# Curriculum Guide

For grades Pre-K through 12 at Thomas Jefferson Independent Day School

THOMAS JEFFERSON
INDEPENDENT DAY SCHOOL

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## Our academic principles stand the test of time.

Success does not happen by accident. It takes a strong work ethic and an unyielding commitment to excellence. But most of all, success takes preparation. At Thomas Jefferson Independent Day School, we lay the foundation for success in life by offering a curriculum that prepares your child to excel in college and all facets of life. Critical thinking skills and solid study habits are learned, and engaged parents play an integral role along the way. TJ does not waste time by following fads. Our focus is on a classic Western Civilization curriculum with texts that have stood the test of time. By learning about the history, culture, origins, and literature of Western civilizations, our students are able to better understand and appreciate other cultures.  Laboratory sciences and advanced mathematics courses create opportunities to develop and strengthen problem-solving and research skills. World languages, art, and music offerings, which begin early on, further broaden the cultural scope of our liberal arts curriculum.

# THE EARLY CHILDHOOD PROGRAM

**The Early Childhood Division—consisting of the Pre-Kindergarten and Kindergarten programs—focuses on several discrete goals: preparing students for academic instruction; engendering enthusiasm for learning; developing an appropriate response to authority; and educating students to work collaboratively. The program strives to present developmentally-appropriate activities for each student.**

| | Language Arts | Math | Science | History/Social Studies | World Languages | The Arts | Program Enhancements | After School Programs |
|---|---|---|---|---|---|---|---|---|
| **Pre-K** | The student will devote attention to reading, writing mechanics, listening, and oral communication. Instruction relies on thematic units, learning centers, stories, and small- and large-group activities. | The student will attach meaning to numerals. The topics include arithmetic skills, visual discrimination, number theory, geometry, problem solving, and measurement. | The program centers on life science, earth science, and physical science. The student will learn through exploration and manipulation, relying on art projects, small-group experiments, games, songs, finger plays, and group discussions. | The program focuses on geography, communities, and citizenship. Instruction relies on learning centers, thematic units, and hands-on activities. | **Spanish**<br>This program stresses language acquisition through games, songs, oral practice, and proper pronunciation of Spanish expressions, numbers, nouns, verbs, and adjectives. They are able to produce some Spanish words in context, without prompting, before they enter the next grade. | **Art — Grades Pre-K and K**<br>Students in the Early Childhood Division learn to distinguish artwork in the studio from their more crafts-oriented activities in the regular classroom. Their early focus is on recognizing the qualities of shape, color, and line; they move on to learning the color wheel and mixing color, combining and manipulating shapes to create visual images, and beginning to depict space. | **Technology — Grades Pre-K and K**<br>Pre-Kindergarten and Kindergarten students have access to Tablet PCs in their classrooms during center rotations. Students use a variety of media and technological resources for directed and independent learning activities. The curriculum helps students develop skills and confidence in using technology and provides an effective means of gaining knowledge and expressing ideas. Early Childhood students also have access to the full computer lab for whole group activities.<br><br>**Physical Education — Grades Pre-K and K**<br>The Pre-kindergarten and Kindergarten programs are aimed at challenging each student to demonstrate progress toward the mature form of selected manipulative, locomotor, and non-locomotor skills. Skills and games center on seasonal sports and recreational activities. In addition to focusing on fundamental age-appropriate skills and games, students will learn that physical activity and healthy nutrition are good for the body, and that they contribute to an active and healthy lifestyle. | All students in grades Pre-kindergarten and Kindergarten may participate in the Extended Day program where the school provides after-school care for TJ students in grades Pre-K through 5 from 3-6 p.m. Monday through Friday. |
| **K** | The student will devote attention to reading, writing, mechanics, listening, and oral communication. The student will use phonics to recognize letters and sounds and decode unknown words. The student will listen to, read, and discuss stories, and engage in literature studies as a class. | The student will strengthen number recognition and the ability to quantify numbers through one hundred. Teachers will introduce the student to the general concepts of addition, subtraction, time, money, fractions, and measurement. | The program emphasizes life science, earth science, and physical science by relying on hands-on discovery, experiments, learning centers, and group activities. The student will learn how to use the scientific method. | The student will develop an understanding of community, family, and citizenship. The teacher introduces the student to the use of maps, globes, and charts to learn how to distinguish one place or region from another. | **Spanish**<br>This program stresses language exploration through games, songs, oral practice, and proper pronunciation of Spanish expressions. Communication skills are expanded as students learn simple vocabulary: nouns, verbs, and adjectives surrounding many themes. | **Music —Grades Pre-K and K**<br>Students in the Early Childhood Division learn about music through songs, dances, stories and play activities. They also experiment with rhythm instruments and using their voices expressively. They learn nursery rhymes, folk songs, songs with actions, songs to accompany stories and games, and music of many styles. The classes perform three times a year at school concerts. | | |

