

# **Sidney Lanier Middle School**

2600 Woodhead · Houston, TX 77098 · Tel. 713.942.1900 · Fax 713.942.1907

# SIDNEY LANIER MIDDLE SCHOOL COURSE CATALOG\*

### 6<sup>th</sup> GRADE

#### **MATH**

Math: Students will establish a problem solving process; work with whole numbers; introduction to fraction and decimal concepts; work with fractions to decimals; percents; addition and subtraction of fractions and decimals between zero and one; addition and subtraction of fractions and decimals greater than one; ratios and rates; proportional reasoning; proportional and non-proportional relationships; use proportionality with percents and measurement; probability; integers and algebraic relationships; angles and polygons; measurement; geometry and measurement of two and three dimensional figures; and data analysis. (Full year, required: mandatory enrollment, no fees)

Math Vanguard: Students will learn number theory; powers and exponents; relationships between different forms of rational numbers; decimal operations; integers and their uses; fraction operations; proportionality; percents and their applications; algebraic expressions and equations; angles and polygons; area and perimeter; three dimensional figures and volume; transformations; statistics: analyzing data; and probability. (Full year, required: GT Placement, no fees)

#### **SOCIAL STUDIES**

World Cultures: Students study people, places, and societies of the contemporary world. Students describe the influence of individuals and groups on historical and contemporary events in society and identify the locations and geographic characteristics of various societies. (Full year, required: mandatory enrollment, no fees)

World Cultures Vanguard: Students study people, places, and societies of the contemporary world. Students describe the influence of individuals and groups on historical and contemporary events in society and identify the locations and geographic characteristics of various societies. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **SCIENCE**

Science: An integrated science course that includes life science, earth/space science and introductory concepts in chemistry and physics. Subjects covered include: classification and properties of matter, transformation of energy, simple machines, energy resources, classification of organisms, adaptations and ecology, the solar system, layers of the earth and plate tectonics. (Full year, required: mandatory enrollment, no fees)

Science Vanguard: An integrated science course that includes life science, earth/space science and introductory concepts in chemistry and physics. Subjects covered include: classification and properties of matter, transformation of energy, simple machines, energy resources, classification of organisms, energy flow in living systems, plant and animal cells, adaptations and ecology, the solar system and earth/moon interactions, layers of the earth and plate tectonics. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **ENGLISH**

Literacy/Reading: Students are introduced to the Reading and Writing workshop. Teachers model successful reading and writing strategies in various genres as students try out those strategies in independent and group work. (Full year, required: mandatory enrollment, no fees)

Literacy/Reading Vanguard: Students are introduced to the Reading and Writing workshop. Teachers model successful reading and writing strategies in various genres as students try out those strategies in independent and group work. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **ELECTIVES**

Art: Students will be introduced to the basic Elements and Principles of Art, experience new techniques first hand and gain knowledge of key terms and concepts. As a group the students will be exposed to painting, sculpture and drawing in an environment that promotes sharing ideas and positive attitudes. The course requires students to create a body of work that demonstrates understanding and will build confidence in their own creative ability and improve their skills. Each project will focus on a particular artist and genre allowing the student to identify and understand its historical relevance and internationalism. (Full Year, required: pencils and a 1" binder)

Model United Nations: Students utilize a holistic approach to an awareness of current global trends. With society is on the precipice of overwhelming population growth and significant change, the class focuses on interpreting, researching, and understanding the subject of diplomacy. (1/2 year, required: open enrollment, no fees – Student's that elect MU will be placed randomly into one of the two MU classes available for 6<sup>th</sup> grade.)

Model United Nations: Students will learn the fundamental structure and function of the United Nations while also listening and watching international news every day. Note taking, research, and higher level thinking skills are the skills emphasized. An understanding of how the global community works and

communicates is the goal for MUN I. (1/2 year, required: open enrollment, \$25 fee—Student's that elect MU will be placed randomly into one of the two MU classes available for 6<sup>th</sup> grade.)

