COURSE OF STUDY
2022-23
GEORGETOWN DAY SCHOOL MISSION STATEMENT

Georgetown Day School honors the integrity and worth of each individual within a diverse school community. GDS is dedicated to providing a supportive educational atmosphere in which teachers challenge the intellectual, creative, and physical abilities of our students and foster strength of character and concern for others. From the earliest grades, we encourage our students to wonder, to inquire, and to be self-reliant, laying the foundation for a lifelong love of learning.
TABLE OF CONTENTS

LOWER/MIDDLE SCHOOL
Curriculum Overview ................................................................. 2

Lower School
Pre-Kindergarten ..................................................................... 10
Kindergarten .............................................................................. 12
First Grade ............................................................................... 15
Second Grade ........................................................................... 17
Third Grade .............................................................................. 20
Fourth Grade ............................................................................ 24

Middle School
Fifth Grade ............................................................................... 30
Sixth Grade .............................................................................. 34
Seventh Grade ........................................................................... 38
Eighth Grade ............................................................................. 42

HIGH SCHOOL
Curriculum Overview .................................................................. 48
Arts: Performing ........................................................................ 50
Arts: Studio ............................................................................... 54
Community Service ...................................................................... 56
English ...................................................................................... 57
History and Social Sciences ...................................................... 60
Innovation and Computer Science ............................................ 66
Interdisciplinary .......................................................................... 68
Mathematics ............................................................................. 70
Physical Education ..................................................................... 73
Science ...................................................................................... 74
World Languages ......................................................................... 78
Georgetown Day School is well known for its challenging and innovative curriculum. From pre-kindergarten on, teachers seek to stimulate, challenge, and inspire students to explore the world around them and discover their place in it. This section of the Course of Study details the PK-8 curriculum.

THE ARTS

The arts program is an essential part of the Georgetown Day School Lower/Middle School curriculum, offering students an in-depth study of theater, dance, music, and the visual arts. The program provides a variety of opportunities for students to develop their interests, skills, and appreciation of the arts.

ARTS CORE CURRICULUM

Theater
The main goals of the drama program are to allow the students to develop a sense of themselves as creative and expressive individuals with responsibilities to a larger community, to be comfortable with risk-taking, to learn movement and drama skills, and to develop critical and creative thinking skills. Over the course of their stay in the Middle School, students enjoy a variety of dramatic performing opportunities.

Music
Music is an important part of every child’s life at GDS. We seek to create a foundation for a lifelong love of music and to foster active audiences, accomplished performers, and musically literate students. In classes, assemblies, and informal get-togethers, children experience the joy and beauty of musical expression. Students experience the different elements of music through movement, singing, and playing instruments, gaining the foundation necessary for an intellectual understanding of music. Faculty members use several instructional techniques including Orff. Age-appropriate technology, including Noteflight and SoundTrap, are incorporated throughout the various curricula.

Visual Arts
Designed to develop the student’s ability to approach creative experiences with self-confidence, the visual arts program introduces students to a broad assortment of media and techniques. Concepts are presented to make students more sensitive to the aesthetic qualities of their environment and to provide a rich source of experience from which they can draw. Teachers work hard to maintain a balance between providing formal instruction and giving students opportunities for free, creative expression. A consistent approach to working in the studio, including the proper use of materials and instruction in specific techniques, ensures that all students gain a common frame of reference. Students work with paints, a wide range of drawing materials, found objects, clay, papier-mâché, and printmaking materials.

ARTS ENRICHMENT CURRICULUM

Band
Beginning in fourth grade, all interested students may take wind and percussion instrument instruction once a week for 45 minutes. In mid-winter, beginner’s band rehearsals begin and are held once a week. The fourth graders perform in May. Fifth and sixth graders have 45-minute lessons once a week and meet twice a week. Seventh and eighth grade students meet twice a week, by grade, for 45 minutes and once a week for 45 minutes as a combined ensemble. The Middle School band, which includes fifth through eighth grades, has a winter concert in January and a spring concert in May.

Chorus
The chorus program is offered in fourth through eighth grades. During weekly rehearsals for this elective, choral techniques, part-singing, and age-appropriate repertoire are presented and developed. Choruses perform at major assemblies and evening concerts throughout the year. Depending on the grade level, frequency ranges from one to three classes per week.
Dance
The Lower School dance program emphasizes the creative process, personal expression, and performance through movement. Dance is introduced to our students in PK/K and continues through fourth grade as a core part of the arts curriculum. Middle School students experience dance history and dance literacy and have the option of being in dance enrichment classes that focus on modern/contemporary dance technique, improvisation, choreography, and performance. Middle School dancers perform in two Dance Showcases and dance assemblies for their peers. Depending on the grade level, frequency ranges from one to three classes per week.

Middle School Visual Arts Enrichments
Visual Arts enrichment begins in the seventh grade. In visual arts enrichment, students have an opportunity to explore a wide range of projects using a variety of materials. Enrichment classes are more akin to a studio atmosphere; students begin each project with strong technical direction and guidance and then become more self-directed as they bring their projects to completion.

HEALTH AND WELLNESS PROGRAM
Formal health education begins in the Middle School. The mission of the program is to encourage health and wellbeing, both among individual students and throughout the GDS community. Students learn to identify, understand, and manage their emotions, while also learning that their physical, emotional, and social wellbeing are integrally related. Emphasis is on acting with courage, learning from setbacks, creating and innovating, and caring for ourselves while caring for each other.

The skills-based curriculum provides students with developmentally appropriate information and resources to make informed, responsible decisions with respect to their personal health and fitness, to navigate their friendships and family lives, and to understand their own and others’ sexuality. The themes of personal responsibility, respect for the worth and integrity of each individual, and understanding and appreciating the diverse populations within our community run consistently throughout the program.

Upon completion of the health education program at GDS, students should have acquired a set of values and skills that will help them lead balanced, purposeful, and joyful lives.

LOWER/MIDDLE SCHOOL INNOVATION
Our innovation program gives students learning experiences to grow their confidence and abilities to solve complex problems affecting ethics, justice, and our collective social good. Students will be able to follow or manage problem solving frameworks to solve complex problems, use foundational digital and innovation skills, and become a self-sufficient learner. Lower School Innovation is integrated into the curriculum of each grade level. Students will learn their expected subject matter content in conjunction with important problem solving skills such as the design process, prototyping, and testing their ideas. Students also pick up foundational digital literacy skills that allow them to use technology in order to transform their learning experiences.

There are two components to Middle School Innovation programming: Hopper Studio and Hopper Quest. Through Hopper Studio, fifth and sixth grade students explore topics of innovation, design, and technology. Students acquire core skills for the “real world”—creativity, critical thinking, collaboration, communication, and agency within a STEAM and interdisciplinary approach to learning. When students complete Hopper Studio modules, they then engage in Hopper Quest, an opportunity for personalized and student-driven learning where students will set their learning path with the support of a coach and mentor. Seventh and eighth grade students enrolled in fitness during the fall, spring, or winter season will engage in a Hopper Quest experience twice a week during athletics time.

LANGUAGE ARTS/ENGLISH
The GDS PK-8th English program aims to build student fluency as readers, writers and critical consumers of written text.

In Lower School language arts, students become fluent readers and writers, as well as effective communicators and listeners across multiple human perspectives, using different mediums for varied purposes. The language arts curriculum equips students with skills necessary to think critically and work collaboratively in order to live healthy, happy, productive and responsible lives.

As reading and writing proficiency increases in Middle School, the English curriculum incorporates books selected both for their literary value, to provide models and inspiration for student
writing, and also to expose students to a broad range of literary forms, genres, points of view, and anti-racist/anti-bias themes. The writing and reading program is informed by Common Core Standards, Ruth Culham’s 6+1 Traits of Writing, and Learning for Justice’s Social Justice Standards to ensure alignment and progression through the program. Students leave the Middle School with a solid literary base, strong writing skills, and the ability to discuss a wide range of ideas in order to effect change in the world.

LIBRARY
The PK-12 library programs’ goal is to develop ethical, knowledgeable 21st Century scholars able to find and evaluate and use credible sources throughout their lives. The libraries of Georgetown Day, in both the Lower/Middle and the High School, are central to the school’s mission. A combined book collection of more than 30,000 volumes and 37 databases, covering all aspects of the curriculum, provides research and reference for the GDS community.

Emily Style, in her essay, “Curriculum as Window and Mirror,” advocates for “curriculum to function both as window and as mirror, in order to reflect and reveal most accurately both a multicultural [i.e., diverse] world and the student herself or himself.” The LMS librarians strive to create a collection and a space where this is possible. Open throughout the school day, the library welcomes regularly scheduled weekly class visits and independent study.

Kindergartners through fourth graders practice skills of information literacy and learn how to select books and articles (both electronic and print) that suit their needs. Middle School students receive instruction in efficient searching and organizing of information, how to avoid plagiarism, and creating bibliographies. In addition, professional and parenting titles are available for the community. “Destiny,” the online catalog, as well as encyclopedias, databases, and teacher-approved websites for projects may be accessed from home through the GDS website (password-protected).

MATH
The PK–8th grade curriculum actively involves children in “doing” mathematics. They explore and discuss ideas; justify procedures; use, describe, and represent data; investigate and solve problems; construct algorithms; develop strategies; and predict results. A variety of activities provide opportunities for tactile, auditory, and visual learning. With an eye to developing the children's mathematical thinking and reasoning abilities, teachers stress the importance of communicating ideas, developing a repertoire of strategies for problem-solving, and gaining flexibility in working with mathematical ideas. Students learn to select strategies and techniques, recognize familiar mathematical structures in unfamiliar settings, detect patterns, and analyze data. To aid in the learning process, students use manipulatives and concrete materials, write about mathematics, and use technology tools.

Lower School Math
In Lower School, students work individually and collaboratively to tackle complex problems, enabling them to use mathematics in a meaningful and relevant way, to communicate clearly and powerfully, and to shape the communities and the world in which they live. Teachers provide an environment that develops and inspires mathematical, critical, and socially minded thinking. Math concepts are regularly applied to real-world situations and other curricular areas. Individual math topics are taught as an integrated whole and the connections among them are prominently featured.

First In Math®, an online program used in grades 1–4 both in school and at home, strengthens mental computation facility while engaging students in problem-solving and critical-thinking activities. Other online programs we subscribe to are IXL and Dreambox, which offers students an opportunity to practice specific skills and reinforce conceptual understanding.

Middle School Math
Students in middle school math classes are challenged to think critically about the mathematical process. They are encouraged to justify their reasoning to build a deeper understanding of the mathematical concepts and to build their capacity to problem solve creatively. Course content focuses on developing students’ conceptual understanding, procedural fluency, and problem-solving strategies to deepen learning. At each grade level, students are encouraged to extend their understanding, moving from concrete tasks to more abstract problems. The goal is to engage students in a variety of experiences and activities that will prepare them for more complex topics in math.
WORLD LANGUAGES

Lower/Middle School language programs at GDS are proficiency-oriented and based on the World-Readiness Standards for Learning Languages that attend to linguistic dimensions and connections that learners make between languages, cultures, and the communities that speak each language. GDS offers Chinese, French and Spanish starting in third grade.

World language instruction—grounded in research and theory on language and discourse functions—is engaging, adaptive, compensatory, and developmental. The goal is to give students the linguistic and cultural tools necessary to appreciate the richness of global diversity and to embrace the opportunities of living in a diverse world. The essential 21st century skills of critical thinking, collaboration, creative problem solving and adaptability are foundational to the program.

Students will experience extensive interactions in the target language. They will also learn the fundamental structures of the language by engaging in communicative activities using authentic media and resources focused on developing functional competence in the four skills (listening, speaking, reading, and writing), as well as the expansion of cultural knowledge. Drama, storytelling, educational trips, collaborative projects, buddy programs, songs, games, workbooks, blogs, and films are a few of the instructional approaches and tools used to ensure engagement, enjoyment, and confidence while communicating in the target language.

As a result of active engagement in the study of a world language, students will:

1. Develop proficiency in their target language
2. Show knowledge of world cultures, leading to a better understanding of those cultures and of their own.
3. Develop the academic confidence and linguistic skills necessary to engage in future language learning and exploration of world literature and global affairs.

PHYSICAL EDUCATION/ATHLETICS

GDS believes strongly that physical education is an integral part of a child’s development. Students learn the value of physical activity while participating in a safe, positive, inclusive, and cooperative class environment. Guided by SHAPE curriculum standards, students move through a progression of individual and class challenges to enhance their fitness, develop their athletic skills, and improve their confidence. Students are empowered and encouraged to make good decisions about their physical, cognitive, social, and emotional health, leading them to an active, productive, and fulfilling life.

An array of facilities, including a full-size gymnasium, wrestling room, outdoor sport court, and a turf playing field, offer exceptional space for curricular and cross-curricular physical activities.

In grades PK-2, movement education is the primary vehicle used to develop locomotor and nonlocomotor skills, spatial awareness, body control, and the ability to manipulate objects. Students are actively engaged in class, working both independently and cooperatively. In grades 3-4, the program develops students’ fitness skills through goal-oriented activities. Sport-specific skills are also introduced for both individual and team sports, including modified competitive opportunities. Emphasis is placed on participation, skill acquisition, strategic thinking, team play, and knowledge of rules. Modified gymnastics, fitness, and dance round out the curriculum for lower grade levels. Self-esteem, sports citizenship, safety, and fun are key objectives in each component of the curriculum.

The goal of the Middle School physical education program is to provide students with the knowledge, skills, and values needed to become physically active over a lifetime. Students are thereby introduced to a variety of fitness, strength activities, and specific skills for both team and individual competition, which are necessary to become lifelong participants. The Middle School physical education curriculum includes social justice lessons that encourages students to celebrate diversity, equity, equality, and inclusion. Students research, review, and discuss how athletes can use their platform to guide others to take a stand on topics that impact our community.

At GDS we prioritize heart health through the use of heart rate monitors so that students gain a further understanding of their bodies. Fifth and sixth graders culminate each unit with an intramural program designed to prepare them for the seventh and eighth grade interscholastic athletic program. Integrated into the this program are the social, emotional, and leadership lessons learned through being a team member.
During the seventh and eighth fitness program, students are exposed to fitness activities that will benefit their health and well-being. The class is designed to provide students with the opportunity to explore and understand the four main components of being physically fit which include: cardiovascular endurance, muscular strength, muscular endurance, and flexibility. Students learn ways to improve speed, agility, and strength through functional movement lifting and training. Participation includes understanding various physical activities and fitness habits that promote a healthy lifestyle. The purpose for each lesson is to meet the physical, mental, and social needs of the whole student. Each student is issued a Polar OH1 heart rate monitor to use during class and the primary objective is to monitor their heart rate while engaging in their workout routine. Students create personalized fitness plans that will assist in improving their overall fitness.

The primary focus of the Middle School athletic program is to provide all seventh and eighth grade students with a variety of athletic experiences. The program includes team and individual sports and fitness activities. Competitive play further develops sports skills, strategy, and team cohesion. This activity continues to build self-esteem and sports citizenship and prepares students with the skill and desire to continue athletics in high school.

**SCIENCE**

With designated science teachers at every grade level, the Lower/Middle School science program seeks to ground students in life, Earth, and physical sciences essential to comprehending the world around them. The foundation for this science learning is informed by the research-based Next Generation Science Standards providing students with internationally benchmarked programming. Teachers use a wide variety of activities and materials that stimulate scientific awareness in order to develop conceptual understanding through concrete experiences and scientific experiments.

**Lower School Science**

In grades PK-4, students develop a love of science and science learning while asking and answering scientific questions creatively, collaboratively, and independently. Using a variety of scientific processes, skills, and tools, they employ their knowledge to address both individual and global issues.

**Middle School Science**

The Middle School program increases emphasis on laboratory work, applying the scientific method, and engineering design process. At each grade level, students are given opportunities to design experiments and engineering projects in order to deepen their understanding of science content.

**SOCIAL STUDIES/HISTORY**

The social studies program strives to develop the critical thinking skills necessary in all students to deal effectively with personal, social, and political responsibilities. The social studies curriculum provides students with knowledge of historical events as well as a sense of the passage of time, the nature of change, and the common bonds human beings share.

**Lower School Social Studies/History**

In Lower School, students develop a meaningful understanding of, and healthy appreciation for, the world, from both contemporary and historical perspectives; view history through multiple lenses in order to think critically; and develop strength of character and empathy to reflect upon and advocate for social justice in the world.

**Middle School Social Studies/History**

Middle School history classes are designed to help young minds learn and practice the skills used to study the past. Our students learn that history is a process where actions have consequences and themes can be perceived and traced over time. From the ages of 11 to 14, students are increasingly able to think analytically, evaluate sources, and engage in research. The curriculum takes advantage of this developmental leap to stimulate the students’ understanding of history as a dynamic interplay of forces.

**DIGITAL CITIZENSHIP**

Throughout the Lower/Middle School, students develop a solid grounding in technology ethics. The Acceptable Use Policy, signed annually by GDS students, details the rights and responsibilities of individuals who participate in the School’s virtual community. The Lower/Middle School community participates in ongoing technology ethics discussions, which help students understand the importance of copyright protection, best practice of internet sources, care for equipment, respect for the work of others, and personal integrity. By the time students complete the eighth grade, they are confident and competent technology users.
STUDENT SUPPORT

Learning specialists and counselors work to facilitate the academic achievement and emotional wellness of students throughout the grades.

The work of learning specialists in the Lower/Middle School varies by grade. In Lower School, all students are screened at the start of the academic year by learning specialists and teachers to establish a baseline for reading. The results of these screenings are carefully analyzed and used to ensure appropriate instruction and support. Additional progress checks are conducted throughout the year. In the lower grades learning specialists primarily focus on systematic reading and writing instruction. Additionally, the math support teacher provides intervention support. Moving through the grades, the learning specialist becomes involved more broadly, supporting students' academic needs in partnership with teachers. When necessary, the learning specialist suggests and implements learning strategies or recommends further evaluation. The learning specialist monitors the use of student accommodations in the classroom. All learning specialists collaborate with GDS faculty, families, and outside professionals as necessary to support the growth of our students.

The Lower and Middle School counselors provide both direct and indirect support to students in classrooms and families. They also work with faculty to support existing health and wellness programs. When necessary, the counselors provide short-term support to individual students.

SPECIAL PROGRAMS

Assemblies
Student assemblies feature celebrations and dramatic productions. Guest presentations include storytelling, Library Theater, ballet and modern dancing, opera, puppetry, juggling, and musical performances. We also hold monthly community gatherings to catch up with one another and assemblies that highlight our GDS community/world diversity.

GDS Assemblies
GDS assemblies have a long tradition at GDS. The founders of the School felt that remembering universal messages at these times was an effective way for students in our diverse population to share cultural traditions and draw the community together.

There are five GDS assemblies during the year at GDS. Thanksgiving is our uniquely American holiday in which the theme is gratitude. At Christmas, we celebrate peace and goodwill. The message for Martin Luther King, Jr., Day is justice. In the spring, Passover’s message is freedom. The Lower School Free-to-Be-Me Assembly and the Middle School Pride Assembly in late spring highlight equality and inclusion. These unique-to-GDS gatherings take many forms, but are always special for students, teachers, and parents.

Theater Productions
Extracurricular theater production opportunities in the Middle School include the fall musical and the Community Production, a student-written show. Students also have the opportunity to be involved in curricular performances, which can include musical theater reviews, improvisational comedy, dramatic scenes, and film productions.

OFF-CAMPUS LEARNING OPPORTUNITIES

Georgetown Day School teachers use a rich array of exhibits, programs, tours, and living experiences. The School’s location in the nation’s capital makes many historic sites, museums, galleries, animal habitats, and other places of interest readily accessible. The use of resources is not limited to destinations and artifacts; the program also benefits from the wealth of expertise available.

Complementing the strengths of the School’s urban programs are grade-level trips to outdoor educational sites. Lower School trips include: Homestead Farm, Camp Letts, Camp Pecometh, and Prince William Forest. Middle School trips include: River Valley Ranch, Chesapeake Bay, and Camp Arrowhead.
LOWER SCHOOL
CURRICULUM OVERVIEW
PRE-KINDERGARTEN

Each child’s learning and development are at the core of the pre-kindergarten curriculum. Its goals are to help children feel comfortable with themselves, their teachers, and their peers in and outside the classroom; develop a sense of their own competence and self-worth and learn to feel positive about themselves as independent people in the world away from home; learn to effectively and happily interact with others; and learn to resolve conflicts and find cooperative solutions. Teachers work collaboratively to ensure that students engage in meaningful, authentic learning opportunities—through a play-based approach—that foster these social and academic goals.

THE ARTS

Dance
PK students experience dance through perceiving, responding to, and performing movement. Through a series of games, challenges, and introductions to different dance forms, the PK dance curriculum assists students’ social/emotional growth and space awareness development. Risk-taking and developing an understanding of what makes us unique are the underpinnings of the PK dance curriculum.

Music
The goal of the music program is to introduce and reinforce basic musical concepts through singing, movement, dancing, playing instruments, and structured listening. The concepts include melody, rhythm, dynamics, and tempo.

Visual Arts
Art projects are a part of each week’s activities; a wide variety of art materials are available during free-choice times. Art is fully integrated into child- and teacher-initiated language arts, social studies, science, and math projects. Experiences are also planned for the sheer joy and excitement of self-expression through art. Students learn techniques such as painting, drawing, and making objects out of clay, boxes, and papier-mâché.

HEALTH AND WELLNESS

Childhood is a unique and valuable stage in the life cycle. Our paramount responsibility is to provide a safe, healthy, nurturing, and responsive setting for children. We support children’s development by cherishing and affirming individual differences, helping them learn to live and work cooperatively, and promoting self-esteem.

The PK daily schedule provides a balance of open-ended and structured time in which our health curriculum naturally occurs. Group meetings, snack/sharing, lunch, concept time, discussion times, outside time, and interactive play present natural opportunities to learn about nutrition, family lifestyles, growth, and environmental health. Conflict resolution is also an important element of learning. Conflicts are a natural consequence of group living and learning. Learning the steps of conflict resolution is as much a function of the curriculum as is discovering the life cycle of a butterfly. Our health curriculum aims at creating and maintaining a setting that fosters children’s social, emotional, intellectual, and physical development and that respects their dignity and their contributions in our community.

A Lower School school counselor works with all PK homeroom teachers and regularly provides lessons to help students better understand personal feelings and engage in social problem-solving.

