The Lutheran High School of Kansas City

CURRICULUM HANDBOOK

English

English 1: (1 credit course)

In this course, students will explore the full spectrum of literary forms and will produce various types and styles of writing, both academic and creative. Oral, grammar, spelling, and vocabulary skills will be integrated into the work, as well. The activities of this course form the foundation of a high school English curriculum.

English2 (1 credit course)

This course is a chronological study of American literature. Analytical reading is emphasized and good writing skills are promoted. Selected novels and plays are studied in addition to the works contained in the anthology. Vocabulary, oral skills, and grammar study continue to be integrated into the course curriculum. Students must have successfully completed *English I* to take this course.

English 3 (1 credit course)

The first semester of English 3 explores mythology and works influenced by it. Beginning with *Mythology* as the grounding text for exploration, this course also looks at Kafka's *The Metamorphosis*, Shaw's *Pygmalion*, and Shakespeare's *The Tempest*. Semester 2 of English 3 is an exploration of texts written by and focusing on a variety of cultures, seeking to answer the question: How do texts from different cultures and times intersect with modern society and issues? Texts used to help discover this answer include *Life of Pi, The Joy Luck Club, My Name is Asher Lev*, and *Their Eyes Were Watching God*. In addition to reading, discussing, and analyzing the texts, students will also engage in both formal and informal writing.

Experiences in Literature (1 credit course)

Experiences in Literature is divided into two stand-alone semesters. First semester focuses on identity, tracing questions about change, personality, and influence throughout the semester. Texts studied include *The Picture of Dorian Gray, Othello, The Catcher in the Rye,* and *The Lost Symbol*. In addition to these texts, students engage in ongoing autobiography activities culminating in an autobiography portfolio. Semester two of this course explores the genre of dystopia, reading *1984, Brave New World* and a number of texts in literature circles. Throughout the unit students engage in exploration of the characteristics of the genre and engage in conversation and analysis of their own experiences and society in light of these characteristics. In addition to reading, students will also engage in formal and informal writing.

World Literature (.5 credit course)

This course will consist of selections of masterpieces; vocabulary; composition and grammar units; book reviews; and daily writing folders. *English I and II* are prerequisites for this course.

This is a dual credit course.

Expository Writing (.5 credit course)

Required for graduation. Students will be engaged in writing a variety of essays including comparative, descriptive, narrative, classification, persuasive, definition, etc. The writing process will be employed on an individual basis to enhance each student's improvement as a writer. A major research paper with MLS documentation will be required. This class may be taken for dual credit. *This is a dual credit course.*

Creative Writing (.5 credit course)

Students in this course will be challenged to write in several styles which may include magazine articles, poems, children's books, plays, etc. Emphasis is placed on both the writing process and the finished product. Group work and peer editing are encouraged.

Social Studies

World History (1 credit course)

This course is the study of man's social, cultural, and political achievements from the earliest civilizations through the Middle Ages, the Renaissance, and to the present day. Main emphasis will be on the development of Western Civilization, some time will also be spent on essential elements of non-western cultures. Particular emphasis is placed on events leading up to the current international issues and modern political views.

U.S. History (1 credit course)

This course explores seven broad themes: global relations, constitutional heritage, democratic values, technology and society, cultural diversity, and economic development. This course will also develop critical thinking skills, create a knowledge base of past decisions to help make informed decisions today, and bring American History to life.

Modern American History (1 credit course)

This course is designed to explore critical events that continue to shape the American experience today. The course timeline includes events starting with the great depression, and moving forward to modern day. (1930-2000's.) Important subtopics in this field include: The growth of the federal government, Foreign Wars, The Cold War, Vietnam, Social Reform and the Civil Rights movement, as well as modern contemporary politics.

American Government (.5 credit course)

This course is designed to explore the origin and workings of the current system of government in America.