Debate - Public Speaking: Students are introduced to the full spectrum of debate events offered at our tournaments. Students learn and practice doing debate, giving speeches and presenting interpretive performances. Students spend time discussing current issues and developing confidence in their speaking skills. Students are welcome to compete at tournaments as well as attend after-school debate club. (Full year, required: open enrollment/priority given to debate summer camp attendees, no fees)

Orchestra: This class is for students that have no previous experience playing a stringed instrument (violin, viola, cello, and bass). The main emphasis of this class will be on developing fundamental techniques such as basic posture and position, tone production, rhythm, note reading, ear training, and ensemble playing. Beginning students are required to participate in the Winter and Spring Concerts. (Full year, required: open enrollment, no fees)

Band – Beginner: Students will choose an instrument through an instrument interview process. There are no before school rehearsals and only 2 after school rehearsals. Students enter will no experience or very little experience with music or musical instruments. Students will perform as part of the beginner band in two concerts, one in December and one in May. Beginners may choose from the following instruments; flute, oboe clarinet, bassoon, alto saxophone, trumpet, trombone, euphonium and percussion. (Full year, open enrollment, \$60 fee)

- Beginner Woodwind (flute, oboe, bassoon, clarinet, alto saxophone)
- Beginner Brass (trumpet, French horn, trombone, euphonium)
- Beginner Percussion (students must take a written music theory quiz in order to enroll)

Band – Intermediate and Advanced: Students have at least one year of experience playing their instrument and reading music. Students will perform between six and ten times in a school year at sporting events, formal concerts and contests. The Intermediate/Advanced bands have morning section rehearsals once a week from 7:00 to 7:45. The following instruments are provided by the school; bassoon, bass clarinet, tenor saxophone, baritone saxophone, French horn, euphonium and tuba. Both Intermediate and Advanced take a multi-day trip in the spring. (Full year, prerequisite: audition/Band Director's permission, \$60 fee)

Orchestra – Concert Orchestra: This intermediate level orchestra focuses on note reading, rhythms, posture, and ensemble technique. Students are required to participate in the fall, winter, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, no fee)

Orchestra – Philharmonic: This intermediate-advanced level orchestra works on refining skills such as intonation, shifting, and vibrato. This orchestra participates in the annual UIL Competition, as well as the fall, winter, pre-UIL, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, no fee)

Orchestra – Sinfonia: An advanced level orchestra, students focus on two-octave scales, advanced shifting, rhythms, and bowing styles. This orchestra also participates in the Lanier Symphony Orchestra with members of the band, the annual UIL Competition, as well as the fall, winter, pre-UIL, and spring concerts.

(Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, no fee)

Choir - Treble: A beginning choral class that will focus on learning healthy singing technique and basic principles of music theory; will participate in all concerts, Katy ISD Choral Festival and Texas Renaissance Festival. (Full year, required: open enrollment/girls only, \$50 fee)

Choir – Tenor Bass: A beginning choral class that will focus on learning healthy singing technique and basic principles of music theory; will participate in all concerts, Katy ISD Choral Festival and Texas Renaissance Festival. (Full year, required: open enrollment/boys only, \$50 fee)

Theatre Arts: A beginning class, students will be required to perform for their classroom, but there is no major production in this course. Students will cover the basics of theatre history, pantomime, musical theatre, monologues, duet scenes and technical theatre. (Full year, required: open enrollment, no fees & max 30 students)

Spanish: An introduction to the Spanish language and culture. Basic vocabulary and phrases are taught. (1/2 year, required: open enrollment, no fees)

Mandarin Chinese: An introduction to the Mandarin Chinese language and culture. Basic vocabulary and phrases are taught. (1/2 year, required: open enrollment, no fees)

German: An introduction to the German language and culture. Basic vocabulary and phrases are taught. (1/2 year, required: open enrollment, no fees)

French: An introduction to the French language and culture. Basic vocabulary and phrases are taught. (1/2 year, required: open enrollment, no fees)

Course offerings subject to change



# Sidney Lanier Middle School

2600 Woodhead · Houston, TX 77098 · Tel. 713.942.1900 · Fax 713.942.1907

# SIDNEY LANIER MIDDLE SCHOOL COURSE CATALOG\*

### 7<sup>th</sup> GRADE

#### **MATH**

Math: Students will learn rational number relationships; introduction to multiplication and division of fractions and decimals; operations with fractions and decimals; integer operations; ratios and rates; proportional reasoning; proportional and non-proportional relationships; similarity and its applications; percents; algebraic expression and equations; developing algebraic reasoning; multiple representations of functions; introduction to place geometry; plane geometry; three dimensional geometry and measurement; data analysis and sample spaces; experimental vs. theoretical probability. (Full year, required: mandatory enrollment, no fees)