# THE LOWER SCHOOL PROGRAM

**The Lower School program focuses on establishing advanced core competencies. The course of study develops essential academic skills: reading, writing, listening, computing, and studying. The program emphasizes studies in English, with a dependence on phonics; in mathematics, where the teachers balance drill with critical thinking and problem-solving in the context of traditional instruction; in social studies and history, concentrating on Western traditions and particularly the American heritage; and in science, in which students use a hands-on approach to learn the lessons of nature and the scientific method. The program builds on world language, music, art, and P.E. skills developed in the Early Childhood Program.**

| | Language Arts | Math | Science | History/Social Studies |
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| **GRADE 1** | Students will decode language and use phonics skills, building a sight-word vocabulary. They will maintain a journal and write stories as means of developing writing skills. Students strengthen their handwriting skills and further develop writing in complete sentences. | Students will add and subtract two-digit numbers without regrouping. They will understand concepts of time, measurement, money, and sequencing. The teacher emphasizes the process as much as the solution. | Students meet with the science teacher in the science lab and engage in an entirely hands-on curriculum. Students learn scientific concepts and the scientific method through controlled experiments as well as reading and writing about science. Topics covered in 1st grade are Organisms, Coding, Comparing and Measuring, Weather, Properties, Solids and Liquids, and The Moon and Beyond. | Students will explore the nature of communities by focusing on the school and neighborhood community. The student will learn to identify the needs and wants of people and families. They will also learn map skills, including cardinal directions and concepts of continent, country, state, and city. |
| **GRADE 2** | Students will develop skills and habits with which to read independently with improved comprehension. Both writing and spelling exercises stem from reading experiences. They will focus on vocabulary development and spelling skills, as well as appropriate grammar in writing and speech. The teacher will introduce cursive handwriting. | The student will develop skills in problem-solving and logical reasoning. The student will add and subtract two- and three-digit numbers with regrouping, and will develop an understanding of number patterns, comparing and ordering numbers, interpreting tables and graphs, and using multiplication and division concepts. The student will understand the concepts of time, measurement, money, simple fractions, geometry, sequencing, probability, special sense, and patterns. | Students meet with the science teacher in the science lab and engage in an entirely hands-on curriculum. Students learn scientific concepts and the scientific method through controlled experiments as well as reading and writing about science. Topics covered in 2nd grade are Life cycle of the Butterfly, Balancing and Weighing, Soil, Air, Changes, and Mystery Festival. | Students will engage in research and make presentations concerning comparisons of communities past and present, rural and urban. They will understand wants and needs, goods and services, government, rules and laws, local and national history, and natural resources and conservation. They will identify the continents, the oceans, the United States, and the state in which he or she lives. |
| **GRADE 3** | The course of study emphasizes vocabulary and comprehension. The teacher reads aloud to encourage enjoyment of diverse forms of literature, and students reads independently and presents reports throughout the year. The program emphasizes spelling, grammar, expository writing, and handwriting. The teacher pays special attention to developing correct paragraph structure. | Students will develop basic computational skills in addition, subtraction, multiplication, and division. They will also focus on fractions, decimals, geometry, money, time, graphs, charts, and estimation. The program stresses problem solving throughout the year. | Students meet with the science teacher in the science lab and engage in an entirely hands-on curriculum. Students learn scientific concepts and the scientific method through controlled experiments as well as reading and writing about science. Topics covered in 3rd grade are Plant Growth and Development, Rocks and Minerals, Chemical Tests, Sound, and Dinosaur Classification. | The focus of the program is the history, geography, government, and culture of Missouri. The student will also study the four geographic regions of the United States, learning differences in physical features, climate, population, farming, industry, natural resources, and major cities in each region. The student will be able to locate all fifty states on a map. |
| **GRADE 4** | Students will develop an appreciation of literature and cultivate word-attack skills by reading chapter books in a variety of genres including fiction and nonfiction. The program enhances vocabulary growth and spelling accuracy. Grammar, usage, and mechanics are integrated throughout the English program. An outgrowth of the program is refined problem-solving skills. | Students will develop reliable skills in multiplication and division, working with fractions and decimals and identifying geometric figures. Instruction incorporates the use of manipulatives to promote critical thinking and mathematical reasoning skills. The student will also develop skills in measurement, probability, and data analysis. | Students meet with the science teacher in the science lab and engage in an entirely hands-on curriculum. Students learn scientific concepts and the scientific method through controlled experiments as well as reading and writing about science. Topics covered in 4th grade are Animal Studies, Oceans, Human Body, and Electric Circuits. | Students will study land forms, climate, natural resources, and the industry of regions throughout the world through instructional media, field trips, hands-on activities, and research projects. The program highlights national holidays, current events, and important figures in U.S. history. Focus on map skills includes intermediate cardinal directions along with charts and graphs. |
| **GRADE 5** | The program includes the customary focus on reading, writing, spelling, grammar, and vocabulary skills. The student will practice editing, grammar, sentence structure, and paragraph construction. The student will also read and study diverse genres of literature, acquire new vocabulary from the readings, and write about books with evidence from the text. | Students will expand on the previous year's knowledge of math. The program emphasizes accuracy and speed in basic computations involving numbers up to 12. The students also add, subtract, multiply, and divide large whole numbers, decimals, and fractions, as well as develop ability in problem solving, English and metric measurement, geometry, probability, and data analysis. | Students meet with the science teacher in the science lab and engage in an entirely hands-on curriculum. Students learn scientific concepts and the scientific method through controlled experiments as well as reading and writing about science. Topics covered in 5th grade are Microworlds, Ecosystems, Measuring Time, Forces and Motion, and Erosion. | The students examine the history of the American people from early times to the present day. The program also focuses on the geography of the United States – mountains, rivers, forests, farms, cities, and natural resources in general. Major skills developed in the course of the year include research, oral presentations, group projects, note-taking, and outlining. Throughout the year, students compose essay responses using original ideas in complete sentences based on the questions. |