LANGUAGE ARTS

Our youngest students receive a rich variety of first-hand experiences and enjoy multiple ways to express their feelings and ideas through language. Through creative play, classroom materials, scientific observations and discoveries, arts and crafts projects, assemblies, school-wide projects (like sharing how their families celebrate holidays), and special family projects, the PK program offers a wealth of meaningful experiences.

Children discuss, draw pictures, and more to capture and communicate their experiences to diverse audiences. They are encouraged to communicate effectively by speaking in front of the class, dramatizing stories, reciting and creating poems, singing songs, asking questions, and sharing personal experiences aloud.

Every child is an author, and each child has a story to tell. Depending on their developmental level, children draw and dictate their words to a teacher or write using “inventive” or “developmental” (phonetic) spelling. Teachers introduce alphabet letters and sounds to children through memorable concrete materials and experiences. These experiences may include art, science, math, social studies, music, or movement.
Language arts is often integrated with other subject areas. Time is invested in developing the gross and fine motor skills on which reading and writing depend. Children learn how to form letters correctly using pencils as they begin to experience writing as a process. When they enter PK, many children are just learning letter names and sounds, and some are emergent readers. A variety of instructional methods and activities introduce phonemic awareness.

Through exposure to outstanding children’s literature, children have many opportunities on a daily basis to increase their knowledge of concepts of literacy through print, story sequence, and illustrations. They learn that words have meaning, that there is a direct correspondence between the written and spoken word, and that print flows from left to right and top to bottom. They learn to predict the outcomes of stories, begin to acquire sight vocabulary, become familiar with sentence structure, make visual and auditory discriminations about letters, and become familiar with punctuation marks. In addition, our print-rich classrooms provide opportunities for the children to read a wide variety of printed matter, including their picture job charts, daily schedules, morning message, Big Books, easy-to-read books, and other library books. One of the main goals in PK is to instill in students a love of books. We target phonological skills using a variety of instructional methods, games, and activities.

LIBRARY
Through weekly visits, PK students are introduced to storytime and book discussions, which are interwoven with the classroom curriculum. In addition, students learn the difference between fiction and non-fiction books and explore different genres. Students learn to choose, check out, and to be responsible for returning their books. The students acquire and practice appropriate library procedures.

MATH
The PK classroom and daily routine are designed so that children develop math concepts and skills. Children discover and explore mathematical concepts both on their own and through teacher-directed lessons. Concrete materials are carefully chosen and logically arranged to teach math concepts so that through play and clean-up, children develop the ability to classify and sort, count, compare, and match using one-to-one correspondence. Throughout the day, math is highlighted, demonstrating the vitally important role that it plays in the students’ lives. The daily routine includes asking children to figure out the different periods in their daily schedule, the day of the week, the day of the month, the number of children present and absent, and the number of days we have been in school. Counting opportunities abound. Sequence and order are reinforced as each arts and crafts project is introduced through review of what to do first, second, next, and last. Every attempt is made to integrate math into all subject areas.

Basic concepts and skill practice include work with the ordering of numbers, numerical symbols, one-to-one correspondence, classifying, sorting, data collection and graphing, pattern discrimination and naming, and the numbers 1–100.

Work with identifying, naming, and comparing attributes associated with shape, size, and color further strengthens concept formation. Collecting, joining, and separating sets of objects while introducing such terms as “greater than,” “less than,” or “equal to” reinforces correct use of terminology and symbols. Work with blocks and Magnatiles expand student knowledge of three-dimensional space and symmetry.

PHYSICAL EDUCATION
In PK, students develop basic body control, explore concepts of rhythm and space, and learn how to use balls, implements, and other equipment. Classes emphasize working with partners and classmates and involvement in basic patterns of play and games. Students also learn the importance of following directions. By year’s end children should take joy and satisfaction in physical activity and their developing physical skills and strength.

SCIENCE
In PK, there are opportunities for children to observe, to ask scientific questions, to experiment, to note results, and to refine their thinking. Whether observing that cooking ingredients change with heat or constructing a ramp in the block area, for example, children explore scientific principles in their play. Teachers encourage this thinking by providing materials, plants, and animals in the classroom, by encouraging children to display their own “museum” collections, and by introducing planned units throughout the year such as planets, birds, and seeds. In the classroom, seeds sprout and caterpillars metamorphose into butterflies.
A science specialist leads hands-on activities with students as they learn to think like scientists and develop observational skills. Students develop hypotheses, conduct experiments, collect and record data, and reach scientific conclusions.

SOCIAL STUDIES
Social Studies centers around the question: Who am I? The topic children this age are most interested in is, appropriately, themselves. What do I look like? What foods do I like best? Who is in my family? What can I do? One major goal in PK social studies is to build each child’s positive self-image and to help children learn what is unique and special about them, what they share in common, and how to function as part of a group. Who is in my family, in my school, in my community, and in my world? In order to answer these questions, we plan special activities and field trips to broaden their knowledge of the roles people play in the world of work and provide ideas for creative dramatic play in the classroom. The children also explore a variety of cultures and celebrate numerous holidays and customs, based in part on the diverse population of their classrooms. They celebrate the lives of diverse individuals who have made lasting contributions to our world. In addition to these special activities, teachers work intentionally to integrate affirmations of difference among children in our community and world.

TECHNOLOGY
Technology in PK is designed to be used as a hands-on tool to enhance students’ learning of reading, writing, math, science and the everyday world. There are iPads for both individual and group work. Each iPad has apps that support Handwriting Without Tears and art. Both students and teachers use technology tools for Morning Meeting, attendance, and to support both visual and auditory learners.

KINDERGARTEN
Each child’s learning and development are at the core of the kindergarten curriculum. Its goals are to help children feel comfortable with themselves, their teachers, and their peers in and outside the classroom; develop a sense of their own competence and self-worth and learn to feel positive about themselves as independent people in the world away from home; learn to effectively and happily interact with others; and learn to resolve conflicts and find cooperative solutions. Teachers work collaboratively to ensure that students engage in meaningful, authentic learning opportunities—through a play-based and academic approach—that foster these social and academic goals.

THE ARTS
Dance
Kindergarten students experience dance through perceiving, responding to, and performing movement. Through a series of games, challenges, and introductions to different dance forms, the PK dance curriculum assists students’ social/emotional growth and space awareness development. Risk-taking and developing an understanding of what makes us unique are the underpinnings of the K dance curriculum.

Music
The goal of the music program is to introduce and reinforce basic musical concepts through singing, movement, dancing, playing instruments, and structured listening. The concepts include melody, rhythm, dynamics, and tempo.

Visual Arts
Art projects are a part of each week’s activities; a wide variety of art materials are available during free-choice times. Art is fully integrated into child- and teacher-initiated language arts, social studies, science, and math projects. Experiences are also planned for the sheer joy and excitement of self-expression through art. Students learn techniques such as painting, drawing, and making objects out of clay, boxes, and papier-mâché.

HEALTH AND WELLNESS
Childhood is a unique and valuable stage in the life cycle. Our paramount responsibility is to provide a safe, healthy, nurturing, and responsive setting for children. We support children’s development by cherishing and affirming individual differences, helping them learn to live and work cooperatively, and promoting self-esteem.
The kindergarten daily schedule provides a balance of open-ended and structured time in which our health curriculum naturally occurs. Group meetings, snack/sharing, lunch, concept time, discussion times, outside time, and interactive play present natural opportunities to learn about nutrition, family lifestyles, growth, and environmental health. Conflict resolution is also an important element of learning. Conflicts are a natural consequence of group living and learning. Learning the steps of conflict resolution is as much a function of the curriculum as is discovering the life cycle of a butterfly. Our health curriculum aims at creating and maintaining a setting that fosters children's social, emotional, intellectual, and physical development and that respects their dignity and their contributions in our community.

A Lower School school counselor works with all Kindergarten classes and regularly provides lessons to help students better understand personal feelings and engage in social problem-solving.

**LANGUAGE ARTS**

Our youngest students receive a rich variety of first-hand experiences and enjoy multiple ways to express their feelings and ideas through language. Through creative play, classroom exploration, scientific observations and discoveries, arts and crafts projects, time with friends and fourth-grade buddies, class presentations, school-wide projects (like sharing how their families celebrate holidays at assemblies), and field trips, the Kindergarten program offers a wealth of meaningful experiences that enhance language development.

Each kindergartener maintains a journal in which they are able to communicate ideas through drawings and writing. Depending on their ability, children may draw and dictate their words to a teacher or write using “inventive” or “developmental” (phonetic) spelling. Teachers provide whole-group and differentiated instruction to develop both technical and creative writing skills. Students practice adding details to an illustration, writing letters to represent a spoken word, using appropriate spacing and punctuation marks, and incorporating sight words into sentences to represent their ideas clearly. Students also reinforce their understanding of writing as a tool for memory as they re-read previous journal entries and present their writing to peers.

When they enter Kindergarten, many children are just learning letter names and sounds, and some are emergent readers; a few children may read with fluency. A variety of instructional methods, games, and activities introduce phonemic awareness to build and reinforce a strong foundation for reading. Through exposure to outstanding children's literature, students have many opportunities on a daily basis to increase their knowledge of concepts of literacy through print, story sequence, and illustrations. They learn that words have meaning, that there is a direct correspondence between the written and spoken word, and that print flows from left to right and top to bottom. They learn to predict the outcomes of stories, begin to acquire sight word vocabulary, become familiar with sentence structure, make visual and auditory discriminations about letters, and become familiar with punctuation marks. In addition, our print-rich classrooms provide opportunities for the children to read a wide variety of printed matter, including their job charts, daily schedules, morning message, labeled classroom materials, and easy-to-read books. All of this reading occurs in the Kindergarten classrooms every day, but children at GDS are not placed into formal reading groups until first grade. One of the main goals in Kindergarten is to motivate children to learn to read and to instill in them a love of books.

**LIBRARY**

Through weekly visits, Kindergarten students are introduced to story-time and book discussions, which are interwoven with the classroom curriculum. In addition, students learn the difference between fiction and non-fiction books and explore different genres. Students learn to choose, check out, and to be responsible for returning their books. The students acquire and practice appropriate library procedures.

**MATH**

The Kindergarten classroom and daily routine are designed so that children develop math concepts and skills. Children discover and explore mathematical concepts both on their own and through teacher-directed lessons. Concrete materials are carefully chosen and logically arranged to teach math concepts so that through play and clean-up, children develop the ability to classify and sort, count, compare, and match using one-to-one correspondence. Throughout the day, math is highlighted, demonstrating the vitally important role that it plays in the students' lives. The daily routine includes asking children to figure out the different periods in their daily schedule, the day of the week, the day of the month, the number of children present and absent, and the number of days we have been in
school. Counting opportunities abound. Sequence and order are reinforced as each arts and crafts project is introduced through review of what to do first, second, next, and last. Every attempt is made to integrate math into all subject areas.

The Kindergarten math curriculum is designed to promote critical thinking, develop cognitive flexibility, and enhance conceptual understanding for our young learners. Students tackle new mathematical concepts through problem-solving experiences—individually or with a small group of peers—and make important connections through direct instruction with a teacher and with visual models.

Children are engaged in three to four formal teacher-directed lessons each week, followed by sufficient time to explore and practice math concepts through selected manipulative materials. Basic concepts and skill practice includes counting and cardinality, numerical symbols, one-to-one correspondence, classifying and sorting, measuring, data collection and graphing, composing and decomposing numbers, and addition and subtraction. While developing essential procedural skills, kindergarten students also learn to critique their own reasoning and the reasoning of others, represent their thinking in multiple ways (e.g., graphs, pictures, equations or physical models), as well as how to effectively use precise mathematical language to express their understanding.

### PHYSICAL EDUCATION

In Kindergarten, students develop basic body control, explore concepts of rhythm and space, and learn how to use balls, implements, and other equipment. Classes emphasize working with partners and classmates and involvement in basic patterns of play and games. Students also learn the importance of following directions. By year’s end children should take joy and satisfaction in physical activity and their developing physical skills and strength.

### SCIENCE

In Kindergarten, there are opportunities for children to observe, to ask scientific questions, to experiment, to note results, and to refine their thinking. Whether observing that cooking ingredients change with heat or constructing a ramp in the block area, for example, children explore scientific principles in their play. Teachers encourage this thinking by providing materials, plants, and animals in the classroom, by encouraging children to display their own “museum” collections, and by introducing planned units throughout the year such as planets, birds, and seeds. In the classroom, chicks and ducks hatch, seeds sprout, and caterpillars metamorphose into butterflies.

A science specialist leads hands-on activities with students as they learn to think like scientists and develop observational skills. Students develop hypotheses, conduct experiments, collect and record data, and reach scientific conclusions.

### SOCIAL STUDIES

Social Studies centers around the question: Who am I? The topic children this age are most interested in is, appropriately, themselves. What do I look like? What foods do I like best? Who is in my family? What can I do? One major goal in Kindergarten social studies is to build each child’s positive self-image and to help children learn what is unique and special about them, what they share in common, and how to function as part of a group. Who is in my family, in my school, in my community, and in my world? In order to answer these questions, we plan special activities and field trips to broaden their knowledge of the roles people play in the world of work and provide ideas for creative dramatic play in the classroom. The children also explore a variety of cultures and celebrate numerous holidays and customs, based in part on the diverse population of their classrooms. They celebrate the lives of diverse individuals who have made lasting contributions to our world. In addition to these special activities, teachers work intentionally to integrate affirmations of difference among children in our community and world.

### TECHNOLOGY

Technology in Kindergarten is designed to be used as a hands-on tool to enhance students’ learning of reading, writing, math, science and the everyday world. There are iPads for both individual and group work. Each iPad has apps that support handwriting, phonics, mathematics, and art. Both students and teachers use technology tools to support visual and auditory learners.
FIRST GRADE

THE ARTS

Dance
First grade students experience creative movement through a series of movement explorations, as an individual, with a partner, or in a group. Students develop their spatial awareness, movement articulation, and physical expression through a variety of movement improvisations. Risk-taking and developing an understanding of what makes us unique are the underpinnings of the first grade dance curriculum.

Music
The first graders become more confident and competent in their continued exploration of the elements of music. While keeping a steady beat when playing xylophones and rhythm instruments, the students also recognize rhythmic notation. Singing in tune, singing longer songs, and singing while playing games further reinforce the understanding of the elements of music.

Visual Arts
In first grade, children are introduced to the art-room experience. Emphasis is placed on the recognition and use of line, shape, color, and texture. Students learn techniques involved in painting, drawing, and collage. The three-dimensional skills learned include clay modeling, pinch-pot construction, and wood assemblage.

COMMUNITY SERVICE

As a natural extension to their social studies curriculum, first grade students partner with advocacy and outreach organizations in the DC-area. In the past, students have engaged in hands-on service by helping bag groceries that go out for monthly deliveries and learning how their work will help others.

HEALTH AND WELLNESS

The first grade health curriculum is implemented in the classroom as well as in science and in physical education. Students will develop personal health skills such as healthy eating habits, disease prevention, physical fitness, and exercise. Developing effective communication skills, wise decision-making, understanding bullying, and building friendships are an integral part of the first grade classroom. Students also learn to care for the environment. At least twice monthly, a school counselor provides class lessons to support students’ growth with social problem solving and positive, yet direct communication.

LANGUAGE ARTS

The main thrust of the first grade language arts program is to teach children to read independently and confidently in a manner consistent with their skill and developmental levels. Phonics, sight-word recognition, fluency, and comprehension techniques are all taught using a comprehensive approach (a combination of Whole Language and Skills-based approaches).

Some children are in the first stages of phonics and sight-word vocabulary building while others read fluently. During the first part of the language arts block, the class reads orally from carefully selected poetry and “big books” (some of which have been composed by the class), in order to learn or reinforce specific skills. Small reading groups further reinforce these skills and focus on the needs appropriate to the phonetics and comprehension mastery level of each member.

Oral and kinesthetic methods characterized by active participation are an integral part of small-group instruction as is fostering an enjoyment of reading. Children read aloud to refine reading fluency skills and build confidence to become independent readers. They discuss the vocabulary and content of the reading selections from various sources. These sources span a wide range of genres and difficulty that reflect the unique interests and character of first-grade readers. A large selection of books and tapes in the classroom encourage reading competence and enjoyment.

An integral part of the language arts block is journal writing and Writing Workshop. During these activities, students learn to develop and present their ideas in writing. Writing Workshop also entails giving and taking suggestions for story lines, enhancing the content with detailed and appropriate illustrations, incorporating changes into written pieces, and creating writers who delight in publishing and sharing their own stories.

Handwriting is taught during a specific period and gradually becomes integrated into other subject areas.
LIBRARY
First graders listen to stories about families, interpersonal relationships, and books with themes about social justice and advocacy. Students begin learning research skills by using library call numbers to find their books and to learn how to evaluate an information source’s authority and reliability. Also, they learn how to cite a source by using the title and author of the book. They continue to use the book selection skills learned in kindergarten by choosing and checking out books.

MATH
The first grade math program incorporates games, activities, and manipulatives for hands-on math. The curriculum introduces a variety of math concepts and repeats them several times throughout the year so that students have many opportunities to practice and master math skills.

First grade math continues and expands upon the use of math for establishing the daily routines associated with maintaining and announcing the daily schedule and calendar. For example, students use our interactive whiteboards to model the number of how many days we have been in school using money, tally marks, place value sticks, and base-10 blocks.

Continued work with manipulatives strengthens concepts of whole numbers, patterns, and counting by 1s, 2s, 3s, 4s, 5s, 10s, and 100s and introduces work with fractions. Children make greater use of the number line, place-value charts, the hundreds chart, and base ten blocks to develop an understanding of our number system. Addition, subtraction, multiplication, and division concepts as well as ideas of equality and inequality are explored through the regular use of manipulatives. Mastery of addition and subtraction fact families through 10 is desired and supported through practice. To strengthen recall of addition and subtraction facts, the FASTmath online software system is introduced and incorporated with classroom work and can be accessed from home.

Classification and sorting of attribute blocks and other objects is the groundwork for algebraic reasoning. Exploration with pattern blocks and tangram puzzles, constructing with polygons and straws, and observing a variety of models strengthens awareness of attributes and characteristics of both 2-D and 3-D geometric shapes. Children learn to measure length, temperature, and weight, as well as gather, record, graph, and interpret data. Through oral and written problem-solving exercises, students demonstrate their understanding of these key concepts.

PHYSICAL EDUCATION
P.E. classes in first grade help students develop joy and satisfaction when performing basic forms of movement and body control, a sense of freedom to explore rhythm and space in gymnastics and dance, and greater control and accuracy with balls, implements, and other equipment. Students are taught in both single and team-teaching situations, and classes are designed for students to work individually, as well as cooperatively in partners or small groups. Teachers help students understand basic game strategies and how to progress to more complex tasks during activities.

SCIENCE
The science program in the first grade responds to a child’s natural curiosity and interest in the physical world. Children begin to learn the skills associated with science such as critical thinking and making observations.

To increase their understanding of the world around them, students perform a number of experiments with magnets to learn about magnetic and other invisible forces and to test different magnets for strength. The students continue to explore physics with a building technology unit using Kapla building sets, learning about building materials, the function of shape, and the importance of a sound design.

Earth science is introduced through a study of weather and the water cycle. In April, students have a mini-unit centered around Earth Day. The unit is based on current environmental issues that the students feel passionate about. The year concludes with a botany unit in which students study pollination, seeds, and plant life cycles. Throughout the year, students become familiar with such concepts as the scientific method, problem solving, and the trial and error process.

SOCIAL STUDIES
The theme of “Families/All About Me” gives first graders an opportunity to explore the full range of what the concept can mean. Children begin the year by describing their own family makeup. Through children’s literature, projects, and
class discussions, they become sensitive to and appreciative of similarities and differences in families. In addition, the students’ parents visit the class to discuss their heritage (place of birth, where they grew up, etc.) and share facts and customs of that area. Shifting focus closer to home, the children study the history and sights of the District of Columbia.

In addition to our study of families, we discuss famous Americans, the African-American experience, and special holidays and celebrations from various cultures and religions. We do an extensive study of Martin Luther King, Jr. and the Civil Rights movement. Children read stories, learn protest songs, and make timelines of the events and learn the meaning of Dr. King’s message. This intensive study makes a smooth transition into our month-long examination of Black History.

Finishing the year, first graders learn all they can about our great United States. They learn geography and map skills, then “travel” through the U.S., exploring regional facts and culture such as music, food, landmarks, fun facts, and climate.

TECHNOLOGY
First grade students continue regular use of technology to enhance their reading, writing, math, and social studies skills. In the classroom, iPad apps are available to support math, handwriting, spelling, and drawing as they apply to the curriculum.

SECOND GRADE

THE ARTS
Dance
The second grade dance curriculum is a continuation of the movement skill development from first grade. Students explore more complex movement explorations, ideas, and spatial relations. Students learn dance-specific vocabulary words and think critically about their discoveries through dance, allowing them to verbalize their dance experiences. Students also learn about the originality of movement choices, improvising with others, and musicality.

Music
Second grade students continue to develop their singing voices through ensemble singing of a familiar children's repertoire, with an emphasis on traditional folk songs, games, and dances. Students learn to read and perform rhythmic notation. Activities include movement, accompanying on xylophones, and playing rhythm instruments.

Visual Arts
Second graders continue to work with line, shape, color, and texture with increased concern for composition. The art projects isolate individual elements of design to develop students’ awareness and technical skills. They use their imaginations and observe their world closely through a variety of projects. Students are encouraged to invent ways to depict what they see and think.

SERVICE LEARNING
Stewardship and companionship define the Second Grade Service Learning curriculum. In conjunction with the social studies and science curricula, students become caretakers of our local natural spaces. They study the history and ecology of the area as well as stewardship skills, including trash removal and Leave No Trace practices. In spring, students document their waterside experiences through poetry and art. They learn songs and dances to perform.

HEALTH AND WELLNESS
The second grade health curriculum encompasses a variety of topics including personal health and fitness, nutrition and healthy eating, disease prevention and control, growth
and development, emotional and social health, family life education, and environmental health. The curriculum is addressed both formally and informally in the classroom as well as in science class, physical education class, and through guest speakers.

In addition to informal meetings, a school counselor provides at least twice-monthly lessons to help second graders address feelings and engage in positive communication with peers.

**LANGUAGE ARTS**

Using a comprehensive approach, instruction focuses not only on reading and writing, but also on developing speaking and listening skills. Small group instruction provides targeted instruction based on routine assessments made in collaboration with learning specialists. Students at all levels develop decoding, fluency, and reading comprehension skills. Students grapple with structured response questions, discuss story elements, and practice reading aloud. They also share their thinking with classmates and demonstrate understanding through self-directed, collaborative projects.

