

2021-22 Course Catalog



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COURSE SEQUENCES

School of Grammar								
SUBJECT	K	1	2	3	4	5	6	
Choir	Kindergarten Program. Assessment required	Primary Choir		Elementary Choir				
Fine Arts		Elementary Fine Arts						
Bible		Bible Stories and Bible Memory Verses		none	Christian Studies 4 Pentateuch	Christian Studies 5 Judges Kings Prophets	Christian Studies 6 New Testament	
English/Literature		Language Arts 1	Language Arts 2	Language Arts 3	Language Arts 4	Language Arts 5	Language Arts 6	
History		History 1	History 2	History 3	History 4	History 5	History 6	
Classical Language		none	none	none	none	none	Introduction to Classical Language (for 6 th grade students who have completed Spelling E)	
Math		Math Prima	Math Secunda - Sexta depending on Assessment					
Physical Exercise		none	none	Lower School PE				
Science		Science 1		Science 3	Science 4	Science 5	Science 6	
Spelling		Spelling A - E depending on Assessment						

5 July 7, 2021 This Course Catalogue is occasionally revised and is subject to change without notice.

School of Logic and Rhetoric (Grades 7 – 12)						
SUBJECT						
	Studies in the Nicene Creed			Introduction to Christian Apologetics	AP® US Government Introduction to Programming / AP Computer Science	Studio Art 1 / 2 Graphic Design AP® Drawing
English/ Literature	English/ Literature 7	English/ Literature 8	World Literature	American Literature	Language Arts 11 / AP® Language & Composition	Language Arts 12 / AP® Literature & Composition
History	History 7: Ancient Civilizations	History 8: Medieval and Renaissance	World History: The Modern Era	AP® US History or US History	Western Civilizations 1 / 2	
Foreign Language	Introduction to Classical Language/Latin I	Latin II	Latin III	Latin IV	AP® Latin	
Math	Pre-Algebra	Algebra 1	Geometry	Algebra 2	Pre-calculus	AP® Calculus AB or AP® Calculus BC
	Logic Physics	Earth Science	Biology	Physics	AP® Chemistry	AP® Physics C: Mechanics (Sem 1), Electricity & Magnetism (Sem 2)
			Chemistry	AP® Biology		

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KINDERGARTEN

The Kindergarten program is a half-day program that introduces Spelling, Penmanship, Reading, and Math. In addition to these core subjects, art, poetry, music, and science are also taught. The Kindergarten program is meant to be 'all-inclusive', and it is not designed to be taken a-la-carte as the other grade offerings.

Kindergarten

Prerequisite: None

Full Program

Website Link: <http://liveoakacademy.org/academics/kindergarten/>

CHRISTIAN STUDIES

The teaching of Christian virtues and Bible memorization start from the beginning, in Kindergarten and the primary grades. In grades 4-6 a three-year Bible survey course is taught, covering the people, events, and geography of the Old and New Testaments, and deepening the students' understanding of familiar Bible stories. In grades 7-8, students explore the Biblical and logical foundations for Christian doctrine and belief. Finally, in the School of Rhetoric, students study Biblical exegesis and the skill of Christian apologetics.

Christian Studies 4: The Pentateuch

Prerequisite: None

Counts towards Full Program: YES

The fourth grade Christian Studies course seeks to deepen the students' understanding of familiar Bible stories from Genesis through Deuteronomy. Study of these books of the Bible includes names and family relationships of key Bible characters, sequence of key events, and lessons learned from the lives of the people and nations whose stories are recorded. The course also examines the ways in which these people and events reveal God's character. Additionally, the geographic context of the stories is examined, including names of key water and land forms, and locations of ancient civilizations, nations, and cities. Students complete reading assignments in The Golden Children's Bible and answer workbook questions orally to a parent or in writing. Students recite weekly Bible Memory passages to parent for sign-off.

Christian Studies 5: Judges, Kings, Prophets

Prerequisite: none

Counts towards Full Program: YES

The fifth grade Christian Studies course seeks to deepen the students' understanding of familiar Bible stories during the Old Testament period of Israel's judges, kings, and prophets. Study of these key Bible characters includes names and family relationships, sequence of key events, and lessons learned from the lives of the people and nations whose stories are recorded. The course also examines the ways in which these people and events reveal God's character. Additionally, the geographic context of the stories

is examined, including names of key water and land forms, and locations of ancient civilizations, nations, and cities.

Students complete reading assignments in The Golden Children's Bible and answer written workbook questions. Students recite weekly Bible Memory passages to parent for sign-off.

Christian Studies 6: Life of Christ

Prerequisite: none

Counts towards Full Program: YES

The sixth grade Christian Studies course seeks to deepen the students' understanding of familiar Bible stories found in the New Testament, with a focus on the life of Christ and a brief look at the early church. The study includes names and family relationships of Bible characters, sequence of key events, and lessons learned from the lives of the people whose stories are recorded. The course also examines the ways in which these people and events reveal God's character. Additionally, the geographic context of the stories is examined, including names of key water and land forms, and locations of ancient civilizations, nations, and cities.

Students complete reading assignments in The Golden Children's Bible and answer written workbook questions. Students recite weekly Bible Memory passages to parent for sign-off.

Christian Studies 7

Prerequisite: none

Counts towards Full Program: YES

The seventh grade Christian Studies course seeks to build a foundational understanding of truth using the Bible as our text and logic as our tool to gain both knowledge and discernment. First, this class provides training in biblical truth based upon the doctrinal statement of the Nicene Creed. Second, it provides training in discernment through the study of logical fallacies. The essential skill of observation will be taught and practiced in order to find examples of both truth and fallacy. Our challenge to each student is to rise to the standards set for church elders, to... "hold firm to the trustworthy message as it has been taught... encourage others by sound doctrine, and refute those who oppose it." Titus 1:9

Class time will be devoted to (1) discussion of elements of the Nicene Creed and their biblical basis, (2) projects and exercises designed to apply the doctrines of the creed, (3) introduction of terms used to define logical fallacies, and (4) exercises in identifying and correcting logical fallacies.

Christian Studies 8

Prerequisite: none

Counts towards Full Program: YES

Eighth grade Christian Studies examines the factual evidence in support of our Christian faith. This includes an examination of the reliability of the gospel authors, the integrity of the New Testament manuscripts, the authenticity of Jesus' claim to divinity, and the veracity of the resurrection account. This course continues building the students' understanding of logical fallacies begun in seventh grade. Students

continue to learn and practice the important skill of observation in order to find examples of both logical and fallacious arguments, with a focus on messages conveyed through advertisements.

Class time will be devoted to (1) discussion and development of concepts introduced in the assigned reading, (2) class exercises designed to enrich the students' understanding of the material, (3) introduction of terms used to define logical fallacies, and (4) group exercises in identifying and correcting logical fallacies.

Home assignments will prepare students for class discussions and provide opportunity to apply concepts through comprehension exercises and analysis. Students will complete most assignments independently, but due to the advanced nature of the text, may require parental assistance at times.

Christian Studies: Biblical Exegesis

Prerequisite: Christian Studies 8 or determined eligibility

Counts towards Full Program: YES

Biblical Exegesis is a School of Rhetoric course which covers, from an exegetical perspective, the entire Bible in a one-year sequence.

This course surveys the Bible, primarily through an analysis of its various literary genres: historical narrative, prophecy, wisdom literature, poetry, Gospel narratives, letters, etc. After understanding the purposes and nature of each genre, students will explore interpretative approaches which are best suited to that genre. This course will also provide tools and methods for doing proper exegesis so that students are enabled to study the Bible in all its richness.

Class time will be devoted to (1) discussion of Biblical genres and representative texts and (2) solving interpretative problems through observation and analysis.

Christian Studies: Introduction to Christian Apologetics

Prerequisite: School of Rhetoric standing

Counts towards Full Program: YES

Introduction to Christian Apologetics is a School of Rhetoric public speaking course which also introduces students to the biblical and theological foundations of Christian apologetics. The course follows the general aims and format of the STOA apologetics and Mars Hill speech events, and could be used as a foundation for competition in those events. The STOA apologetics and Mars Hill events include a database of apologetics questions and cultural connections to aid in the creation of speeches. Themes for speeches include, but are not limited to: The existence and nature of God; the Scriptures; the nature, purpose, and destiny of man; the person of Christ; and Salvation, or to Know God. Introduction to Christian Apologetics students will discuss these topics and prepare speeches on them. Approximately 15 speeches are given by each student during the course. Peer feedback is an essential part of the course.

CLASSICAL AND MODERN LANGUAGES

As a classical academy, training in Latin at Live Oak Academy is both a means to an end and an end in itself. Students acquire valuable knowledge about the structures of language and syntax, and their study of Latin vocabulary also enhances their ability to understand word roots in English and other derivative languages.

