PHILOSOPHY

The Middle School curriculum reaches for a balance academically, socially, physically, and morally and is based on the wide variety of developmental changes found in our students between fifth and eighth grades. We foster an ethical framework in our students that includes both personal and community responsibility. Emphasis is placed upon critical and analytical thinking skills and individual expression in each discipline. The students look to their teachers as facilitators to guide them as they learn the value of cooperation and technology throughout the student-centered curriculum. These educational tools and knowledge provide a springboard as we seek to develop lifelong learners with an intense curiosity and the self-assurance that a challenge presents an opportunity for growth. While we realize that girls leaving the Middle School will be at various places along the path of academic and emotional maturity, we wish for each of them a joyful spirit, strength, resilience, and a love of learning as she continues her journey.

Mrs. Linda Kramer

Head of Middle School

MIDDLE SCHOOL PROGRAM OF STUDIES

TABLE OF CONTENTS

Fine Arts.......................................................................................................................................... 2

English/Writing................................................................................................................................... 4

History/Social Studies....................................................................................................................... 5

Mathematics..................................................................................................................................... 6

Physical Education & Wellness......................................................................................................... 8

Science .............................................................................................................................................. 10

Technology ...................................................................................................................................... 11

World Languages ............................................................................................................................. 12
FINE ARTS

Overview
The goals of the Middle School Arts program are to foster innovative creative self-expression, to build skills, expose each girl to multiple ways of making and experiencing art, and to promote the self-esteem of each student.

Fifth-Sixth Grade Overview
Each fifth and sixth grade girl has classes in music and art. Wherever possible, the subject content in these classes is correlated to other courses such as social studies, technology, and English.

Music
Music class provides integrated and multicultural experiences through singing, movement, and acting. Music theory, sight-singing, ear-training skills, and electronic keyboard are introduced according to the student’s placement through workbook, computer software, and musical games. The Music Memory program is used to introduce music history and composers.

Studio Art
Studio Art provides hands-on opportunity for creative problem solving. Using the context of art history with masterworks serving as inspiration to explore a wide variety of materials and processes, students learn and practice unifying principles of design. Comprised of observational drawing, still-life painting, construction and sculpture techniques, this overall introductory curriculum spans two years and is preparation for concepts addressed in subsequent studio classes.

Seventh-Eighth Grade Overview
Students entering the seventh and eighth grades are exposed to a variety of arts courses that are taken over a two-year period. To fulfill the graduation requirements from Middle School, each girl must complete seven courses from the following Fine Arts categories: dance, music, drama, technical theatre, broadcasting, debate, ceramics, digital photography, and studio art.

PERFORMING ARTS

Dance
At the seventh grade level, the techniques of classical ballet and contemporary jazz are introduced. In addition, the basic elements of choreography are studied and practiced through small group composition projects. In eighth grade, dance includes ballet, jazz, and modern dance techniques. Students are introduced to important figures in the history of modern dance and present information and choreograph dances based on their studies.

Drama
The seventh and eighth grade drama class studies the principles of acting and begins to understand traditional theatrical conventions. Through rehearsal and informal class presentations, students begin to discover the uses of all theatrical elements. This drama course allows the student to experience a working knowledge of the theater and to create
an interest in dramatic art. Daily class work consists of exercises in voice and diction, stage movement, acting, blocking and characterization.

**Technical Theatre**
The seventh grade technical theatre class studies the principles of technical theatre, including lights, costumes, scenery, sound and performance. They are introduced to traditional theatre elements through construction and implementation of a Toy Theatre production. Working on a miniature scale theatre allows students to produce a play, design sets and costumes, and create their own sound effects. The class performs a play based on a folk or fairy tale of its choosing, allowing students a chance to experience the “backstage” process from beginning to end.

**Music**
Seventh and eighth grade music students study the history of musical theater. Through this repertoire the students study vocal techniques and other musical skills as they develop a musical revue performed for the other Fine Arts classes. The students do research in preparation for their presentation. This class gives students a chance to experience singing in a fun and positive way.

**Debate**
Through a variety of hands-on activities, seventh and eighth grades are introduced to the basics of effective communication and persuasive argumentation. Students learn about public speaking basics while improving their verbal and nonverbal presentation skills. Each student researches, organizes, and participates in a debate on a current issue. She is required to critically analyze information while preparing her case, defending her ideas in rebuttal, and refute the logic of an opposing viewpoint.