## World Languages

**Spanish — Grades 1-2**
In 1st and 2nd grade most of class time is devoted to visual cues, songs, gestures, role plays, manipulatives, and listening practice in order to acquire vocabulary in context without translation. Students receive lots of comprehensible input and continue expanding their vocabulary. They begin writing in simple complete sentences, though the emphasis is still on listening and uses of basic phrases. Cooperative stories are still used, but students have an opportunity to begin reading in the target language as well as responding to questions about what's being read.

**Spanish — Grades 3-5**
The students begin the study of the details that make up the language. The students learn to write in the target language and notice the differences between English and Spanish spelling and pronunciation. A written study of familiar vocabulary moves it to active language. Activities include mimicry, aural comprehension, and reading and writing in the target language. In addition, an emphasis on oral practice is encouraged through roleplays and specific times where only the target language is allowed. Grammatical concepts include formation of regular verbs in the present tense, plurals, negatives, and questions, as well as spelling and gender agreement. The students also study Spanish culture.

## The Arts

**Art — Grades 1-5**
Throughout grades one through five, students meet with the art teacher twice per week. They create works of art in various media, using a variety of techniques, to learn the principles of design and the elements of art. Along the way, they increase their art vocabulary to be better able to communicate about their own creative efforts and about the role of art in society throughout history. Art projects connect to the classroom curriculum whenever natural opportunities arise. The study of great works in art history proceeds thematically—that is, through landscapes, portraits, or figure sculptures.

**General Music — Grades 1-4**
Students in the Lower School study music of many styles, composers, and performers from all eras. Through an emphasis on singing, playing instruments, movement, listening, improvisation and composition, students learn basic theory, notation, musical form and style. All students will experience playing percussion instruments, Orff instruments and recorders. The students learn significant works by important composers, folk songs, popular songs, songs to accompany games, and songs that develop musical ability. The students perform three times a year at school concerts.

**Instrumental Music — Grades 3-5**
Students in 3rd, 4th, and 5th grade may participate in strings class if they play cello, viola, violin, or double bass. Students in 5th grade begin playing a band instrument if they are not already participating in strings class. All students are required to take instrumental music in 5th grade. No previous lessons are required for students entering the program, and they are not required to take lessons outside of school.

**Choir — Grades 3-5**
Students in 3rd, 4th, and 5th grade may participate in choir if they are interested in vocal performance. No previous lessons are required for students entering the program, and they are not required to take lessons outside of school.

## Program Enhancements

**Science — Grades 1-5**
Students in grades 1-5 meet three times weekly with the science teacher in the science lab to follow topical units of study, such as the atmosphere, cellular structure and function, elementary chemistry, states of matter, geology, properties of light, natural resources and conservation, life cycles of plants and animals, astronomy, and ecosystems. They learn the scientific method through hands-on activities and experiments, as well as by reading and writing about science.

**Technology — Grades 1-5**
Lower school students meet in the computer lab twice a week during the school year. Students gain confidence in accessing the local area network, using their personal network user names and passwords, and using the features of the PC. Students participate in structured class assignments where they plan, design, and implement curriculum-related projects. Technology instruction reinforces and enhances mathematics, language arts, social studies, and science curriculum. In the self-contained classroom, students also have access to a laptop cart, from which they can supplement their computer lab experience and integrate technology into the classroom. Specific topics include computer literacy, spreadsheets and charting, online research methods, and keyboarding. Multimedia presentations are created and presented in the fourth and fifth grades, involving collaborative efforts between the classroom and computer lab. The skills students master in the computer lab are easily and confidently transferred to computer use in the library, individual classrooms, and at home.

**Physical Education— Grades 1-5**
The Physical Education program is based on the strong belief that a healthy, balanced, well-rounded student has a greater chance of learning, understanding, and excelling in and out of the classroom. Fundamental age-appropriate motor skills are progressively refined and combined into more specific sport skills. The student will be introduced to a variety of skills through individual and team sports. The curriculum stresses sportsmanship and fair play in all areas, with more sport-specific activity in the later years. Through physical activity, the courses provide opportunity for challenge, enjoyment, self-discovery, self-expression, and lifelong skills to enhance one's quality of life.