Economics (.5 credit course)

This course will focus on Economics or the study of the way in which society organizes its limited resources to satisfy the many wants and needs of people in that society. Students will be introduced to the characteristics of the mixed market U.S. economic system and how basic economic problems are dealt with. This is a dual credit course.

Sociology (.5 credit course)

The emphasis of this course is the study of human behavior in groups. It is designed to acquaint students with the types of groups we form, how we function in these groups, and how we deal with social problems resulting from the interaction from within and between these groups.

Psychology (.5 credit course)

This course is the study of the general principles of human behavior and will focus on how human behavior affects learning, personality development, and mental health.

Mathematics

Algebra I (1 credit course)

This course is designed to teach students the basic algebraic concepts, skills necessary to solve algebraic problems, and provide a firm foundation of mathematical skills used in higher-level mathematics courses. The course covers all operations with real numbers, all operations with polynomials, factoring of polynomials, as well as solving and graphing linear and quadratic equations. The course will be presented in a real-life approach with practical applications.

Geometry (1 credit course)

This course is the study of spatial figures and relations in a logical, deductive manner. Algebraic skills will be reviewed and reinforced throughout the course. Selected topics include coordinate geometry, proofs; properties of triangles, polygons, congruence, similarity, circles, and trigonometry. Prerequisite: Algebra I.

Algebra II (1 credit course)

This course will build upon and extend the concepts, manipulative skills and application methods of solving equations and inequalities, as well as investigations of a variety of functions. As students study each family of functions, students will learn to represent them in multiple ways—as verbal descriptions, equations, tables and graphs and will also learn to model real-world situations using functions in order to solve problems arising from those situations. This course will also develop techniques of problem solving combined with "mathematical reasoning" and it will introduce advanced topics that will serve as a foundation to Trigonometry & Pre-Calculus. Prerequisite: Algebra I and Geometry.

College Algebra (1 credit course)

College Algebra is the continuation of Algebra II, and is often the basic college math requirement. Students will study algebraic equations and inequalities and their graphs. In addition, students will learn about absolute value, polynomial, rational, logarithmic, and exponential functions and their graphs. Topics will also include conic sections, systems of equations and inequalities, matrices, and determinants. Additional topics may include sequences and series, combinatorics, probability, and mathematical induction. *This is a dual credit course.*

Pre-Calculus (1 credit course)

This course is designed to provide the basis for further study of math beyond Algebra. Topics taught in this course include defining, evaluating, and graphing of trigonometric functions: developing trigonometric identities, solving triangles and studying their applications in engineering, navigation, and other areas. Included in the course will be a study of elementary functions, their graphs and applications, including polynomials, rational algebraic functions, and exponential, logarithmic and trigonometric functions. *This is a dual credit course.*

Statistics (1 credit course)

In this course, students will be introduced to the major concepts of probability, interpretation of data, and statistical problem solving. Students will learn the course concepts through hands-on experimentation and investigation. They will analyze existing data as well as data collected through a survey, observational study or experiment. They will then display the data in different ways, analyze it, and draw conclusions based on the results. The four main components of the course are: exploring data, data collection, probability, and inference. Algebra 2 is a pre-requisite for this course. *Graphing Calculators are required.

Calculus (1 credit course)

This honors course is designed to strengthen the concepts of analytic geometry essential to calculus; to develop the derivative and integral as limiting processes; and to study applications of calculus and apply them to the problems of engineering and science. This class can be taken for dual credit, or college credit can be earned by earning a passing grade on the AP Exam given in May. *This is a dual credit course.*

Calculus 2 (1 credit course)

This course is intended for those students who have successfully completed the first semester (year) of Calculus. Students will further their knowledge of differentiation and integration from Calculus I. Topics include new integration techniques such as integration by parts, trigonometric substitution, partial fractions, and improper fractions. Students will also consider parametric equations and polar coordinates, furthering their knowledge of tangent lines, calculating area, surface area, and arc length. Additional topics will be in the realm of sequences and series, such as convergence of sequences, estimating the value of a series, and power series. Further topics may include vectors and three-dimensional space. *This is a dual credit course.*

Science

Biology (1 credit course)

This course is an introduction to the basic concepts of biology. Students will be introduced to the unity and diversity of life as well as a basic understanding of life processes at the cellular and molecular level. Laboratory work will focus on using the scientific method to investigate these concepts.