Math Vanguard: Students will learn integer operations; rational number relationships; addition and subtraction of fractions; multiplication and division of fractions; percents; exponents and scientific notation; square roots; equations and algebraic reasoning; ratios and proportions; applying proportionality; the Pythagorean theorem; two dimensional geometric figures and their relationships; spatial relationships and volume in geometric solids; surface area and similar figures; probability and prediction of real-world events; data collection and data analysis; using algebraic representations to solve real-world problems. (Full year, required: GT Placement, no fees)

Algebra – Students will learn models, tables, graphs, diagrams, verbal descriptions, linear, quadratic, exponential, and other equations and inequalities, exponents, direct and inverse variation, domain and range, algebraic properties, roots, and scatter plots. The major focus of the 1<sup>st</sup> semester is linear functions with the major focus for the 2<sup>nd</sup> semester being quadratic functions. Regular Algebra I is more concrete, or hands on (less theory), and lets the students "learn by doing" on how to solve algebra problems. While the concepts are the same in both Regular Algebra I and IB Algebra I, the way the problems are solved is very different. This is a high school credit course in which students must pass the State of Texas STAAR End of Course Exam in Algebra I in order to earn high school credit for Algebra 1. NOTE: students qualify by taking an assessment and meeting minimum matrix scores. (Full year, required: Algebra I matrix placement, no fees)

IB Algebra: Students will learn models, tables, graphs, diagrams, verbal descriptions, linear, quadratic, exponential, and other equations and inequalities, exponents, direct and inverse variation, domain and range,

algebraic properties, roots, and scatter plots. The major focus of the 1<sup>st</sup> semester is linear functions with the major focus for the 2<sup>nd</sup> semester being quadratic functions. IB Algebra I differs from Algebra I in that it is more theory driven with a focus on the "how" and "why" of algebraic concepts. This is a high school credit course in which students must pass the State of Texas STAAR End of Course Exam in Algebra I in order to earn high school credit for Algebra 1. NOTE: students qualify by taking an assessment and meeting minimum matrix scores. (Full year, required: Algebra I matrix placement, no fees)

#### **SOCIAL STUDIES**

Texas History: Students study the history of Texas from early times to the present. Students examine the full scope of Texas history including Natural Texas and its People; Age of Contact; Spanish Colonial; Mexican National; Revolution and Republic; Early Statehood; Texas in the Civil War and Reconstruction; Cotton, Cattle, and Railroads; Age of Oil; Texas in the Great Depression and World War II; Civil Rights and Conservatism; and Contemporary Texas eras. (Full year, required: mandatory enrollment, no fees)

Texas History Vanguard: Students study the history of Texas from early times to the present. Students examine the full scope of Texas history including Natural Texas and its People; Age of Contact; Spanish Colonial; Mexican National; Revolution and Republic; Early Statehood; Texas in the Civil War and Reconstruction; Cotton, Cattle, and Railroads; Age of Oil; Texas in the Great Depression and World War II; Civil Rights and Conservatism; and Contemporary Texas eras. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **SCIENCE**

Science: An integrated science course that includes life science, earth and space science and environmental science. Subjects covered include: safety and nature of science, cells, human body systems, genetics, adaptations and biomes, ecology and ecosystems, weathering and erosion, sustainability and environmental issues.

Science Vanguard: An integrated science course that includes life science, earth and space science, environmental science and chemistry. Subjects covered include: safety and nature of science, electromagnetic spectrum and the universe, weather, climate and ocean systems, earth systems and human impact, structure and function in living systems/body systems, DNA & genetics, and chemical interactions. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **ENGLISH**

Literacy/Reading: Students continue their participation in the Reading and Writing workshop to sharpen their skills throughout the year. Included are projects, whole-class and individual novels, and vocabulary development. (Full year, required: mandatory enrollment, no fees)

Literacy/Reading Vanguard: Students continue their participation in the Reading and Writing workshop to sharpen their skills throughout the year. Included are projects, whole-class and individual novels, and vocabulary development. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **ELECTIVES**