Introduction to Classical Language 6

Prerequisite: Student must be at least in 6th grade

Counts towards Full Program: YES

Introduction to Classical Language will prepare 6th grade students for the study of classical languages, especially Latin grammar, Latin vocabulary, Latin sayings, English derivatives, and some of the rich content of ancient Greek and Roman civilization in an effort to give them a more concentrated and focused year of study before Latin 1. Students will begin to develop an understanding of language as a system of grammar and syntax to be applied to both English and Latin – how words function in a sentence, the parts of speech, and verb systems. Specific Latin content will include the system of noun declensions in Latin and basic, foundational verb forms as an introduction to an inflected language, as well as a number of other basic elements of the language. To supplement beginning vocabulary in Latin, students will study key classical Latin and Greek word roots to build English vocabulary. Likewise students will learn the Greek alphabet to accompany their understanding of Greek word roots. The course is designed to develop the student's curiosity and interest in the Greek and Roman history, art, culture and traditions that will be more immediately accessible to them through a study of Latin and/or Greek.

Latin I

Prerequisite: Student must be at least in 7th grade

Counts towards Full Program: YES

The goal of Latin I is to equip students with a functional knowledge of the rudiments of Latin. No prior knowledge of the subject material is assumed. Students move through Latin for the New Millennium Level 1, studying and comprehending nouns and verb forms as they begin to fit them together into cohesive sentences. The course takes a systematic and highly structured approach to the mastery of Latin forms and grammar. As students consider the grammatical workings of Latin, they also begin to consider the principles of Latin syntax (as compared to English). Students are memorizing and drilling vocabulary and basic forms and paradigms on a daily basis in Latin I and II. Assignments will help them master Latin forms and syntax through translation (both from and into Latin). Frequent quizzes help lead to and assess mastery of key vocabulary, forms, and ability with syntax. Students work consistently on pronunciation and oral delivery of Latin forms and content. The curriculum develops a rich sense of the historical and cultural contexts in which the Latin language and its uses flourished.

Latin II

Prerequisite: Latin I or determined eligibility

Counts towards Full Program: YES

Latin II continues the work of Latin I, with solid review at the beginning of the year of key grammar. The course introduces advanced beginning to intermediate grammar and syntax. While mastering new forms and reviewing old ones, we will shift our focus increasingly to Latin syntax. By year's end, we have begun to read more complex passages from the text, with the expectation that the basics of Latin grammar and syntax have become a body of working knowledge for the students.

Latin III

Prerequisite: Latin II or determined eligibility

Counts towards Full Program: YES

This course represents an intermediate to advanced Latin grammar and syntax course. After some review at the year's beginning, students are introduced to the final building blocks of Latin syntax, including more advanced work with the subjunctive mood and other forms of the Latin verb system and complex sentences. The units of this course are organized to work with adapted and original selections from Caesar's work, and students are building a vocabulary primarily aimed at reading proficiency of Caesar.

AP® Latin

Prerequisite: Latin IV or determined eligibility, not sooner than 10th grade

Counts towards Full Program: YES
AP® Fee: \$175

The following content is adapted from the College Board's course description for AP® Latin:

AP® Latin is designed to provide advanced high school students with a rich and rigorous Latin course, approximately equivalent to an upper to intermediate (typically fourth or fifth semester) college or university Latin course. Students who successfully complete the course are able to read, understand, translate, and analyze Latin poetry and prose. AP® Latin students prepare and translate the required Latin readings with an accuracy that reflects precise understanding of the Latin in all its details; they also read and comprehend passages at sight, even if not with full understanding of every detail. These two types of study powerfully reinforce each other. The course thus allows time for regular, sustained, and integrated practice at sight reading.

Throughout the course, students develop their language skills through various activities: precise, literal translation of prepared poetry and prose; reading with comprehension of sight passages, both poetry and prose; and written analyses that demonstrate the results of critical reading in clear and coherent arguments supported by textual examples. Another important aspect of reading Latin lies in the mastery of the many terms that have been devised by scholars and teachers over the years to describe and analyze Latin grammar, syntax, and literary style. Linguistic competence, important as it is, does not exhaust the goals of studying Latin. The Latin language is also the best route to learning about the history, literature, and culture of the ancient Romans. With this in mind, texts have been chosen that will allow students to encounter some of the important people, events, and literary genres of Roman times, focusing on the core periods of the late Republic and the early Principate. Vergil's Aeneid, arguably the most influential work of Latin literature, is both a model of Latin poetic style and a profound meditation on the meaning of Roman history and civilization. Caesar's Gallic War, for generations a standard school text, is still rightly admired

both for its pure and straightforward Latinity and for its historical interest, as it engages with controversial issues of war and peace, empire, ethnicity, leadership, and the roles and purposes of historiography. English readings from Vergil's Aeneid and Caesar's Gallic War are also included in the required syllabus in order to put the Latin excerpts in a significant context. The course exposes students to and develops skills characteristic of the methods of classical philology, with its rigorous attention to linguistic detail coupled with critical interpretation and analysis.

FINE ARTS

Our purpose in teaching Fine Arts is to foster in our students a love for what is good, true and beautiful, as befits a classical Christian and liberal arts education. Participation in Fine Arts is encouraged at Live Oak where students learn to read music and give praise and worship to God through song. We offer four choirs: Primary Choir (grades 1-2), Elementary Choir (grades 3-6), Classic Choir (grades 7-12), and Choral Ensemble. Art projects, art instruction, and art appreciation are incorporated into the curriculum in various ways throughout grades K-12.

Fine Arts 1

Prerequisite: None

Counts towards Full Program: YES

The themes and subjects of Fine Arts 1 are integrated into the First Grade program and reinforce their other studies, with a focus on science and history. First graders will be guided to create art and craft projects using varied tools and media. Artistic concepts and techniques will also be introduced, such as the warm and cool colors of the color wheel.

Fine Arts 2

Prerequisite: None

Counts towards Full Program: YES

The second grade Bible/Fine Arts course will focus on artistic works that were inspired by Scripture. Students will be introduced to a sample of the world's most recognized artists and will discuss selected works by these artists that depict Biblical and nature scenes. The biographical sketches of the artists will focus on their character and spiritual inspiration for their works. Students will be guided to complete artistic projects based upon basic artistic techniques, using a variety of media, and inspired by the works of art they are studying.

Fine Arts 3

Prerequisite: None

Counts towards Full Program: YES

The Third Grade Fine Arts course presents the basic elements of art: lines, shape, color, value, texture, form and space. The focus is on learning these elements and incorporating them in creative projects. The course also includes the study of some of the world's greatest artists and their works, such as Leonardo Da Vinci, Claude Monet, Vincent van Gogh, and Paul Klee. Class time will be devoted primarily to hands-

on art projects. Each project will be introduced with the teaching of art elements and study of the featured artist's biographical information, media and techniques.

Course Overview for Fine Arts 4, 5, and 6

The Fine Arts courses will present a historical overview of great art and artists, beginning with ancient Egypt, Mesopotamia, and Greece, through the European Renaissance, and concluding with early American art. This journey follows the School of Grammar course of history studies taught in second through sixth grade but approaches this same historical journey from the perspective of great art and artists.

Fine Arts 4 : Earliest art discoveries – 1200 AD

Prerequisite: Fine Arts 3 or determined eligibility

Counts towards Full Program: YES

This course begins with the study of the oldest paintings in the world: cave paintings. The class will move on to explore the paintings, sculpture, and architecture of the ancient Egyptians, Mesopotamians, Greeks, and Romans; it will conclude with an investigation of the great works of art and architecture produced in the Middle Ages. The basic art elements of lines, shape, color, value, texture, form and space, will be used to create drawings, paintings, and sculptures.

Fine Arts 5: 1200 AD – 1800 AD

Prerequisite: Fine Arts 4 or determined eligibility

Counts towards Full Program: YES

In this course, students will examine the paintings, sculptures, and architecture of the Middle Ages, Renaissance, Mannerism, and Baroque periods. The class will study works from these great artists: Cimabue, Giotto, Fra Angelico, Leonardo Da Vinci, Michelangelo, Tintoretto, Ghiberti, Donatello, Botticelli, Raphael, Jan Van Eyck, Correggio, Cellini, Reubens, and Rembrandt. The basic elements of art will be used to create drawings, paintings, sculptures, prints, etchings, and embossings that mimic the great works.

Fine Arts 6: 1800 AD – 1966 AD

Prerequisite: Fine Arts 5 or determined eligibility

Counts towards Full Program: YES

In this course, students will explore the paintings, sculptures, and architecture in the styles of Neoclassical, Romanticism, Realism, Impressionism, Fauvism, Expressionism, Cubism, and Surrealism. The famous artists to be studied include Delacroix, Reynolds, Blake, Turner, Monet, Manet, Renoir, Cezanne, Van Gogh, Gauguin, West, Homer, Whistler, Remington, Bellows, Bauer, Picasso, and Dali. The basic elements of art will continue to be used to create drawings, paintings, sculptures, prints, etchings, and embossings that emulate facets of the great works.