Physical Science (1 credit course)

This course teaches the use of the scientific method to solve problems, the metric system of measurement, laboratory skills, and basic concepts in physics and chemistry.

Chemistry (1 credit course)

This course presents the basic concepts of chemistry and is designed for beginning chemistry students. The course will teach the following skills: problem solving, laboratory techniques, and how to write formal laboratory reports.

Advanced Chemistry (1 credit course)

This course uses and expands on all the concepts learned in Chemistry. Students will perform labs on a more independent level and will learn to write formal lab reports. Students will study inorganic chemistry, organic chemistry, analytical chemistry, and biochemistry.

AP Biology (1 credit course)

This course focuses on specific species and natural populations with area ecosystems. Students will practice the use of field research sampling techniques, data collections and analysis, and the use of field guides in identifying organism.

Anatomy and Physiology (1 credit course)

The curriculum for this honors course focuses on the study of the general principles of physiology and structure of the systems of the human body. Introductions to nutrition, pathology, immunology and embryology are also included in this course.

Physics (1 credit course)

This course presents the basic concepts of physics in a logical sequence. The course is designed to teach basic problem solving and laboratory skills that should prepare students for college level physics.

Religion

Old Testament (1 credit course)

This course will follow the creative, redemptive, and preservative work of God among His Chosen People. Beginning with the creation narrative and ending with the minor prophets, this course teaches the history of Israel and God's dealing with them.

New Testament (1 credit course)

This course contains a strong emphasis on the unfolding of God's promise of salvation in the birth, death, and resurrection of His Son, Jesus Christ, and His work through the people of the early Christian church in spreading the gospel to others.

World Religions (.5 credit course)

This course will focus on world denominations and practices. The majority of the course will deal with training an effective response to Islam, Hinduism, and its various forms including the New Age movement, and various cults of Christianity.

Christian Denominations (.5 credit course)

This course is designed to introduce students to the Christian faith, in particular Lutheranism and will also study several of the evangelical denominations that emerged from the Protestant movement.

Defending the Faith (1 credit course)

In this apologetics course, students will examine the rational basis for the Christian faith and how to defend their faith against contemporary objections. The course will be based on historical and scientific evidence and philosophical arguments, as well as Biblical knowledge as it considers and exposes other world views and claims of our time.

Applied Christianity (1 credit course)

This course is designed for Christian students who desire to boldly share their faith in Christ. This class will challenge students to live a Christian life in an increasingly changing world. Most visibly, students in this class will help in the creation and presentation of the weekly chapel services.

Electives

German 1 (1 credit course)

This course is designed for beginning German learners. Students will acquire vocabulary and proper sentence structure by participating in a variety of communicative activities that focus on developing speaking, listening, reading and writing skills in the German language. Students will also develop cultural awareness through discussions of cultural customs and cultural activities.

German 2 (1 credit course)

This course is designed for intermediate German learners. Students will continue to acquire vocabulary and proper sentence structure by participating in a variety of communicative activities that focus on developing speaking, listening, reading and writing skills in the German language. Students will also continue to develop cultural awareness through discussions of cultural customs and cultural activities.

German 3 (1 credit course)

This course is designed for advanced German learners. Students spend the first semester reviewing grammar and vocabulary concepts from German 1 and 2 while continuing to acquire the language through communicative activities that focus on refining students' speaking, listening, reading and writing skills. In the second semester the class is taught entirely in German with emphasis being put on student initiated language interaction, complex grammatical structures, and authentic films. In addition, students who complete the third year of German are eligible to participate in a trip to Germany with LHS through EF Tours.