Art: Designed for students who have successfully completed 6th Art. The course will help students further master the elements and principles and also introduce the conceptual approaches of todays contemporary artists. Students will explore the artwork of historically relevant artists and create pieces that demonstrate their understanding of technique and meaning. (Full Year, required: successful completion of ART I, pencil and have a 9"x12" sketchbook)

Model United Nations II: Students prepare and attend the Model United Nations meeting as a country and committee in order to solve global issues (such as global warming, North Korea situation, etc.). Committee meeting practice, current events, and resolution writing all lead up to the MUN meeting in the Spring. (Full year, required: open enrollment, \$25 fee)

Debate - Contemporary Issues: Students will spend class time preparing for competitions, both in class and off campus. The curriculum focuses on U.S. domestic issues such as the economy and education. Project topics include the modern U.S. Presidents and Supreme Court rulings. Tournament participation is not mandatory. (Full year, required: open enrollment/priority given to those that competed in 6<sup>th</sup> grade, no fees)

Band – Beginner: Students will choose an instrument through an instrument interview process. There are no before school rehearsals and only 2 after school rehearsals. Students enter will no experience or very little experience with music or musical instruments. Students will perform as part of the beginner band in two concerts, one in December and one in May. Beginners may choose from the following instruments; flute, oboe clarinet, bassoon, alto saxophone, trumpet, trombone, euphonium and percussion. (Full year, open enrollment, \$60 fee)

- Beginner Woodwind (flute, oboe, bassoon, clarinet, alto saxophone)
- Beginner Brass (trumpet, French horn, trombone, euphonium)
- Beginner Percussion (students must take a written music theory quiz in order to enroll)

Band – Intermediate and Advanced: Students have at least one year of experience playing their instrument and reading music. Students will perform between six and ten times in a school year at sporting events, formal concerts and contests. The Intermediate/Advanced bands have morning section rehearsals once a week from 7:00 to 7:45. The following instruments are provided by the school; bassoon, bass clarinet, tenor saxophone, baritone saxophone, French horn, euphonium and tuba. Both Intermediate and Advanced take a multi-day trip in the spring. (Full year, prerequisite: audition/Band Director's permission, \$60 fee)

Orchestra: This class is for students that have no previous experience playing a stringed instrument (violin, viola, cello, and bass). The main emphasis of this class will be on developing fundamental techniques such as basic posture and position, tone production, rhythm, note reading, ear training, and ensemble playing. Beginning students are required to participate in the Winter and Spring Concerts. (Full year, required: open enrollment, \$70 fee)

Orchestra – Concert Orchestra: This intermediate level orchestra focuses on note reading, rhythms, posture, and ensemble technique. Students are required to participate in the fall, winter, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$75 fee)

Orchestra - Philharmonic: This intermediate-advanced level orchestra works on refining skills such as intonation, shifting, and vibrato. This orchestra participates in the annual UIL Competition, as well as the Fall, Winter, Pre-UIL, and Spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$90 fee)

Orchestra - Sinfonia: An advanced level orchestra, students focus on two-octave scales, advanced shifting, rhythms, and bowing styles. This orchestra also participates in the Lanier Symphony Orchestra with members of the band, the annual UIL Competition, as well as the fall, winter, pre-UIL, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$110 fee)

Choir - Treble: A beginning choral class that will focus on learning healthy singing technique and basic principles of music theory; will participate in all concerts and the Texas Renaissance Festival. (Full year, required: open enrollment for 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir - Intermediate Treble: The course will focus on more advanced musical concepts and sing more difficult repertoire; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival (Full year, required: Choir – Treble or prior outside experience may audition/ 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir - Concert Treble: This choir will focus on advanced repertoire and theory concepts; the most advanced girls' choir and often represents Lanier in performances off-campus throughout the year; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival. (Full year, required: Choir I – Treble *and* an audition/ max 24 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir - Concert Tenor Bass: This choir will focus on advanced repertoire and theory concepts; the most advanced girls' choir and often represents Lanier in performances off-campus throughout the year; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival. (Full year, required: Choir I – Treble *or* an audition/ max 30 7<sup>th</sup> and 8<sup>th</sup> grade boys only, \$150 fee)