**VISUAL ARTS**

**Studio Art: Art and Community**
The seventh and eighth grade Art and Community curriculum focuses on refining studio skills while working to develop higher-level thinking and to sustain open-creativity. Students visit Dallas area museums, galleries and artists’ studios visiting with artists and art administrators in order to gain first-hand knowledge of the role of the Visual Arts within a society. Through conversations with arts professionals and exposure to current exhibitions, students develop a personal visual narrative while working from observation, memory and imagination. In conjunction with the subject matter encountered in field trips, students make two-dimensional and three-dimensional artworks that incorporate aspects of visual space and composition, volume, texture, color (color mixing, expressive color, color organization and principles of color). The curriculum emphasizes that the girls use studio and art specific vocabulary in order to address meaning, form and function in relationship to their own creations.

**Photoshop Animation**
In this seventh grade course, each student masters various skills in Adobe Photoshop before creating a scene which becomes the backdrop for an animation in the video editing program, Final Cut Pro X. After imagining a story and storyboarding, each student uses either the digital camera to photograph her characters or the digital camcorder to film her
characters on green screen. The characters are either manipulated in Adobe Photoshop or animated in Final Cut Pro X. The addition of music, sound effects, and text completes the story.

**Ceramics and Sculpture**
The eighth grade Ceramics and Sculpture curriculum focuses on developing higher-level thinking and sustaining open creativity. Work from observation, memory and imagination are the basis for projects. This class is an introduction to three dimensional forms using clay and other materials, as well as some of the artists who work with sculpture.

**Digital Storytelling**
In this eighth grade course, students communicate a story through moving images. The girls are introduced to some of the vocabulary of cinema: point of view, shots, scene, and sequence, as well as the technique of the storyboard. While viewing and critiquing professional and student work, the girls use the video camera and the editing program Final Cut X to create a short narrative film. The project challenges each student to explore ideas of aesthetics and self-expression and to solve creative problems in order to communicate effectively.

**Photography**
The curriculum for this eighth grade course in Photography provides a technical and design-based course in which students use traditional and alternative dark room processes to explore ideas of aesthetics, self-expression, creative problem solving and effective visual communication. Decision making and the development of a spoken vocabulary to describe what she is making and seeing will be major focal points for each girl in the studio. Projects will be introduced through art historical references, examples and teacher demonstrations. With each assignment the girls will execute artworks that are creatively challenging while still being developmentally appropriate.

**ENGLISH/WRITING**

**Fifth Grade**
In the fifth grade, girls read novels with strong female characters and engage themes such as courage and acceptance. By analyzing character and plot and synthesizing what they read with regard to incidents in their own lives, students gain reading competency as well as empathy. Entries in *Writer’s Notebook*, which are based on student readings, provide opportunities for students to develop focus, unity, and precise word choice through major writing assignments addressing personal narrative, poetry, and short stories. An independent reading program encourages students to choose texts from all literary genres to facilitate additional pleasure and confidence. Literature also provides the basis for word study, supplemented by systematic vocabulary instruction. Instruction in grammar, punctuation, and mechanics, enables students to construct sentences intentionally, proofread accurately, and speak effectively.
Sixth Grade
Sixth-grade girls focus on the development of critical-thinking strategies. Literature selections address the themes of tolerance, courage, friendship, and family. Students analyze characters, explain motivations, make predictions, draw conclusions, and examine points of view. Writing assignments include quick writes, Writer’s Notebook entries, creative stories, personal narrative, formal literary responses, and poetry—all of which encourage a sound understanding of the mechanics of writing and grammar. Students brainstorm ideas, use an outline or graphic organizer, write multiple drafts, and revise in class. To read with greater comprehension and clarity, students study vocabulary through the literature and in a separate vocabulary workbook.

Seventh Grade
Seventh-grade girls explore themes such as coming of age, tolerance, and racism in classic short stories, novels, and poetry. By analyzing elements of literature, students gain perspective on the lives of others and connect the importance of word choice to understanding themes. Writing assignments consist of short analytical pieces, personal narrative, poetry, and creative stories. The writing process begins with free writing and brainstorming, followed by multiple drafts, peer support, and individual conferencing with teachers. Girls study grammar and syntax in context to appreciate more-sophisticated sentence structures and to develop advanced writing skills. Literature also provides the basis for word study supplemented by systematic vocabulary instruction.