Students write, revise, and publish a variety of genres, including, but not limited to, poetry, friendly letters, descriptive narratives, fictional narratives, persuasive letters, and expository pieces while learning proper paragraph structure. Young writers collaborate with peers and teachers to give and receive feedback related to mechanics, organization, and author’s craft. Throughout the school day, second grade students learn to write across the curriculum. Many of the units of writing are linked to the units of the Identity Project in Social Studies. Our study of writing conventions includes punctuation, grammar, print penmanship, and spelling of high-frequency words and word patterns.

**MATH**

Mathematics is differentiated to meet the varying needs of our students. Within the study of each concept, teachers reinforce skills, encourage exploration, provide enrichment, and challenge learners based on our regular formative assessments. Much of the students’ mathematical exploration is done through open-ended problem solving. Project-based, hands-on learning also supplements pencil-and-paper problem solving throughout the year. Students explore math concepts during morning routines and through games in addition to our regular math period.

We begin the year building upon familiar concepts of numeration, pattern recognition, explaining reasoning, and problem solving. Particular emphasis is placed on addition and subtraction strategies and fact fluency. We continue the year with units in measurement, graphs and data, multiples of equal groups, money, time, and geometry with real-life applications. Students are routinely encouraged to reflect on what they have learned by explaining their thinking.

**PHYSICAL EDUCATION**

P.E. classes in second grade concentrate on the refinement and mastery of complex forms of movement and body control, on the ability to fully and safely explore rhythm and space in gymnastics and dance as well as individual talents, and on the improvement of throwing, catching, kicking, striking, and jump-roping skills through a variety of fitness activities and modified games. Students also participate in an orienteering and Native American games unit during the spring trimester. Classes emphasize the ability to work cooperatively with classmates in both small and large groups in addition to the comprehension and application of play strategies in games, activities, and complex tasks.

**SCIENCE**

The second grade science curriculum emphasizes physical and biological science. The year begins with students developing a fundamental understanding of the classification of living and non-living things. Students then focus on each class of animals through a series of hands-on activities, simulations, and research. Students continue to exercise their classification skills while raising live arthropods and to sharpen their observation skills while documenting the stages of metamorphosis. This unit naturally feeds into understanding the basic principles of adaptations and evolution.
In a unit on physical science, students learn about electricity through the study of batteries, bulbs, and motors. Students design and build their own electrically powered car. Students develop skills of observing, measuring, comparing, predicting outcomes, and recording information.

The second grade concludes with a look at water ecology and general ecosystems, an opportunity for students to learn to appreciate and respect our environment. The second graders take what they have learned and apply it in the field on their overnight trip in the spring.

**SOCIAL STUDIES**

Through our year-long Identity Project, students learn about their own identities while learning about other ways people might identify, coinciding developmentally with student interest in self and concrete descriptions of community membership. Students learn with visiting experts and through written and hands-on activities, class discussions, field trips, multimedia, community panels, and student presentations.

Students systematically begin to explore a multidimensional understanding of identity in a social, cultural context. Ongoing studies provide both a mirror for students to consider the many ways in which their identity is constructed and a window through which they learn about and honor differences among classmates. Students move beyond generalizations and stereotypes, and nurture personal pride in their own identity. They develop empathy skills as they learn to value multiple and various identities within and among friends and to communicate across differences.

Through study of character qualities—virtues—students understand and practice what it means to be a caring individual within a collaborative community. Each week, students take ownership of a particular virtue to emphasize in their actions and observe in others. Our focused anti-bias curriculum bridges our character building and social identity explorations.

**TECHNOLOGY**

Second graders begin the school year with a working baseline knowledge of technology that they build on and begin learning how to become members of the digital community. Students have regular access to technology tools and iPads. Each student has individual accounts in the form of a subscription to websites that allow for home/school connectivity in literacy and mathematics.

Throughout the school year, students are taught how to create and maintain a successful community where each member is valued and feels secure. The Digital Citizenship and Ethics studies expand upon this concept. Similar to the content in PK/K and first grades, second grade students are asked to imagine themselves opening up the front door of their home and heading out into the world. The conversation revolves around what choices are needed to keep the student safe, who is there to help guide the student, and how to navigate those situations. There are several discussions, online activities, videos, and written work.
THIRD GRADE

THE ARTS

Dance
Third grade dance curriculum is a continuation of the kinesthetic learning and thought process from second grade. Movement qualities and their relation with music and emotionality are introduced in the third grade curriculum. Students learn and perform dance phrases; basic technical elements are introduced. In-depth analysis of the relationship between movement and music is emphasized.

Music
Third graders continue to gain an understanding of music through speech, song, rhythm instruments, xylophones, and movement. Students review rhythmic notation and begin to play the soprano recorder to facilitate the learning of melodic notation. As they did in the earlier grades, the students continue to learn folk songs and age-appropriate children’s repertoire.

Visual Arts
Building on previously learned concepts and skills, the third graders are introduced to elements of composition, proportion and artistic complexity. A variety of assignments are presented in both 2-D and 3-D media. Long-term projects are introduced, incorporating imagination and observation. Projects include 3-D imaginative creatures and self-portraits.

SERVICE LEARNING

Prior to the pandemic, third grade teachers developed an ongoing partnership with the bilingual preschool CentroNía for a project that is integrated into the social studies and language curricula. Third graders visit their buddies three times and then host a final celebration at GDS. Most of the children and staff at CentroNía are non-native English speakers, who have immigrated themselves or have family still living in other countries. GDS teachers emphasize the students’ experiences when discussing issues of immigration and different cultures in their social studies and language classes.

HEALTH AND WELLNESS

In the third grade, the students learn about community, mental, social, and emotional health. These topics are discussed during class meetings throughout the year. Students learn about making responsible decisions and conflict resolution through discussion and role play. Family life and identity are also discussed, beginning with the video That's a Family and culminating with the Free-To-Be-Me assembly. Personal health and fitness are taught during P.E. classes, and topics of growth and development are covered during science classes.

In an effort to help students’ increase their sense of personal responsibility and feelings of empowerment, a school counselor sees the students for twice-monthly class lessons that include habits outlined in the book, The 7 Habits of Happy Kids by Sean Covey. They also participate in weekly mindfulness practice and engage in lessons to understand bullying and promote taking a stand against such behavior.

LANGUAGE ARTS

Third graders have many opportunities to engage with reading throughout the year. Whether participating in teacher-led guided reading, gathering information from expository texts, reading independently for pleasure, or working through multi-step directions on a math assessment, the students develop their decoding, fluency, and confidence. Comprehension is emphasized, and higher-level skills such as predicting, sequencing, and inferring are practiced both in group work and independent assignments. In literature discussion groups, children read independently, write responses to their reading, and share their interpretations and theories with their peers. Children read texts across a wide range of genres including realistic fiction, fantasy, and expository and narrative nonfiction.

Third graders love to write. Through a Writing Workshop framework, children develop their own personal narratives, twist a traditional fairy tale, and create poetry to share the formative moments of their lives. Through a wide variety of assignments, students develop their ability to explore their identity, share information they have gathered, and express their creativity. Third graders gain competence in word processing and frequently use individual iPads during Writing Workshop.

Our writing curricula is often intertwined with our social studies units; students participate in a number of interdisciplinary writing exercises that help them to simultaneously hone their foundational writing skills while deepening their content knowledge and understanding. Third graders become more proficient at spelling and writing mechanics. Students have weekly word work to strengthen spelling skills. Individual conferences are used to teach grammar, punctuation, and capitalization.
LIBRARY
Third Grade library time is devoted to exploring central ideas of information literacy, listening to books that broaden understanding of how literature represents people and cultures, and guided book selection. Use of encyclopedias and map resources—both print and online—recur throughout the year, starting with the Immigration project in the fall. Paraphrasing and understanding the structure of databases are explored in conjunction with science topics, and the concepts of authorship and citation are tied to homeroom projects. Time for choosing independent reading is built into weekly library time.

MATH
Third graders continue to work at understanding base-ten numbers, emphasizing place value through a million and beyond. Further work with estimation and determining the reasonableness of an answer precedes formal work with rounding. Students refine their knowledge of multi-digit addition and subtraction with regrouping. Students spend considerable time and focus on set theory, use of arrays, and repeated addition and subtraction, as well as “fair sharing” to solidify multiplication and division concepts prior to learning and mastering fact families through the twelves. Students learn several algorithms for multi-digit multiplication and long division with one-digit divisors and up to two-digit dividends.

Concept understandings of fractions are taught using a variety of manipulatives that emphasize real-world use. Students identify fractions on a number line, fractional parts of a set, and fractional parts of a region. They compare and order fractions, convert between mixed numbers and improper fractions, and find equivalent fractions. Through carefully planned explorations, students record and analyze data, noting significant patterns that lead them to discover standard algorithms for adding, subtracting, and multiplying fractions. Fraction and money comparisons and connections to decimal notation are made at each step in the learning process.

A more formal focus on the study of geometry includes classification and identification of geometric shapes. The study of lines, line segments, rays, and angles as components of 2-D shapes precedes work with prisms, pyramids, and other 3-D shapes and constructions. Pattern blocks, tangram puzzles, and geoboards support this study. Students continue to gather, record, graph, and interpret data. Students measure area and perimeter, length, temperature, weight, and liquid and solid volume, using both metric and U.S. customary units.

To strengthen rapid recall of addition/subtraction facts and multiplication/division facts, the 24® Games and other math software programs are used in class and are available at home. Thinking skills and problem-solving strategies receive considerable emphasis.

PHYSICAL EDUCATION
Students in the third grade explore rhythm and space in gymnastics and dance and work to master and control fundamental throwing, catching, kicking, striking, and jumping skills that will be used in more organized games in later grades. Classes emphasize the ability to work cooperatively with classmates in groups of all sizes and to apply strategies in organized games. Students are taught why movement and activities are important to their physical well being.

In the fall, students participate in basketball, soccer, tennis, and volleyball. The winter schedule includes dance, gymnastics, and wrestling. The year concludes with softball/baseball, lacrosse, and track-and-field. Many of the activities are adapted or modified for maximum student participation and success. Students are also challenged to look at the importance of exercise and physical fitness. The first and third trimester also includes the two day per week running program to improve cardiovascular fitness. Each student is encouraged to give her/his personal best and records the number of laps completed each day.

SCIENCE
In third grade, students continue to develop their scientific and critical thinking skills while learning about the life cycles of plants, astronomy, and the Earth. Students begin the year by observing plants and designing experiments to test what plants need to live and how they reproduce. Through regular excursions on the school grounds and in local parks, students observe and record changes in trees and learn to identify local trees based on leaf characteristics. Students dissect plants and learn about plant reproduction. As fall progresses, students see the trees dropping their seeds and hypothesize how seed shape, texture, and covering help new trees grow. Discussions of evolution and adaptations take place throughout this discovery and students share their knowledge on a field trip exploring trees at a local national park.
During the winter months, students study the origins of the Universe, our galaxy, and the Solar System. They are introduced to the Periodic Table and learn about elements, atomic structure, and how to build model atoms. Discussions and activities about scale are common throughout this unit. Exploration of the planets of the Solar System, including our own planet Earth, concludes with students making a model of their chosen planet and comparing their planet to others. The unit includes a field trip to the Smithsonian Air and Space museum and local excursions to allow first-hand study of changes in the Earth over recent as well as geologic time frames. The winter months conclude with the Lower School science fair, where students have the opportunity to design their own experiments and share them with the rest of the school.

With the coming of spring, cherry blossoms bloom and we resume observing the life cycles of plants, dissecting flowers, learning how flowers make seeds, and exploring how different plants and animals have evolved to depend on each other. Advantages and disadvantages of different pollination methods are discussed and students even complete a cost-benefit analysis on how plants direct their energy towards reproduction or survival. A field trip to Great Falls National Park allows students to explore native wildflowers and see changes in the rocks of our local environment. By the end of the school year, many flowers have turned to seed, ready for the next generation of plants to grow, and the next generation of scientists to explore how.

SOCIAL STUDIES

The theme of 3rd grade social studies is a comparative study of movements of people to and within the current United States. Framing the year with the acknowledgement that our school is on Nacotchtank land and working to understand what that means, our students focus in on aspects of current U.S. migration, the Great Migration of the 20th Century, the Ellis Island and Angel Island waves of immigration, and the early colonial interactions of indigenous, English, and African settlers at Plimoth Plantation and Jamestown.

In each movement we examine the "push and pull" factors which drove the movement as well as both the challenges faced upon arrival in a new region and the resulting impacts of those migrations. Through our social studies curriculum, students read a variety of expository materials including nonfiction trade books, biographies, historical fiction, and primary sources. Some touchstone texts include *We Came Through Ellis Island: The Immigration Adventures of Emma Markowitz*, *Kai's Journey to Gold Mountain*, *The Great Migration: Journey to the North*, and *The Village that Vanished*.

Children complete comprehension-related activities in varied formats such as study guides, social studies log entries, concept maps, charts, and creative activities to reinforce prior knowledge. We hear first-hand accounts from guest speakers, interview first-generation immigrants within our school community, read picture books, study art, music, and contributions of immigrants, etc.

TECHNOLOGY

Third graders are hands-on, energetic learners who like to figure things out and pursue new information, and throughout the academic year they expand their understanding of the wider digital world and the many activities that are or will be available to them. Third grade students like to use all kinds of digital tools, but especially the iPad that each student receives at the beginning of the school year. Throughout the year, they write and edit stories, create media, consult developmentally appropriate websites, and share schoolwork with teachers and with one another. The iPads expand the time available for teaching and learning because online encyclopedias, reference materials, primary documents, and many digital tools are right at hand instead of outside the classroom.

A range of apps and websites including GoogleDocs, First In Math, Dreambox, IXL, Britannica, and BookCreator, along with the camera, video, and voice recording iPad features, serve as foundations for learning in third grade classrooms. These digital resources offer students the opportunity to dig more deeply into every subject and create content that demonstrates their knowledge.

In the third grade immigration unit, third graders work in small collaborative teams, recording interviews with GDS community members who have immigrated to the United States, and using this first-hand source material to help them create a detailed presentation poster about each person. A digital reading resource, RAZkids, helps children fine-tune their reading skills and expand vocabulary by crafting interesting reading passages for each reader.
Because third graders are eager to explore and learn more about the digital world, the third grade curriculum includes digital citizenship lessons that concentrate on making choices and decisions, evaluating sites and digital resources, and understanding the concept of personal privacy.

**WORLD LANGUAGES**

In 2022–23, third graders begin language study and may choose to study Chinese, French, or Spanish. Starting in 2023–2024, all third grade students will learn Spanish.

**Chinese**
The third grade Chinese program introduces students to this language through natural approaches and Total Physical Response (TPR) method with songs, stories, games, exercises, and cooperative group activities. Students develop an understanding of tones and pronunciation in Chinese and develop basic communication skills in listening and speaking, as well as reading and some character writing. This program uses Easy Steps to Chinese Level 1, which offers a developmentally appropriate, task-based curriculum that emphasizes oral communication. The objective is to develop communication skills in a context that is meaningful to the students and can be used in their daily activities.

**French**
The third grade French program introduces students to this language through songs, games, exercises, group activities, and basic reading and writing in French. This goes hand-in-hand with the acquisition of the language through the Total Physical Response (TPR) method, proven to be very successful with students this age who respond well to concrete methods such as acting, mimicry, and singing. Students also learn about French culture in France as well as in other French-speaking countries. The program uses Aventures, Book I and II, which includes textbooks, workbooks, flashcards, and CDs for listening activities and songs. Teachers use multiple resources and websites for francophone culture exposure to engage students and reinforce the vocabulary. The BBC Early Advantage’s Muzzy Language Course is used as an enrichment tool. The program’s specific objectives are to introduce students to Hispanic American culture, to foster a positive attitude toward language learning, and to provide a solid foundation for basic communication skills.

**Spanish**
The third grade Spanish program is a dynamic, interdisciplinary, and developmentally appropriate program for young learners, providing language development through songs, stories, games, exercises, cooperative group activities, and basic reading and writing in Spanish. The goal is to provide an environment where students feel comfortable taking risks and making the inevitable mistakes that are part of the process of learning a foreign language. Students are also introduced to the cultures of Spanish-speaking communities. The program uses Descubre el español con Santillana, Book B, which makes language learning a cultural adventure. The main goal of Descubre in 3rd grade is the communicative competence of students in the Spanish language by means of cultural-awareness activities that focus on the gradual development of listening, speaking, reading and writing skills. In addition, the BBC Early Advantage Muzzy Language Course is used as an enrichment tool. The program’s specific objectives are to introduce students to Hispanic American culture, to foster a positive attitude toward language learning, and to provide a solid foundation for basic communication skills.
FOURTH GRADE

THE ARTS

Dance
The fourth grade dance curriculum focuses on developing creative problem-solving skills. Students will continue to explore different dance styles and their specific techniques. Students learn longer and more complex dance phrases, which also include different movement qualities as well as an understanding of spatial relations. Students also continue to practice their improvisational skills through different dance experiences.

Music
Fourth grade students improve their musicianship through the recognition of melodic notation, singing, movement, soprano recorder, and xylophone activities. Instruments of the orchestra and several composers are studied in conjunction with listening units. In addition, fourth graders sing in chorus or play in the band.

Chorus and Band
All fourth graders have the option to take chorus as a separate class from general music classes. Students experience age-appropriate repertoire while learning foundational vocal technique along with score reading in preparation for more advanced part-singing in later grades. Students perform at all the major school assemblies, a December concert with middle and high school singers, and the Independent School Treble Festival at the Washington National Cathedral.

All fourth graders have the option to learn a concert band instrument as part of beginning band. Being the first grade-level with instrumental instruction, students take forty-five-minute lessons once a week with their section learning to put together their instrument, play with appropriate technique, and read musical scores for band. Later in the year, full band rehearsals commence in order to prepare a culminating concert for students and families in May.

Visual Arts
Fourth graders further refine their technical and organizational skills. Long-term projects are assigned with a focus on more detailed and sophisticated solutions. Emphasis is placed on individual inventiveness stressing realism through a wide range of projects that include jungle drawings, 3-D clay figures, and papier-mâché cakes.

FOURTH GRADE SERVICE LEARNING

Fourth graders are big buddies to GDS PK & K students. They visit the classrooms regularly and form close friendships with their younger buddies. In addition, the school’s “celebrations” are times for service.

HEALTH AND WELLNESS

The fourth grade health curriculum focuses on healthy relationships. Throughout the year, students rotate through lessons that focus on responsible decision-making and the relationships one has with oneself, with others, and with the world at large. Students study personal health and fitness in physical education class and environmental health, disease prevention, human reproduction, and human development in science. Students also participate in lessons designed to help them begin to understand puberty and hygiene.

To further their understanding of responsibility and their capacity to problem solve, students participate in twice-monthly lessons with a school counselor on positive communication, conflict resolution, and managing feelings. They also have daily class meetings and frequent discussions about these topics in homeroom.

LANGUAGE ARTS

Increased competency, interest, and comprehension are the goals of the reading program. A variety of reading materials, including novels, nonfiction, and myths, as well as books on children’s instructional reading level, is read by children as part of the reading program. All children are required to read at least one novel and one nonfiction book each month, and they also have opportunities to read additional books for personal interest. In addition, children are encouraged to participate in the Independent School Treble Festival at the Washington National Cathedral.

Teachers encourage the students to write in many genres and across all curriculum areas. They learn to express factual knowledge and creative ideas in a logical and clear fashion.

Aspects of grammar and spelling are addressed through the writing process. Throughout the year children have opportunities to improve and build confidence in speaking to different audiences through various projects, discussions, and presentations.
**LIBRARY**

Fourth graders become more proficient at using the online catalog to find books for independent reading and research. Students develop and practice skills important to research, such as finding information in print and online databases. They also explore how authority might influence the reliability of a source. They practice formulating essential questions to guide their research and learn responsible documentation of chosen sources. Ample time is also provided for read-alouds and browsing for independent reading.

**MATH**

Throughout the year, fourth graders spend time discussing what it means to be a mathematician in order to establish positive math mindsets and attitudes. They work collaboratively to solve problems, use different tools to represent their thinking, find multiple solutions, and seek to understand different strategies and perspectives. They challenge themselves to justify their answers with sound logic and precise mathematical language. Each unit emphasizes conceptual understanding of topics, fluency with procedures, and problem solving.

Fourth graders build on their place value understanding to explore patterns in the base-ten system, place value notation, comparing and ordering multi-digit numbers, and rounding to any place. Students use their place value understanding to learn the concepts and procedures for multi-digit addition, subtraction, multiplication, and division. Fourth graders learn to use multiplication and division to find factors and multiples of given numbers, as well as to identify whether numbers are prime or composite. They use all four operations to solve word problems, including problems with more than one step.

In addition to exploring whole numbers, fourth graders extend their understanding of fractions. Students use models and patterns to understand fraction equivalence and practice various strategies to compare and order fractions. They begin learning operations with fractions, including addition and subtraction of fractions with the same denominator and how to multiply a whole number times a fraction. They extend their place value understanding to the decimal system, gaining a conceptual understanding of tenths and hundredths and how to compare decimals.

Students in fourth grade are also introduced to data interpretation, units of measurement, algebraic patterns, and geometry concepts. They gain a basic understanding of geometric measurement, including different types of angles, and how to classify shapes based on their properties.

**PHYSICAL EDUCATION**

P.E. classes in fourth grade apply the basic fitness, agility, and endurance movements, as well as manipulative ball, stick, and racquet skills learned in previous grades as students are introduced to more traditional organized games and activities. They continue advanced exploration of rhythm and kinesthetics in gymnastics and dance, both individually and in groups of varying sizes.

In the fall, students participate in basketball, fitness, badminton, soccer, tennis, Ultimate Frisbee, flag football, and volleyball. The winter schedule includes dance, gymnastics, and wrestling. Softball/baseball, lacrosse, and track-and-field are offered in the spring. Students are challenged to look at the importance of strategy and physical fitness.

**SCIENCE**

The science curriculum in fourth grade is designed as a culmination of topics, themes, and skills that students have learned through their first years of elementary exploration. As in the earlier years, the program is hands on, experiential, and allows students to learn about science the same way scientists learn when exploring for the very first time. Our goal for the year is to continue to foster students’ love for exploration, while refining skills introduced in prior years.