Theatre Arts: A beginning class, students will be required to perform for their classroom, but there is no major production in this course. Students will cover the basics of theatre history, pantomime, musical theatre, monologues, duet scenes and technical theatre. (Full year, required: open enrollment, no fees & max 30 7th and 8th grade students)

Technical Theatre: This class will work on introducing the students to technical theatre, and mastering the required skills needed for high school technical theatre. This class may require afterschool rehearsals based on the current show being produced, crew assignments and technical necessities. (Full year, required: Theatre Arts I, \$50 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Theatre Production JV: Students perform in school plays and continue working on advanced theatre skills. Students are expected to have an open schedule for afterschool rehearsals and district competitions. (Full year, required: Theatre Arts I and audition, \$100 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Theatre Production Varsity: Students work on our competition one-act play and continue working on advanced skills in theatre. Students need to AUDITION and be placed in this class by the Mr. Hernandez.

Students are expected to have an *open schedule* for afterschool rehearsals and district competitions. (Full year, required: audition only, \$100 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Spanish: An expansion of what was learned in the 6<sup>th</sup> grade, there is an emphasis on learning new vocabulary, grammar structure, listening and speaking in Spanish. Themes covered are greetings, seasons, weather conditions, telling time, likes and dislikes, describing oneself and others, a day at school and activities, health and leisure activities. A focus on verb conjugations in the present tense is taught. (Full year, required: open enrollment)

Spanish – Native Speaker: The class is conducted solely in Spanish and the material covered is equivalent to Spanish 1 and Spanish 2. The students must pass this class to qualify for the 8<sup>th</sup> grade AP Spanish class. (Full year, required: passage of Native Speaker exam from previous year)

Mandarin Chinese: An expansion of what was learned in the 6<sup>th</sup> grade, there is an emphasis on learning new vocabulary, grammar structure, listening and speaking in Mandarin Chinese. Themes covered are greetings, seasons, weather conditions, telling time, likes and dislikes, describing oneself and others, a day at school and activities, health and leisure activities. A focus on verb conjugations in the present tense is taught. (Full year, required: open enrollment)

Mandarin Chinese – Native Speaker: The class is conducted solely in Mandarin Chinese and the material covered is equivalent to Mandarin Chinese 1 and Mandarin Chinese 2. The students must pass this class to qualify for the 8<sup>th</sup> grade AP Mandarin Chinese class. (Full year, required: passage of Native Speaker exam from previous year)

German: An expansion of what was learned in the 6<sup>th</sup> grade, there is an emphasis on learning new vocabulary, grammar structure, listening and speaking in German. Themes covered are greetings, seasons, weather conditions, telling time, likes and dislikes, describing oneself and others, a day at school and activities, health and leisure activities. A focus on verb conjugations in the present tense is taught. (Full year, required: open enrollment)

French: An expansion of what was learned in the 6<sup>th</sup> grade, there is an emphasis on learning new vocabulary, grammar structure, listening and speaking in French. Themes covered are greetings, seasons, weather conditions, telling time, likes and dislikes, describing oneself and others, a day at school and activities, health and leisure activities. A focus on verb conjugations in the present tense is taught. (Full year, required: open enrollment)

\* Course offerings subject to change



# **Sidney Lanier Middle School**

2600 Woodhead · Houston, TX 77098 · Tel. 713.942.1900 · Fax 713.942.1907

# SIDNEY LANIER MIDDLE SCHOOL COURSE CATALOG\*

## 8th GRADE

#### **MATH**

Math: Students will learn relationships between and among rational numbers; integers and other real number representations; introductions to proportional relationships; apply proportional relationships; proportional vs. non-proportional relationships; applying the properties of similarity; patters and sequences; equivalence in algebraic expressions and equations; solving equations and inequalities; two dimensional geometric figures and their relationships; geometric transformations and dimensional changes; spatial relationships in geometric solids; volume and surface area of geometric solids; square roots, irrational numbers, and the Pythagorean theorem; probability and prediction of real world events; data collection and data analysis. (Full year, required: mandatory enrollment, no fees)