German 4 (1 credit course)

This course is designed for advanced German learners. German 4 is taught entirely in German and students are required to communicate entirely in German as well. The course focuses on developing speaking and writing skills in German. Students will explore a variety of German literature, music, films, idioms, and cultural celebrations while acquiring vocabulary and refining grammatical skills along the way. Each student is expected to demonstrate greater competence and confidence in speaking and writing throughout the year. In addition, students who complete the fourth year of German are eligible to participate in a trip to Germany with LHS through EF tours.

Spanish 1 (1 credit course)

This course is designed for beginning Spanish learners. Students will acquire vocabulary and proper sentence structure by participating in a variety of communicative activities that focus on developing speaking, listening, reading and writing skills in the Spanish language. Students will also develop cultural awareness through discussions of cultural customs and cultural activities.

Spanish 2 (1 credit course)

This course is designed for intermediate Spanish learners. Students will continue to acquire vocabulary and proper sentence structure by participating in a variety of communicative activities that focus on developing speaking, listening, reading and writing skills in the Spanish language. Students will also continue to develop cultural awareness through discussions of cultural customs and cultural activities.

Spanish 3 (1 credit course)

This course is designed for advanced Spanish students. Two years of curriculum are taught on a rotating basis, allowing for students to take a third year of the language. Students will continue to acquire the language through communicative activities that focus on refining student's speaking, listening, reading and writing skills. Emphasis is put on the student initiated language interaction, complex grammatical structures, and authentic literature and films. In addition, students who complete the third year of Spanish are eligible to participate in a trip to Costa Rica or Spain with LHS through EF Tours. *This is a dual credit course*.

Spanish 4 (1 credit course)

This course is the higher level of High School Spanish and is designed for advanced Spanish students. Three years of curriculum are taught on a rotating basis, allowing for students to take a fourth year of the language. Students will continue to acquire the language through communicative activities that focus on refining student's speaking, listening, reading and writing skills. Emphasis is put on the student to continue language interaction, complex grammatical structures, and authentic literature and films. This includes learning and practice of Journalist techniques. *This is a dual credit course*.

Personal Finance (.5 credit course)

This course is designed to help students gain an understanding of financial responsibility including: Goals and Decision Making, Careers and Planning, Budgeting, Banking Services, Saving and Investing, Credit, and Consumer Skills.

Health (.5 credit course)

This course will deal with the integration of physical, mental, social, and spiritual dimensions of life in order to promote a healthy lifestyle. This is a semester course paired with Personal Finance.

Physical Education (1 credit course)

This course is designed to help students develop and maintain an acceptable level of physical fitness. Through a variety of exercises, sports and related health activities, students will acquire useful physical skills, better health habits, and a more positive self-concept in a Christian environment.

Concert Choir (1 credit course)

In this course, students will learn fundamentals of music theory, proper vocal technique and sight singing. They will perform for chapel, area Lutheran churches, concerts throughout the year and during the 5-day music tour in the spring. This group will also participate in district and state music contests and festivals.

Handbells (1 credit course)

This course will teach students to play handbells or improve upon their handbell ringing skills. These elements of music – time signature, key signature, dynamics, texture, meter, note names, note values, tempo – will be taught as well as basic conducting and sight-reading. Students will be part of a handbell choir that will perform for chapel, at area Lutheran churches, concerts throughout the year and a 5-day music tour in the spring.

Concert Band (1 credit course)

Students in concert band will perform at chapel, area Lutheran churches, concerts throughout the year, basketball games (pep band), and during a 5-day music tour in the spring. Fundamentals of music theory will be taught and students will learn how to be a part of an ensemble, follow direction and make their contribution to the final performances. This group will also participate in district and state music contests and festivals.