## After School Programs

All students in grades 1-5 have several opportunities for after-school enrichment at TJ. In addition to tutorials available every day from 3:15 - 4 p.m., students can participate in several activities including book club, math club, studio art, Spanish club, coding, strings, recreational team sports, and choir. The Extended Day program provides after-school care for TJ children in grades Pre-K through 5 from 3-6 p.m. Monday through Friday.

# THE MIDDLE SCHOOL PROGRAM

**Middle School confronts the formidable challenge of negotiating the transition from childhood to adolescence. The course of study requires a high degree of intellectual integrity and rigor yet does not expect the level of sophistication of a high-school student. The instructor must walk the fine line between playing the pedagogue and nurturing the emotional development of a young person into the threshold of adulthood. The result of a TJ middle school education is the readiness to tackle a demanding academic program in the Upper School. Students will emerge from the Middle School prepared to write an essay, take comprehensive final exams, organize and apportion time for homework, think seriously about ideas, retain vital facts and details necessary to the presentation of a credible judgment, and engage in civil and reasoned discourse.**

**The school fundamentally believes that students must acquire the requisite knowledge with which to think critically. That premise then inspires a program designed to inculcate foundational knowledge – in literary study, in the study of history, in scientific disciplines, in mathematics, and in foreign languages. Students will acquire the skills to apply certain operations in these disciplines – like conjugating verbs, factoring equations, and testing hypotheses. TJ fields interscholastic teams in cross-country, volleyball, basketball, cheerleading soccer, tennis, and track at the middle-school level.**