Our year-long theme is Energy. Students explore how their bodies and the bodies of all living things use energy to survive and reproduce. They explore how people use energy in their work and how different machines use energy. Students also explore the Earth to see how energy affects the Earth’s structure, formation, and motion over long and short periods of time. Finally fourth graders explore energy and the environment—where does and where can energy come from? How do our choices affect our lives and our planet? Along the way, students develop skills in making accurate and detailed observations, developing and supporting hypotheses with objective evidence, designing experiments, and presenting conclusions supported by strong, numerical data.
Integrated throughout the year are computer literacy and engineering skills. Students learn and practice presentations using a variety of media, learn how to take effective scientific photos and videos, and develop proficiency with scientific tools. The STEAM program is both integrated into the science curriculum and a stand-alone practice. Many fourth grade units have culminating building and design projects, and students are led through engineering challenges throughout the year.

SOCIAL STUDIES

Students study ancient cultures and civilizations. Children explore aspects of ancient life. There is a study of Greek history from the Greek expansion to “The Golden Age,” culminating in an exploration of the origins of democracy. The year ends with an Ancient Civilizations celebration, which includes dramatic performances, displays of student projects, and a luncheon. Fourth graders also engage in a study of the Ancient Mali Empire. Along with learning about the geography, history, religion, and economics of this region, students read and learn about historical figures and how they made an impact on the land and its people.

TECHNOLOGY

The goal of the fourth grade technology program is to provide both academic and social support, as students navigate the world of media at school and at home, and to assist students as they complete their long-term research projects.

Fourth grade students are given a GDS email account for the first time, use Google Drive, the internet, and iPad apps to increase their competency and broaden their understanding of the digital world. Students have regular access to technology tools, iPads, and Chromebooks. Each student has individual accounts in the form of a subscription to websites that allow for home/school connectivity and literacy and mathematics. These resources are used to introduce, review, and reinforce research, math, and writing skills.

The Digital Citizenship and Ethics units are structured aspects of the fourth grade curriculum. The fall focus is on appropriate email use and research skills. In the spring the focus shifts to the science curriculum, as students navigate the world of human reproduction. There are several Town Hall Meetings, small and large group discussions, online activities, videos, and written work.

WORLD LANGUAGES

In 2022–23, fourth grade students will continue language study and begin in Chinese, French, or Spanish. Starting in 2023–24, all fourth grade students will learn Spanish.

Chinese

The fourth grade Chinese program continues the students’ study of Chinese through natural approaches and Total Physical Response (TPR) method with songs, stories, games, exercises, and cooperative group activities. Students work on understanding tones and pronunciation in Chinese. They develop basic communication skills in listening and speaking, as well as basic reading and writing with Chinese characters. Character typing is introduced this year. This program continues with Easy Steps to Chinese Level 1, a developmentally appropriate, task-based curriculum that emphasizes oral communication skills. Character typing and multimedia resources online are also introduced. The course expands the students’ skills in a context that is meaningful to the students and can be used in their daily activities.

French

The fourth grade French program focuses on developing listening and speaking skills as well as cultural awareness. To enhance the latter, each student completes a project on the French-speaking country of his or her choice and further cultural exploration is introduced through French foods. Students are introduced to basic grammar and they learn to speak and write simple French sentences accurately. The Total Physical Response (TPR) method, proven to be very successful with this age student, continues to be used. Students enjoy learning French through singing, acting, games, technology, drawing, conversation, and writing. The text is *Aventures, the Complete French Language Development Program, Book II.*

Spanish

The fourth grade Spanish program is a dynamic, interdisciplinary, and developmentally appropriate program for young learners, fostering language acquisition through songs, stories, games, skits, cooperative group activities, and basic reading and writing practice. The goal is to provide an environment where students feel comfortable taking risks and making the inevitable mistakes that are part of the process of learning a foreign language. Students are also introduced to the
cultures of Spanish-speaking communities. The program uses *Descubre el español con Santillana, Book C*, which makes language learning a cultural adventure. The main focus of the program in 4th grade is the communicative competence of students in the Spanish language by means of cultural-awareness activities that promote the gradual development of listening, speaking, reading, and writing skills. In addition, the BBC Early Advantage Muzzy II Language Course is used as a language enrichment tool. The program's objectives are to introduce students to Hispanic American culture, to foster a positive attitude toward language learning, and to provide a solid foundation for the development of basic communication skills.
MIDDLE SCHOOL CURRICULUM OVERVIEW
FIFTH GRADE

THE ARTS

CORE CURRICULUM

Theatre
The fifth grade drama curriculum develops skills in the areas of improvisation, character development, ensemble work, and scene performance. Each drama class prepares a short play based on a children’s book. The performance is a collaboration with 5th grade music and is presented to the Lower School audience.

Music
In fifth grade music, students continue to develop performing skills on Orff instruments as they gain fluency in reading melodic and rhythmic notation. Activities include singing, playing recorder, playing xylophones and percussion instruments in ensemble, movement activities, compositions, and structured listening.

Visual Arts
The fifth grade curriculum fosters a deeper understanding of and familiarity with the materials and techniques used in art. Elements of 2- and 3-D design are the focus of long-term projects in printmaking, clay construction, painting, and a variety of other media.

ENRICHMENT CURRICULUM

Band
The band program continues in fifth grade with instrumental instruction once a week for 45 minutes as a section, once a week for 45 minutes as a grade-level, and once a week for 45 minutes combined with sixth grade to form an ensemble. Fifth grade band participants are members of the Middle School Band, which performs twice a year.

Chorus
As part of the Middle School Chorus, fifth graders meet two times a week for 45 minutes: one grade-level rehearsal and one combined rehearsal with sixth grade. Students learn the fundamentals of proper vocal technique through singing a wide range of vocal repertoire. The Middle School Chorus performs at major assemblies and festivals. All participate in an evening concert held each spring.

Dance
The fifth grade dance curriculum is “The World of Dance,” in which students learn a variety of dance styles and rhythms from all around the globe, including samba, hip-hop, tarantella, dhabke, among many others; students also learn formal dance styles including improvisation, acrobatics, and modern dance. They experience being part of a dance ensemble and perform in an evening showcase.

COMMUNITY ENGAGEMENT & EXPERIENTIAL LEARNING (CEEL)

Community Engagement and Experiential Learning (CEEL) is an important, ongoing component of every GDS student’s educational experience. Across their four Middle School years, students take part in “GDS Corps,” which connects them with opportunities to take informed action: in “my school,” “my city,” “my region,” and finally, “my country.” Through experiential exercises outside of the traditional classroom setting, they learn to be active, empathetic, and collaborative citizens and problem-solvers.

5th Grade Green Corps: In the 5th Grade CEEL program, students work on environmental justice initiatives in their own school community. They garden and improve on-campus green spaces, grow vegetables in classroom hydroponic systems, and learn about food justice issues in our neighborhood. The central theme of the Green Corps curriculum is community, which is instilled through active learning and discussion at GDS and field trips to local community partner organizations.

ENGLISH

The purpose of the fifth-grade curriculum is to improve interactive and reflective reading skills and increase proficiency in written work. Students are challenged to view texts through the framework of windows and mirrors and reflect upon who is represented in the stories they read. The reading program includes individualized reading activities, whole group reading, and vocabulary study.

Our texts for the year include fictional novels, non-fiction texts, poetry, and a variety of media sources. Texts are selected with an eye toward supporting student writing, building textual relationships, providing access to a wide variety of formats and voices, and encouraging students to develop anti-racist critical thinking skills. A highlight of the curriculum is
the Traveling Biographies study: an integrated unit of social studies, reading, report-writing skills, written papers, and oral recitations based on the student’s choice of a historical figure.

The 5th-grade grammar and vocabulary curriculum is built around mastery of 5th-grade level vocabulary and understanding the structure of a sentence. By learning parts of speech and applying the rules of grammar and mechanics, students become aware of the structure of the English language and begin a journey to becoming active participants in their own writing.

HEALTH AND WELLNESS
Fifth graders meet for Health & Wellness once a week, and each student rotates through five units over the course of the year, each of which addresses broadly a specific aspect of their health and wellness. In addition to providing accurate, evidence-based information, the curriculum and the pedagogy emphasizes student connection and reflection. Students engage with the material in active ways, they hone their skills by exploring how they might respond in particular age-appropriate scenarios that they are likely to encounter during their middle school journeys and beyond. Throughout the year, we will emphasize the importance of empathy, courage, and character, as we develop students—and human beings—who care deeply for themselves and for others.

In this course, the emphasis is on developing values and providing accurate, up-to-date and culturally responsive information, so that our students will have the skills and the knowledge to make informed, thoughtful decisions, in order to live balanced, purposeful, and joyful lives. The major topics are: 1) Sexual Education and Relationships: Navigating Physical Development, Friendships, and Intimacy; 2) My Brain: Understanding All That It Does and Taking Full Advantage of Its Power; 3) Mental Health: Understanding and Managing My Emotions; 4) Drugs, Alcohol, and Nutrition: Making Good Choices About What Goes Into My Body; and 5) Media and Digital Citizenship: Who am I Online and How Do I Navigate the Digital World?

HISTORY
Fifth grade history has an emphasis on freedom and justice in the United States. The course covers the events leading up to the American Revolution, as well as civics, civil rights, slavery, and the American Civil War. Students explore the triumph of the human spirit in moments of adversity and injustice throughout U.S. history. Through primary sources, guest speakers, film/videos, and literature, students examine these issues.

Readings, discussions, projects, oral and written reports, simulations, guest speakers, and on-site explorations enable students to become familiar with and experience the historical significance of this region. Geography is integrated with the lessons in history, literature, and world events. At the conclusion of each unit, evaluations, activities, and projects allow students to demonstrate knowledge and discuss the historical concepts associated with the topic.

INNOVATION - HOPPER STUDIO
Through Hopper Studio, 5th grade students will experience core design, prototyping, and problem solving skills. The students will experience a broad range topics, including computer science, textiles, digital storytelling, fabrication, graphic design, and reverse engineering through out the year. We use a combination of online materials and in-person instruction to helps students understand the why the skills are important. Each studio also makes sure that students get hands on experience with the tools and equipment.

LEARNING TECHNOLOGIES
Students in the fifth grade are eager to explore the digital world, and they do so with abandon, becoming more knowledgeable and nimble technology users. Fifth graders use digital tools to discover and collect information, write, edit, work collaboratively, and communicate with their teachers using GDS email, the MyGDS section of the school’s website, and shared Google documents. Access is plentiful, and fifth grade children enthusiastically use digital cameras, blogs, GDS online library databases, and curriculum-related websites to enrich or dig more deeply into their studies.

Chromebooks, as well as iPad and Google apps, help fifth grade students become stronger researchers, innovators, and problem-solvers, whether they are figuring out the range of solutions for a math problem or learning more about the giants in the world of social justice. In science, students use a computer-aided design app to fashion buckles and hooks—a part of the backpack challenge—and then they print out the object on a 3-D printer. Response systems such as Socrative
allow children to share their knowledge on various topics and teachers to gauge how much their students know and where more work is needed. At the end of the year, the fifth grade Traveling Biographies project requires students to use almost all of their technology skills as they create a project that requires researching an individual, choosing and evaluating resources, writing and editing a short biography and turning it into presentation that is shared, filmed, and performed throughout the school.

Because they are such fearless digital world explorers, fifth graders also participate in digital citizenship activities, learning more about ethics, digital footprints, decision-making, and privacy—concepts that we encourage them to consider whenever they use technology. Our goal is to help them become stronger and better citizens whether they work in the digital or non-digital world.

**LIBRARY**

To practice developing information literacy skills, fifth graders conduct research coordinated with the curriculum, most notably through a biography project. The online catalog, databases, and encyclopedias, as well as print encyclopedias and reference materials, provide students information in a variety of formats. Students learn how to use online tools to assist with creating a bibliography. Building on information literacy skills taught in 4th grade, 5th graders are asked to explore how author bias might reinforce stereotypes in works of fiction. Read-alouds and independent browsing time are also an important part of library time. Another important part of the 5th graders work through their library classes is preparing for the Hopper Awards, a unique celebration of books run entirely by students.

**MATH**

The fifth grade math course solidifies arithmetic operations, develops a conceptual understanding of numerical relationships, and strengthens spatial reasoning through visual modeling and geometry. Students gain fluency with addition, subtraction, multiplication, and division of whole numbers and decimals, as well as addition, subtraction, and multiplication of fractions. They also write and interpret numerical expressions, analyze patterns and relationships, and explore the place value system to gain a more conceptual understanding of arithmetic operations. An emphasis is placed on justifying reasoning both verbally and on paper. Students are encouraged to extend their learning through open-ended tasks and problem-solving activities. A variety of resources is used to enrich the Illustrative Mathematics 5th Grade curriculum and build a strong mathematical foundation.

**PHYSICAL EDUCATION**

The goal of P.E. classes in fifth grade develop skills, strategy, and a sense of teamwork through games and activities. Students apply basic and more advanced fitness, agility, and endurance movements, as well as manipulative ball, stick, and racquet ball skills. They continue their exploration of rhythm and kinesthetics in gymnastics and dance both individually and in groups of varying sizes, and they learn to link moves and stunts into routines.

Students participate in cooperative and competitive activities, which increase skill, strength, and fitness. In the fall, students participate in modified or regular sports such as basketball, soccer, tennis, fitness games, Ultimate Frisbee, flag Football, and volleyball. The winter schedule includes dance, gymnastics, and basketball. The year finishes with softball/baseball, lacrosse, and track-and-field.

Teachers structure lessons to develop a sense of personal and group safety, strategies to encourage participation in a variety of situations. Students are encouraged to develop an appreciation for more advanced techniques in movement and to incorporate health and wellness in their daily lives.

**SCIENCE**

Located in its own lab and taught by a designated science teacher, fifth grade science blends biology, chemistry, and physical science. Throughout the year, the fifth grade students participate in a hands-on science program that encourages them to develop the skills and understanding of doing science as real professional scientists would.

An emphasis is placed on the idea that for scientists to answer scientific questions they must design a fair experiment or investigation. Hands-on projects are used to explore biology, chemistry and physical science concepts.

By the end of the year the students will know (among other things) how a spring engine works and how to analyze an object by taking it apart, how much soap to use to make the
biggest bubble, what makes a crayfish lift its claws, what attributes make a rocket fly best, and how to build a wind turbine to produce the most voltage from a constant amount of wind.

**WORLD LANGUAGES**

**Chinese**
The fifth grade Chinese curriculum continues to develop the skills of oral communication, reading comprehension, character writing, and typing through the program Easy Steps to Chinese Level 1 and 2, which includes a task-based curriculum that emphasizes oral communication skills. Students use interactive computer games, online recording, and textbook audio to increase their understanding and practice applying the language to their daily lives, including topics such as physical appearance, clothing, countries and languages, school subjects, making phone calls, weather, season, and describing sickness.

**French**
The fifth grade French curriculum continues to refine students’ communication skills as third-year language students. Through the Discovering French program, which includes an integrated video to accompany each lesson, students share in the lives of dozens of young people from all over the French-speaking world. The vocabulary introduced in fifth grade emphasizes daily life. Grammar is taught for accurate self-expression, both orally and in written assignments. This program introduces the language in an easily comprehensible manner, using useful communicative phrases and expressions. Discovering French includes a book, a workbook, cassettes, a video, and online resources for francophone cultural aspects, including listening, reading and writing activities for more practice and reinforcement. It represents the first level of a program used throughout the Middle School.

**Spanish**
Students in fifth grade Spanish focus on enhancing communication skills in addition to gaining a more thorough understanding of Spanish speaking cultures. In class, students are provided with ample opportunities to internalize vocabulary and to use it creatively in new situations. The program, Realidades I (Units 1A–5A), features technology-based learning tools such as a companion website, an online interactive textbook, audio files, interactive computer games, and links to scenes of native speakers engaged in real-life situations and experiences. Everyday objects, art, literature, music, rhymes, readers, and projects are uniquely woven together throughout the curriculum, making it easy to integrate language, culture, and communication in the classroom. Based on solid research in second-language acquisition, the curriculum teaches students strategies to be effective communicators, whether listening, speaking, reading, or writing.
**SIXTH GRADE**

**ARTS**
Sixth grade students study theater, dance, music, and visual arts on a rotating basis for their core arts. For enrichment arts, students choose band, chorus, or dance.

**CORE CURRICULUM**

**Drama/Dance**
The sixth grade drama program focuses on performance. Students have a unit of movement improvisation, which includes both physical and combined physical and verbal improvisation. This exploration helps develop actors’ physical performance skills, their spatial awareness, and also the difference between solo and ensemble improvisation. Students further their performance skills through character development, creation and performance of original monologues, and presentation of self-directed scenes from various sources.

The sixth grade core dance program focuses on experiencing the history of dance through musical theater. In the first unit, students learn the evolution of the use of dance in musical productions while also learning the dances themselves. Folkloric dances, Baroque dance forms, and elements of jazz dance are just a few of the dance skills students learn in the first unit. In the second unit, students choose a musical theater production, study the importance of its message, create characters in relation to that study, and recreate a dance scene for a peer performance.

**Music**
Students continue to develop the skills studied in fifth grade and learn more advanced concepts in melody, harmony, rhythm, tone color, and form. They are challenged to create original compositions using these skills. Singing, movement, playing xylophones, and listening activities are a constant in the music room.

**Visual Arts**
Sixth grade students examine formal elements of design. Positive and negative space are explored in two and three dimensions. Close attention is paid to detail, complexity, and formal composition, with emphasis on planning and execution. Students are encouraged to apply their individual creativity through assignments that include linoleum-cut printmaking, collage, painting, perspective drawing, and clay construction.

**ENRICHMENT CURRICULUM**

**Band**
The band program continues in sixth grade with instrumental instruction once a week for 45 minutes as a section, once a week for 45 minutes as a grade-level, and once a week for 45 minutes combined with fifth grade to form an ensemble. Sixth grade band participants are members of the Middle School Band, which performs twice a year.

**Chorus**
As part of the Middle School Chorus, sixth graders meet two times a week for 45 minutes: one grade-level rehearsal and one combined rehearsal with the fifth grade. Students learn the fundamentals of proper vocal technique through singing a wide range of vocal repertoire. The Middle School Chorus performs at major assemblies and festivals. All participate in an evening concert held each spring.

**Dance**
The sixth grade dance curriculum is “The World of Dance,” in which students learn a variety of dance styles and rhythms from all around the globe, including samba, hip-hop, tarantella, dhabke, among many others; students also learn formal dance styles including improvisation, acrobatics, and modern dance. They experience being part of a dance ensemble and perform in an evening showcase.

**COMMUNITY ENGAGEMENT & EXPERIENTIAL LEARNING (CEEL)**
Community Engagement and Experiential Learning (CEEL) is an important, ongoing component of every GDS student’s educational experience. Across their four Middle School years, students take part in “GDS Corps,” which connects them with opportunities to take informed action: in “my school,” “my city,” “my region,” and finally, “my country.” Through experiential exercises outside of the traditional classroom setting, they learn to be active, empathetic, and collaborative citizens and problem-solvers.

6th Grade Exploration Corps: As part of their 6th-grade CEEL program, Exploration Corps students travel to all eight Washington, DC wards to learn about local history and the grade-level theme, culture. Through conversations with experts, artists, and activists, they discover a bit about what makes the nation’s capital and each of its neighborhoods special, before retelling the story of DC to the rest of the Lower Middle School community.
ENGLISH
In sixth-grade English, students begin the year by unpacking Rudine Sims Bishop’s article, “Windows, Mirrors, and Sliding Glass Doors.” This, then, becomes a critical framework as they develop their analytical reading and writing skills. An emphasis on student voice and choice empowers students to write confidently, value their authorial voice, and collaborate thoughtfully with their peers.

Our texts for the year include fictional novels, historical memoirs, graphic novels, nonfiction articles, poetry, and a variety of media sources. Texts are selected with an eye toward supporting student writing, providing access to a wide variety of formats and voices, and encouraging students to develop anti-racist critical thinking skills.

Our writing mechanics lessons cover punctuation, parts of speech, sentence structure, organization, and word choice. Students engage in these topics through direct instruction, the NoRedInk website, teacher-generated practice activities, and by looking critically at their own writing.

HISTORY
Sixth graders explore the theme of power by considering our driving question, “How do institutions of power develop?”
In an inquiry-based class, we dig for the roots of injustices and contemplate the change in societies over time. Students consider issues of equity, equality, and justice in the context of the government, culture, and religion in ancient Egypt. We also examine the ways the environment impacts the longevity and success of civilizations. From there, we investigate current events related to environmental injustice and look for connections from ancient to modern times. Student finalize their study of ancient civilizations through an examination of common cultural universals across the globe and time. We conclude our year with a study of religions and belief systems.

Throughout the year we seek to foster curiosity in an active, constructivist classroom through experiential and student-centered learning activities. Class work includes small and large group activities, multimedia projects, independent research, written work, and authentic experiences from religions and cultures studied. Collaboration, creativity, and communication are stressed throughout the year as students learn to develop their historical thinking and discover patterns in experiences throughout time.

Our mission of global competence prompts us to delve not only into the history of events in civilizations around the world, but also the cultures and religions thereof. Students are tasked with considering history and beliefs from multiple perspectives and approaching new ideas from a place of understanding and curiosity instead of allowing assumptions to cloud judgment.

HEALTH AND WELLNESS
Sixth graders meet for Health & Wellness once a week, and each student rotates through five units over the course of the year, each of which addresses broadly a specific aspect of their health and wellness. In addition to providing accurate, evidence-based information, the curriculum and the pedagogy emphasizes student connection and reflection. Not only do students engage with the material in active ways, they hone their skills by exploring how they might respond in particular developmentally appropriate scenarios that they are likely to encounter during their middle school journeys and beyond. Throughout the year, we will emphasize the importance of empathy, courage, and character, as we develop students—and human beings—who care deeply for themselves and for others.

The emphasis of the course is on developing values and providing accurate, up-to-date and culturally responsive information, so that our students will have the skills and the knowledge to make informed, thoughtful decisions, in order to live balanced, purposeful, and joyful lives. The major topics are: 1) Sexual Education and Relationships: Navigating Physical Development, Friendships, and Intimacy; 2) My Brain: Understanding All That It Does and Taking Full Advantage of Its Power; 3) Mental Health: Understanding and Managing My Emotions; 4) Drugs, Alcohol, and Nutrition: Making Good Choices About What Goes Into My Body; and 5) Media and Digital Citizenship: Who am I Online and How Do I Navigate the Digital World?