Eighth Grade
Eighth grade reads classic short stories, novels, and poetry illustrating themes of identity, friendship, family, and community. Students model grammatical techniques used by accomplished authors to learn how to vary their writing. Studying Shakespeare’s Romeo and Juliet, students learn to appreciate the power of oral expression, dramatic irony, and word choice. To develop voice, students write personal narratives, short analytical pieces, creative stories, and poetry as they advance toward more-complex literary analysis and creative papers. Writing begins with individual free writing and brainstorming, followed by revision of multiple drafts and conferencing with teachers and peers in a cooperative classroom community. Girls study grammar and syntax in context to develop more sophisticated writing strategies. Literature also provides the basis for word study, supplemented by systematic vocabulary instruction.

HISTORY/SOCIAL STUDIES

Overview
Middle School social studies provide a background of history as students make connections with names, places and events. The students learn to appreciate the cultures of today as they explore the past which shaped them. Research skills are encouraged through reports and projects as students gather information and draw conclusions. All forms of communication — oral, written, and multimedia — are fostered as the student presents her ideas to the class.

Fifth Grade
Fifth-graders use a geography-based curriculum designed to explore major world regions. Using the five themes of geography (location, place, region, movement, and interaction), students use
geographic tools, ideas, and vocabulary to study continental areas. These regions provide opportunity for students to discover how to use a spatial perspective to think about the world and to discover how physical settings influence people, and vice versa. The intent is to foster a broader understanding of the world.

Sixth Grade
Sixth grade is designed to present an early history of the United States. It emphasizes the English settlements of North America and then examines the independence of the Thirteen Colonies and the writing of the Constitution. The course continues with the study of the Westward Movement, the growth of urban centers in the North, and the agricultural economy of the South. Significant attention is given to the Civil War and Reconstruction Era culminating with an overview of the Civil Rights Movement. Throughout the year, students practice note-taking, reading comprehension, outlining and essay writing, and critical thinking and analysis. Students are encouraged to see the interrelationship of cultural, political, and economic developments and their effect on the modern world.

Seventh Grade
Seventh grade studies the ancient river valley civilizations of Mesopotamia and Egypt, including the early empires of Assyria, Babylon and Persia concluding with the history of Judaism. Subsequently, the curriculum focuses on Ancient India and China and the importance of the Silk Road, which are examined up to the early medieval period, including work on the Mongol empire. The course concludes with a study of Early American cultures and a week-long field trip to Taos, New Mexico. Throughout, the overarching question of change through time pervades. Writing and presentation skills are emphasized along with geography and chronology. Current events are integrated into the curriculum to allow students to make connections between the past and the present.

Eighth Grade
How identity is formed and how order is maintained provide themes for eighth grade to continue the study of world history. The course focuses on the classical civilizations of Greece and Rome, continues with the Byzantine and Islamic Empires and concludes with Medieval Europe, ending in 1453. The curriculum acquaints students with famous people and events, affording the opportunity for in-depth analysis, discussion, and the practice of skills in studying critical thinking, and writing. Students examine maps and timelines and also consult primary sources as they construct their understanding of a past whose legacy is still current. Current events are integrated into each unit of study, most particularly into the Islamic portion, giving students insight into the challenging issues of our world today. The course encourages creativity in presentations while providing, at the same time, practice in writing skills. Sustaining an argument in an essay is a major goal.

MATHEMATICS

Overview
Middle School mathematics can be particularly important to a child’s overall mathematical experience because it is a time to solidify computation with whole numbers, decimals, fractions,
percents, and build on problem-solving skills developed in earlier grades. Because of the developmental differences inherent in the Middle School ages, the program focuses on a variety of different pedagogical approaches. The Mathematics Department is sensitive to the fact that students develop formal and logical thinking skills at different rates. With this in mind, the teachers set realistic goals while maintaining a challenging environment through a variety of experiences. Emphasis is placed on logical thinking, risk taking, and problem solving through the use of manipulatives, visual aids, calculators, computers, and cooperative learning experiences. Differentiated instruction is used each year to accommodate a wide range of academic abilities and learning styles.