Fine Arts 7

Prerequisite: None

Counts towards Full Program: Yes

This year-long class provides in-depth experiences in a variety of media that may include painting, sculpture, fiber, book arts, drawing, cartooning, clay, glass art, print making, photography, and digital media. Some art projects will be self-directed, fueled by the students' own interests with research in art history, cultures, and contemporary art.

Fine Arts 8

Prerequisite: None

Counts towards Full Program: Yes

This year-long course continues the exploration of drawing, painting, inventing and building using the skills, concepts, and knowledge provided in Studio Art. A variety of media will be explored in-depth and may include painting, sculpture, fiber, book arts, drawing, cartooning, clay, glass art, photography, and digital media. Some art projects will be self-directed, fueled by the students' own interests with research in art history, cultures, and contemporary art.

Fine Arts 9-12: Studio Art 1

Prerequisite: determined eligibility

Counts towards Full Program: YES

Studio Art develops art principles through drawing, painting and design. Students complete projects to learn fundamental concepts and methods of visual art by using a variety of media and techniques. Students develop skills in individual areas of interest and will train in the use of specific mediums. All work for this course is two-dimensional and will practice foundation represent skills and individual expressions as well. This course should be taken for students interested in taking AP Studio.

Fine Arts 9-12: Studio Art 2

Prerequisite: Studio Art 1 or teacher approval

Counts towards Full Program: YES

Studio Art 2 deepens and expands principles and techniques learned from Studio Art 2. Students continue refinement of methods and skills practiced in Studio Art and expand them to self - directed works using a variety of media. Most of work for this course is 2-dimensional but students may learn 3- dimensional or digital studies as well. This course should be taken for students preparing or interested in taking AP Studio Art: 2D Design.

Fine Arts 9-12: Graphic Design I

Prerequisite: Completion of Studio Art 1 or portfolio submission

Counts towards Full Program: YES

Design is an ever expanding and relevant part of our globalized, interconnected world. In this course, we will explore what constitutes the field of graphic design. We will adopt the language of visual expression through a variety of methods and materials including typography, abstraction and drawing, photography, research, project based assignments, lectures, exercises, and class critiques. The core of this course will be a focus on the principles of composition, leading to further consideration of graphic design as a state of communication, form, language, identity, observation, and aesthetics. Although software mastery is not the

primary objective of the course, we will learn the following computer programs and core competencies associated with each: Adobe Photoshop Adobe Illustrator Adobe InDesign . In this course, we will address the following questions: What is design? What is design thinking? What is/isn't art? Which mediums, if any, are design specific? What are the core competencies required as a graphic designer? What are the greater applications of a graphic design education?

Fine Arts 9-12: AP® Drawing

Prerequisite: determined eligibility

Counts towards Full Program: YES
AP® Fee: \$175

The AP® Drawing course is for students interested in a rigorous and focused study in art. Students will develop a quality portfolio that demonstrates a mastery of concept, composition and execution in Drawing. This course is based on a student creating a body of work that demonstrates quality, concentration and breadth. This portfolio will be submitted to the College Board for college credit. As in any college level course students will be expected to spend a considerable amount of time outside of class in order to complete assignments and doing homework and sketchbook assignments.

HUMANITIES (ENGLISH)

Live Oak Academy's Language Arts courses emphasize the study of classic literature, traditional grammar, and thoughtful composition, with an eye to the true, the good and the beautiful. In the School of Grammar, students are equipped with all of the tools needed to become perceptive readers and competent writers. Logic and Rhetoric stage students build on these skills as they actively engage with the text and read with discernment. As writers and speakers, students in the School of Logic learn to take a position and defend it with well-supported arguments. As they progress through the School of Rhetoric, their arguments increase in complexity as they hone their critical reading and thinking skills.

Language Arts and Literature 1

Prerequisite: None

Counts towards Full Program: YES

The first grade Language Arts course focuses on helping students become strong readers and capable writers. Instruction in reading takes place at home and in the classroom as students read from the Pathway Reader Series and apply the decoding skills learned in the spelling program. During the year, students are introduced to a variety of beautiful poems which they memorize and recite. Susan Wise Bauer books' First Language Lessons and Writing with Ease develop the students' grammar and writing skills using the classical methods of dictation, narration, and copy work.

Language Arts and Literature 2

Prerequisite: Language Arts and Literature 1 or determined eligibility

Counts towards Full Program: YES

This course builds upon the grammar and writing skills introduced in Live Oak Academy's first grade class. Susan Wise Bauer books' First Language Lessons and Writing with Ease employ the classical methods of dictation, narration, and copy work to help students increase their grammar and writing skills. By reading aloud in class and at home, using a variety of age- appropriate readers and classic novels, students increase their reading skills. Beautiful poetry will be read, memorized, and recited.

Language Arts and Literature 3

Prerequisite: Language Arts and Literature 2 or determined eligibility

Counts towards Full Program: YES

Students in Live Oak Academy's third grade language arts course will gain English language skills necessary to speak, read, and write with accuracy and clarity. Grammar concepts will be practiced in class and at home using Level 3 of First Language Lessons by Susan Wise Bauer. In addition, students will read uplifting literary works, many of which have been selected to enhance their history studies. The third grade composition assignments guide students through each step of the writing process and trains them in how to compose coherent and thoughtful original compositions. Finally, classic poems will be read, memorized, and recited.

Language Arts and Literature 4

Prerequisite: Language Arts and Literature 3 or determined eligibility

Counts towards Full Program: YES

In this language arts course, beautiful literature selections, detailed writing instruction, and a thorough grammar study deepens the fourth graders' appreciation of good books and hones their writing skills. Uplifting novels such as Heidi and The Princess and the Goblin provide the fourth graders with inspiring themes and virtuous characters, while historical fiction works like The Door in the Wall and The Apple and the Arrow enhance what the children are learning in their history studies. Classic poems are analyzed, memorized, and recited. In addition, students are guided through each step of the writing process while they compose a variety of compositions including expository, descriptive, biographical, and narrative. Susan Wise Bauer's First Language Lessons Level 4, provides pupils with a traditional approach to the study of English grammar.

Language Arts and Literature 5

Prerequisite: Language Arts and Literature 4 or determined eligibility

Counts towards Full Program: YES

The fifth grade language arts course emphasizes writing, reading and grammar study. WriteShop, a thorough and incremental writing curriculum, aids students in writing with correct structure and appealing style. Grammar concepts are presented in class and practiced at home using Susan Wise Bauer's Grammar for the Well-Trained Mind. Also, students read wonderful works of literature such as Johnny Tremain and The Witch of Blackbird Pond and poems by American authors which enhance their fifth grade American history study. The students' reading skills will increase as they participate in class discussions about the meaning and structure of the literature.

Language Arts and Literature 6

Prerequisite: Language Arts and Literature 5 or determined eligibility

Counts towards Full Program: YES

The sixth grade language arts course will help students gain English language skills necessary in the transition from Live Oak's School of Grammar to the School of Logic. This class which emphasizes grammar, writing, and the writing process, in addition to literature studies, continues building on the basics learned in previous LOA English courses. Students will use Grammar for the Well Trained Mind by Susan Wise Bauer to reinforce their understanding of the eight parts of speech and their functions in a sentence. WriteShop II, an incremental writing program, instructs students in descriptive, expository, and persuasive writing. The genres of literature that will be read and analyzed include historical fiction, classic literature, and fantasy; books such as The Adventures of Tom Sawyer, Rifles for Watie, and Roll of Thunder, Hear My Cry will broaden the sixth graders' knowledge of American history.

Literature and Composition 7

Prerequisite: Language Arts and Literature 6 or determined eligibility

Counts towards Full Program: YES

This language arts course integrates the studies of writing, literature, and ancient history. In literature, books like The Children's Homer and The Bronze Bow, and poems such as The Destruction of Sennacherib and Ozymandias deepen the students' understanding of the ancient world. Writing topics

strengthen what students are learning in history because they are based on the historical events and noteworthy people of Mesopotamia, ancient Egypt, ancient Greece, and ancient Rome. Put That in Writing, the composition textbook, instructs students in how to write with formality and develop properly-structured, logical paragraphs. The grammar text, Analytical Grammar, reinforces the students' previous grammar studies and provides a systematic approach to language mastery.

Literature and Composition 8

Prerequisite: Literature and Composition 7 or determined eligibility

Counts towards Full Program: YES

The eighth grade language arts course emphasizes active reading and essay writing. The literature textbook, *Windows to the World*, teaches students how to read, infer, analyze, and write about literature. In addition, it recognizes the power of literature to influence readers for good or ill, and therefore seeks to teach students to recognize an author's worldview and read with discernment. Eighth graders will read and analyze classic literature such as *Sir Gawain and the Green Knight*, *Dr. Jekyll and Mr. Hyde*, *Romeo and Juliet*, and *The Time Machine*. Additionally, students will learn how to construct a standard 5-paragraph essay. A variety of papers will be composed throughout the year including literary, expository, descriptive, and persuasive essays. Finally, the grammar text *Analytical Grammar* will reinforce the students' previous grammar studies providing a thorough and systematic approach to language mastery.

