and visual, to recognize, analyze, and apply ethical standards when facing pressure to be unethical.
- **World Religions (0.50 credit, one semester):** This course teaches world religions in a manner that communicates the various abstract concepts of the various major religions found on the earth in a historical concept with an understanding of diversity. All religions are treated with respect and taught from a Christian worldview.
- **Cultural Anthropology (0.5 credit, one semester):** This course focuses on the the reasons why societies form and change. Through the duration of the class, students will study culture, learned traditions of the past and the present era, world views, religion, social organization, kinship, gender roles, and the effects of globalization. Learning is mainly reading and discussion based.
- **AP Psychology (1 credit):** AP Psychology is a survey course acquainting the student with core concepts in psychology, the use of the scientific method in research, and the physiological basis of behavior from a traditional western world view. Topics covered include social psychology, perception, states of consciousness, memory, learning, human growth, development, stress and adjustment, as well as abnormal behavior, treatments, and therapy.

- **Creative Writing (1 credit):** Creative Writing is an introduction to writing genres including essay, short story, novel, poem and play with an understanding of the major literary elements used to make writing expressive, interesting, engaging and more precise. Students are directed in journal writing and critical reading as well as formal paper writing.
 - **High School Band (1 credit):** Students learn the basics of musical notation, sound production, and proper technique for the musical instrument of their choice. This group is a performing ensemble which performs at some athletic events, concerts, and festivals.
 - **SAT/ACT Preparation (0.50 credit):** The purpose of this course is to help students prepare for the ACT and SAT Tests. The course provides general test-taking tips and information for all four sections of the ACT test as well as the SAT Test. During this course, several practices tests will be taken to provide opportunity for improvement in preparation for the official exams.
 - **TOEFL Preparation (1 credit):** Open to students who will be required to take the TOEFL for college or university reasons, this course provides general test-taking tips and practice on TOEFL-like questions as well as review and practice the skills tested on the sections of this exam.
 - **Computer Productivity Applications (1 credit):** Students will learn the practical aspects of working with word processing applications such as LibreOffice Writer and Microsoft Word, spreadsheet applications such as LibreOffice Calc and Microsoft Excel as well as gain fluency in working with presentation applications such as LibreOffice Impress and Microsoft Powerpoint. This is a portfolio based course based on a series of assigned projects.
 - **Physical Education & Health (boys and girls separate classes):** This course teaches the basics of human physiology and maintenance of human health throughout life including everyday and warmup exercises. Also studied are a variety of individual and team sports including badmitten, basketball, soccer, football, softball, etc.
- ❖ **High School Clubs for Credit**
- ***Curricular Clubs meeting during the designated “club” time during the school day:***
 - **Chess Club (0.50 credit):** Chess Club gives students an opportunity to play friendly games of stress against their peers, in a fun and learning environment. Students of all levels are welcome to come, as help is given to those who need it. Chess Club also offers

chess quizzes, chess puzzles and problems, and students also participate in local tournaments.

- **Cooking Club (0.75 credit):** Taught by our local, amateur master chef, Mr. Rotola, this club will meet twice each week during the regular school day and once each month for an extended session in the dormitory. Students will learn the basics of cooking and baking focusing on desserts and main courses. They will learn about meals from different cultures, countries, and the basics of food safety.
 - **Teenview Magazine:** TeenView Magazine is a magazine for teens, by teens, from a teen’s point of view facilitated by Mr. Marquis Murphy, the founder and president of the Youth Educational Empowerment Program. Through ongoing training and workshops, TeenView Magazine teaches participants useful skills that can cultivate academic and career achievements. Every completed issue, participants gain confidence in their abilities.
 - **Art Club (0.50 credit):** Led by our very own “King of Art”, Mr. Charles Baughman, co-owner of The Art Park, is a nationally known artist as well as a long-time art educator. The Monart guided drawing system of drawing shows how to perceive the visual world in terms of five basic elements of shape. Just as a musician learns notes and scales in order to play an instrument, students learn the skills necessary to translate their perceptions onto paper.
 - **Choir (0.50 credit):** Students learn how to read music, match pitch, basic vocal warm-up skills, sight-sing, and will perform at home football games, school musical programs, and various other performances throughout the year. Staples include *The Star Spangled Banner*, spirituals, and other music from the American choral tradition.
 - **Yearbook (0.50 credit):** Students learn the basics of desktop publishing by creating, editing, and assembling the Life Prep Yearbook for the current school year. This book forms the chronicle for the life of the school and its students for the year.
- **Extracurricular Clubs meeting at the dormitory or off-campus:**
- **Dance Club (0.25 credit, girls only):** Students will learn and practice skills in modern, jazz and hip-hop style dancing. The group will perform at home football and basketball games.
 - **Investing Club (0.25 credit):** Students will use real and play money, choose businesses based on merit to invest. In the process,

they will learn the ins and outs of the stock market, bond market, and mutual funds.

● **Piano & other musical instrument lessons (0.25 credit):**

Private and group lessons will be offered for credit at the expense of the student. Students will be expected to practice on a daily basis.

● **Aerospace Engineering (0.25 credit):** Will learn the different components that make up various aircraft and systems as well as field trips to the Wichita Aviation Museum, Kansas Cosmosphere, and other local destinations of interest to the Wichita aviation community.

**Unless otherwise stated, all courses are one credit. Each credit at Life Prep Academy is equal to one Carnegie Unit.*