Math Pre-AP Honors: Similar in concept to Pre-Algebra, this course is for students that need additional preparation for 9<sup>th</sup> grade Algebra. Students will learn models, tables, graphs, diagrams, verbal descriptions, linear, exponential, and other equations and inequalities, exponents, direct and inverse variation, domain and range, algebraic properties, geometric shapes, formulas and equations, personal finance, proportional relationships, rational numbers, and scatter plots. The major focus the Pre-AP Math 8 Honors course is linear functions and equations. NOTE: students qualify by taking an assessment and meeting minimum matrix scores. (Full year, required: Algebra I matrix placement, no fees)

Algebra I – Students will learn models, tables, graphs, diagrams, verbal descriptions, linear, quadratic, exponential, and other equations and inequalities, exponents, direct and inverse variation, domain and range, algebraic properties, roots, and scatter plots. The major focus of the 1<sup>st</sup> semester is linear functions with the major focus for the 2<sup>nd</sup> semester being quadratic functions. Regular Algebra I is more concrete, or hands on (less theory), and lets the students "learn by doing" on how to solve algebra problems. While the concepts are the same in both Regular Algebra I and IB Algebra I, the way the problems are solved is very different. This is a high school credit course in which students must pass the State of Texas STAAR End of Course Exam in Algebra I in order to earn high school credit for Algebra 1. NOTE: students qualify by taking an assessment and meeting minimum matrix scores. (Full year, required: Algebra I matrix placement, no fees)

IB Algebra I: Students will learn models, tables, graphs, diagrams, verbal descriptions, linear, quadratic, exponential, and other equations and inequalities, exponents, direct and inverse variation, domain and range, algebraic properties, roots, and scatter plots. The major focus of the 1<sup>st</sup> semester is linear functions with the major focus for the 2<sup>nd</sup> semester being quadratic functions. IB Algebra I differs from Algebra I in that it is more theory driven with a focus on the "how" and "why" of algebraic concepts. This is a high school credit course in which students must pass the State of Texas STAAR End of Course Exam in Algebra I in order to earn high school credit for Algebra 1. NOTE: students qualify by taking an assessment and meeting minimum matrix scores. (Full year, required: Algebra I matrix placement, no fees)

Geometry: Students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; twoand three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry. In the logical arguments and constructions strand, students are expected to create formal constructions using a straight edge and compass. Geometry course is primarily Euclidean geometry, with an understanding that non-Euclidean geometries exist. In proof and congruence, students will use deductive reasoning to justify, prove and apply theorems about geometric figures. Throughout the Geometry course, the term "prove" means a formal proof to be shown in a paragraph, a flow chart, or two-column formats. Proportionality is the unifying component of the similarity, proof, and trigonometry strand. Students will use their proportional reasoning skills to prove and apply theorems and solve problems in this strand. The two- and three-dimensional figure strand focuses on the application of formulas in multi-step situations since students have developed background knowledge in twoand three-dimensional figures. Using patterns to identify geometric properties, students will apply theorems about circles to determine relationships between special segments and angles in circles. Students will deal with probability to ensure students have proper exposure to these topics before pursuing their post-secondary education. (Full year, required: 7<sup>th</sup> grade Algebra I or IB Algebra I, no fees)

#### **SOCIAL STUDIES**

U.S. History: Students study the history of the United States from the early colonial period through Reconstruction. Historical content focuses on the political, economic, religious, and social events and issues related to the colonial and revolutionary eras, the creation and ratification of the U.S. Constitution, challenges of the early republic, the Age of Jackson, westward expansion, sectionalism, Civil War, and Reconstruction. (Full year, required: mandatory enrollment, no fees)

U.S. History Vanguard: Students study the history of the United States from the early colonial period through Reconstruction. Historical content focuses on the political, economic, religious, and social events and issues related to the colonial and revolutionary eras, the creation and ratification of the U.S. Constitution, challenges of the early republic, the Age of Jackson, westward expansion, sectionalism, Civil War, and Reconstruction. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

### **SCIENCE**

Science: An integrated science course that includes chemistry, earth and space science, environmental science and life science. The course covers 8<sup>th</sup> grade Science state and district objectives. Subjects covered

include: safety and nature of science, chemical properties and interactions, waves, electromagnetic spectrum and the universe, rock cycle and plate tectonics, human impact and earth resources, climate and ocean systems, and genetics.