World Literature and Composition

Prerequisite: Literature and Composition 8 or determined eligibility

Counts towards Full Program: YES

English 9 (World Literature) emphasizes expository and analytical writing in conjunction with the study of imaginative and classical literature. Students are trained in clear thinking and reasoned support of ideas and they are developing their critical reading skills as they also use the text as a basis for other forms of reflection. Texts studied include *A Tale of Two Cities*, *Great Expectations*, *Macbeth*, *A Midsummer Night's Dream*, *Silas Marner*, *Frankenstein*, *Kim*, and *Animal Farm*, along with other poetry and shorter readings. Students learn to refine their thoughts through small and large group discussion, and through formal and informal written responses to the literature.

Students learn the techniques of literary research and to identify central issues in content and style, to separate major and minor issues, and to think critically about the written word. Course work also includes fundamentals of research writing, including: locating and evaluating sources of information and criticism, note-taking and summarizing, documenting information using standard MLA format, and outlining and presenting the results of their research. They focus on the primary techniques of good writing, including: choosing appropriate subjects, developing theses, and presenting evidence in a logical, clear, and effective manner. Careful attention is paid to the writing process, as students practice pre-writing techniques, first-draft composition, peer-review, revision, editing, and proof-reading.

American Literature and Composition

Prerequisite: World Literature and Composition or determined eligibility

Counts towards Full Program: YES

This course will cover a broad spectrum of American literature—poetry, novels, and short stories—in the context of historical and philosophical change. Among the texts to be studied are Mark Twain’s *Adventures of Huckleberry Finn*, Thornton Wilder’s *Our Town*, F. Scott Fitzgerald’s *The Great Gatsby*, and Nathaniel Hawthorne’s *The Scarlet Letter*. Students will read and respond in class discussion and in essays. The course will provide instruction in essay composition, vocabulary development, rhetorical grammar, and research techniques.

Language Arts 11 and 12

Prerequisite: American Literature and Composition or determined eligibility

Counts towards Full Program: YES

Literature from the Western Canon I and II:

Great Thinkers and Writers in the Western Tradition

This two-year course sequence surveys major literary works from the Western Canon, beginning with literature from Greco-Roman antiquity through the medieval period in the first year, and literature from the Renaissance through early modernity in the second year. We will examine the major questions that have informed the Western literary tradition: man’s understanding of his own experience in the world, and how that understanding is influenced by and in turn influences his relationship to God. In the pre-Christian tradition, we consider the ways in which the individual confronts the conditions of his own knowledge, morality, and place in society. At every stage, the historical context of the literature—the relevant historical, social and philosophical concerns— will be integral to our understanding of the questions and concerns represented by the various authors. This course will largely follow a chronological sequence, but in both the first and the second years, we will read one or two novels and one or two of Shakespeare’s plays with attention to thematic content, and we will likewise examine poetry from various periods that is thematically relevant, where it may not be chronologically contiguous. There will be careful attention paid to the historical conventions of poetry and its forms, and the analysis and understanding thereof. Writing for the course focuses on both the traditional skills of literary analysis, but also thoughtful synthesis and reflection, and students can expect both analytical and creative writing assignments.

In its content and aims, the course is designed to function in dialogue with the thinkers and writers studied in the Western Civilization and Intellectual History course. As such it is paired with that two-year course in such a way that readings from both courses will be referred to in the conversation of each course.

Readings in the first year include literature from the following authors (or works): Homer, Aeschylus, Sophocles, Plato, Aristotle, Augustine, Boethius, Petrarch, Dante, Beowulf, Chaucer, Sir Gawain and the Green Knight, Malory, More, and Spenser.

Readings in the second year include literature from the following authors (or works): Marlowe, Shakespeare, 16th -17th century poets including Sidney, Donne, and Jonson, Swift, Milton, Johnson, 18th-19th century poets including Blake, Dickinson, Coleridge, Wordsworth, Keats, Byron and Shelley, Tennyson, Whitman, and Eliot.

Plays read by Shakespeare may include: Hamlet, King Lear, Othello, Richard III, The Merchant of Venice, Much Ado about Nothing, Love’s Labours Lost, or The Comedy of Errors.

Our study of the novel may include work by the following authors: Austen, Eliot, Dickens, Hardy, Dumas, Dostoevsky, and Tolstoy.

AP® Language and Composition

Prerequisite: American Literature and Composition or determined eligibility

Corequisite: Language Arts 11

Counts towards Full Program: YES

AP® Fee: \$175.00

(requires enrollment in Literature from the Western Canon for AP credit)

This class, which meets once a week and in conjunction with Language Arts 11, is designed to work in addition to the reading and writing that students complete in their 11th grade Language Arts course. In addition, we read a variety of non-fiction writing as students develop key skills in rhetorical analysis. The course focuses on expository, analytical, personal, and argumentative texts and compositions, and the students focus on key skills for synthesis in reading and writing. By itself, it provides more in-depth practice in the analytical study of all modes of writing: students build close reading/analytical skills, practice written rhetorical analysis, study literary terms and rhetorical figures and strategies to build their understanding of writing and rhetoric. This course is intended to prepare students to successfully complete the AP® exam in English Language and Composition. After the AP® exam, time permitting, we can work more extensively on personal statement writing, critical to the college admissions process.

AP® Literature and Composition

Prerequisite: American Literature and Composition or determined eligibility

Corequisite: Language Arts 12

Counts towards Full Program: YES

AP® Fee: \$175

(requires enrollment in Literature from the Western Canon)

This class, which meets once a week, is designed to work with the reading and writing that students complete in the Humanities 11/12 course, and requires enrollment in Literature from the Western Canon. By itself, it provides more in-depth practice for the analytical study of literature across genres: students build close reading/analytical skills, practice written literary analysis, study literary terms and rhetorical figures to build their understanding of how authors communicate ideas in literature, and learn to apply their analytical skills to a variety of texts across historical periods. This course is intended to prepare students to successfully complete the AP® exam in English Literature and Composition. Students will be reading and analyzing literature studied in Grades 11 and 12 but may also refer to readings from the 9th and 10th grade literature selections. After the AP® exam, time permitting, we can work more extensively on personal statement writing, critical to the college admissions process.

Spelling A - E

Prerequisite: Previous Spelling Course or determined eligibility

Counts towards Full Program: YES

This course uses the books *Spell to Write and Read* and *WISE Guide for Spelling* by Wanda Sanseri. This multi-sensory approach teaches penmanship, the sounds of speech (phonograms), and spelling rules in a

manner that stimulates logical thinking and equips students for spelling mastery and reading fluency. The program covers 2,000 core words, plus derivatives, to teach the foundational principles of English. Starting with spelling words at a beginning reader level, the program concludes with words at the high school graduate reading level.

HUMANITIES

Grades one through twelve survey World History, and especially Western Civilization from ancient times to the modern day. While attending Live Oak Academy, students will study this history sequence three times, in increasing depth and complexity. At each level students will be taught to see history as God's unfolding plan for the world and appreciate His working in the development of civilization. The chronological study of history parallels the study of literature.

History & Geography 1

Prerequisite: None

Counts towards Full Program: YES

The first grade History and Geography course introduces students to American history through a series of seven biographies of famous explorers and Americans by Ingri and Edgar d'Aulaire. In addition to reading the books and listening to them being read aloud, students discuss the people and events of the stories and work on projects to reinforce their understanding. A second book of history stories from around the world introduces students to famous people who made history. Also, students explore both world and United States geography. World geography focuses on continents and oceans, hemispheres, poles, the equator, and compass directions. United States geography consists of the names of the regions and states of the United States, learned through geography songs. Finally, students will learn to read simple maps, charts, and graphs through group and workbook activities.

History & Geography 2

Prerequisite: History & Geography 1 or determined eligibility

Counts towards Full Program: YES

The second grade History and Geography course presents the study of ancient history, from approximately 5,000 B.C. to 500 B.C. Through stories, projects, and hands-on activities, the world of Mesopotamia and ancient Egypt will be explored in a multi-sensory approach. In conjunction with the study of ancient history, students will learn the countries and capitals of the Middle East and major land and water forms of the Middle Eastern and Mediterranean regions. Second graders will also continue their American history studies with the book, *Story of the Pilgrims*. A second book, *History Stories for Children*, introduces students to famous people and events from America and around the world. Additionally, students learn (or review) the names and locations of the fifty United States. Finally, the second graders become familiar with and illustrate geographic forms, and learn to read simple maps, charts, and graphs through workbook activities.