| | English | Math | Science | Social Studies/History | World Languages | Other Middle School Offerings | Fine Arts/Performing Arts |
|---|---|---|---|---|---|---|---|
| **GRADE 6** | The course begins a student's transition from reading for plot to reading for meaning. Students read novel-length texts, short stories, drama, and poetry as they are introduced to basic literary terminology and techniques. Through critical reading, students learn the intricacies of style and technique used by authors to craft complex plots and themes. In addition, students undertake an intensive study of grammar, from parts of speech through the rules of punctuation. During the year, student compositions will expand from paragraph to complete essay, with careful attention given to rhetorical forms and modes. | **Pre-Algebra**<br>Pre-algebra is a gateway into the world of algebra and geometry. The topics—which include patterns, formulas, integers, real numbers, and solving equations—are presented in an integrated approach as an introduction to algebra. | **Science**<br>Students explore topics in life science, physical science and earth/space science. Cell structure, reproduction, ecosystems, genetics, plant and animal life cycles and adaptations, and ecosystems are some of the concepts covered in the life science unit. In the physical science unit, the periodic table of elements is introduced, and students learn such concepts as state and structure of matter, light, sound, chemical reactions, motion, and electricity. The earth's composition, earthquakes, volcanoes, and the solar system are concepts covered in the earth/space unit of the course. Students engage in many hands-on laboratory activities and write lab reports for these activities. | **World Geography**<br>The world geography course is designed to provide students with a basic understanding of the world in which they live. The Earth's physical features, climates, soils, vegetation, natural resources, and demographics will be studied. Study skills and time management practices will also be taught. | **Chinese**<br>**Introduction to Chinese**<br>In this course, students are given an introduction to Chinese language and culture. Oral communication skills are the primary focus, but students are also introduced to the written characters. They will learn to both write and read Chinese characters and develop an understanding for the language and its origins. | **Physical Education — Grades 6-8**<br>The physical education courses in grades 6-8 place strong emphasis on developing knowledge and skills in various team sports and activities. Students learn basic skills and strategies through lead-up games and activities. Exposure to a variety of skills and sports allows the student to build motor development. Students also participate in the Presidential Physical Fitness Test at the beginning and end of the school year.<br><br>**Electives — Grades 6-8**<br>Middle School students engage in elective courses during 5th hour. These electives are meant to provide a time for the students to study a topic that may not be part of their core course of study, or allow them to study a particular topic of interest in more depth. Examples of such electives are Middle School Musical, Team Sports, Book Club, Robotics, History Day, STEM, Sculpture, Strategic Games, and Drama. | **Art**<br>The sixth grade students learn still life drawing from direct observation, working from simple groups of geometric objects, with an emphasis on accurate proportional rendering, along with different ways of rendering space using simple lines. Studies in Art History cover an introduction to the esthetic and evolution of art from the primitive forms of the prehistoric period, to architectural monuments of ancient Egypt, to the highly advanced figure sculpting of the Greeks.<br><br>**Middle School Instrumental Ensemble**<br>Students elect this class instead of Middle School general music. Students play Clarinet, Flute, Trumpet, Trombone, Sax, Bass, Violin, Viola, Cello, Percussion, etc. MSIE students perform at Middle and Upper School concerts throughout the year, and also as smaller ensembles at various events. |
| **GRADE 7** | This course builds upon the skills foundation laid in 6th Grade English, with students continuing their study of literary forms and genres. Students will begin to synthesize the elements of fiction and poetry in order to craft informed arguments about texts. They will be introduced to the basics of poetic meter, poetic terminology, and more complex poetic forms. The study of grammar will focus on a review of verb tenses and sentence diagramming. During the year, students will study the various "modes" of essays, which may include Description, Narration, Illustration, Comparison, Causation, and Process Analysis. | **Algebra I- Grades 7-8**<br>Building on the basics of pre-algebra, this course focuses on solving linear, quadratic, radical, and rational equations and inequalities. A graphical approach—including domain and range—to the general shapes of some basic functions is also presented as a tie between intercepts and zeros. Factoring, systems of equations, exponents, and radicals also receive emphasis in the course. | **Life Science**<br>Life Science introduces students to the fundamental concepts common to the study of life. The course offers a basic study of cells, genetics, and the diversity of living organisms. Life Science also addresses ecology and environmental science. | **United States History**<br>The United States History course is a survey course based on a frontier theme. It covers the history of this country from the colonial period to the present day through the lens of the American