Science Vanguard: An integrated science course that includes in-depth investigation of chemistry and physics concepts with topics in earth and space science, environmental science, and life science including high school chemistry and physics concepts. Subjects covered include: motion, waves, energy transformations, properties of matter, changes in matter, and solution chemistry as well as topics and applications in earth science, space science and biology. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

Integrated Physics and Chemistry (IPC): A high school credit course that integrates the disciplines of physics and chemistry with hands-on, in-depth investigations in the following topics: motion and forces, waves, heat and energy transformations, properties of matter, changes in matter, atomic structure and interactions, organic compounds, and solution chemistry. (Full year, required: admission into Algebra I or Pre-IB Algebra I, no fees)

#### **ENGLISH**

Literacy/Reading: Students produce frequent projects based on different genres and units of study. Whole-class and independent novels are analyzed using the workshop format. Ongoing vocabulary development is also stressed. (Full year, required: mandatory enrollment, no fees)

Literacy/Reading Vanguard: Students produce frequent projects based on different genres and units of study. Whole-class and independent novels are analyzed using the workshop format. Ongoing vocabulary development is also stressed. In addition, the Vanguard scope has a broader depth and breadth requiring the student to expand his understanding of the world. (Full year, required: GT Placement, no fees)

#### **ELECTIVES**

Art: Designed for students who have successfully completed Art II and want to take their art to the next level. The course content builds on the basic art concepts and introduces students to new media and techniques. Students also continue to learn about art history and the integral part art plays in our daily lives. There will be an emphasis on citizenship, following directions, completing assignments, and meeting deadlines. The class will also be expected to have a student grade pencil set and a sketchbook (1/2 Year, sketching pencil set and a 9"x12" sketchbook; this class is a rotation class and enrollment is based on the student's schedule)

Advanced Art: The class will work in accordance to the High School ART I curriculum and will earn High school credits. This course includes discussion in the meaning, major forms, and components of contemporary art. Students further develop knowledge of elements and principles of design used in creation of two-dimensional works, art appreciation, and art history. Students are exposed to various media and techniques used in drawing, painting, and printmaking. (Full Year, required: sketching pencil set, a coloring pencil set (Prismacolor or Prang) and a 9"x12" sketchbook)

Model United Nations III: Preparing for the MUN meeting is the main focus as well as mentoring a student they are assigned at the beginning of the year. At the mid-point and the end, the mentor and mentee present a short summary of how the support between them is working and what they have learned. Level III

students write a thesis paper covering a global political issue of choice that is reviewed by Socratic Method. (Full year, required: open enrollment, \$25 fee)

Debate: The curriculum also includes an ongoing mock government and exploration of international issues through projects on China, Russia, India and the continent of Africa. In addition to preparing for tournaments, the 8<sup>th</sup> graders work on how to teach the 6<sup>th</sup> grade debaters at debate club. (Full year, required: instructional approval, no fees)

Band – Intermediate and Advanced: Students have at least one year of experience playing their instrument and reading music. Students will perform between six and ten times in a school year at sporting events, formal concerts and contests. The Intermediate/Advanced bands have morning section rehearsals once a week from 7:00 to 7:45. The following instruments are provided by the school; bassoon, bass clarinet, tenor saxophone, baritone saxophone, French horn, euphonium and tuba. Both Intermediate and Advanced take a multi-day trip in the spring. (Full year, prerequisite: audition/Band Director's permission, \$60 fee)

Orchestra: This class is for students that have no previous experience playing a stringed instrument (violin, viola, cello, and bass). The main emphasis of this class will be on developing fundamental techniques such as basic posture and position, tone production, rhythm, note reading, ear training, and ensemble playing. Beginning students are required to participate in the Winter and Spring Concerts. (Full year, required: open enrollment, \$70 fee)

Orchestra – Concert Orchestra: This intermediate level orchestra focuses on note reading, rhythms, posture, and ensemble technique. Students are required to participate in the fall, winter, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$75 fee)

Orchestra – Philharmonic: This intermediate-advanced level orchestra works on refining skills such as intonation, shifting, and vibrato. This orchestra participates in the annual UIL Competition, as well as the Fall, Winter, Pre-UIL, and Spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$90 fee)