History & Geography 3

Prerequisite: History & Geography 2 or determined eligibility

Counts towards Full Program: YES

The third grade History and Geography course focuses on ancient Greece and Rome. The primary text, *A Child's History of the World* by Virgil Hillyer, introduces 3rd graders to the fascinating history of these two ancient civilizations. Employing the classical methods of classroom chants, narration and copywork,

students learn about the significant events, noteworthy people, and major accomplishments of these two important contributors to Western Civilization. To bring the ancient world to life, a variety of historical fiction novels and biographies are read. In geography, children learn geographical terminology and memorize the continents and selected countries.

History & Geography 4

Prerequisite: History & Geography 3 or determined eligibility

Counts towards Full Program: YES

The fourth grade History and Geography course looks at the key events and important people from the fall of the Roman Empire through the Reformation. Students read sections from several primary textbooks and history readers covering the Middle Ages, Renaissance, and the Reformation. Using a history timeline chant based on the flashcards from Veritas Press, students commit to memory the significant dates, people and deeds of these eras. Pupils will also memorize the countries and selected capitals of the major European countries. Finally, students will compile a creative and comprehensive history binder with projects and class work throughout the year.

History & Geography 5

Prerequisite: History & Geography 4 or determined eligibility

Counts towards Full Program: YES

The fifth grade United States History and Geography course, Explorers to 1815, introduces students to what Europeans came to think of as “The New World” and then traces the development of the American nation from the colonial period until 1815. In order to emphasize the significant events and personalities found in the core text and history readers, recitation and drill work will be done regularly. Additionally, the text, 200 Questions about American History helps students to learn the major facts about America’s past. During the fourth quarter, students will examine California’s fascinating past in a literature-based mini-course. While reading books such as *The Story of Junipero Serra* and *By the Great Horn Spoon* the people and events of early California will come alive for the students. This year’s geography study will focus on North America.

History & Geography 6

Prerequisite: History & Geography 5 or determined eligibility

Counts towards Full Program: YES

The sixth grade History and Geography course looks at the key events and important people in American history from 1815 to the middle of the 20th century. Students will read four books from the captivating history series, A History of Us, by Joy Hakim, and work through thought-provoking study guides that correlate with these books. History flashcards from Veritas Press as well as the text, 200 Questions about American History will aid students in committing to memory the significant dates, people, and deeds of this era in U.S. history. Finally, pupils will memorize “The Gettysburg Address,” the U.S. presidents, and the location and capitals of the 50 states.

History 7: World History - Ancient Civilizations**Prerequisite:** History & Geography 6 or determined eligibility**Counts towards Full Program:** YES

The seventh grade world history course forms the second stage of Live Oak's three-year history cycle. In the first semester, students will learn about man's earliest civilizations as they investigate Mesopotamia and ancient Egypt. During the second semester, the pupils' history study will focus on ancient Greece and Rome. In class, art projects, hands-on activities, mock trials, classroom debates and classroom plays will deepen the students understanding of the beliefs and cultures of the ancient world. The study of each of these four ancient civilizations will culminate in a major oral presentation. Finally, this year's geography lessons will focus on the Middle East, North Africa, Scandinavia, Europe and the British Isles.

History 8: World History - Medieval and Renaissance**Prerequisite:** History 7 or determined eligibility**Counts towards Full Program:** YES

This class forms the second stage of Live Oak's three-year history cycle. It will cover World History, with an emphasis on Western History, from the Fall of Rome through the French Revolution. The Middle Ages will be studied in the first semester and the beginning of Modernity (Renaissance, Reformation, Revolution) in the second semester. This study of history often runs parallel to what the students will be reading in language arts and will help to illumine it. In addition, students will read four historical novels to enrich their understanding of the time period being studied. This year's geography lessons will focus on Sub-Saharan Africa, Asia, Oceania, and the Americas. Some independent research will be required for projects and oral presentation; students will be directed to useful websites and provided with library books.

World History – Modern**Prerequisite:** History 8 or determined eligibility**Counts towards Full Program:** YES

Modern World History builds upon the knowledge of the history of civilizations and cultures (begun in History 7 and 8) as students examine the events, the people, and the ideas of our own time—the world from the Industrial Revolution, through the 19th and 20th centuries. Students consult a variety of resources as they study—books of history and biography (secondary sources); first-hand accounts of events (primary sources); and oral interviews with people who lived through events themselves.

The history of any time includes much more than the stories of kings and queens, wars and migrations. It also encompasses the story of the everyday lives of common people, the science and technology, the music and art, the religion and philosophy, and even the poetry and stories of the time.

In addition to the history of ideas and people, the course addresses the geography of the places students are reading about: the physical features, the political boundaries, and the cultural identities of the people. The movement and isolation of peoples, the shelter or exposure offered by physical geography, the access to resources, and many other aspects of geography affect the progress of historical change.

United States History**Prerequisite:** World History or determined eligibility**Counts towards Full Program:** YES

Starting with a brief discussion of the pre-European American situation, this course proceeds to examine history from 1492 until 1992, both chronologically and thematically. During the Pre-Revolutionary period students examine how America came to be and how this history shaped the country she later became. Reading original documents, the students learn to engage historical figures, rather than merely memorize dates and names. Progressing through the War Between the States to the First World War and beyond, we track both the changes in American government and society and those aspects which remain constant.

Advanced Placements students meet for one additional section every week. Because they are preparing for the AP exam, they have more in-depth study of documents and regular practice writing a "Document Based Question."

AP® US History**Prerequisite:** World History or determined eligibility**Counts towards Full Program:** YES**AP® Fee:** \$175.00

Starting with a brief discussion of the pre-European American situation, this course proceeds to examine history from 1492 until 1992, both chronologically and thematically. During the Pre-Revolutionary period students examine how America came to be and how this history shaped the country she later became. Reading original documents, the students learn to engage historical figures, rather than merely memorize dates and names. Progressing through the War Between the States to the First World War and beyond, we track both the changes in American government and society and those aspects which remain constant. Advanced Placement® students meet for one additional section every week. Because they are preparing for the AP® exam, they have more in-depth study of documents and regular practice writing a "Document Based Question."

Western Civilization -Intellectual History 1**Prerequisite:** United States History or determined eligibility**Counts towards Full Program:** YES

Great Thinkers and Writers in the Western Tradition

Western Civ. / Intellectual History Year 1 is the first part of a two-course sequence. The second part is typically completed in a student's senior year. The course is a capstone course to the entire educational endeavor of Live Oak Academy. It integrates previous training in History, Literature, Christian Studies, and other disciplines into a conversation with some of the most important questions human beings ask: Who am I? Is there a God? What is possible to know about him? Does history have meaning or a goal? How should I live? What is a person's goal in the social, political, and religious contexts encountered in our world?

We will enter this conversation through the reading, analysis, and discussion of great books. (See below for a list of some of the books that have been read over the years in Western Civilization / Intellectual History Year 1. The actual list of assigned readings can and will vary from year to year.) The books selected are ones that have stood the test of time and are ones that, over many centuries, thoughtful individuals have read and reread.

Western Civilization / Intellectual History begins with Greeks, continues into the Roman and early Christian era and winds up in the High Middle Ages. The focus throughout is western. Year 2 proceeds from the Late Middle Ages and Reformation and into the 20th Century.

Western Civilization -Intellectual History 2

Prerequisite: United States History or determined eligibility

Counts towards Full Program: YES

Western Civilization and Intellectual History I and II: Great Thinkers and Writers in the Western Tradition Students survey the great conversation among history's most eminent thinkers and writers, from Moses and Plato to Nietzsche and the rise of post-modernism. Unlike many similar classes, the heart of this survey is the Incarnation and the immediate cultural and intellectual effects of Christianity as it both confronted and integrated pre-Christian culture. In the first year, the course surveys the Jewish and Greek roots of European thought, then traces the conversation forward through the high-medieval synthesis of Christianity with the requirements of worldly rule. In the second year, students consider the transformative controversies of the Renaissance and Reformation, and finally the multiple revolutions of the modern period. Most of the reading is in primary sources, written by many of the most eminent and admired (or hated) thinkers of all time. The goal is first to understand each thinker on his own terms, as he would have understood himself, second to understand his thinking as an element in the centuries-long controversy and dialogue of great ideas, and third to let that Great Conversation illuminate the student's own world view in the present day. The course takes this respectful approach even in cases where the thinker in question is an enemy of our Christian faith, in part for moral reasons, but also because we wish to test and refine our own stand by a candid examination of our philosophical opponents.

The course is paired with the Western Literature two-year course, and the two courses function together in informing the conversation around ideas and historical contexts. As such, readings from both courses may be referred to in the conversation of each course.

AP® US Government

Prerequisite: determined eligibility

Counts towards Full Program: YES
AP® Fee: \$175.00

The AP® course in United States Government and Politics will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students successfully completing this course will know important facts, concepts, and theories

pertaining to U.S. government and politics, understand typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures) be able to analyze and interpret basic data relevant to U.S. government and politics (including data presented in charts, tables, and other formats), be able to critically analyze relevant theories and concepts, apply them appropriately, and develop their connections across the curriculum. Topics covered include: the Constitutional underpinnings of the US government, political beliefs and behaviors, political parties, interest groups and mass media, institutions of national government, public policy, and civil rights and liberties.