frontier. Special emphasis will be placed on the Constitutional principles of government, major crises in the history of the country, and the role of different leadership styles in shaping our republic. Students will also learn historical research methods and writing skills. | **Latin**<br>**Introduction to Latin**<br>This course introduces the student to the essentials of Latin grammar, reading, and translation skills; its ultimate goal being the reading of original Latin literature. Proper pronunciation, the formation of nouns and adjectives, and the present and all past tenses of the indicative mood are studied. The student examines Roman culture through the medium of connected Latin readings set in Pompeii and Roman Britain. | | **Art**<br>Seventh grade students learn ceramics, using several classic methods of vessel making: coil building, slab building, and pinch building. Their training in drawing includes an introduction to the use of formal perspective in rendering deep space and issues of human proportion as related to portraiture and basic shading techniques. Studies in Art History cover the Romanesque and Gothic periods of Medieval Art.<br><br>**Middle School Instrumental Ensemble**<br>Students elect this class instead of Middle School general music. Students play Clarinet, Flute, Trumpet, Trombone, Sax, Bass, Violin, Viola, Cello, Percussion, etc. MSIE students perform at Middle and Upper School concerts throughout the year, and also as smaller ensembles at various events. |
| **GRADE 8** | This course begins to transition students from viewing texts as individual creations to viewing them as products of culture. The texts studied, which include several novels, plays, and poems, parallel-in theme and subject-those which they will be examining in other courses. Students will undertake studies of the language of literature, types of genre, and forms of poetry to interpret texts from specific points of view. Grammar skills will be reviewed as students review the essentials of argumentation and composition. | **Geometry**<br>The first half of this course concentrates heavily on the deductive proof, focusing on proving lines parallel, triangles congruent, and polygons similar. The second half of the course emphasizes right triangles, circles and tangents, areas of plane figures, and areas and volumes of solids. The course also focuses on further developing algebra and problem solving skills. | **Physical Science**<br>This course deals with basic chemistry and physics—the two fundamental physical sciences. One semester is spent on each broad topic. A major goal of the course is to prepare students for the in-depth study of the sciences encountered in the Upper School. | **Ancient History**<br>This course is the first of a three year series of courses that provide an in-depth look at Western Civilization. This course traces the development of the Mediterranean World and Europe from prehistoric times to about 500 CE. Included in this course are civilizations in Mesopotamia, Egypt, Greece and Rome and the great stories and personalities of the Western tradition like Cicero and Julius Caesar. Students will also continue to hone historical research and writing skills as a part of this course. | **Spanish 1**<br>This course develops the following linguistic domains: speaking, reading, writing, listening comprehension and culture. Students will learn to express increasingly complex thoughts relevant to their lives through mastering the basic building blocks of language: vocabulary and structure. They will also develop both cultural awareness and communicative skills through selected audio-visual media. | **Chinese 1**<br>The fundamental method to learn Chinese language is through Pinyin (a phonetic system used to help pronounce Chinese). For most sections of the Chinese AP exam, the test is written in Chinese characters. Thus, emphasizing recognition of Chinese characters begins at this level. Students learn how to introduce themselves, ask nationalities, describe body parts and features, say names of food and drinks, indicate time and date, express personal hobbies, and discuss future dream careers. Chinese culture, history, and idioms are also introduced.<br><br>**Latin 1**<br>This course stems directly from the foundation laid in Introduction to Latin. Grammar is reviewed and developed. For example, the past tenses of the indicative mood are augmented by their equivalents in the subjunctive, and the participial system is developed. Latin readings set in the first century A.D. deal with the province of Britain and the city of Rome. | **Art**<br>Eighth graders confront problems of formal design – the issue of the expressive and successful use of compositional strategies in visually resolving arrangements in two-dimensional space culminating in a four color printmaking project. More work is done with portraiture and figure drawing, with an emphasis in charcoal medium and shading techniques. Studies in Art History cover the Renaissance, Baroque, and Rococo periods.<br><br>**Middle School Instrumental Ensemble**<br>Students elect this class instead of Middle School general music. Students play Clarinet, Flute, Trumpet, Trombone, Sax, Bass, Violin, Viola, Cello, Percussion, etc. MSIE students perform at Middle and Upper School concerts throughout the year, and also as smaller ensembles at various events.<br><br>**Middle School Vocal Ensemble — Grades 6-8**<br>The MSVE allows students with a keen interest in music to develop their musical abilities. The choir sings two- and three-part music, with an emphasis on independent singing and using correct vocal skills. The MSVE performs at school events, concerts, and local contests. |