**Fifth Grade**
Fifth graders solidify their computation skills with whole numbers and work toward mastery of fraction, mixed numbers, decimal, and integer operations. Key concepts include ratio, proportion, percent, measurement (metric and customary), estimation, number theory, geometry, write and solve simple equations, data analysis, and probability. Applications of mathematics and the correct use of the vocabulary of mathematics are stressed. Learning through the use of manipulatives is an integral part of fifth grade mathematics. *Big Ideas Math* by Big Ideas Learning provides opportunities for daily analysis of data, perception of patterns, exploration and mathematical relationships, and communication of ideas and thinking. Students also begin to explore spreadsheets and their operations throughout the year.

**Sixth Grade**
This course is designed to foster the transition from arithmetic to algebraic thinking. Sixth graders solidify their computation skills with fractions, decimals, percents, integers, and rational numbers. Key concepts include orders of operations, ratio, proportion, probability, exponents, square roots, variables, writing and solving simple equations and inequalities, and data analysis. Geometric studies include the Pythagorean Theorem, finding volume, surface area, perimeter, and area. The correct use of mathematical vocabulary is stressed. Emphasis is placed on problem solving using mental math whenever possible and estimating the reasonableness of answers.

**Seventh Grade - Integrated Mathematics**
This is an integrated program that incorporates content not only from algebra but also from number and operation, geometry, proportional reasoning, data interpretation, and probability and statistics. The goal of this course is to continue the shift from concrete thinking to the more abstract. Students will continue to explore many of the topics introduced in sixth-grade math such as integer operations, proportion, percent, probability, and geometry. In addition, students are exposed to a wide variety of abstract topics such as more advanced work with equations and inequalities, functions, polynomials, operations involving positive and negative exponents, graphing linear equations, and simple proofs. To aid students in their understanding of these algebraic topics, the curriculum is infused with opportunities for students to use the graphing calculator (TI-84 or TI-84 Plus), computer applications such as spreadsheet, manipulatives and rich group discussions.

**Eighth Grade - Integrated Mathematics**
This is an integrated program that incorporates content not only from algebra but also from number and operation, geometry, proportional reasoning, data interpretation, and probability and statistics. The focus is on developing and strengthening algebraic thinking, conceptual understanding, and basic skills. The course will emphasize symbolic, graphing, and tabular representations of information and data. Manipulatives and calculators (TI-84 Plus) will be used to support content learning. Upon completion of the Algebra program, students will be evaluated for placement in their math courses for the following year.

**PHYSICAL EDUCATION & WELLNESS**

*Overview*
Health and fitness become major components of the curriculum in Middle School. The emphasis begins with team and individual sports and health, and shifts to fitness, and nontraditional and lifetime activities. Many new activities are introduced, providing students with opportunities to evaluate and increase fitness levels, transfer and use skills in new and different ways, and enjoy greater variety. At a time when they are faced with rapid emotional change and many decision-making opportunities, students work during health rotations to acquire the knowledge and skills necessary to manage their well-being for a lifetime.

*Fifth Grade*
**Focus:** Physical Activity - Health - Fitness – Safety
**Team and individual sport/activities:**
Aquatics, basketball, cooperative games, cricket, field hockey, lacrosse, soccer, softball, tennis, table tennis, track and field, and volleyball

**Students learn:**
Positions, rules and refinement of manipulative skills in sport activities.

**Small-sided team games:**
Fifth Grade Olympics
Green & White competition
Field day

*Sixth Grade*
**Focus:** Physical Activity - Health - Fitness – Safety
**Team and individual sport/activities:**
Aquatics, badminton, basketball, cooperative games, cricket, field hockey, flag football, lacrosse, soccer, softball, tennis, team handball, track and field, and volleyball

**Students learn:**
Game play and refinement of sport specific skills

**Small-sided team games:**
Green & White competition
Field day
**Seventh Grade**

**Focus:** Physical Activity - Health - Fitness – Safety

**Team sports, individualized activities, games and skills:**
Aerobics, badminton, basketball, cricket, field hockey, flag football, games, golf, lacrosse, soccer, softball, team handball, tennis, track and field, and volleyball