MATHEMATICS

Mathematics displays God's systematic and orderly nature. Teaching math from a Christian worldview requires that the teacher regularly connect the glory of math and how limitless the study of math can be. As the student transitions from the concrete, grammar stage to the abstract, logic and rhetoric stages of math, students should be taught from the perspective that God created an orderly universe, and that math reflects that order.

MATH PRIMA – MATH SEXTA CURRICULUM

The aim of the Math in Focus Singapore Math curriculum utilized in Math Prima through Prealgebra is to allow students to develop their ability in mathematical problem solving. This includes using and applying mathematics in practical, real-life situations as well as within the discipline of mathematics itself. An important feature of learning mathematics within this curriculum is the use of a concrete introduction to the concept, followed by a pictorial representation, followed by the abstract symbols. Although each class covers many different concepts, only the core concepts are highlighted for each course.

Math Prima

Prerequisite: determined eligibility

Counts towards Full Program: YES

In Math Prima students will spend the year learning the hundreds chart: counting forward and backward, skip counting, comparing numbers, exploring more and less, determining missing numbers in a sequence, and learning the place value of ones, tens, and hundreds. Students will explore number bonds using number stories and learn to associate number bonds with part-whole. From this foundation, students will study addition and subtraction. We will emphasize mastery of all single digit addition facts and their inverse subtraction facts and mental math strategies for solving math problems. Students will also learn addition and subtraction of two digit numbers. They will use these skills in many different contexts, such as with place value, money, time, measurement, sequence, and comparison. Simple geometric shapes will be introduced. Finally, students will use repeated addition and arrays to solve multiplication

problems. Division will be introduced through sharing and grouping. This introduction will lay the foundation for a more extensive exposure to multiplication and division in Math Secunda.

Math Secunda

Prerequisite: Math Prima or determined eligibility

Counts towards Full Program: YES

In Math Secunda students will continue to build problem solving skills and mental math strategies as they solve part whole and comparison real world problems. Concrete items, including base ten blocks, will be used to provide a foundation for understanding mathematical concepts. Place value will be emphasized to master addition and subtraction facts. Key concepts that will be learned include:

- Numbers to 1000 (place value, comparing, ordering)
- Addition to 1,000 (with and without renaming)
- Subtraction to 1,000 (with and without renaming)
- Mental Math and Estimation (adding and subtracting)
- Multiplication and Division (2 through 5, 10)
- Money (recognize, count, and show money; add and subtract money)
- Fractions (write, compare, and order fractions; add and subtract like fractions)

Math Tertia

Prerequisite: Math Secunda or determined eligibility

Counts towards Full Program: YES

In Math Tertia, students will learn to model 2-step part whole and comparison real world problems involving addition, subtraction, multiplication, and division. The properties of multiplication will be explored using arrays, number lines, and area models. Students will practice mental math strategies to estimate and solve problems in multiple ways. These skills will be applied to real world problems involving fractions, measurement, money, time, area, and perimeter. Key concepts that will be learned include:

- Numbers to 10,000 (place value, compare and order)
- mental math and estimation (adding and subtracting, round/estimate sums & differences)
- adding and subtracting numbers (with and without regrouping)
- multiplication and division (properties, 0-10 facts)
- measurement (length, weight, and capacity in metric and standard)
- money (adding and subtracting)
- time (adding and subtracting, elapsed time)
- fractions (comparing, ordering, and simplifying fractions, equivalent fractions, fractions of a set)
- area and perimeter (estimating and comparing for plane figures)

Math Quarta

Prerequisite: Math Tertia or determined eligibility

Counts towards Full Program: YES

In Math Quarta students will learn what makes up a whole number. They will continue in their skills of the four arithmetic operations. Fractions will be taught more in depth. Decimals are introduced. Key concepts that will be learned include:

- Whole numbers to 100,000 (place value, comparing, and ordering)
- Estimating and Number Theory (estimating products, factors, multiples, prime/composite numbers)
- Adding and Subtracting of multi-digit numbers
- Whole Number Multiplication and Division (2 digit multiplication, 1-digit division)
- Fractions (adding and subtracting like fractions, mixed numbers, improper fractions, fractions of a set)
- Decimals (introduction, rounding, adding and subtracting)
- Area and Perimeter (rectangles, squares, composite figures)

Math Quinta

Prerequisite: Math Quarta or determined eligibility

Counts towards Full Program: YES

In previous years, students have mastered the foundations of the four arithmetic operations. They have also mastered the concrete concepts of positive whole numbers, different types of fractions (mixed numbers, improper fractions, equivalent fractions), and decimals. Students will now use this foundation to study these concepts at an even deeper level. Key concepts that will be learned include:

- Whole Numbers (numbers to 10,000,000, place value, rounding and estimating)
- Whole Number Multiplication and Division (multiplying and dividing by tens, hundreds, or thousands, multiplying by powers of ten, order of operations)
- Fractions and Mixed Numbers (adding and subtracting unlike fractions and mixed numbers)
- Multiplying and Dividing Fractions and Mixed Numbers (multiplying and dividing fractions and mixed numbers)
- Multiplying and dividing by a 2-digit number (multiplying a 2-digit number by tens, multiplying a 2-, 3-, or 4-digit number by a 2-digit number)
- Area (finding the area of rectangles and triangles, finding the area of a rectangle with fractional side lengths)
- Ratio (Using ratio to compare numbers, finding equivalent ratios and missing terms in equivalent ratios, stating comparisons as division, fractions, and ratio)
- Decimals (identifying, comparing, and rounding decimals to the thousandths place, rewriting decimals as fractions and mixed numbers)
- Multiplying and Dividing Decimals (multiplying and dividing decimals by a whole number and by powers of ten, estimating decimal sums, differences, products, and quotients, converting metric units)

- Percent (expressing percent as part of a whole, as a fraction, and as a percent; finding percent of a number, finding the number represented by a percent)
- Surface Area and Volume (building, drawing, and identifying cubes, rectangular prisms, and pyramids; finding surface area; finding and comparing volume of solids and composite solids; solving word problems involving 1, 2, and 3 steps.)

Math Sexta

Prerequisite: Math Quinta or determined eligibility

Counts towards Full Program: YES

As with the earlier Singapore Math courses, in Math Sexta each concept is covered with both concrete representations through modelling, and with more symbolic equations. Real-world problems are included in every chapter, so students can see the applications of the math they are learning. It is crucial that a student master the arithmetic concepts covered in Math Sexta before entering a rigorous pre-algebra and algebra program. During second semester, students will be introduced to elementary geometry and statistics as a preview of more advanced math courses ahead.

Pre-Algebra

Prerequisite: Math Sexta or determined eligibility

Counts towards Full Program: YES

This Pre-Algebra course provides students with an introduction to the concepts of algebra and geometry; at the same time, it solidifies their grasp of arithmetic concepts and procedures. The following concepts and skills are consistently integrated into the curriculum: logic and critical thinking skills development; problem solving; and the reading and writing of mathematics, and developing a greater level of abstraction. Some of the major objectives include improving computational skills in equations and inequalities and extending understanding of geometric concepts. Successful completion of this course gives students a firm foundation for the Algebra class that follows this course.

Algebra 1

Prerequisite: Pre-Algebra or determined eligibility/assessment

Counts towards Full Program: YES

This year long algebra 1 course will give the students a comprehensive and fundamental understanding of the basic algebraic concepts. Sample problems solved in class will help the students develop and acquire problem-solving skills and critically thinking skills, which are extremely valuable and beneficial for further studies in math and science. This course primarily focuses on exponents, radicals, linear and quadratic functions, inequalities and graphing in two-dimensional coordinate systems. Topics in this course will include: evaluating expressions, polynomials, negative numbers, factoring, graphing lines, solving linear equations, solving quadratic equations, linear functions, exponents, radicals, rational algebraic expressions, and functional notation. Successful completion of this algebra 1 course will result in an excellent preparation and foundation for the succeeding math classes such as geometry, algebra 2, pre-calculus and calculus.

Geometry**Prerequisite:** Algebra 1 or determined eligibility/assessment**Counts towards Full Program:** YES

This course will study geometric shapes such as lines, triangles, quadrilaterals, and circles. The properties of the shapes will be examined, and the concepts of congruence and similarity will be introduced. The students will also develop skills by using length, perimeter, area, circumference, surface area, and volume to solve real-world problems. The course will have an emphasis on logical reasoning and problem solving skills.

Algebra 2**Prerequisite:** Algebra 1 or determined eligibility/assessment**Counts towards Full Program:** YES

To succeed in Algebra 2, a student must have successfully completed Algebra I with solid understanding of all concepts, including how to solve linear and quadratic equations, graph lines, solve systems of equations, and solve inequalities and absolute value equations. Students should be comfortable simplifying and performing operations on rational and irrational algebraic expressions.