# THE UPPER SCHOOL PROGRAM

**The Upper School program expressly prepares students for college. The curriculum emphasizes traditional liberal arts offerings featuring diverse subject areas and texts. The required program of study entails a three-year sequence of Biology, Chemistry, and Physics (AP or Applied), followed by a fourth year of an Advanced Placement Biology or Chemistry; four years of English, including two AP courses; a minimum of three years of a foreign language; a math sequence through pre-calculus, plus a fourth year of a quantitative course (AP Calculus AB, AP Calculus BC, AP Music Theory, or AP Statistics) as the minimum requirement for graduation; and a history sequence beginning with ancient history in the eighth grade, progressing through medieval and AP European History in 9th and 10th grades, AP US History in 11th grade and an interdisciplinary Humanities course along with Economics and US Government and Politics in the senior year. The overall program includes 20 AP offerings. Interim Courses (January only) include Music Appreciation, Art History, Statistics, the Bible as Literature, Speech, Research Methods, and the Senior Personal Finance Program.**
**TJ is a member of MSHSAA and the Ozark Seven Conference and fields high school teams in cross-country, volleyball, basketball, cheerleading, tennis, soccer, golf, swimming, and track and field.**

| | English | Math | Science | History | World Languages | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Spanish | Latin | Chinese | Other Upper School Offerings |
| **GRADE 9** | **English I**<br>Students begin the Upper School English program with an introduction to literary and rhetorical schemes and tropes. Reading works that correspond to the time period and culture that they are studying in history class, students will explore the ways in which literature can reflect and respond to world events. Students review critical reading skills as they practice the art of argumentation through a study of traditional forms and patterns. In addition, students begin to formally engage outside sources in their writing, as research skills are introduced. | **Geometry- Grade 9**<br>The first half of this course concentrates heavily on the deductive proof, focusing on proving lines parallel, triangles congruent, and polygons similar. The second half of the course emphasizes right triangles, circles and tangents, areas of plane figures, and areas and volumes of solids. The course also focuses on further developing algebra and problem solving skills.<br><br>**Algebra II- Grades 9-10**<br>This course begins with a review of Algebra I in greater depth and degree of difficulty. Students solve systems of equations using matrices and determinants; higher order systems and systems of inequalities are introduced. Complex solutions, irrational functions, synthetic and long division of polynomials also receive attention. The course also places great emphasis on exponential and logarithmic functions and equations. | **Biology**<br>This course develops concepts introduced in the seventh grade Life Science course: molecular and cellular processes and principles of heredity. The course also focuses on human anatomy and physiology as well as surveying the plant and animal kingdoms. | **Medieval History**<br>This course is the second of a three year series of courses that provide an in depth look at Western Civilization. This course traces the development of the Mediterranean World and Europe from about 500 CE to 1700 CE. The course covers early church history, Byzantium, Islam, the Franks, feudalism and manoralism, the Crusades, the Protestant Reformation, the Renaissance, Exploration and Discovery, and the development of nation-states. Students will also continue to hone historical research and writing skills as part of this course. | **Spanish II**<br>This course continues the development of the speaking, reading, writing, and listening comprehension skills introduced in Spanish I. Constant review and introduction of increasingly complex grammatical concepts, weekly oral presentations, journal writing, appropriate internet activities, and ample opportunity for self-expression enable the students to address that which is relevant to their lives. | **Latin II**<br>This course, a direct continuation of the work undertaken in the seventh and eighth grades, begins a process that will culminate in Advanced Placement studies in the senior year. Students encounter increasingly complex grammatical constructions, including various uses of the subjunctive mood. Readings encompass Roman Britain and life in Imperial Rome. | **Chinese II**<br>This course is designed to expand upon the knowledge gained in the sixth grade and eighth grade course. Students will continue to study both the oral and written language, in addition to studying Chinese culture. Students will engage in written assignments as well as the creation of oral presentations in the Chinese language. | **Physical Education — Grades 9-10**<br>The physical education program required of freshmen and sophomores offers each student opportunities to improve personal fitness levels and to develop lifetime habits of physical fitness and recreation. The course provides assessments, instruction, guidance, and activities to address weaknesses and enable students to lead more productive lives throughout school and afterward.<br><br>**Electives — Grades 9-12**<br>Upper School students have two elective periods, and selections include: Upper School Instrumental Ensemble, Upper School Vocal Ensemble, Publications, Art, Robotics, Intro to Coding, Historical Research Methods, Study Hall, Speech and Debate, AP Computer Science, AP Music Theory (Grade 12), AP Studio Art: 2-D Design (Grade 12), and more. |
| **GRADE 10** | **English II**<br>Students trace the development of English literature throughout the year as they encounter texts from a variety of genres and cultures. Students are introduced to literary theory as it relates to political and social history of the English diaspora. The study of poetry is highlighted as students review the basics of meter and form as they relate to meaning. Student writing continues to build on the skills learned in English I, as secondary source materials become commonplace, and students begin to enter into existing literary arguments. | **Precalculus- Grades 10-11**<br>This course covers conic sections, sequences, series, and probability, among its many topics. As a precursor of calculus, trigonometry receives substantial emphasis. The fourth quarter is devoted largely to the study of limits and basic derivatives. | **Chemistry**<br>This course introduces students to the study of matter and energy, including its composition, structure, and changes it undergoes. Among its many topics, the course covers the structure of the atom, electron configuration, chemical bonding, the proper naming of compounds, and the mathematics of chemistry. | **Advanced Placement European History**<br>This course is the third of a three-part series of courses covering the origins and growth of Western Civilization. The course covers the Enlightenment, the French Revolution and Napoleon, the Congress of Vienna, the development of nationalism, industrialism and imperialism, the unification of Germany and Italy, World War I, World War II, and European division and unity in the postwar era. The students will also learn historical research methods and writing skills. | **Spanish III**<br>Students will continue to pursue the objectives of Spanish I and II by emphasizing fluency and correctness of oral and written expression. Cultural appreciation and communications skills are developed through careful reading of selected texts and focused attention to movies and videos from throughout the Spanish-speaking world. Readings include excerpts from Spanish and South American authors, articles from current periodicals, and appropriate internet activities. Students are expected to participate freely in all discussions and to communicate only in Spanish. | **Latin III**<br>This course marks the end of the Cambridge Latin Series and concludes the sequential study of grammar begun in Latin I. Students begin to read original Latin literature by Martial, Catullus, Cicero, Ovid, Vergil, and Pliny the Younger. | **Chinese III**<br>Each week, the class is asked to memorize basic Chinese characters for the basic level of vocabulary and dialogue. Students are able to describe body parts, physical and emotional feelings, and common medical symptoms and treatments, and vacation plans. Chinese culture and idioms are covered while students can read and comprehend a basic level of a story in Chinese characters. Students also begin to type assignments in Chinese characters. | **Humanities- Grade 12**<br>An interdisciplinary course integrating history, literature, philosophy, political discourse, and the fine arts, the Humanities class is required of all seniors. The class simulates a college class in a variety of ways: it invites students to synthesize broad swaths of information and ideas; it schedules discussions of entire texts rather than discussing them in increments, requiring students to organize their study time as they will in college; and it integrates several disciplines—art, history, literature, political analysis. The course resembles a college course in that it relies on a few formidable exams rather than several a semester. A student learns then that a great deal rides on a few major tests. |