**Students learn:**
Game play and advanced skill development
Specific game strategies and advanced rules

**Full-sided team games:**
Green & White competition
Field day

**Athletics:**
Fall – Cross Country, Field Hockey, Volleyball
Winter – Basketball, Soccer, Swimming
Spring – Lacrosse, Softball, Tennis, Track and Field

---

**Eighth Grade**

**Focus:** First Aid, CPR, and AED – Fitness – Physical Activity – Safety

First Aid/CPR/AED – Adult & Pediatric Certification

Introduction to Fitness Center
  Cardio Machines
  Free Weights
  Individual Fitness Prescriptions
  Upper and Lower Body Weight Machines
  Auxiliary Equipment

Physical Activity – Non-traditional games and activities

**Students learn:**
Individualized activities, games, and skills

**Small-sided team games:**
Green & White competition
Field day

**Athletics:**
Fall – Cross Country, Field Hockey, Volleyball
Winter – Basketball, Soccer, Swimming
Spring – Lacrosse, Softball, Tennis, Track and Field
**Overview**

The science courses in Middle School allow students to explore. Learner-centered lessons encourage them to observe nature directly and be active participants in testing their ideas through hands-on, minds-on activities. Students look at the Earth around us as being divided into four layers or spheres: the solid layer (lithosphere), the liquid layer (hydrosphere), and the gaseous layer (atmosphere) and the living layers (biosphere). These “spheres of influence” are represented in the parts of the Earth developed and evolved over the course of billions of years and are still changing today. The students study one layer each of the first three years of Middle School, after which the eighth grade focuses on the inter-relationships between these layers or systems and studies the biosphere, the last layer- the Earth as a whole. The science curriculum in the Middle School is designed to prepare students for more sophisticated scientific inquiry in Upper School.

**Fifth Grade – The Lithosphere**

Fifth-grade students seek to better understand how dynamic processes within the Earth impact the form and structure of the surface of the Earth, as well as ecosystems and human activities. Through experiments focused on the concepts of density and magnetism and the investigation of minerals and rocks, students are able to model the physical properties and chemical composition of the interior and surface of the Earth. Students learn about how energy from within the Earth drives plate tectonics and evaluate the evidence for plate tectonics. They also investigate how earthquakes and volcanoes impact flora, fauna, and human society. The practice of laboratory skills is incorporated into all units. The scientific inquiry process is an important component of this course and provides a framework from which concepts are addressed.

**Sixth Grade – The Hydrosphere**

Sixth-grade students study water in its various forms on the surface of the Earth. They learn about the abundance of water on Earth and also the scarcity of fresh water and how this impacts human society. They will investigate factors that make water move in predictable ways through Earth systems. Through models, observations, and student-designed investigations, students discover the polar nature of the water molecule. Using water as the context, students explore foundational concepts in chemistry and biology. The practice of laboratory skills is incorporated into all units. The scientific inquiry process is an important component of this course and provides a framework from which concepts are addressed.

**Seventh Grade - The Atmosphere**

Seventh-grade students study the physical and chemical properties of the atmosphere through observations and experiments. They discover that air has weight, exerts pressure, and that energy from the sun causes winds and leads to different weather phenomenon. To further explore energy in the atmosphere, students build and test the efficiency of small, working wind turbines. Foundational chemistry concepts and skills are covered as students learn about the chemistry of gases. At the end of the year, they venture out of Earth’s atmosphere and into space, mapping the solar system and exploring the possibility of life in space. The practice of laboratory skills is incorporated into all units. The scientific inquiry process is an important component of this course and provides a framework from which concepts are addressed.
Eighth Grade - The Biosphere

Eighth-grade students use observation to discover the essential characteristics of living things and to explore the interactions of living things and their environments through a study of biomes and ecosystems. Through physical models of their own design, students observe the relationships among and between individuals in a population and the cycling of nutrients through an ecosystem. They study the complex function and structure of animal and plant cells as well as the mechanisms by which individual cells replicate. After learning about genes and inherited traits, students apply their understanding by designing organisms that exhibit the heritable traits of their parent organisms. Students end their eighth grade year with a study of human physiology and anatomy. The practice of laboratory skills is incorporated into all units. The scientific inquiry process is an important component of this course and provides a framework from which concepts are addressed.