INNOVATION - HOPPER STUDIO
In Hopper Studio, 6th grade students continue to grow the skill from 5th grade Hopper Studio through “Level 2” activities. The skills include a broad range of design, prototyping and problem solving skills, including computer science, textiles, digital storytelling, fabrication, graphic design, and reverse engineering. The class culminates in a presentation of prototypes at our GDS Mini Maker Faire.
MATH
The goal of the sixth grade math course is to solidify concrete mathematical topics to begin making generalizations and using abstract reasoning. The sixth grade math course uses arithmetic operations to explore various topics including integers, rational numbers, proportions, expressions and equations, geometry, probability, and estimation strategies. Patterns and visual models are used to develop the meaning of a variable, which gives students the tools to begin to simplify expressions and solve basic equations. Students become familiar with mathematics through open-ended tasks, problem-solving activities, and projects. A strong emphasis is placed on the way students justify their reasoning verbally and on paper. A variety of resources is used to enrich the Accelerated Illustrative Mathematics 6th Grade curriculum and to build a strong mathematical foundation.

LIBRARY
Sixth grade students come to the library bi-weekly through their English classes to choose books for independent reading. Additional library classes are scheduled as needed to support students through research-based projects. Skills taught include refining a research question, choosing an appropriate source and creating a bibliography.

PHYSICAL EDUCATION
The sixth grade program refines motor skills and game strategies and works to improve student cooperation and teamwork. Drills are designed to improve skill, strength, fitness, and general comprehension of game concepts and strategies.

In the fall, students participate in soccer, tennis/badminton, and volleyball. The winter schedule offers gymnastics, wrestling, and basketball. The year concludes with baseball/softball and lacrosse. Sixth grade students are placed on organized teams with other classmates and participate in an intramural program in preparation for the seventh and eighth grade interscholastic program. They compete against their peers in an atmosphere that promotes healthy competition. The games are officiated by P.E. faculty; however, students are responsible for their team’s sports-citizenship, warm-up activities, and substitutions.

SCIENCE
Sixth grade science focuses on Earth science, and serves as an introduction to programming and robotics. Students actively explore and investigate real-world problems through hands-on activities and collaborative projects. The curriculum maintains an interdisciplinary approach and integrates the sciences with humanities and math.

In the coding and robotics curriculum, students tolerate and respond productively to failure, negotiate differences of opinions, and develop systematic approaches to problem solving. Over the course of these lessons, students learn programming basics, block-based coding, and introductory robotics. One of the tools we use is SNAP!, a block-based reimplementation of Scratch with added robotics capabilities. With the Hummingbird Robotics Kits, students make their own robots built out of a combination of kit parts, 3D printed elements, and crafting materials.

Additionally, students explore Earth science through computer simulations and hands-on activities. Students build earthquake-resistant structures to complement their study of earthquakes; students investigate Earth’s interior, plate tectonics, and volcanoes through Google Earth applications and explore themes of social justice at the intersection of climate change and poverty.

WORLD LANGUAGES
Chinese
The sixth grade Chinese curriculum continues to emphasize listening, speaking, reading, character writing, and typing. Chinese culture and oral communication skills are emphasized through the use of music, exercises, cooperative group activities such as role play and skits, as well as corresponding with students in China. Online resources including interactive flashcards, computer games, and voice recording are used to reinforce students’ practice. Grammar structures are emphasized more this year to ensure accurate communication.

French
The sixth grade French curriculum continues to develop student listening and comprehension skills. It also promotes communication skills through acquisition of vocabulary in context. There is a focus on cultural awareness of the French-speaking world through a video introduction to each lesson. There is an emphasis on grammar and verb conjugation for
accurate oral and written communication. Students are given frequent opportunities for practice in guided lesson activities. This program uses *Discovering French Bleu*, which includes a book, a workbook, and other online resources for francophone cultural aspects, including listening, reading, and writing activities for more practice and reinforcement.

**Spanish**

An introductory course is offered to students who wish to start Spanish in the Middle School. The sixth grade Spanish curriculum focuses on language and culture. For continuing Spanish students, the sixth grade curriculum continues with *Realidades I* (Units 5B–9A). This material offers students a wide range of useful, creative, and motivating tools to build language proficiency and to facilitate a smoother transition to a more advanced level. Cultural and video materials enrich a new thematic vocabulary, and technology is integrated with the instruction of each chapter. The curriculum website, an interactive textbook, a video mystery (¿Eres tú, María?), computer lab time, research project assignments, and text preparation are some of the tools that teachers use during instruction or as alternative assessment. Extra vocabulary and grammar practice meet the needs of a diverse population within the classroom. The program also presents heritage readers, a wide selection of thematic and authentic readings from around the Spanish-speaking world, better preparing our students to be active participants in the global community. Through a variety of activities in meaningful contexts, we ensure that students develop increased fluency in the four language skills: reading, writing, listening, and speaking.
SEVENTH GRADE

THE ARTS
During seventh grade, students have the opportunity to choose two enrichment arts. Students can elect the same subject for both classes or take two different disciplines within the visual and performing arts depending on their interests. All are year-long courses.

Band
Students who have been playing an instrument continue with three weekly band rehearsals in seventh grade. As part of the Middle School Band, they perform in the winter and spring.

Chorus
As part of the Middle School Chorus elective, seventh graders meet for three 45-minute classes a week, two grade-level rehearsals, and one combined rehearsal with the eighth grade. Students learn the fundamentals of proper vocal technique through singing a wide range of vocal repertoire. The Middle School Chorus performs at major assemblies and festivals. All participate in the evening concert held each spring.

Visual Arts
This class encourages self-expression and an opportunity for students to focus on long-term projects and work at their own pace. Individual ideas are expressed through multimedia sculpture, clay constructions, painting, and graphic design.

Theater
This course focuses on the development of acting and directing skills, playwriting, and theatre tech. Students participate in a variety of improvisational exercises on their own, with partners, and in a group. These improvisations are either movement-based or both physical and verbal. Students begin the study of character development through both writing and acting exercises. Students also experience scene development as actors and as directors. They learn about dramatic structure and objectives through writing, acting, observing, and directing their own self-devised scenes. Students may also explore non-scripted scenes using props, established situations, and suggestions from classmates. Spontaneity and creativity are important tools fostered through this improv process.

Dance
The 7th grade dance curriculum is “The World of Modern Dance,” in which students learn and experience, through technique classes and choreography, the history of modern dance in America. 7th grade enrichment dance students join their 8th grade counterparts as part of a dance ensemble and perform together in an evening showcase.

ATHLETICS
The mission of the Georgetown Day School MS athletic program is to provide all students with the opportunity to represent the school and compete interscholastically in a wide variety of sports. It is our hope that each student athlete will experience the challenges and triumphs that are unique to sport. GDS athletics provide a supportive atmosphere in which coaches challenge the intellectual and physical abilities of our student athletes, foster strength of character, and encourage concern for others. It is our goal that the athletic experience of each student will be framed within a context that instills self-discipline, dedication, pride in performance, respect for others, and a lifelong love of sport.

COMMUNITY ENGAGEMENT & EXPERIENTIAL LEARNING (CEEL)
Community Engagement and Experiential Learning (CEEL) is an important, ongoing component of every GDS student’s educational experience. Across their four Middle School years, students take part in “GDS Corps,” which connects them with opportunities to take informed action: in “my school,” “my city,” “my region,” and finally, “my country.” Through experiential exercises outside of the traditional classroom setting, they learn to be active, empathetic, and collaborative citizens and problem-solvers.

7th Grade Care Corps: New in the 2022-23 school year, the 7th Grade Care Corps program centers around mental health: self and community wellness exercises and the exploration of local youth advocacy initiatives. Students consider, “how can I take care of myself while taking care of others?” and “how is self care an essential component of effective activism?” The mental health curriculum is inclusive of different identities and wellness modalities, and will center around the core theme of connection.
ENGLISH

The English program in the seventh grade consists of studies in literature, writing, grammar, and vocabulary. Our texts for the year include fictional novels, short stories, historical memoirs, non-fiction articles, and a variety of media sources. Texts are selected with an eye toward supporting student writing, providing access to a wide variety of formats and voices, and encouraging students to develop anti-racist critical thinking skills. Each unit is approached through a historical lens, looking closely at the time when the piece was written, when it is set, and how our contemporary context influences our understanding of the writing.

As we move through the year, students are challenged with a broad range of writing assignments. Early in the year, they learn about the tools and techniques that contribute to advanced narrative writing. Then, students demonstrate their understanding of authorial voice and characterization by producing pieces that extend beyond the novel they read. Later in the year, students learn to write in an academic voice, unpack the structures that support creating longer pieces, and produce coherent and well-organized writing on demand.

Our writing mechanics lessons cover various topics, including academic writing style, complex sentence structure, organization, integrating direct quotations, paraphrasing, and citation format. Students engage in these topics through direct instruction, the NoRedInk website, teacher-generated practice activities, and looking critically at their own writing.

Our vocabulary work is grounded in Vocabulary From Classical Roots, which emphasizes using Greek and Latin roots to decode new words.

HEALTH AND WELLNESS

Seventh graders meet for Health & Wellness once a week, and each student rotates through five units over the course of the year, each of which addresses broadly a specific aspect of their health and wellness. In addition to providing accurate, evidence-based information, the curriculum and the pedagogy emphasizes student connection and reflection. Not only do students engage with the material in active ways, they hone their skills by exploring how they might respond in particular developmentally appropriate scenarios that they are likely to encounter during their middle school journeys and beyond. Throughout the year, we will emphasize the importance of empathy, courage, and character, as we develop students—and human beings—who care deeply for themselves and for others.

The emphasis of the course is on developing values and providing accurate, up-to-date and culturally responsive information, so that our students will have the skills and the knowledge to make informed, thoughtful decisions, in order to live balanced, purposeful, and joyful lives. The major topics are: 1) Sexual Education and Relationships: Navigating Physical Development, Friendships, and Intimacy; 2) My Brain: Understanding All That It Does and Taking Full Advantage of Its Power; 3) Mental Health: Understanding and Managing My Emotions; 4) Drugs, Alcohol, and Nutrition: Making Good Choices About What Goes Into My Body; and 5) Media and Digital Citizenship: Who am I Online and How Do I Navigate the Digital World?

INNOVATION - HOPPER QUEST

Hopper Quest is a trimester-long course. Seventh and eighth grade students enrolled in fitness during the fall, spring, or winter season, will engage in a Hopper Quest experience. Students enrolled in this course design and pursue independent projects, work with mentors, and navigate a journey exploring topics and challenges meaningful to them. We start with a curriculum designed to help them harness their creativity and learn frameworks of thinking. Then the students set their learning path with the support of a mentor. At the end of each trimester, we hold a Hopper Quest Gallery where students share about their learning journey to a broad audience.

HISTORY

Seventh grade history examines power by considering the ways in which institutions of power can be broken down or reorganized. Our focal point is global revolutions and power struggles. Students begin the year discussing the Haitian Revolution and considering the impact of colonization and revolution into the present day. From there, students move to the Indian subcontinent where they consider the competing philosophies of social change that led to independence and partition. In the spring, students learn about the Iranian Revolution and what structures need to be in place for revolutions to achieve their goals.
Throughout the year, we will consider the impact of historical colonization on revolution by using essential questions to drive examination and analysis. In the study of each region, we will contemplate the influences of geography and cultural exchanges and attempt to identify challenges or obstacles to stabilizing post-revolutionary societies. Students track themes embodied in the power struggles throughout the year, gathering data and information, which they will use to create their culminating “Power Project” performance—a year-end multimedia exhibition.

Each class is a community, and we seek to stimulate curiosity and critical thinking. Class work includes small and large group discussions, analysis of primary and secondary sources, thinking routines, expository writing, special projects, simulations, debates, and research. Our goal is to foster global competence by recognizing perspectives, communicating ideas, and brainstorming solutions to current problems.

**LIBRARY**

Seventh grade students use the library for research across the curriculum. With the help of classroom teachers and the librarian, seventh grade students are refining their ability to craft a research question and then choose and document the appropriate sources to support that question. Students are encouraged to visit the library on their own for selection of independent reading materials, and the librarian periodically visits classes to highlight specific material to spark student interest.

**MATH**

**Pre-Algebra**

Seventh Grade Pre-Algebra is an opportunity for students to explore math from multiple perspectives and apply previous understandings of mathematics. The contextual problems and applications allow students to reason abstractly while solidifying their numerical fluency. Students look for patterns and develop generalizations of them using algebraic expressions. They engage in lessons and tasks exploring the cultures and people who shaped ancient and modern number systems. Spatial reasoning is developed through the two- and three-dimensional geometry concepts that are foundational to this course, including polygons, circles, and the Pythagorean Theorem. While students refine their skills with simplifying expressions and solving equations, the process is emphasized by justifying and communicating their reasoning. Students develop flexible thinking by approaching tasks with multiple problem-solving strategies. Opportunities to interpret and analyze data and summarize findings using statistics are integrated throughout the course.

**Algebra I**

Fundamental algebraic concepts are viewed from multiple perspectives to help students develop the ability to conceptualize abstract ideas and apply their learning to unfamiliar situations, thereby, building confidence and a strong foundation for upper-level mathematics. Content includes investigating linear, quadratic, and exponential equations, systems of equations and inequalities, polynomials, and rational expressions. Students solve problems independently and collaboratively developing their communication and critical thinking skills and to build self-reliance and perseverance. An emphasis is placed on the way students justify their reasoning and communicate their thinking both verbally and on paper. Regular problem-solving sets allow students to use their prior knowledge to solve multi-faceted math tasks and extend their learning. A strong foundation in and mastery of all the topics, concepts, and skills of a broad-based pre-algebra program are essential prerequisites for success in Algebra I. Multiple resources, texts, and computer-based applications are used to enrich the curriculum.

**SCIENCE**

Seventh grade science begins with an in-depth study of the Chesapeake Bay, which includes an overview of the geography, geology, and environmental issues of the Bay. This study includes a three-day trip to the Bay with the Chesapeake Bay Foundation. Students test local water and soil samples to analyze their local ecosystem’s health.

From the very large ecosystem of the Chesapeake Bay to the very small work of microscopy, the next unit of study delves into the tiny world of cells and the foundation of life. Types of cells, structure and function of organelles and Mendelian genetics are covered. Students complete a cell analogy project to concretely understand the parts of a cell.

The final third of seventh grade science is devoted to the study of human body systems, and uses microscopes, laboratory experiments, and models to aid student understanding.
WORLD LANGUAGES

Chinese
The seventh grade Chinese program continues to emphasize listening, speaking, character reading, and typing. This course strengthens students’ grammar and vocabulary. Chinese culture and oral communication skills are emphasized through the support of music, exercises, cooperative group activities such as role-play and skits, as well as activities connecting with students in China including video chats and pen-pal letters. Online resources including interactive flashcards, computer games, and voice recording are used to reinforce students’ practice.

French
This course builds a solid conversational base by developing listening and speaking skills. Classes are conducted almost exclusively in French. Reading and writing are introduced progressively and are always preceded by aural-oral drill. Grammar is presented to develop accurate oral patterns. The majority of class time is spent developing active, practical use of French, chosen for its everyday use and relevance to the students’ lives and interests. The text provides information about other French-speaking cultures. Tapes of native speakers supplement the text and sharpen listening comprehension.

Spanish
The seventh grade Spanish curriculum helps students further develop skills in speaking, reading, listening, and writing. Designed to provide multiple learning opportunities for language usage, phonics, and language structure, the curriculum uses Realidades II (Units 1A–5A), which offers students challenging goals, effective feedback, and a variety of activities. Knowledge of basic structures and vocabulary is reviewed and expanded to enable students to communicate at a low- to intermediate-level in real-life situations.

The program incorporates a full range of material including technology components such as online tutorial practices, end-of-chapter tests, interactive games and competitions, and an interactive textbook to meet the needs of students in today’s Spanish classroom. The seventh grade curriculum teaches culture and communication through colorful geography maps, key vocabulary, basic grammar reviews, reading and writing activities, hands-on activities, interdisciplinary study, and a mystery video story (En busca de la verdad), among other approaches. Our goal in seventh grade is to develop the students’ ability to use the target language for real purposes in culturally appropriate ways. The 21st century global community awaits these students who are eager to communicate and understand
EIGHTH GRADE

THE ARTS

During eighth grade, students have the opportunity to choose two enrichment arts. Students can elect the same subject for both classes or take two different disciplines within the visual and performing arts depending on their interests. All are year-long courses.

Band
The eighth grade band program is the culmination of study begun in fourth grade. Students rehearse for three periods a week and perform in the winter and spring.

Chorus
As part of the Middle School Chorus elective, eighth graders meet for three 45-minute classes a week, two grade-level rehearsals, and one combined rehearsal with the sixth and seventh grades. Students learn the fundamentals of proper vocal technique through singing a wide range of vocal repertoire. The Middle School Chorus performs at major assemblies and festivals. All participate in an evening concert held each spring.

Dance
In 8th grade dance, students experience a more rigorous training in modern dance, choreography, improvisation, and performance of their "World of Contemporary and Post-Modern Dance" curriculum. 8th graders also enjoy opportunities to perform with the HS dance troupe, Fata Morgana, and at off-campus performances as well as a regional dance festival. Lastly, 8th grade enrichment dance students join with their 7th grade counterparts as part of a dance ensemble and perform together in an evening showcase.

Visual Arts
This enrichment class provides an atmosphere that encourages self-expression and is an opportunity for students to focus on long-term projects and work at their own pace. Individual ideas are expressed through clay constructions, mixed-media sculpture, painting, and graphic design.

Theater
This course focuses on the development of acting and directing skills, playwriting, and theatre tech. Students participate in a variety of improvisational exercises on their own, with partners, and in a group. These improvisations are either movement-based or both physical and verbal. Students begin the study of character development through both writing and acting exercises. Students also experience scene development as actors and as directors. They learn about dramatic structure and objectives through writing, acting, observing, and directing their own self-devised scenes. Students may also explore non-scripted scenes using props, established situations, and suggestions from classmates. Spontaneity and creativity are important tools fostered through this improv process.

ATHLETICS

The mission of the Georgetown Day School MS athletic program is to provide all students with the opportunity to represent the school and compete interscholastically in a wide variety of sports. It is our hope that each student athlete will experience the challenges and triumphs that are unique to sport. GDS athletics provide a supportive atmosphere in which coaches challenge the intellectual and physical abilities of our student athletes, foster strength of character, and encourage concern for others. It is our goal that the athletic experience of each student will be framed within a context that instills self-discipline, dedication, pride in performance, respect for others, and a lifelong love of sport.

COMMUNITY ENGAGEMENT & EXPERIENTIAL LEARNING (CEEL)

Community Engagement and Experiential Learning (CEEL) is an important, ongoing component of every GDS student’s educational experience. Across their four Middle School years, students take part in “GDS Corps,” which connects them with opportunities to take informed action: in “my school,” “my city,” “my region,” and finally, “my country.” Through experiential exercises outside of the traditional classroom setting, they learn to be active, empathetic, and collaborative citizens and problem-solvers.

8th Grade Advocacy Corps: In the capstone year of GDS Corps, 8th graders select a social justice issue to spend the year studying in their history classes and through the CEEL curriculum. In the fall, they make connections to the heart of their chosen issue through conversations with individuals with relevant lived experiences. In the winter, they use their heads to examine policy underpinnings, interview experts with different viewpoints, and turn in Constitutional Issue Papers. Finally, in the spring, they employ their hands in a day of action off
campus supporting community partner organizations working on their issues, and by creating culminating Citizens of GDS podcast episodes to educate the broader GDS community. The hope is that by the end of 8th grade, students have a deep understanding of the grade-level theme of citizenship, and intrinsic motivation to engage as an active, productive member of society.

ENGLISH

In eighth-grade English, students begin the year by unpacking Chimamanda Ngozi Adichie’s TED Talk “The Danger of a Single Story.” This speech is the yearlong framework for their development as analytical readers and writers. The texts for the year include classic and contemporary fiction, short stories, non-fiction articles, podcasts, primary historical sources, poetry, and various other media. Texts are selected with an eye toward supporting student writing, providing access to a wide variety of genres and authorial voices, and promoting anti-racist critical thinking skills.

Early in the year, students explore the theme of identity through narrative writing. From there, students write persuasive and expository paragraphs and essays, building their capacity to use primary and secondary sources effectively. Toward the end of the year, students participate in a poetry unit where they read and write in various forms.

Throughout the school year, students participate in Socratic Seminars to achieve a deeper understanding of the ideas and values in the novels. This format for group conversation challenges students to drive the conversation and construct meaning through disciplined analysis, interpretation, listening, and participation.

Writing mechanics lessons cover various topics, including academic writing style, complex sentence structure, active and passive voice, integrating secondary sources, paraphrasing, and citation format. Students engage in these topics through direct instruction, the NoRedInk website, teacher-generated practice activities, and looking critically at their own writing.

Our vocabulary work draws on language found in the assigned texts. Through direct instruction, quizzes, and creative writing assignments, students learn to demonstrate their understanding of figurative language, word relationships, and nuances in word meanings.

HEALTH & WELLNESS

Eighth graders meet for Health & Wellness once a week, and each student rotates through five units over the course of the year, each of which addresses broadly a specific aspect of their health and wellness. In addition to providing accurate, evidence-based information, the curriculum and the pedagogy emphasizes student connection and reflection. Not only do students engage with the material in active ways, they hone their skills by exploring how they might respond in particular developmentally appropriate scenarios that they are likely to encounter during their middle school journeys and beyond. Throughout the year, we will emphasize the importance of empathy, courage, and character, as we develop students—and human beings—who care deeply for themselves and for others.

The course emphasis is on developing values and providing accurate, up-to-date and culturally responsive information, so that our students will have the skills and the knowledge to make informed, thoughtful decisions, in order to live balanced, purposeful, and joyful lives. The major topics are:

1) Sexual Education and Relationships: Navigating Physical Development, Friendships, and Intimacy;
2) My Brain: Understanding All That It Does and Taking Full Advantage of Its Power;
3) Mental Health: Understanding and Managing My Emotions;
4) Drugs, Alcohol, and Nutrition: Making Good Choices About What Goes Into My Body; and
5) Media and Digital Citizenship: Who am I Online and How Do I Navigate the Digital World?