Orchestra – Sinfonia: An advanced level orchestra, students focus on two-octave scales, advanced shifting, rhythms, and bowing styles. This orchestra also participates in the Lanier Symphony Orchestra with members of the band, the annual UIL Competition, as well as the fall, winter, pre-UIL, and spring concerts. (Full year, required: audition and min. 1 year stringed instrument (violin, viola, cello, and bass) experience, \$110 fee)

Choir - Treble: A beginning choral class that will focus on learning healthy singing technique and basic principles of music theory; will participate in all concerts, Katy ISD Choral Festival and Texas Renaissance Festival. (Full year, required: open enrollment for 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir – Intermediate Treble: The course will focus on more advanced musical concepts and sing more difficult repertoire; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival (Full year, required: Choir I – Treble or prior outside experience may audition/ 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir – Concert Treble: This choir will focus on advanced repertoire and theory concepts; the most advanced girls' choir and often represents Lanier in performances off-campus throughout the year; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival. (Full year, required: Choir I – Treble *and* an audition/ max 24 7<sup>th</sup> and 8<sup>th</sup> grade girls only, \$150 fee)

Choir – Concert Tenor Bass: This choir will focus on advanced repertoire and theory concepts; the most advanced girls' choir and often represents Lanier in performances off-campus throughout the year; will participate in all concerts, UIL Concert and Sight-Reading and Texas Renaissance Festival. (Full year, required: Choir I – Treble *or* an audition/ max 30 7<sup>th</sup> and 8<sup>th</sup> grade boys only, \$150 fee)

Theatre Arts: A beginning class, students will be required to perform for their classroom, but there is no major production in this course. Students will cover the basics of theatre history, pantomime, musical theatre, monologues, duet scenes and technical theatre. (Full year, open enrollment, no fees & max 30 7<sup>th</sup> and 8<sup>th</sup> grade students)

Technical Theatre: This class will work on introducing the students to technical theatre, and mastering the required skills needed for high school technical theatre. This class may require afterschool rehearsals based on the current show being produced, crew assignments and technical necessities. (Full year, requires Theatre Arts I, \$50 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Theatre Production JV: Students perform in school plays and continue working on advanced theatre skills. Students are expected to have an open schedule for afterschool rehearsals and district competitions. (Full year, requires Theatre Arts I and audition, \$100 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Theatre Production Varsity: Students work on our competition one-act play and continue working on advanced skills in theatre. Students are expected to have an open schedule for afterschool rehearsals and district competitions. (Full year, required: audition only, \$100 fee, max 24 7<sup>th</sup> and 8<sup>th</sup> grade students)

Spanish: This course is a year that focuses on encouraging active student participation by providing practices and activities in listening, speaking, reading and writing Spanish. Students will receive high school credit for successful completion of both semesters. (Full year, required: open enrollment)

Spanish – Advanced Placement: The class is conducted solely in Spanish. The students who pass the class have the opportunity to take the Advanced Placement (AP) Spanish Language Exam. Universities and Colleges may grant course credit or placement based on qualifying AP scores. (Full year, required: successful completion of 7<sup>th</sup> grade Native Speaker class)

Mandarin Chinese: This course is a year that focuses on encouraging active student participation by providing practices and activities in listening, speaking, reading and writing Mandarin Chinese. Students will receive high school credit for successful completion of both semesters. (Full year, required: open enrollment)

Mandarin Chinese – Advanced Placement: The class is conducted solely in Mandarin Chinese. The students who pass the class have the opportunity to take the Advanced Placement (AP) Chinese Language Exam. Universities and Colleges may grant course credit or placement based on qualifying AP scores. (Full year, required: successful completion of 7<sup>th</sup> grade Native Speaker class)

German: This course is a year that focuses on encouraging active student participation by providing practices and activities in listening, speaking, reading and writing German. Students will receive high school credit for successful completion of both semesters. (Full year, required: open enrollment)

French: This course is a year that focuses on encouraging active student participation by providing practices and activities in listening, speaking, reading and writing French. Students will receive high school credit for successful completion of both semesters. (Full year, required: open enrollment)

\* Course offerings subject to change