TECHNOLOGY

Overview

Middle School technology is designed to develop the basic skills necessary for becoming an independent user of computers and computer software, to help recognize the importance of technology in today’s world, and to teach computer applications, which are valuable in the pursuit of learning in all disciplines. Computer instruction is integrated into all subject areas. Teachers often team-teach with Hockaday’s technology instructors to help their students create technology-based presentations.

Fifth-Sixth Grade

As students enter Middle School, they become familiar with laptop management, PowerSchool (personal learning network), email privileges, file management and cloud learning. In addition, girls are exposed to a variety of programs, including Microsoft Office, Tinker Cad, OneNote, Movie Maker, and Audacity. Other topics include Internet research techniques, computer ethics, digital citizenship, acceptable-use policies and media literacy. Students continue to work on improving their keyboarding skills for accuracy and speed. Examples of embedded projects are included below.

Fifth-graders use PowerPoint in their foreign language class to illustrate an original poem and learn how to print using a specific layout and color printer. They also engage in robotics in their science class and participate in the hour of code.

Sixth-graders learn how to film in the video lab and use Movie maker to create, edit and upload completed movies for their history class. They also create public service announcements in Music after researching specific artists introduced in class.

Seventh-Eighth Grade

Seventh- and eighth-grade students continue to refine their word-processing, file-management and cloud-learning skills. In mathematics and science classes, student learn data and numeric analysis and graphing by using spreadsheets. Girls become more skilled at manipulating various
forms of media such as scanners, 3-D printing, and cameras. Students continue to engage in multimedia projects, video-editing, and web apps. Examples of embedded projects are included below.

Seventh-graders are using One-Note to record and organize notes, collaborate in the classroom, and apply interactive tools. Also, using 3-D software and printers to design and produce snowflakes for science.

Eighth-graders create stop motion picture animation illustrating their personal poetry with images and narration. In Spanish, the girls use the video lab to act, edit, and create video skits while speaking in Spanish.

WORLD LANGUAGES

Overview
The Middle School world language program uses a proficiency-oriented, integrated approach to teaching the four basic skills of listening, speaking, reading, and writing, anchored in the study of diverse world cultures.

Fifth- and Sixth-Grade French and Spanish
In the fifth- and sixth-grade French and Spanish programs, tailored instruction meets the needs of students who have had previous foreign language experience as well as those who are beginning their language studies. Whether expanding existing conversational skills or laying the foundation for a second language, online programs, age-appropriate songs, dialogues, skits, interactive language games, and student-generated projects establish meaningful communication in the language. Vocabulary is introduced through practical, real-life situations, such as ordering in a restaurant, asking for directions, or introducing a friend. This eliminates dependency on complicated grammar explanations. Selected structures such as subject-verb and noun-adjective agreement are explored in situational context to strengthen writing skills. Through exposure to the culture and traditions of a variety of French- and Spanish-speaking countries, students begin to develop a more-informed world view.

Seventh- and Eighth-Grade French and Spanish
In the Level I French and Spanish courses, students will develop a basic proficiency in and self-confidence with the language in both its oral and written forms as they also continue to develop a more in-depth understanding of grammar and begin to use the language in a more creative and intuitive manner. Activities are designed to promote active student participation in simulated real-life situations, and the use of an online interactive text program helps students to reinforce and internalize pronunciation, structures, and vocabulary learned from classroom instruction. Videos and online cultural materials help them understand and appreciate the cultures of the French- or Spanish-speaking worlds and gain a better general understanding of the world beyond the confines of the classroom.

Seventh- and Eighth-Grade Latin
In this Level I Latin course, students establish an understanding of the basic grammatical principles of a highly inflected language. Students learn to read with understanding and translate simple Latin texts while developing a background in the basic structures of the Latin language, such as cases, declensions, verb tenses, and conjugations. Classroom activities are expanded through the use of interactive software. In the seventh grade, the main focus is Roman daily life; the eighth-grade focus shifts to understanding the global impact of Roman society. Understanding English vocabulary and usage through an intense study of derivatives is emphasized throughout the course. Students benefit from enrichment activities which explore the enormous impact of Roman civilization on the modern Western world.

New eighth grade students who have been studying French, Latin, or Spanish may continue with that language and will be assessed for placement in our language program. Those who have not already begun their study of a foreign language may select an Upper School Mandarin Chinese I, Latin I, French I, or Spanish I course as a foreign language option.