INNOVATION - HOPPER QUEST

Hopper Quest is a trimester-long course. Seventh and eighth grade students enrolled in fitness during the fall, spring, or winter season, will engage in a Hopper Quest experience. Students enrolled in this course design and pursue independent projects, work with mentors, and navigate a journey exploring topics and challenges meaningful to them. We start with a curriculum designed to help them harness their creativity and learn frameworks of thinking. Then the students set their learning path with the support of a mentor. At the end of each trimester, we hold a Hopper Quest Gallery where students share about their learning journey to a broad audience.
HISTORY

Eighth grade history at GDS focuses on United States history. Our year begins with indigenous history and takes us through the early twentieth century. Eighth graders continue to investigate the overarching Middle School history theme of power by considering how systems of power operate within the United States. Throughout the year, students view these events through a lens of social justice, considering how social identifiers like race, religion, gender, socioeconomic status, country of origin, etc. impacted the experiences of different communities living in the modern U.S.

This class covers the following topics: Colonial America & Independence; Civics and The Constitution; The Industrial Revolution; The Civil War & Reconstruction; and The Turn of the 20th Century.

Eighth grade history’s biggest project is the Constitutional Issue Paper (“CIP”), which students work on throughout the year. Students will investigate a contentious Constitutional Issue and evaluate multiple views of the issue before they present their own conclusions and suggestions for policy changes. Students’ research includes the opportunity to interview people with careers in relevant fields.

LIBRARY

Through teacher and librarian supported classroom based projects, eighth grade students are refining their information literacy skills, such as in-text citations, recognizing author bias, and discerning the reliability of information. Eighth grade students are also encouraged to come to the library on their own for selection of independent reading materials. The librarian visits classes to introduce reading material that complements course topics.

MATH

Algebra I and Geometry are offered in eighth grade.

Algebra I

Fundamental algebraic concepts are viewed from multiple perspectives to help students develop the ability to conceptualize abstract ideas and apply their learning to unfamiliar situations, thereby, building confidence and a strong foundation for upper-level mathematics. Content includes investigating linear, quadratic, and exponential equations, systems of equations and inequalities, polynomials, and rational expressions. Students solve problems collaboratively to use their communication and critical thinking skills and independently to build self-reliance and perseverance. An emphasis is placed on the way students justify their reasoning and communicate their thinking both verbally and on paper. Regular problem-solving sets allow students to use their prior knowledge to solve multi-faceted math tasks and extend their learning. A strong foundation in and mastery of all the topics, concepts, and skills of a broad-based pre-algebra program are essential prerequisites for success in Algebra I. Multiple resources, texts, and computer-based applications are used to enrich the curriculum.

Geometry

In Geometry, students refine both inductive and deductive reasoning skills while applying varied strategies to solve contextual problems and construct mathematical arguments using proofs. The course includes an in-depth analysis of geometric figures and their properties requiring students to act as thinkers by making connections between lines, planes, two-dimensional polygons and circles, and three-dimensional shapes. Algebra is heavily integrated into the geometry curriculum, oftentimes with a focus on coordinate and analytical geometry. Through the use of hands-on exploration, constructions, and online applications such as DESMOS and Geogebra, students uncover connections between geometric properties and relationships and their engineering and scientific applications. Students learn by doing, working collaboratively to make discoveries and expand on newly introduced concepts for higher-order thinking. Self reliance, critical and creative thinking, and the ability to justify their reasoning through written work are at the center of the course. Multi-faceted regular problem-solving enriches class-based investigations and cross-curricular projects.

SCIENCE

Eighth grade science builds on skills taught throughout the Middle School science program. Laboratory experiments, centered on the study of matter and energy, serve as a foundation for scientific investigation and experiential learning. Students learn that mass is conserved when it changes state, and that matter has characteristic properties that can be used to identify unknown substances. Critical-thinking skills are emphasized through numerous writing assignments, including lab reports in which students use data collected in the lab as supporting evidence for analysis.

Eighth-grade science classes introduce students to the Periodic Table of the Elements, chemical reactions, and
separation techniques. At the end of the year, students are equipped to analyze, separate, and identify the different parts of an unknown mixture. Careful data collection, safety, collaboration, and study skills are emphasized throughout the year. Physical science is further explored through the study of physics including projectile motion, force, velocity, and the electromagnetic spectrum.

**WORLD LANGUAGES**

**Chinese**
The eighth grade Chinese program continues to develop students' skills in listening and speaking Chinese, as well as reading and writing Chinese characters. Chinese culture and oral communication skills are emphasized with the use of music, stories, exercises, videos, and cooperative group projects such as in-class skits. This course builds the students' grammar and vocabulary, and continues basic listening, speaking, reading, and writing skills in a context that is meaningful to the students and can be used in the students' daily activities.

**French**
The eighth grade French program continues to expand the students' linguistic capabilities in listening, speaking, reading, and writing. New grammatical concepts are introduced progressively while at the same time provision is made for review and reinforcement of already acquired language patterns. The text captures students’ interest with real-life conversational situations between young people from the French-speaking world and its cultures. The students have opportunities to work in groups on cultural and cross curricular projects. Students have also the opportunity to develop and record their own dialogues.

**Spanish**
The curriculum in eighth grade Spanish completes the second half of *Realidades* II and continues using a recursive scope and sequence to revisit themes from previous chapters. This natural recycling allows for important review and re-teaching. Students expand their vocabulary, grammar, and cultural understanding as they visit each theme in greater depth and improve their listening, reading, speaking, and writing skills. As in previous years, the program offers a complete selection of materials and technology components to meet the needs of students in today’s Spanish classroom. The eighth grade curriculum introduces culture and communication through geographic maps, key vocabulary, grammar reviews, reading and writing activities, Videohistorias, language and culture connections with other disciplines, hands-on activities, videos, and speaking opportunities.
School should prepare students for life as well as college. A GDS education engages students with real-world problems, motivates them by placing them at the center of their learning, teaches them to collaborate across difference, empowers them to connect with resources both at school and beyond our campus, challenges them to think critically and creatively, and prepares them to be active citizens in the world. These beliefs guide the High School to recommend the following course of studies for all its students.

RECOMMENDED COURSE OF STUDIES

The recommended course of study for the High School is:

- 4 years of English
- 4 years of mathematics
- 4 years of a world language
- 3–4 years of natural and physical sciences
- 3–4 years of history and social sciences
- 1 year each of performing and studio arts
- 2 years of physical education
- 9th grade seminar

MINIMUM REQUIREMENTS

The minimum requirements for receiving a Georgetown Day School diploma are:

- Arts, Performing: One year of performing arts.
- Arts, Studio: One year of studio art.
- Community Service: At least 60 hours of service (See guidelines under Community Service.)
- English: Four years of assigned English.
- Mathematics: Three years of math while in high school.
- World Languages: Two successive years of the same language completed in high school.
- Ninth Grade Seminar: A required course for all 9th graders. The course covers study skills and strategies for success in high school, as well as concepts of identity development and cross-cultural communication.
- Physical Education: Two years of physical education, taken freshman and sophomore year.
- Science: Three years, of which one is a life science (9th grade biology) and one is a physical science.

COURSE LOAD

The required minimum for each semester’s work is five academic courses, unless special circumstances arise. Many students elect to take additional academic, fine arts, or elective courses. GDS encourages all students to pursue their individual passions while exploring our diverse curriculum. Students who persist through our curriculum will be well positioned to gain admission to many colleges and universities. Highly selective colleges will expect students to explore beyond the minimum requirements for a diploma. All students must have at least one free period.

COURSE LENGTH

Except where noted, most courses are yearlong (two semesters).

COURSE CANCELLATION

At the School’s discretion, any course in which the enrollment is fewer than ten students may be canceled.

INDEPENDENT STUDY POLICY

If a student in their junior and senior years has a particular interest in a subject that is not covered in our curriculum, they may apply to complete an Independent Study. An Independent Study course is the equivalent of a regular academic course with the same level of rigor expected.

- Independent Studies will be evaluated on a Pass/Fail basis.
- Each Independent Study will be limited to a maximum of three students.

In order for an Independent Study to appear on a GDS transcript the Independent Study must be:

- Supervised by a member of the GDS faculty
- Approved by the Assistant Principal for Academics
- Approved by a Department Chair
To be approved for an Independent Study, a student must submit an application (available in the Assistant Principal for Academics’ office) that clearly and thoroughly describes the work to be completed, the resources necessary for completion of the work, the scheduled meeting times between student and faculty mentor, and an explanation for how the student work will be assessed. Copies of all assessments that are given in an Independent Study will be filed with the Assistant Principal for Academics. Proposals for Independent Study will not be accepted after the deadline for adding a course.

**PASS/FAIL OPTION (JUNIORS AND SENIORS)**

Students in their junior and senior years have the option to take one course pass/fail each semester.

**Eligible Courses**
The P/F option may not be used to fulfill department requirements but could apply to courses that fulfill the five academics per semester requirement. A select group of courses determined by individual departments may not be taken pass/fail. See stipulation about sequential courses under pass/fail grading (next).

**Pass/Fail Grading**
A 60 or better is a passing grade. In sequential courses (i.e., math, science, and language courses), a 70 or better is required to move on to the next course. Students whose average grade is between 60 and 70 may not be eligible to take the next course in the sequence without intensive remedial work as determined by the department chair and Assistant Principal for Academics.

**Pass/Fail Process**
Students may take one course pass/fail per semester and have at least four courses that are assessed with grades. Students may elect to take a course P/F up through the end of the first progress period. Students must request to take a course P/F from the appropriate department chair and also get approval from the College Counseling Office and the Assistant Principal for Academics.

**COMMUNITY ENGAGEMENT**
Students must complete 60 hours of approved service at no more than two locations. At least 20 hours must be completed by the beginning of junior year. The 60-hour community-service requirement must be completed and submitted to the Community Engagement and Experiential Learning office by January of senior year.

**UPPER LEVEL (UL) COURSES**
Upper Level (UL, marked UL) courses represent the most challenging level of coursework offered at GDS. Students in UL courses examine the material at the highest levels with sustained intellectual independence. These classes often involve increased expectations for time spent out of class.

**LIBRARY • INFORMATION & LITERACY SKILLS**
The GDS library program supports the curricular mission of GDS by providing print and online collections, managing welcoming library spaces, encouraging exploration of identity via interactions with media, supporting independent reading and individualized learning, and teaching information skills. In the High School, the librarian teaches students effective research skills and information-finding strategies, including efficient searching, critical evaluation of sources, and ethical and responsible use of intellectual property. This occurs through project planning with other departments, co-teaching within classrooms, stand-alone lessons, reference interactions, and individualized instruction. The library is available for reference, research, and readers’ advisory for the entire community, encouraging lifelong habits of library use to prepare our students for life beyond GDS.

**NINTH GRADE SEMINAR**
Diversity and Equity: The Intersections of Identity
The 9th grade seminar will focus on identity and points of connections within groups. The start of high school is a key time to examine identity and how it reflects personal as well as community values. Building a campus culture that embodies equity, inclusion, and engagement is essential for equipping today’s students with the knowledge and skills necessary to successfully and compassionately address the increasingly complex challenges of our global society.

**SENIOR QUEST**
All seniors participate in a Quest, or investigation, in which they apply their curiosity, talents, interests, skills, and knowledge to a question, task, creation, or issue of relevance to the student in particular as well as to a significant constituency outside of the GDS community. Quests call for teamwork, a multi-disciplinary approach, community involvement, demonstrable social value, and presentation and communication skills. Quest proposals are due in February of senior year. Work on a Quest may begin once approval has been granted by the Senior Quest Committee, composed of GDS staff and seniors. Seniors present their Quests results to parents, staff, and invited guests at the Senior Quest Night in late May.
ARTS: PERFORMING

Graduation Requirement: One year of Performing Arts

One semester courses may be combined with any other one or two semester course to meet the full year Performing Arts credit. The two semesters do not have to be in the same academic year.

THEATER

Acting I
Practice the basic skills required to be an actor. Begin your journey with an exploration of the actor’s vocal, physical, and psychological instrument while building skills and creating characters using fun exercises. Discover in what ways an actor’s body, voice, and imagination are used when creating/performing a character. Experience how warm-ups for each part of the actor’s instrument help ready an actor to perform. Discuss the negative effects of performance anxiety and explore ways to release oneself from its power. Connect and embrace the power of working as an ensemble in a safe learning environment. Uncover clues an actor uses when analyzing a script.

Acting II
Prerequisite: Permission of instructor or audition
Plunge into scene work through in-depth text analysis, concentrated partner work, and full investment in given circumstances. As the first step in the continued study of the craft of acting, students in this class explore ways to activate contemporary texts in rehearsal and performance.

Scene Study
Prerequisite: Acting II
In this course students will apply the lessons of Acting I and II to the preparation, rehearsal, and presentation of scenes, focusing on contemporary realist plays, mid-20th century to the present. Scenes are presented in class for critique, then reworked to explore and apply the feedback. Technique exercises will be introduced diagnostically to address problems as they arise. An important course for students wishing to participate in extracurricular theater, including directing a One Act.

Directing for the Stage
Prerequisite: One course from the GDS High School Performing Arts Department acting track and permission of instructor.
This course for the advanced theater student concentrates on the vision and the methods of significant directors of American, European, and Japanese theater, including Stanislavsky, Meyerhold, G.B. Shaw, Peter Brook, Suzuki, Joseph Papp, and Craig Wolfe. Plays studied include those from the classical repertoire, including Shakespeare, Chekhov, and Brecht, as well as contemporary works by recognized playwrights such as Mamet, Fugard, McNally, and N. Shange. Students study the theatrical values in Ancient Greek theater. Students both direct and act in each other’s projects and direct designers and actors from other classes in the department. Student work is performed in the Lunchbox Series and the spring theater arts showcase. Instructors include a director, acting coaches, and a variety of guest artists. This course is recommended for students who wish to direct a show in the Winter One Acts series. Students attend several professional productions.

Theater Production
Theater Production examines elements of technical theater and how the practical skills gained in that subject can apply to everyday living. This is a project-based class grounded in the different areas of technical theater: scenic, lighting, sound, props, and costumes. Students will learn about the history of each discipline, complete a project on design, as well as a project on a skill from that discipline. Technical skills include drafting, understanding light plots and instruments, sound manipulation, basic sewing skills, basic power tool usage, and problem-solving, as students expand their skill sets through hands-on-learning.

Advanced Theater Design and Technology (Spring)
Prerequisite: Theater Production course or equivalent experience.
This course continues the progression from Theater Production by focusing on design and advanced technical skills. In the design part of the course, each student will select a theater discipline (scenic, lights, props, sound, or costume). Through script reading, analysis, research, discussion, and presentation, students will hone their design and communication skills, following the regional theater process, from first production meeting to presentation of final designs. For the technical elements of the course, each student will work with the instructor on an area to increase their skills. Projects will vary by discipline and will also identify real-world challenges. This process will equip students with the skills necessary to meet those challenges. Students will have access to working professionals in the field.
AutoCad (Fall)
AutoCad is a computer-aided design program that is the industry standard for architecture, engineering, and theater design, as well as many other professions. In this class, students will learn 2D drafting basics and expand into 3D drafting. Students will apply principles learned in geometry and other math courses to create drawings that are clear communication tools. This type of drawing asks students to determine how structures work and how to describe that information graphically. The goal of the course is for students to be able to create clear drawings as tools of communication, and in the process to increase their spatial awareness.

DANCE
Introduction to Ballet (Full Year)
Ballet is a multi-level class that focuses on learning and refining basic technique as well as learning beginning ballet steps. Once students have mastered basic skills and steps, higher level technique is incorporated into the understanding and exploration of both ballet choreography and history. Through exercises, choreography and discussions, the course emphasizes not only specific technique, but also polishing one’s own style. The course will involve significant physical study with additional work including viewing films of live dances, discussion, and writing projects.

Ballet II (Full Year)
The study of classical ballet for the student with previous experience. Students will work on refining their execution of techniques, including turn out, placement, and alignment. Students will practice in detail the mechanics, dynamics and artistic qualities of ballet. Students will perform in Lunchtime Showcases. Class includes trips to the ballet and visits from guest artists. This course is highly recommended for students interested in any and all forms of dance and for those wishing to choreograph for Fata Morgana.

Introduction to Tap Dance (Fall)
Tap is a multi-level class that focuses on learning and refining basic technique, as well as learning beginning tap steps. Once students have mastered basic skills and steps, higher level technique is incorporated into the understanding and exploration of both tap choreography and history. Through exercises, choreography, and discussions, the course emphasizes not only specific technique, but also polishing one’s own style. The course will involve significant physical study with additional work including viewing films of live dances, discussion, and writing projects.

Tap II (Spring)
This class is for students who have cultivated the basic vocabulary of tap and have at least one year of experience. Students will learn more skills and vocabulary and develop strong technique. Students will explore original combinations, simple time steps, paddle and roll combinations, and music fundamentals. Students will perform in Lunchtime Showcases. Class includes trips to musical theater and visits from guest artists.

Introduction to Jazz Dance (Spring)
This is a historically informed jazz technique class. Class will focus on rhythm and syncopation, musicality, and improvisation. Dancers will develop flexibility, strength, range and ease of motion, and technique. Working from a strong center, dancers will find freedom in the use of torso and limbs, a sense of dynamics and initiation of movement, and balance and control in breath. An important class for students wishing to participate in extracurricular musicals or choreograph for Fata Morgana. Class will include trips to musical theater and visits from guest artists.

Jazz Dance II (Fall)
Prerequisite: Audition and permission of instructor
A historically informed jazz technique class for dancers with at least one year of experience in jazz or ballet. Class will focus on rhythm and syncopation, musicality, and improvisation. Dancers will work on flexibility, strength, range, ease of motion, and maintenance of technique. The class is structured to allow dancers to work to their fullest potential, using technique to efficiently and effectively communicate with the choreography. With traditional jazz combinations, dancers become magnetic and confident performers. Recommended for students wishing to participate in extracurricular musicals or choreograph for Fata Morgana. Class will include trips to musical theater and visits from guest artists.

MUSIC
Music Theory Fundamentals (Fall)
This course will focus on foundational components of music theory including pitch, pitch class and class collection; rhythmic hierarchy; simple and compound meters; major and minor diatonic scales; pentatonic and whole tone scales, melodic and harmonic scales; and metric displacement. The course will examine both Western and non-Western techniques such as West African rhythmic construction, Indian Raga scale construction and application, Middle

HIGH SCHOOL CURRICULUM OVERVIEW

2022-23 COURSE OF STUDY • 51
Eastern modal construction and application, and Asian melodic techniques. This course is recommended for students wishing to take the UL Music Theory and Composition course.

**Music Theory and Composition**

*Prerequisite: One course from the GDS HS Performing Arts Department and permission of instructor*

In this course students will learn the rudiments of musical structure and form. Topics include sound and notation, rhythm, melodic writing, ear training, and chord progressions. In addition to these theoretical concepts, student will work with the compositional elements of orchestration, balance in structure, motivic development, and setting text to music. Students will also learn keyboard technique. Students will present their arrangements and compositions at public performances.

**Music and Power (Fall)**

Societies have used music as a tool of power for centuries. This course will examine how music was used in terms of nationalism, subversion, war, and protest. How did the Nazi party use the music of Carl Orff? How did American hymnody promote the Civil War? What are the hidden messages of American slave music? What does Rap really talk about? Why is the Broadway musical so catchy yet so thought-provoking? Probing these topics and more will arm students with the skills to critically examine the music we consume and mine it for deeper truths. Throughout the semester, students taking this course will perform appropriate music associated with the topics studied. Additionally, they will offer a public presentation of their findings from this course.

**Music and Religion (Spring)**

The Western music canon is rooted in Christianity. When tracing the history of Western music, scholars begin in the Medieval church and track its development against Western Christian polity, reformation, and rebellion. But what of other major world religions? How does music function in religious settings outside of Christianity? How did non-Western music develop in conjunction with other religions? This course explores the partnership of music and religion and will compare its religious function in Buddhism, Hinduism, Judaism, Islam, and Christianity. Throughout the semester, students taking this course will perform appropriate music associated with the religions studied. Additionally, they will offer a public presentation of their findings from this course.

**VOCAL MUSIC**

**Chamber Choir**

*Prerequisite: Audition/Permission of the Instructor.*

Chamber Choir is a 24-voice mixed choir and open to all GDS students. The curriculum includes music from the Western canon, Africa, Asia, Latin America, and the Muslim World. Particular attention is paid to music literacy, music theory, music appreciation, and some form and analysis. The course is designed for s. Included are a Spring Break performance tour and a rigorous concert schedule, which includes participation in GDS Singers at the final rehearsal and concert of each semester.

**TOLV (Full Year)**

*Requirements: For students in grades 10–12 who have completed one year in GDS’s choral ensemble. TOLV is by permission of instructor and limited to 3 soprano, 3 alto, 3 tenor and 3 bass voices.)*

TOLV is a highly selective, 12-voice, mixed ensemble. The ensemble explores chamber music of the Western canon, Africa, the Muslim world, Asia, and Latin America. Particular attention is paid to ensemble building, music literacy, intonation, international phonetic alphabet, and appropriate performance practice.

**INSTRUMENTAL MUSIC**

**Jazz Improvisation and Creative Music Lab (Introductory Level)**

Jazz Improvisation Lab is open to all students of any instrument. The Lab provides answers to the question, “What do I play?” when asked to improvise. The course develops instrumental technique, as well as a foundation in music theory. Activities in class include reading notated music, playing by ear, improvising, and learning to read chord progressions and notation. The course includes opportunities to perform on and off campus throughout the year.

**Jazz and Creative Music Chamber Ensemble (Advanced Levels II–IV)**

*Prerequisite: Jazz Improvisation. Open by audition or permission of instructor.*

Jazz Chamber Ensemble is an advanced-level jazz ensemble for mixed instruments. Improvisation, written music, and ear-training/theory are incorporated into the creation and performance of arrangements of music from the standard
jazz repertoire and creative music. Students will participate in several performances through the year on and off campus. Jazz Chamber Ensemble and Jazz Ensemble-Big Band will combine for special events and repertoire presentations.

**Jazz - Large Ensemble (Advanced Levels II-IV)**
*Prerequisite: Jazz Improvisation. Open by audition or permission of instructor.*
The Jazz Ensemble is a classic big band (reeds, trombones, trumpets, guitar, piano, bass, drums) as well as other instruments (flute, clarinet, vibraphone, violin, etc.) performing music from the Swing Era and beyond. Written music, “head” arrangements, improvisation, and more culminate in performances with concerts of music by Duke Ellington, Count Basie, Sun Ra, and contemporary big band composers. Students will participate in several performances throughout the year on and off campus. Jazz Chamber Ensemble and Jazz Large Ensemble will combine for special events and repertoire presentations.