This course is designed to build on algebraic concepts learned in Algebra 1, preparing to student to succeed in Precalculus. It develops advanced more algebra skills such as equations and inequalities involving polynomials, imaginary and complex numbers, quadratics, irrationals, logarithms and exponential functions. Students will learn to recognize and graph equations representing conic sections. The course includes series and sequences, statistics and probability, and an introduction to trigonometric functions. It also introduces matrices and their properties. The course will have an emphasis on logical reasoning and problem solving skills.

Precalculus**Prerequisite:** Algebra 2 and Geometry or determined eligibility/assessment**Counts towards Full Program:** YES

To succeed in Precalculus, a student must have completed a year's course in Algebra II, learning how to graph functions and solve systems of equations and inequalities. She must understand complex numbers and have knowledge of exponential and logarithmic functions and probability. She should be comfortable with rational and irrational algebraic expressions.

This course will study further properties of functions and inverse functions, polynomials with real and complex zeros, exponential and logarithmic functions and equations, trigonometric functions and equations, polar coordinates, vectors, matrices, analytic geometry, sequence and series, and a brief introduction to the concept of limits and calculus. The course will have an emphasis on modeling of real world applications using the math concepts.

AP® Calculus BC

Prerequisite: Precalculus (Grade B or above) or determined eligibility/assessment, summer assignment and assessment

Counts towards Full Program: YES
AP® Fee: \$175.00

Live Oak Advanced Placement® Calculus BC is a full year course intending to give students command of the fundamental concepts and methods of single-variable calculus. Topics include limit operations, differentiation, integration, and an introduction to ordinary differential equations. Students will be working with a graphing calculator to supplement the class. The course will prepare students to succeed on the AP® Calculus BC exam, although taking the AP® exam is not a course requirement. The course is the equivalent of a full year of university freshman calculus.

To succeed in Calculus, a student must have completed a year's course in PreCalculus, learning frequently used functions & their graphs, transformation of function graphs, trigonometric functions & their inverse functions, matrix, polar coordinates, parametric functions, sequences & series, and limits.

Introduction to Programming

Prerequisite: Algebra 1

Counts towards Full Program: YES

Introduction to Programming teaches students how to program using Python 3.x. Python is currently the most popular programming language according to many different metrics. No prior programming experience is required for this course. However, this course is rigorous – the topics ramp up in complexity and the problem sets are challenging.

AP Computer Science A

Prerequisite: B average in both semesters of Algebra 2

Counts towards Full Program: YES
AP® Fee: \$175.00

This course emphasizes object-oriented programming methodology with a concentration on problem-solving and algorithm development and is meant to be the equivalent of a first semester college-level course in Computer Science. The language of concentration is Java. The course also includes an introduction to the study of data structures, design, documentation, and abstraction. This course is designed to prepare students for the College Board's Advanced Placement Examination in May.

SCIENCE

The belief that science is a reflection of God's incredible complexity and design forms the core of Live Oak Academy's science curriculum. In their exploration of science and its laws, students also are encouraged to understand theories and conclusions, guided by the belief that God provides insight into His creation. Through each stage of growth, students will be taught to explore the wonders of God's handiwork that reveals the seen and unseen.

General Science 1**Prerequisite:** determined eligibility**Counts towards Full Program:** YES

First graders at Live Oak Academy receive an overview of science topics that relate to the world around them. These include: eating healthy foods, manners, the forces of gravity and magnetism, the earth's weather system, habitats, and the life cycle of plants and butterflies. The purpose of first grade science is to foster the student's natural curiosity about the world around them. Learning takes place primarily through activities that employ the five senses, such as observations, experiments and simple projects. The goal is to strengthen the student's understanding of the world around them, while retaining the joy of discovery.

General Science 2**Prerequisite:** General Science 1 or determined eligibility**Counts towards Full Program:** YES

Second graders at Live Oak Academy will receive an overview of science topics that relate to the world around them. These include the difference between living and non-living things, the life cycle of plants, the human body (bones and muscles), the forces of gravity and magnetism, the earth, and oceans. Learning will take place primarily through activities that employ the five senses, such as observations and simple experiments. The goal is to strengthen the student's understanding of the world around them, while retaining the joy of discovery.

General Science 3**Prerequisite:** General Science 2 or determined eligibility**Counts towards Full Program:** YES

Third graders will enjoy a broad look at Life Science, Earth Science, and Physics. We start our book in Life Science, discussing plants and animals and end in Life Science, discussing humans. In our 3rd and 4th units we will be discussing Physics and Earth Science. We will spend a majority of the first semester studying animals (cold-blooded and warm-blooded) and plants and ecosystems. In the second semester most of our study will focus on the states of matter, sound, energy, the Earth, weather and the solar system. Students will enjoy many hands-on experiments and activities in the science classroom. They will learn how to conduct experiments and how to utilize the scientific method. Our class will be creating a Science Fair project together, which will take some time in the second semester as well. This approach includes learning to conduct experiments regularly and to record them properly in a science notebook. We will also be making connections across various topics and applying science to previously held conceptions or knowledge.

Primary: Earth Science 4**Prerequisite:** General Science 3 or determined eligibility**Counts towards Full Program:** YES

Fourth graders at Live Oak Academy study earth science. While investigating the heavens and the earth, students will learn about the lithosphere, the atmosphere, weather, and astronomy. The textbooks will be

used primarily at home for directed reading and activities. Websites are also used in the course, both for required home assignments and optional enrichment. Class time will include lectures and simple note-taking, discussions, activities, experiments, show-and-tell, and oral sharing of experiments and reports. Home assignments include readings, science notebook work, worksheets (using the textbook or websites), drawings, experiments, journals (brief daily logs of observations), short research reports, and tests.

Primary: Biology 5

Prerequisite: General Science 4 or determined eligibility

Counts towards Full Program: YES

This class covers biology at a grade appropriate level, including the topics of taxonomy, cells, photosynthesis, plants, protists, animals, and ecology. Our approach will be appropriate to the grammar stage: an emphasis on memorization, observation, measurement, classification, and use of mnemonics.

Primary: Chemistry 6

Prerequisite: Primary Biology 5 or determined eligibility

Counts towards Full Program: YES

Sixth grade Chemistry will utilize inquiry-based instruction. Our study has five lesson sets: matter's phases, density, atoms and molecules, changes and interactions, and finally an introduction to acids and bases.

Students begin the year investigating the solid, liquid and gas phases of matter. The behavior of atoms and molecules in each phase of matter is described using kinetic theory. Students begin to relate macroscopic observations of matter to the behavior of atoms and molecules.

Students will study density in our second lesson set. They will use water displacement to determine the volume of irregular solids and thus calculate density values in the laboratory. There will be opportunities to compare densities of substances and identify factors that influence density values.

Next, atomic theory is introduced and students learn about the structure of the atom. The periodic table is explored to see how element families, periods and groups are related to each other by common properties. Students will research an element and make an atom model.

In the fourth lesson set, students to use their observational skills to identify physical and chemical changes. They conduct a variety of chemical reactions and learn how chemical equations are used to represent chemical change. They also study the effect of temperature on the rate of chemical reactions, graphing and interpreting data and predicting the products of a reaction.

Finally in our last lesson set, students use chemical indicators to identify acid and base solutions. Labs will have students determining the concentration of acids and bases using the pH scale. Students will also explore dilution and neutralization.

Logic: Physics 7

Prerequisite: Chemistry 6 or determined eligibility

Counts towards Full Program: YES

This class will teach most of the major topics of physics, including force, energy, and work. This includes

potential and kinetic energy and motion, energy of atoms and molecules, electrical energy and charge, magnets and electromagnets and lights and sound. Throughout the course, hands on experiments play a predominant role in class time. Students will learn how to predict results and record experimental data that result in an investigative analysis. This leads to a student led science project presented in the spring at the annual LOA Science Fair.

Logic: Earth Science

Prerequisite: Pre-Algebra or determined eligibility

Counts towards Full Program: YES

Eighth grade Space & Earth Science takes an in depth look at the physical non-living universe that can be divided into four major divisions or spheres. The four divisions are as follows: the celestial sphere – outer space; the atmosphere – the layers of gases surrounding the earth; the hydrosphere – the natural waters that cover and penetrate the earth’s surface, and the lithosphere – the solid part of the earth and its surface.