Beginning Drawing & Painting (1 credit course)

This course serves as a general introduction to drawing and painting giving the student exposure to a variety of two-dimensional studio disciplines, color theory, first-hand observation and originality as well as theory of aesthetics, art history and criticism. Students will explore visual problem solving using the elements of art and principles of design.

Intermediate Drawing & Painting (1 credit course)

This course emphasizes drawing and painting techniques and media and application of the elements of color, line, form, shape, space, texture and value to good design and composition. Experimentation with a variety of materials will be encouraged. Subject matter will include landscape, still life, portrait/figure and abstracts. Students will be exposed to professional masters' work and learn fundamentals of art criticism and evaluation. Successful completion of Beginning Drawing & Painting is a prerequisite.

Advanced Drawing and Painting (1 credit course)

This course serves as a dual credit and is designed for students who have successfully completed Intermediate Drawing & Painting and have demonstrated effective modes of problem solving with insight and reason as they relate to the art form. Experimentation and working from life will be stressed as well as art history and art criticism. Portfolio preparation for college and entry into competitive shows will be encouraged.

Portfolio Seminar (1 credit course)

This portfolio preparation course is designed for highly motivated students interested in post high school study of art. Students will work mostly in two-dimensional form. (Grade 12 by application through instructor only)

Ceramics

This course provides an introduction to hand building and wheel-thrown ceramic methods. Hand building techniques include pinch, slab, coil, and drape and extruded forms. The elements of art and principles of design are stressed as they are applied to form and surface decoration. Historical and present cultural references will be explored as they pertain to functional and non-functional wares.

Digital Photography (.5 credit course)

The first semester of this course is for any student wishing to communicate visually in photographic work utilizing digital imaging processes. Students will solve visual problems using selected electronic imaging devices developing an awareness of the media and its impact on culture and history in addition to the fundamentals of art criticism and evaluation. Students will need their own digital camera.

Graphic Arts (.5 credit course)

This course introduces students to graphic design as a form of visual communication through the use of type, image, form, and color. Combined with their knowledge from Digital Photography students will create projects that explore design processes in two and three dimensions, visual identity and communication, creative problem solving, and basic design practice of critiques and discussion. Prerequisite: *Digital Photography*.

Yearbook/Journalism (1 credit course)

This course will focus on yearbook production including development of a theme, page layout, written commentary, photography, and advertising. Students will learn about areas of newspaper writing such as features, special interest, sports, editorials, and columns. Students will also learn the steps involved in writing, editing, printing, and publishing a newspaper.

CAD/3-D Printing (1 credit course)

This course is designed to introduce students to the principles, concepts, practices and standards for architectural and engineering design and construction. Students will learn the basic process for drafting design, while using tutorials to develop understanding of drafting software. Students will be learning basic design and engineering principles through the use of discussion and projects. The students will be working toward an engineering and architectural capstone that will be developed and made using a 3D printer.

<u>Coding I – Python/Introduction to Computer Science (1 credit course)</u>

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems.

The course gives a foundation in the tools used in computer science and prepares students for further study in computer science. This class is a prerequisite for coding courses including AP Computer Science Principles and AP Computer Science A courses.

AP Java - Coding II (1 credit course)

This course builds upon the concepts of Introduction to Computer Science/CPU Coding. It is designed to give students command of the Java coding language. The curriculum is designed to prepare you for the AP college board exam following the successful completion of the course. Pre-requisite: Intro to Computer Science/CPU Coding.

Industrial Shop (1 credit course)

Learn a variety of vocational, practical, and hands on skills using industrial shop equipment. Learn safe operation of tools and proper functioning of electric power tools. Work in a hands on environment with wood and other construction materials.

Teacher Aide (1 credit course)

This course is designed to give students practical work experience from secretarial work to teacher assistant work, including the grading of simple papers. Responsibility in students will be strengthened and confidence gained in the completion of work. Applicants for the course MUST have at least a 2.75 cumulative GPA.