**Jazz UL**
*Prerequisite: Permission of instructor*
This course focuses on repertoire for small groups and on improvisation techniques. Students will hone skills acquired in previous jazz courses. Arranging, theory, and the business of making music will be explored in order to give the students a fuller picture of a music career. Students will record, tour, and participate in competitions and festivals.
ARTS: STUDIO

Graduation Requirement: One year of Studio Art
The studio art department offers a comprehensive curriculum that fosters skills and creativity in a variety of media. Students may begin their study of art in ceramics/sculpture, photography, drawing/painting, digital media, graphic design, or film and animation. Advanced courses are available once students have completed a first year in a specific course. Students are advised to begin their study of art in 9th or 10th grade in order to meet the requirement for graduation and to allow time for advanced study for those inclined. The curriculum emphasizes the study of fine arts, digital arts, and principles of design and complements these skills with research projects including museum visits and historical and contemporary artist studies.

Foundations in Ceramics & Sculpture
This course introduces students to a range of three-dimensional media, with a strong emphasis on wheel-thrown pottery. Students learn how to prepare clay, use a variety of glazes, and successfully operate a pottery wheel. During the first semester, students complete a broad range of wheel-thrown vessels, while in the second semester the course focuses on a more hand-built and sculptural approach to form. Work will range from realism to abstraction. Students electing this class should expect to get messy and be challenged to be resourceful and imaginative in their art-making.

Advanced Ceramics & Sculpture
Prerequisite: Foundations in Ceramics and Sculpture
Advanced Ceramics and Sculpture is for students who are exceptionally motivated and work well independently. Although not specifically an AP course, students may elect to focus their work on preparation of an AP 3D portfolio. Students will work directly with concepts of design and articulate artwork that clearly reflects an understanding of these principles. In addition to refining skills and building their craft as potters, students will work on themes and identity-based projects, and anatomical studies using the skeleton and live models.

Foundations in Drawing & Painting
This introductory drawing and painting course offers training in basic and advanced techniques of drawing and painting. Foundational skills will include color theory, composition, proportion, value, form, brushwork, perspective, and working from life. Students work in a variety of traditional and digital methods that challenge them to see more analytically while gradually expanding their repertoire of skills. Students work toward building a portfolio of artwork that meets the criteria for advanced course work and reflects their unique vision.

Advanced Drawing & Painting
Prerequisite: Foundations in Drawing & Painting
This class is for highly motivated students who want to further their studies in fine, abstract, and conceptual art as well as prepare a portfolio for the UL Master Studio: Interdisciplinary Workshop course or college applications. Students also learn to develop a variety of traditional and multimedia skills. Projects are designed to help students further develop their technical and conceptual skills, including landscape painting, life drawing and oil painting, technical and architectural drawing, themed and identity-based projects, and anatomical studies using the skeleton and live models.

Master Studio: Interdisciplinary Workshop
Prerequisite: Advanced Painting & Drawing or Advanced 2D Art
This course is geared toward students wishing to be challenged by further developing their portfolios and/or pursuing the AP exam. Highly motivated students should be resourceful, creative thinkers, and be able to work independently while experimenting with various mediums in their work. Students will experiment with any of the following projects: prompt-based projects, group projects, murals, large-scale paintings, social justice projects, original drawings, multimedia, graphic design, and digital art. Students will also learn how to prepare high-quality college portfolios, write artist statements, develop online portfolios, apply for internships, and participate in major scholarship competitions.

Foundations in Digital Photography
This course provides a comprehensive experience in current photographic processes. It introduces students to the technical and visual processes of photography. Students examine how digital technology has transformed photography from a medium of absolute record to one of limitless manipulation of digital images with Adobe Photoshop. Assignments initially stress the essentials of the photographic process and then shift toward fostering an understanding of the expressive elements.
of the medium. Students follow an introductory photography curriculum that covers both technical and aesthetic aspects of this rapidly evolving medium using digital cameras in conjunction with the computer programs Adobe Photoshop and Lightroom. Students learn the essential principles of composition and design while exploring classic photographic subjects such as architecture, still life, portraiture, landscape, and social documentary. In addition, an art history research project will focus on prominent photographers. Each student is expected to develop a portfolio that meets assignment objectives and demonstrates technical competence.

**Advanced Digital Photography**

*Prerequisite: Foundations in Digital Photography*

Through a series of portfolio-building assignments, advanced photography students continue their creative, visual, and technical inquiry into traditional and/or color digital camera operation. There is a strong emphasis on the photograph both as fine art and as an interrelated extension of the students’ interests and perceptions. Advanced metering, studio lighting, alternative printing techniques, Lightroom, and Adobe Photoshop manipulations are taught. Initially assignments stress the essentials of the photographic process, however as the year progresses students gain an understanding of the expressive elements of the medium. Students are expected to build a comprehensive portfolio in addition to designing and hanging an exhibition for the community.

**Foundations in Digital Media & Graphic Design**

Students will learn the basic principles of design through the following projects: magazines, album covers, game covers, identity projects, posters, logos, and infographics using Adobe Photoshop, Illustrator, and InDesign. Students will also learn how to develop a concept, work with typography, create original digital graphics, and manipulate and create composite photos.

**Foundations in 3D Modeling & Design**

The new course will explore the basics of 3D Modeling using both the latest in laser cutting technology and Adobe Dimensions, Photoshop, and Illustrator to create and apply realistic textures, lighting principles and techniques, and camera types and their appropriate usage. The laser cutter will be used to create prototypes from materials such as wood, plastic, and metal.

**Foundations in Digital Film & Animation**

This introductory course takes a new approach to learning about cinema and animation as an important medium for self-expression and as an art form. Students will be learning a variety of video techniques, including: scriptwriting, storyboarding, camera work, lighting, video editing, animation, and special effects. Students will create hands-on art projects with sound design and learn basic production methods of shooting and editing with Adobe Premiere. The second semester will focus on animation and using traditional tools combined with the latest animation software. Students will attend field trips to museums and watch movie screenings of current shorts and features. Students will also learn film history and appreciation.
COMMUNITY ENGAGEMENT

Graduation Requirement: Students must complete a minimum of 60 hours of approved social impact work during their four years at the High School.

At least 20 hours must be completed by September of junior year. The 60-hour community service requirement must be completed and turned in to the Community Engagement & Experiential Learning office by second semester of senior year.

No more than 40 hours earned on a service trip, camp, or experience outside the DMV will count toward the requirement.

Community Engagement at GDS
Community engagement has been a bedrock of GDS’s educational mission since the school’s founding. We firmly believe that independent community service and activism helps prepare GDS students for life beyond our school walls. Students who interact within and outside of their communities, who have engaged with—and learned about—a variety of individuals, and who have had to think critically about real-world problems, leave GDS prepared for the 21st century with better communication and collaboration skills, an ability to think creatively about the world’s challenges, and tools that empower them to address the systemic inequities that exist in the world.

Independent Engagement Guidelines
- Approved before the work begins.
- Completed in an unpaid capacity with established nonprofit organizations or at the School.
- Free to the organization's consumers.
- Local, at least in part.
- Focused on social and/or environmental justice and increasing equity of opportunities, rights, and resources for all.
- Unique to this requirement (the service must be done for this requirement and not also applied for a scout project, court ordered, or for another organization), and
- Supervised by someone unrelated to the student

Students must track their approved action work and submit experiences for credit through MobileServe. The entry process requires a written reflection, as well as verification from a supervisor by email and/or proof of service through a certificate, timesheet, etc. https://www.gds.org/academics/community-engagement

GDS Student-Led Community Service Clubs
GDS students find participation in student-led community service clubs particularly rewarding. Students can receive community service credit for ongoing involvement in a service club. Current service clubs include teaching and tutoring, environmental work, and informal mentoring through arts instruction.
English

Graduation Requirement: Four years of assigned English
It is in the shared encounter with great literature that we reflect on our deepest humanity, discover our most inventive thinking, and hone our powers of articulation (both written and spoken) in order to participate in the most crucial conversations about the world and our place in it.

English 9

English 9 serves as an introduction to literature and composition. Common texts include the Book of Genesis (selections), Hurston's *Their Eyes Were Watching God*, Yang’s *American Born Chinese*, Homer’s *The Odyssey*, and a Shakespeare play (*Romeo and Juliet* or *A Midsummer Night’s Dream*). Individual teachers supplement these texts with works of their own choosing, including Foer’s *Extremely Loud and Incredibly Close*, Cisneros’s *The House on Mango Street*, Achebe’s *Things Fall Apart*, Whitehead’s *Sag Harbor*, Woodson’s *Red at the Bone*, Torres’s *We the Animals*, and Brontë’s *Jane Eyre*. English 9 texts focus on journeys—both metaphorical and physical—in which the protagonists adolescence as they struggle toward the formation of tested and tempered identities. The readings and discussions introduce students to basic literary concepts pertaining to epic, dramatic, and narrative forms. Class discussion generally focuses on the assigned reading and emphasizes the interdependence of close attention to textual detail and sound interpretive generalization.

Students write poems, stories, tests, and extended critical essays, all of which constitute “major assignments”—but the abiding focus of the writing project is the five-paragraph essay. Beginning with single paragraphs in response to relatively narrow writing prompts, students are guided toward an essay whose thesis unfolds like a short, discursive sonata. The format enables students to present a long thought in an efficient and logically satisfying array. Once students have mastered this paradigm—and have felt the momentum that coherent and efficient presentation can give to their thinking—this model can guide them to more sophisticated argumentative designs.

Along with the writing project, there is a good deal of grammar instruction. Formal grammar lessons are reinforced by teachers’ extensive notations in the margins of student compositions and by one-on-one meetings with students as they plan drafts and revisions. Teachers work to deliver their students to tenth grade with a firm grasp of the mechanics of strong writing, together with an alertness to the accent of mature prose.

English 10

In the readings and discussions of English 10, we carry the ninth-grade theme of identity formation into more problematic terrain, attending to the ways in which identity can be compromised by its social and cultural context. We also pay more attention to intertextuality, to the ways in which parallels and symmetries between texts—even texts so far afield that they could not have influenced each other—can open rich, interpretive terrain. Reflecting this new level of complexity in text and discussion, the writing project of English 10 tackles increasingly complex issues of form in both analytical and creative writing. Analytical essays move beyond the boundaries of the five-paragraph essay to explore diverse argumentative forms that respond organically and nimbly to the textual issues at hand. Creative writing becomes increasingly investigative and responsive to the literary work being studied, while still honoring the student’s powerfully individual writing voice.

Our shared texts are the Gospel According to Mark, Morrison’s *Song of Solomon*, Fitzgerald’s *The Great Gatsby*, Smith’s *Life on Mars*, Lahir’s *Interpreter of Maladies*, Baldwin’s *Giovanni’s Room*, and English Romantic poetry. These texts are supplemented by a variety of works chosen by individual teachers, with a particular emphasis on texts with female protagonists; these might include Barry’s *One Hundred Demons*, Alderman’s *Disobedience*, Gyasi’s *Homegoing*, DeLappe’s *The Wolves*, or Sophocles’s *Antigone*.

English 11

The first semester of English 11 is a writing course that we call “Argument.” Our shared texts are the Declaration of Independence, Thoreau’s “Civil Disobedience,” King’s “Letter from Birmingham Jail,” the Alcatraz Proclamation, Morrison’s *Playing in the Dark*, Jacob’s *Incidents in the Life of a Slave Girl*, the Declaration of Sentiments, “Woman-Identified Woman,” and essays by bell hooks. Other texts might include Baldwin’s *The Fire Next Time*, Lorde’s “The Master’s Tools Will Never Dismantle the Master’s House,” and Chisholm’s “Equal Rights for Women.” These works are supplemented by a wide variety of readings on contemporary issues of the day—for instance, transgender rights, immigration, and the criminal justice system—along with some classical models of persuasive discourse, all chosen to bring the students’ argumentative skills into contact with questions beyond our standard literary topics. In the readings and in discussion, there is a strong focus on issues of social justice and on the logical skills and habits of mind that enable one to take well-grounded and effective
stands in the conversations that shape our national life. The second semester focuses on the figuration of American identity in American poetry and fiction. Our shared texts include poems by Walt Whitman, Emily Dickinson, and Elizabeth Bishop; short stories and novellas by Herman Melville, Nathaniel Hawthorne, and Edgar Allan Poe; and one novel, le’s The Gangster We Are All Looking For. Additional texts might include Bennett’s The Sobbing School, Orange’s There There, and Parks’s The Red Letter Plays.

English 12

English 12 serves as the culminating experience of a student’s progress through the GDS English curriculum. Common texts include Shakespeare’s Hamlet, Forrée’s Fefu and Her Friends, Morrison’s Beloved, a Faulkner novel (The Sound and the Fury or As I Lay Dying), and a Greek tragedy (Aeschylus’s Agamemnon or Sophocles’s Oedipus Rex). These are supplemented by such texts as Bronte’s Wuthering Heights, the graphic-novel version of Auster’s City of Glass, and Smith’s White Teeth. These texts are chosen for the richness and intensity of their disruptions and for the ways in which they challenge their protagonists to find some sort of decency and fulfillment in worlds where the moral compass seems to be spinning, but also for the ways in which they challenge the students to find interpretations sufficiently capacious and stable to honor the scope and integrity of the works.

The writing assignments include both creative and critical responses to the reading. Following the trajectory of the three previous courses, they hold the students to high standards while giving them room for aspiration and self-expression. While students are reading Faulkner, for instance, and studying the signature Modernist technique of “stream of consciousness” narrative, they’re asked to write narratives of their own, in which they attempt to capture the deflected monologue of a mind guided by surprise, both expressing and taking in the converging streams of sensation and reflection. Literary analysis, however, continues to be the course’s center of gravity and a realm of particular growth. In class, students focus intensely on the page, with a view to stirring up interpretive possibilities to be explored in the writing, where audacity and originality are encouraged and acknowledged, even as we continue to reinforce the protocols of lucid, logically coherent, and intellectually responsible prose.

The final writing assignment is the Senior Paper. The paper is a work of original critical inquiry on a text not included in the 9–12 curriculum. The project, a sustained act of “guided autonomy,” gets under way in March with a proposal naming the text to be studied and stating the questions that will guide the student’s reading and thinking. The writing begins in earnest after Spring Break. Regular classes convene less often, and students meet at least once a week with their teachers to present their work in progress, meeting internal deadlines, until the final draft arrives on the teacher’s desk on the last day of Senior classes.

JUNIOR AND SENIOR ENGLISH ELECTIVES

The following electives are offered both semesters. Students may take these courses as a semester course in the fall or in the spring or as a yearlong course. (Elective offerings may change from year to year.)

The Age of Shakespeare

While this course focuses on the dramatic works of Shakespeare (plays and sonnets) within their social, cultural and theatrical context, there will be an equal focus on interpreting scenes and monologues from the plays into production design and/or performance.

Contemporary Women’s Literature (not offered in 2022-23)

“I write hungry sentences,” says poet Natalie Diaz. “They want more and more lyricism and imagery to satisfy them.” All of the works we’ll read in this course share this hunger for beauty and power in their language, as Diaz describes her poems’ hunger. Equally important, our books share an appetite that looks up off the page and at the world around us. These books are hungry to disrupt authority, challenge presumptions, and unsettle truths—authority, presumptions, and truths predicated on (mis)conceptions of gender as it intersects with class, race, ethnicity, religion, sexuality. Our work—our joy—will be to sit at the table with these hungry texts.

The reading for this class will include work from among the following: Salvage the Bones (Jesmyn Ward); Another Brooklyn (Jacqueline Woodson); Dry Land (Ruby Rae Spiegel); Department of Speculation (Jenny Offill); A Visit from the Goon Squad (Jennifer Egan); Nevada (Imogen Binnie); Severance (Ling Ma); Bright Dead Things (Ada Limón); When My Brother Was an Aztec (Natalie Diaz); Conversation with Friends (Sally Rooney); Lost Children Archive (Valeria Luiselli); and Black Light (Kimberly King Parsons). To complicate and deepen our encounters with this literature, we will also be reading critical theory from various disciplines, including feminist theory, queer theory, and critical race theory.
Contemporary Art, Literature, and the (Dis)Empowered Body

In a cross-disciplinary dive into a diverse array of contemporary fiction and contemporary visual art, we’ll ask the vexed questions: What does it mean to inhabit a body in our present moment? Why is it that occupying a body is so utterly exhilarating and also so wholly disquieting? The writers and artists with whom we’ll spend the semester are especially concerned with marginalized bodies existing in spaces and structures designed to diminish, deform, or even destroy them. How can these marginalized bodies shift from disempowerment to empowerment, and, crucially, how might literature and art live up to their elusive promise of transformation?

Our fiction reading may include Paul Beatty’s *The Sellout*, Ottessa Moshfegh’s *My Year of Rest and Relaxation*, Natalie Diaz’s *Postcolonial Love Poem*, Colson Whitehead’s *The Nickel Boys*, Alison Bechdel’s *Fun Home: A Family Tragicomic*, Imogen Binne’s *Nevada*, Art Spiegelman’s *Maus*, Anthony Veasna So’s *Afterparties*, Carmen Maria Machado’s *Her Body and Other Parties*, and Robin Coste Lewis’s *Voyage of the Sable Venus and Other Poems*. Our visual artists may include Kara Walker, Mickalene Thomas, Titus Kaphar, Decolonize This Place, Nan Goldin, Zanele Muholi, Bill Traylor, Catherine Opie, Miguel Luciano, Shirin Neshat, Roberto Lugo, Glenn Ligon, and Fred Wilson. Essay and theory writers may include Zadie Smith, Olivia Laing, Michel Foucault, Judith Butler, Hilton Als, Fred Moten, Laura Mulvey, and Saidiya Hartman. Films may include *We Are the Best!* and *La Haine*.

Creative Writing (not offered in 2022-23)

Creative Writing is an elective which, on some days, will look like other literature classes, with focused and searching discussions of iconic texts, but most days will be a workshop for young poets, playwrights, and storytellers. We will be writing frequently, but each of the writing assignments will begin with reading. Our texts will be *The Norton Anthology of Poetry*, drama and short fiction anthologies that will vary from year to year, and several anthologies of short plays where we will find models, thematic cues, and a tradition of English poetry, drama, and fiction that we can’t help but join, and modify by our own contributions to it. In this class, however, we’ll try to be particularly mindful of the ways in which the work we’re doing relates to the work of artists who have written before us. Writing will be due every week or so, which should give us time to read and discuss each other’s work in class, and at the end of the semester each student will submit a portfolio of finished work that reflects in some integral way the student’s response to the notes she has received on work in progress, but also reflects the student’s own developing taste and artistic motives. (In each semester, we’ll be exploring different genres. The emphasis of the first semester will be poetry. The emphasis of the second semester will be playwriting.)

Philosophy and Literature

“No one is needed to tell us that poetry and philosophy are akin,” Wallace Stevens declares in *The Necessary Angel*. “Truth is the object of both.” Are literary texts vehicles for philosophy? What are the advantages of each way of driving at truth? How can we best understand the world and our place in it? We’ll examine the possibilities of philosophy and literature as ways of knowing and wondering. We’ll take up several questions—what can we know? what is death, and should we fear it? how should we live ethically? and more—and see how philosophy and literature each address them. Plato banished poets from his ideal city (but elsewhere praised them); Philip Sidney considered poetry to unite the best qualities of philosophy and history. So even as literary writers ask philosophical questions, they wonder whether and why literature is the right mode in which to do so. We’ll wonder along with them. Philosophical texts may include Plato, Aristotle, Lucretius, Descartes, Berkeley, Kant, Nietzsche, and Charles Mills. Literary texts may include Thomas Mann, Fyodor Dostoevsky, W.B. Yeats, Wallace Stevens, Ralph Ellison, Marilynne Robinson, Don DeLillo, and Rebecca Goldstein.
The GDS HS History and Social Science department seeks to confront, interrogate, and connect issues of race, equity, and diversity throughout our wide-ranging curriculum, uses of scholarship, and approaches to learning. As we explore diverse historical, economic, and political developments, teachers and students are grounded by the spirit of inquiry as they actively work together as antiracist practitioners to make connections, discern patterns, and perceive the contingencies of the past. Through thinking, speaking, writing, research, and analysis, we strive to see the past as not a litany of progress but as a series of fits and starts that both respond to and are shaped by the individuals within it. Together, our work in understanding the past helps to inform our understanding of the present as we seek to bring our ideas and actions to bear upon current inequities and matters of social justice, both within and beyond our school community.

History 9: Communities and Change
This dynamic course allows students to actually “do” history as they develop key skills in historical analysis, writing, and research and confront the challenges of applying historical concepts to the world around them in a variety of ways. Students begin by examining the communities that comprise and surround Washington, DC, using historical records, archival newspapers, oral histories, and other sources to explore long-held assumptions and little known facts about life in the nation’s capital. Special attention is paid to the thriving Black community in DC and its persistence, despite challenges, over time. Questions regarding politics and socioeconomics, race and ethnicity, insiders and outsiders, and continuity and change will be explored as students learn to extract, synthesize, and analyze information in order to come up with conclusions about historical patterns and processes. In the second semester, students move to the wider world as they examine current global conflicts in places of origin for many of DC’s newer residents. Throughout the year, students will produce regular research and position papers and comparative essays and they will have many opportunities to engage in discussions and debates about current events and their connections to those of the past.

Asian History (Grade 10, also open to Grade 12 as an elective course)
This survey history course uses a seminar approach to investigate all corners of Asia. The course begins with an exploration of Asia as the cradle of civilization as we examine early humans and new developments in that field. Issues of ethnicity and race emerge in an examination of ancient Egypt and Nubia, along with the ways that western historians have chosen to spin the histories of these civilizations. Much of the course is concerned with Asia’s history before the arrival of Europeans; the arc of Africa’s great kingdoms and the variety of political, religious, and economic life across the range of the continent is explored through discussion, debate, inquiry activities, and research. The second half of the year examines the impact of the European incursion, colonialism, and the struggle for independence. Special focus will be given to the social-cultural, political, and economic transformations that occurred in Africa during this time. As they move from topic to topic, students engage with the material and practice historical analysis in a variety of ways, using literature, art, and music along with primary and secondary sources to develop their active understanding of content and context.

The following courses are also available for seniors as electives provided they have already taken one of these offerings as a sophomore.