Eighth grade earth science begins with the study of space: the sun, moon, planets, and all other objects beyond the earth’s atmosphere, including the technology used to study space, will be considered. The earth’s atmosphere is described and discussed in the second unit. The atmosphere’s design provides protection and sustenance for life on Earth. Meteorology, atmospheric water in the form of clouds, and movement in the atmosphere, such as storms and winds, will be examined. Students should be able to identify simple weather maps and patterns at the end of this unit. The third unit of study introduces the solid part of the earth, the lithosphere. An introduction to geology will be presented including the identification of minerals and ores, rocks and fossils. Also, the study of the earth’s plate tectonics will explore the earth’s frequent earthquakes and volcanoes. The hydrosphere is the fourth and final unit of study. The presence of large quantities of water makes the Earth different from every other known planet in the universe. A close look at the earth’s oceans and seas, glaciers, and groundwater systems will show how this important resource can shape the Earth’s surface and subsurface. Pre-algebra is required, but it can be taken concurrently.

Rhetoric: Biology

Prerequisite: Algebra 1 or concurrent enrollment acceptable

Counts towards Full Program: YES
Lab Fee: \$150.00

This course encompasses ecology, biochemistry, basic chemistry, cell physiology and function, Mendelian genetics, proteins synthesis, biotechnology, origins of life, botany, anatomy, and taxonomy. Students will be required to follow a comprehensive laboratory program, as well as participate in group activities and projects. Labs include a variety of topics such as enzyme investigations, DNA electrophoresis, bacterial growth experiments, and dissections.

AP® Biology

Prerequisite: Algebra 1, Rhetoric Biology and Rhetoric Chemistry or equivalent
(In exceptional situations, enrollment is permitted at the discretion of the academy administration)

Counts towards Full Program: YES
Lab Fee: \$150.00

Corequisite: Algebra 2, Summer Reading

AP® Fee: \$175.00

This course includes many of the topics covered in Rhetoric Biology, but explores them in greater depth with the use of a college level textbook. Added content includes: special attention to plant systems and physiology as well as animal systems form and function. Students apply broad-level concepts to detailed biological principles. The laboratory component includes numerous labs that are specifically related to topics on the AP® exam. Students are expected to take the AP® Biology exam in May.

Rhetoric: Chemistry

Prerequisite: Algebra 1

Counts towards Full Program: YES

Lab Fee: \$150.00

Chemistry at Live Oak Academy is being offered as a one -year high school course. This course gives a basic introduction to chemistry and a foundational understanding of the chemical concepts and processes. The purpose of this course is to prepare the students for the advanced science programs and to spark interest in innovative and progressive chemistry technologies.

The topics taught in this course will include: Scientific measurement, atomic structures, ionic, metallic and covalent bonding, chemical names and formulas, the mole and quantifying matter, chemical reactions, stoichiometry, the states of matter, gas laws, solutions, equilibrium thermochemistry, reaction rates, acids, bases and salts, oxidation and reduction reactions, electrochemistry, organic chemistry and nuclear chemistry. Particular attention is given to precision of measured values and significant figures.

AP® Chemistry

Prerequisite: Algebra 1, Rhetoric Chemistry or equivalent,
(In exceptional situations, enrollment is permitted at the discretion of the academy administration)

Counts towards Full Program: YES

Lab Fee: \$150.00

Corequisite: Algebra 2, Chemistry or equivalent

AP® Fee: \$175.00

This yearlong advanced placement chemistry course is the equivalent to one full year of college level general chemistry. This AP® chemistry course will meet the standards of a good first year college chemistry course and it will prepare students for the AP® chemistry exam in May. Students who pass the AP® Chemistry exam will most likely receive college credit.

Rhetoric: Physics

Prerequisite: Algebra 1

Counts towards Full Program: YES

Corequisite: Algebra 2, completion recommended

Lab Fee: \$150.00

The School of Rhetoric Physics class is an overview of the fundamental science of Physics. Physics is a captivating and electrifying look into motion and energy. The curriculum focuses on the mathematical analysis of motion and force, work, momentum, wave motion, and electricity. Material is presented in a learning environment that combines classroom lecture, hands-on labs and experiments, and multiple demonstrations.

AP® Physics C: Mechanics

Prerequisite: Precalculus and Trigonometry, Rhetoric Physics or equivalent
(In exceptional situations, enrollment is permitted at the discretion of the academy administration)
Corequisite: Calculus, summer HW assignment, Physics or equivalent

Counts towards Full Program: YES
Lab Fee: \$150.00
AP Fee: \$175.00

This course covers the same material as a semester long first-year college course in physics, and will prepare students to take the AP® Physics C Mechanics Exam in May. The material covered in this course follows the syllabus for that exam. Due to the content of the class, an introductory calculus course (including differentiation and integration) should be taken before or concurrently with this class.

AP® Physics C: Electricity and Magnetism

Prerequisite: Precalculus and Trigonometry, Rhetoric Physics or equivalent
(In exceptional situations, enrollment is permitted at the discretion of the academy administration)
Corequisite: Calculus, summer HW assignment, Physics or equivalent

Counts towards Full Program: YES
Lab Fee: \$150.00 (if not taking Mech)
AP® Fee: \$175.00 (if not taking Mech)

This course covers the same material as a semester long first-year college course in physics, and will prepare students to take the AP® Physics C Electricity and Magnetism Exam in May. The material covered in this course follows the syllabus for that exam. Due to the content of the class, an introductory calculus course (including differentiation and integration) should be taken before or concurrently with this class.

PHYSICAL EDUCATION

Choir OR PE is free to LOA students who take two or more core classes.

Both Choir AND PE are free to LOA students who take three or more core classes.

Physical Education 3 - 6

Prerequisite: Grades 3-6

Counts towards Full Program: NO

The course will cover some or all of the following activities:

- Basketball
- Touch Football
- Baseball
- Volleyball
- Soccer
- Kickball
- Hockey
- Physical Fitness
- Crab Soccer
- Dodge ball
- Badminton
- Frisbee Golf

PE teachers will be stressing good sportsmanship, teamwork, the fundamentals of the team sports mentioned above, and fun.

Physical Education 7 - 8

Prerequisite: Grades 7-8

Additional Tuition for part-time students: \$520

Counts towards Full Program: NO

ENRICHMENT CLASSES

Choir OR PE are free to LOA students who take two or more core classes.

Both Choir AND PE are free to LOA students who take three or more core classes

Through their participation in choir, students will find delight in singing and making music in community, writing the good, true, and beautiful on their hearts.

Primary Choir

This class is not available a-la-carte

Prerequisite: For 1st and 2nd graders taking the full program

Counts towards Full Program: NO

Through their participation in choir, students will find delight in singing and making music in community, writing the good, true, and beautiful on their hearts. Goals for Primary Choir students include:

- Learn beloved patriotic songs and hymns.
- Enjoy rhythm and vocal exercises.
- Become familiar with musical terms, and learn the basics of musical notation.
- Learn the groups of instruments in the orchestra and become familiar with individual instruments.
- Become familiar with the major music eras and some of the famous composers associated with each of them.
- Learn and present musical selections for the Christmas and Spring Choir Concerts.
- Prepare students for the more varied and challenging music of Elementary Choir.

Elementary Choir

Prerequisite: Grades 3-6

Counts towards Full Program: NO

Additional Tuition for part-time students: \$520

Goals for Elementary Choir students include:

- To advance an understanding of the rudiments of quality choral singing.
- To facilitate students' progress in vocal control, observance of musical markings, and the following of the motions of the director.
- To fine-tune students' ears in order to understand and duplicate musical subtleties such as vowel pronunciation, dynamics, phrasing, and expression.
- To sing in unison, 2, and 3-part harmony with resonant vowels and with a unified sound.
- To expose students to a variety of music within the classical choral tradition with a focus on the sacred.

Classic Choir

Prerequisite: Grades 7-12

Counts towards Full Program: NO

Additional Tuition for part-time students: \$520

Goals include:

- To create a time of community and praise to God.
To expose students to a variety of music within the choral tradition with a focus on the sacred (in both Latin and English)
- Instruction in 3 and 4 part singing.
- Christmas and Spring Concerts for family and friends.

Jazz Band

Prerequisite: Grades 7-12, Proficiency on instrument, ability to read music

Additional Tuition: \$720

Counts towards Full Program: NO

This class will culminate with a performance during the spring choir concert. Students will meet an hour weekly to receive music to practice, accept instruction regarding standard progressions in jazz, learn about the relevant jazz history in correlation with the assigned music, listen to classic recordings and practice interacting in a jazz setting. The program will be set up in four units: 1) roots of jazz 2) the blues 3) New Orleans style jazz 4) swing. Upon completion of this course, students will be able to lead a jam session, lead and follow a tune using standard jazz communication methods, understand several types of common forms in jazz music, and have a basic understanding of jazz history.

Yearbook

Prerequisite: School of Rhetoric Students only

Counts towards Full Program: NO

Additional Tuition: \$205

This is a year-long course where students creatively and collectively plan and execute the 140 page full-color yearbook for the Academy. Their individual contributions include page layout and design, photo cropping, photography of students, classes and all campus activities and editing of pages. Students are trained to use our on-line yearbook program. Because of the nature of this course, all students are required to have their own personal computer and must bring it to class each week. The time commitment for this enrichment class is 1-2 hours in class each week and 1-2 hours outside of class each week.