| **GRADE 11** | **AP Language and Composition**<br>Students will trace the development of American literature from the colonial period through today via a study of short stories, plays, novels, poetry, and essays. Grammatical structures will be reviewed as students seek to synthesize their composition and literary analysis skills in preparation for the AP exam. Student write several argumentative essays on American literature and society, culminating in a research-based term paper on an aspect of American culture. | **Advanced Placement Calculus AB or BC (1st and 2nd year)- Grades 11-12**<br>These college courses prepare the student for the Advanced Placement exams and further coursework in higher mathematics. The courses focus on limits, derivatives, and integrals. The first-year students study tangent line problem; rates of change including position; velocity, acceleration, change, and area under a curve.<br><br>**Advanced Placement Statistics- Grades 11-12**<br>The AP Statistics course emphasizes data collection, summary, and analysis. The course addresses the underlying concepts of modern statistics. Units of study will include probability and the four major topics given by The College Board; exploring data, planning a study, anticipating patterns, and statistical inference. | **Applied Physics**<br>The first half of the course will give students a foundation in classical mechanics – the study of motion, forces and energy. During the second semester, the focus will shift to oscillatory motion, waves, electricity and magnetism. Lab work and analytical skills are important throughout the course.<br><br>**AP Physics**<br>This university level, algebra-based course instructs students in solving problems in the fields of classical mechanics, energy, electricity, waves and sound. Lab work is designed to develop expert problem-solving skills and reinforce the application of mathematical skills, including the analysis of experimental data using graphs.<br><br>**Advanced Placement Biology**<br>The AP Biology course is designed to be the equivalent of a college introductory course for biology majors. Students are prepared for the AP exam by investigating three major topics: molecules and cells, heredity and evolution, and organisms and populations.<br><br>**Advanced Placement Chemistry**<br>The AP Chemistry course is designed to be the equivalent of the General Chemistry course taken in the first year of college. Major areas of study include the structure of matter, bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics and chemical equilibrium. Guided-inquiry laboratory work is intended to be a significant component of this course, with an emphasis on accurate record-keeping and a mindful approach to laboratory work and data analysis. | **Advanced Placement United States History**<br>This course provides students with the opportunity to use analytical skills and factual knowledge to deal systematically with problems in United States history. The course makes demands upon the student equivalent to those of a full-year introductory college course. It emphasizes the assessment of historical materials in terms of relevance, reliability, and importance.<br><br>**AP U.S. Government and Politics**<br>The government course is designed to provide students with an analytical perspective on the political system of the United States. The course makes demands upon the student equivalent to those of a college-level introductory political science course. The course covers the following topics: the U.S. Constitution, the National Government (Legislative, Executive, and Judicial branches), civil rights and civil liberties, political beliefs and behaviors, political parties, interest groups, media, and public policy. | **Spanish IV**<br>This course refines the students' understanding of Spanish grammar and continues to insist upon fluency and correctness of expression, while honing students' writing, reading, listening and speaking skills. Students read several short stories, short novels and excerpts from longer novels, keep a personal journal, write formal and informal essays, and they prepare oral presentations and written reports on assigned topics. Preparation materials for the Advanced Placement test are used frequently.<br><br>**AP Spanish Language & Culture**<br>This course provides an opportunity for advanced students to pursue further studies through exploring Hispanic literature and culture. Reading selections come from the required reading list for the AP Exam and students expand their abilities to communicate in speaking, listening, reading and writing. The end goal of this course is to prepare students to take and pass the Advanced Placement Spanish Language and Culture exam.<br><br>**AP Spanish Literature & Culture**<br>This course introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin America, and the U.S. Hispanic literature. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication (interpersonal, interpretive, and presentational), and the five goal areas (communication, cultures, connections, comparisons, and communities) outlined in the ***Standards for Foreign Language Learning in the 21st Century***. | **Latin IV**<br>This course is a preparation for Advanced Placement studies. Students read selections from Latin prose authors, Caesar, Livy and Cicero.<br><br>**AP Latin**<br>Students study from the Latin Literature AP syllabus. The emphasis is on literal translation, knowledge of metrics and figures of speech, and literary interpretation. Students refine their command of advanced Latin grammar. | **Chinese IV**<br>Memorizing and being able to recognize Chinese characters is crucial for success on the AP exam, therefore, this course is designed to prepare students to recognize and write in Chinese. While learning an advanced level of vocabulary and sentence structure, students begin to be exposed to AP practice questions. The class should be able to comprehend a given set of pictures and type a complete story in Chinese characters. The students should also be able to read e-mail requests and respond and make recommendations in Chinese characters.<br><br>**AP Chinese Language & Culture**<br>The Chinese AP exam consists of sections of listening, reading comprehension, speaking, and writing. For most sections of the exam, the test is written in Chinese characters. Thus, memorizing and being able to recognize Chinese characters is crucial for success on the AP exam. The class covers topics on customs, daily life, education, economics, geography, family, and entertainment. All four sections appearing on the AP exam are covered during each topic. Chinese culture, history, and idioms are also discussed on a daily basis. | |
| **GRADE 12** | **AP Literature and Composition**<br>Reflecting a typical two-semester college English course, the class takes a chronological approach to the English literary canon from Beowulf through post-modern poetry. Students write several inter-disciplinary essays, several of which focus on the explication of poems and plays. Grammatical concepts and literary terms will be reviewed as students prepare for the AP exam. | | | | | | | **Interim Courses**<br>Interim alters the content and rhythm of the year during the month of January. The month-long program replaces English and History courses with interdisciplinary classes that supplement the traditional program. Courses include:<br><br>Statistics - Grade 9<br>Bible as Literature - Grade 9<br>Music Appreciation - Grade 10<br>Art History - Grade 10<br>Speech - Grade 11<br>Research Skills - Grade 11<br>Personal Finance - Grade 12 |

# Our Mission:

Through a dedication to academic excellence, Thomas Jefferson Independent Day School stands accountable for educating students to make the most of their abilities. The School educates students to acquire and refine essential academic knowledge and skills; cultivate an appreciation of the arts; develop lifelong fitness skills; assume responsibility for their behavior; seek out challenge, welcome criticism, test new capacities; practice self-discipline; and find joy in learning. The school brings students together with teachers who exemplify intellectual curiosity, a dedication to truth, and the advantages of living the examined life.

THOMAS JEFFERSON
INDEPENDENT DAY SCHOOL