African History (Grade 10, also open to Grade 12 as an elective course)
This survey history course uses a seminar approach to investigate all corners of Africa. The course begins with an exploration of Africa as the cradle of civilization as we examine early humans and new developments in that field. Issues of ethnicity and race emerge in an examination of ancient Egypt and Nubia, along with the ways that western historians have chosen to spin the histories of these civilizations. Much of the course is concerned with Africa’s history before the arrival of Europeans; the arc of Africa’s great kingdoms and the variety of political, religious, and economic life across the range of the continent is explored through discussion, debate, inquiry activities, and research. The second half of the year examines the impact of the European incursion, colonialism, and the struggle for independence. Special focus will be given to the social-cultural, political, and economic transformations that occurred in Africa during this time. As they move from topic to topic, students engage with the material and practice historical analysis in a variety of ways, using literature, art, and music along with primary and secondary sources to develop their active understanding of content and context.
including analytical writing, historical research, and critical thinking. By the end of the course, students will have a deeper understanding of the historical evolution of the Asian continent and the countries that inhabit it today.

**European History (Grade 10, also open to Grade 12 as an elective course)**

This survey course examines the political, social, and ideological changes in Europe from the Renaissance to the modern era. In addition, the course provides practice in historical analysis through formal writing, research, debate, discussion, and a host of other activities. Topics include the Renaissance and Reformation, the Age of Exploration, the Scientific Revolution, the development of absolute monarchies, the rise of nation states, the Enlightenment and the French Revolution, nationalism, imperialism, industrialization, the two World Wars, the Cold War, and the rise of the European Union. The course emphasizes the importance of how perspectives on the past should be understood because of their continuing role in influencing the present.

**Latin American History (Grade 10, also open to Grade 12 as an elective course)**

This survey course is an introduction to the history, politics, and cultures of Latin America. The course will examine Latin American history from its pre-contact Native American civilizations to the modern nation-states struggling to become mature democracies. The course will emphasize how Latin America is one of the world’s most diverse and complex regions, using the discipline of history to show students how that came to be. Influenced by the newest historiography in the field, the course will confront common misconceptions about the region and the notion of a monolithic Latin America. Special care will be taken to show how the region was created and influenced in innumerable ways by the interweaving of its Native American, European, African, and Asian peoples.

**World History (Grade 10, also open to Grade 12 as an elective course)**

This dynamic course provides students with a wide-ranging look at the history of the world, focusing on the lived experience of individuals and groups in a variety of settings. Beginning with notions of power and developing webs of relationships and ending with modern expressions of action and agency in response to both internal and external pressure, the course allows students to actively engage with a variety of sources as they develop understandings of the ways that history manifests politically, economically, and culturally in different settings. Students will employ case studies in order to develop understandings of both commonalities as well as distinct and singular developments throughout the world, exploring routes of engagement as well as agency and action within specific societies. Throughout the course, students will engage in activities designed to develop skills in researching and using evidence to support their ideas, use available technology to present their understanding, and build key competencies in historical writing, thinking, and analysis.

**American History Studies (Grade 11) (Gender or Immigration focus)**

These interdisciplinary American History Studies courses offer students an opportunity to explore American history with different lenses from the colonial period through to the 20th century. The Focus on Immigration theme will allow students to examine and analyze the experiences of Americans from a variety of backgrounds while exploring continuities and changes in immigration policy over time. Concepts include race and ethnic-based policies; international and national contexts; the politics of immigration, assimilation, acculturation, and ethnic identity; and the social construction of race and ethnicity. The Focus on Gender theme brings together women’s and feminist studies, men’s and masculinity studies, and LGBT/Queer studies to explore different representations of gender in American history over time. Students will work to understand critical gender theory along with the development of institutionalized approaches to gender.

**U.S. History (Grade 11)**

U.S. History is a survey course designed to familiarize students with the people, places, and movements in American history as well as to acquaint them with changing historical interpretations. We don’t shy away from controversy here, and students will encounter an array of documents, individuals, and stories as they seek to better understand where the country has been and where it is headed. Teachers work to support different learning preferences and styles in ways that anticipate and respond to students as they take risks in their thinking and writing. In addition, the course works to sharpen skills in essay and research writing through a variety of activities that include discussion, debate, historical investigations, and analysis of primary sources and other historical documents. Above all, our goal is to have students acting like historians and developing a depth of understanding that will allow them to engage more meaningfully with the challenges we face today.
U.S. History (Grade 11)
This survey course takes a comprehensive approach to American history by exploring intellectual and social history along with political and economic developments. Together, students and teachers investigate the American past at the highest levels of scholarship, research, writing, and thought. Students in U.S. History should be prepared to engage in deep research as they explore and challenge the ways that historians have shaped historical narratives and understandings to serve the needs of their own biases and time periods, often using these to minimize or eliminate the significant contribution of diverse groups and people who are integral to a better understanding of the American story. In the process, students will sharpen key skills in historical thinking, writing, and original research, exploring monographs, articles, and primary sources on their own and in focused study groups. Special attention will be paid to lifting up Black people and Black voices as integral to the development of all of these components. Meanwhile, students will make important connections between the past and the present as they explore the historical roots of current issues and events.

U.S. Political History (Grade 11)
This course will focus on the historical development of our current political system and how our institutions and political practices have changed since Colonial times. This examination will include elections, current and historical, the expansion of the right to vote, the development of our system of political parties, changing roles and expectations of and for the Presidency and Congress, and the Courts. Students will participate in a citywide model court program in the spring. The changing role of the media will also be covered, as well as public interest groups and lobbyists as political influencers. Students will complete analyses, profiles, and projects, on all or most of these topics. Current political issues will serve as the subject of many of our discussions. Students enrolled in this course are advised not to take an additional 11th grade U.S. History course, and to postpone U.S. Government until senior year.

ELECTIVES IN HISTORY
The following courses have been designed to allow students to explore select topics in greater depth than can be covered in the required courses. Electives are open to juniors and seniors.

YEARLONG ELECTIVE
Topics in Contemporary Psychology
This is an overview course with a university level rigor. It introduces students to the major concepts, theories, and methods of the social science of psychology. Topics covered include, but are not limited to: fields of study in psychology; research design and ethics; learning; theories of personality; psychological disorders; treatment for psychological disorders; motivation and emotion; stress; group dynamics; attraction; cognition; empathy; moral development; identity; and others. It will have a strong focus on experiential learning and will include opportunities to participate in psychological research. The course leads to increased self-awareness, improved communication and social skills, and a better understanding of self and others.

SEMESTER ELECTIVES
American Civil War (Fall)
The course will explore the war to end slavery from a variety of perspectives—social and political as well as military—to help seminar participants evaluate how and why the war came, how and why it was fought in the manner in which it was, and how and why the war continues to be a “living” conflict in American culture, society, and politics. Students will explore military history in a broad sense to note not just the tactical and strategic movements of soldiers but also the larger contexts of social and political history that motivated those soldiers’ collective decisions to fight. To that end, the class will focus on seminar-style discussion of primary and secondary sources and culminate in a research project that incorporates scholarly research in both primary and secondary source materials. Hands-on activities will include seminar discussion, primary source research, walking tours of DC’s circle forts, and a visit to a Civil War battlefield.

American Government (Fall)
This course will be an introduction to the study of the American political system. It will introduce the institutional structures, political actors, and constitutional debates in American government and politics. The course will begin with the constitutional underpinnings of the U.S. political system.
and then discuss how the government operates in practice. By looking at current issues in the American political system, students will come to know more about: the role of campaigns and elections; the influence of political parties, interest groups and the media; the institutions of the federal government; and recent and longer term changes in the powers and expectations of the office of the President. The course will also examine the role of race and gender in American politics. Overall, this course will enhance students’ ability to think critically about politics, political choices, political institutions, and public policies. Students enrolled in this course may not also enroll in U.S. Political History.

Comparative Politics (Spring)
Comparative Politics at GDS involves an integrated approach to political systems and structures throughout the world. The course employs the case study model to examine issues relating to power, privilege, and political structures in 8-10 countries, while making use of the rich resources available in Washington, DC to drill down into these questions even further. Students produce position papers, engage in debates, and travel to think tanks and universities to experience the kind of work that is done by experts in these areas.

Conflict Analysis and Resolution (Fall & Spring)
This interdisciplinary course will introduce students to core concepts and processes in conflict resolution, drawing from the fields of psychology, political science, public policy, history, anthropology, sociology, economics, and other disciplines. Students will learn conflict-specific theory and research, as well as procedures and interventions aimed at preventing, diminishing, and resolving conflict. Students will have the opportunity to interact with our Lower and Middle School students in the development of peer mediation initiatives, along with other projects.

Contemporary Issues (Spring)
This course, the first to be proposed and designed primarily by students, allows juniors and seniors to engage with contemporary issues through a variety of critical lenses. Using the range of available media and through the creation of a bimonthly online interactive journal that analyzes emergent issues in depth, students will gain a better understanding of events as they occur at the local, national, and international levels and a better appreciation of the connection between past and present. Collaborative teaming, discussion and debate, and media literacy provide consistent structures for a course whose content will reflect the ever-changing news landscape and national discussion. Further, the bimonthly journal will provide additional content for the second-semester 9th grade history course, which focuses on the experiences and challenges of international immigrants to the greater Washington area and the recent history of their places of origin, including Africa, the Middle East, Asia, and Latin America.

Cultural Anthropology (Spring)
Cultural Anthropology considers the nature of culture through customs and beliefs including language, subsistence, families and kinship, religious beliefs, and art in non-Western societies. The second half of the course concentrates on a number of American subcultures, such as religious cults, ethnic or racial groups, and regional subcultures. Choices of subcultures will be based on class interest. Students also have the opportunity to examine specialized monographs and articles as well as to develop research projects using non-textual sources.

From Freedom Rides to Ferguson: Civil Rights in America (Spring)
This course is intended to provide students with much more than a merely academic view of the civil rights battles of the mid-20th Century. Topics will include: the Freedom Rides of 1961, integration of the University of Alabama and University of Mississippi, the historic march from Selma to Montgomery in March 1965, the rise of the Black Power movement, and many others. Linking past to present, our focus for the second half of the course will be current civil rights issues, including police use of deadly force in dealing with persons of color, racial disparity in policing activities more generally, and racial disparity in the criminal justice system (particularly the administration of the death penalty), among many others. Most importantly, we hope that the course will inspire students to continue to advocate for civil rights and social justice throughout their lifetime in whatever way most aligns with their beliefs, values, and interests.

Introduction to Economics (Fall)
This course covers the basics of economics, including the micro-foundations of consumer behavior and allocating scarce resources, as well as the macro-level of complex market interactions in an economy such as that of the United States. Significant components of the American economy, such as socio-economic inequality and the stock market, get special attention and will be a focus of research. Students also examine economic development in nations where traditional rules of the marketplace may not easily apply.
Europe Between the Wars (Fall) [UL]
This class will examine Europe from the end of World War I to the beginning of World War II through multiple lenses (e.g., political, social, economic, and cultural). To what extent did the interwar period reflect dissatisfaction with, and the disintegration of, the mid-to-late 19th century European order and the values associated with that order (e.g., reason, science, faith in human progress, balance of power)? How did political, social, and cultural developments during the interwar period reflect (or contribute to) this disintegration? How are the events of the interwar period relevant to developments in Europe today (e.g., rise of right-wing nationalist, homophobic, anti-Semitic governments in Hungary and elsewhere; and Brexit), as well as to our own country’s employment of the ideas, rhetoric, and symbols that emerged during that period? These are just some of the questions that will be addressed in this course, which uses primary sources and written fiction, along with film, painting, architecture, and other artistic forms to help find the answers.

Gender Studies (Fall)
This class introduces students to the complex interdisciplinary field that is gender studies today, bringing together women's and feminist studies, men's and masculinity studies, and LGBT/Queer studies. While primarily U.S.-based, the course will explore how different definitions and representations of gender and sexuality spread via immigration and media. The goal of the class is to explore key concepts in gender studies through the lens of critical theory, to understand the ways in which critical theorists have engaged, critiqued, and developed the work of other philosophers, and to build understanding of how these philosophies connect to the students' own lives. Topics include the debate between nature versus nurture, feminism, masculinity, gender-based violence, and social institutions such as family, education, sport, and religion.

Hip Hop and Social Justice (Fall & Spring)
This course will examine the history of how Hip Hop Culture has created and facilitated social justice movements to address issues such as police brutality, inner-city violence, racism and discrimination, poverty, inequity in education, and more. The course places at its core the dismantling of White Supremacy and all other forms of discrimination as they are represented through individual, interpersonal, institutional, and structural forms of oppression. This course will highlight the strategies of resistance used by Hip Hop Practitioners in order to provide prominent examples for our students to emulate and build upon.

International Relations (Spring) [UL]
This course involves a survey of major principles and an investigation of key topics in international relations, including security, trade, cooperation, and conflict. With a primary focus on current events as they unfold around the world, the course offers students a chance to investigate not only the key differences among nations, but to interrogate their own understandings of the world and the role the U.S. plays in its relationships with foreign nations.

Impact of Historically Black Colleges & Universities and Black Greek Organizations in America (Spring)
This course will introduce students to the impact of Historically Black College and Universities in America. Students will identify: the causes that define a need for these schools; key moments in HBCU history, African American history, and American history; and themes related to the intersectionality between education, race, gender, culture, economics, resistance, social justice, and social change. This course will introduce Black Greek organizations to juniors and seniors. Students will learn about the history of the organizations’ foundations and prominent members as key catalysts in American history, civil rights, and activism.

Law & Constitutional Rights (Spring) [UL]
This course is designed to give students a sampling of the meaning, operation, and significance of law in recent American history and government. We begin the course with a full-length case study of a legal issue as it makes its way to the U.S. Supreme Court. Thereafter, we focus on various aspects of American law (depending, in part, on the interests of the students). Topics covered in the past include criminal law, the law of search and seizure, and the rights and legal protections of various minorities. In each case, our purpose is to learn substantive law in that area and understand how it develops through precedent and legislation. Main ideas in the philosophy of law may also be covered. Finally, we engage in a simulation—perhaps a mock trial or moot court—in order both to expand our understanding of a substantive issue and to experience one aspect of the legal process.

The Middle East (Fall)
The course begins with an overview of the founding and spread of Islam, with some exploration of the Umayyad, Abbasid, and Ottoman Empires. Students will study the breakup of the Ottoman Empire and examine the rise of Arab nationalism and Zionism, as well as the rise to power of Shah Reza Pahlavi in Iran. The strategic and economic importance of the region is studied along with the founding of Israel; the
continuing conflict among Jews, Arabs, and Christians; and the rise of Islamic fundamentalism. Particular emphasis will be placed on understanding the Arab-Israeli conflict.

**The Middle East Since World War II (Spring)**
The course will be based on the events that shook and shaped the greater Middle East, and include a focus on the two main themes of colonialism and nationalism. The various ideologies that grew out of these themes, such as pan-Africanism, will also be addressed. This course will deal with a multicultural and diverse political, social, and environmental milieu. Basques, Berbers, and other ethnic groups that are frequently overlooked by mainstream courses will also be explored. Throughout the course, a variety of methods will be used to ensure that student learning styles and preferences are addressed, supported, and developed in a way to produce flexible thinkers and active writers.

**Politics & Policy (Fall)**
This course introduces students to various aspects of foreign and domestic public policy. Students learn how various aspects of the system of the U.S. government affect public policy—the Congress, the Presidency, and the Courts, as well as regulatory agencies, the federal bureaucracy, and state and local governments. Students also explore the ways in which private citizens, civil society, lobbies, and non-governmental organizations affect local and international public policy. There will be special attention given to the President’s State-of-the-Union address, and there will be guest speakers on various aspects of public policy. Students engage in two major policy research projects, as well as debates, discussions, and class presentations.

**Skin Deep**
See listing under Interdisciplinary Department.

**World War II (Spring)**
This examination of WWII asks students to consider the interplay between battlefields and the social, political, technological, and ethical considerations of the conflict. More than just following military tactics and battles, this course explores roles played by racial and ethnic minorities and women in the war, both in battles and on home fronts. The goal of the course is to create an advanced history seminar, and to that end the class will focus on seminar discussion of primary and secondary sources and research that incorporates scholarly materials. Field trips to the Udvar-Hazy center, the National Museum of American History, and the National Museum of the Holocaust will offer hands-on activities, as will seminar discussion and workshop opportunities for student writing.
INNOVATION & COMPUTER SCIENCE

Foundations in Programming (Fall & Spring)
In this one-semester, introductory computer programming course, students will develop logic, problem-solving, and programming skills using the Python and Processing languages. Students will then use this knowledge to control and work with a variety of different microcontrollers such as Raspberry Pi and Arduinos. This course represents an awesome opportunity for students new to programming to experience computer science in a collaborative, hands-on, and fun environment. After completing this course, students will be prepared to explore other opportunities within the department.

Foundations in Creative Engineering (Fall & Spring)
This is a hands-on laboratory course involving the physical construction, electronic wiring, and computer programming of robots. Students will, both individually and in groups, be responsible for constructing their own individual robots. Where possible, these robots will be evaluated on students’ lab completion and reflection process, and where appropriate through timed and agility robotics competitions. This is considered an introductory level class, and all are encouraged to join—students should welcome, and not fear, our new robot overlords.

Foundations in Video Game Design
Calling all storytellers, artists, and aspiring programmers! Students in this course will learn introductory computer programming through game development. They will work collaboratively in a studio environment to design worlds and build them in code. We will study what makes certain games fun, the ethics of games, and how to code games in 2D and 3D. Each student will create several mini-games and finish with a final project. Concepts covered include coding fundamentals, graphics, sound, artificial intelligence, world-building, and design.

Advanced Programming for Robotics (Fall)
This course requires programming experience, but not robotics experience.
This course covers how robots perceive, think, and act in the world. Starting with pre-built robots, students will implement fundamental algorithms including computer vision, sensor integration, navigation, manipulation, and mission-planning. The course will include hands-on labs, guest lectures, and a final project to program a ground robot to navigate the GDS campus.

Advanced Data Structures & Algorithms (Spring)
This course introduces the common data structures and algorithms that will enable you to grow as a programmer and problem solver. We will perform mathematical analysis of data structures as well as hands-on implementation and measurements. At the end of this course, you will be able to identify and implement appropriate algorithms for a wide variety of problems. Topics covered include: Hash tables, trees, graphs, and algorithms such as sorting, path-planning, and dynamic programming.

Coding for Social Impact
How does technology perpetuate inequities in our community and in society at large? And how can it be a catalyst for positive change? Students in this course will select one social impact topic per semester, research its relationship to software, and use web and mobile development technologies to meaningfully address a relevant issue. Projects depend on student interest, but may include: using data science to investigate local air quality, producing virtual reality documentaries, and leveraging web/mobile platforms for voter registration research, mail routing for the homeless, health/wellness tracking, and more.

This course emphasizes the importance of the design process. Students will engage external stakeholders to develop a deep understanding of their values as potential users. They will work collaboratively in a studio environment to create a shared understanding of the people they design for (and with). Concepts covered include design thinking, interaction design, and advanced web and mobile software development in React.

Simulated Physics
The content in this course includes the topics from GDS’s present Physics offering: kinematics, Newton’s Laws, Momentum, Waves, and Circuits. Additionally, we teach basic Python programming. Rather than physical labs and pen/paper derivations, the students will submit Python code that demonstrates physics concepts. The course will include Python coding lectures to prepare the students to build their simulations. This elective course will be team-taught with the Science department.

Music Production & Audio Engineering
This course will dive deeply into the combinations of science and art involved in the production of a contemporary audio recording. Students will grow their understanding of music
production by experiencing the process in three distinct roles: studio musician, audio engineer, and record producer. Students will analyze, consume, and perform acoustic and electronic music, learn the basic concepts of working with MIDI, explore the use of microphones, employ classic recording techniques, and learn just what it is a music producer actually does in the music business of today.

Students will glean information from foundational instructional texts that include Modern Recording Techniques, The Mixing Engineer’s Handbook, Zen and the Art of Producing, various podcasts, interviews, and video sources, as well as the firsthand experiences of their wizened-yet-not-totally-jaded instructor, an active professional musician, engineer, and producer.

Students will have the opportunity to sing and play instruments in this course, but proficiency as a vocalist or instrumentalist is in no way required for participation.
INTERDISCIPLINARY

The goal of our interdisciplinary courses is to have students move beyond subject-specific boundaries, while offering opportunities to expand their understanding of a particular topic that no one discipline offers. We seek to develop a more all-inclusive approach to learning with an emphasis on the connections found among disciplines as a unifying thread. Ultimately, the coalescence of knowledge and learning are key in any learning community, and at GDS we view this as part of our larger commitment to a progressive teaching philosophy.

Conflict Analysis and Resolution
The course will introduce students to core concepts and processes in conflict resolution. This interdisciplinary field will draw from psychology, political science, public policy, history, anthropology, sociology, economics and other disciplines. It also generates conflict-specific theory and research, as well as procedures and interventions aimed at preventing, diminishing, and resolving conflict. Students will have the opportunity to interact with our Lower and Middle School students in the development of peer mediation initiatives along with other projects.

The Good Life: The Neuroscience of Happiness & Well-Being
In this skills-based course, we will cover topics ranging from mindfulness and meditation to down-time and the Default Mode Network, from happiness and joy to the neurobiological basis of empathy and gratitude. Students will learn the importance of exercise and outdoor activity, as well as the biological imperative of relationships and social connections. Other topics will include sleep, spirituality, money management, nutrition, grit, optimism, executive functioning, and time management.

Neuroscience
In this two-semester elective course, students will be introduced to the biological underpinnings of behavior, particularly when it comes to areas of brain dysfunction. While students will gain a solid grounding in the discipline of neuroscience, it is our deeper hope that through collaborative projects focused on specific topics that are likely to impact their lives (i.e. Anxiety and Depression, Alzheimer’s, Autism, Learning and Memory, Schizophrenia, the Adolescent Brain, PTSD, etc.), students will gain a real understanding of how the brain works, how sometimes it doesn’t, and what we can do both on an individual and a collective level to help those who need support. In what we think seems like an extraordinary opportunity, we plan to leverage myriad resources here in the DC area to challenge students to be more than consumers of information, but rather active learners and researchers who will, in turn, use their skills to advocate on behalf of others. Throughout the process, students will take the lead in the discovery process, learning not only about a particular body of information, but also developing a skill-set that would enable them to present their learning in a purposeful, sophisticated manner. Ultimately our hope is that students will not only grasp the essential underpinnings of neuroscience but also be able to apply their understanding and to advocate on behalf of those impacted by the various conditions. The neurobiology perspective of the course will complement the behavioral approach by offering a physiological explanation for normal and pathological behavior. Throughout the year, students will explore the cellular basis of brain function, investigating neural communication, both within a single neuron and between neurons. Our exploration will ground students in a molecular perspective that will foster understanding of neuronal proteins, ion channels, neurotransmitter receptors, and signal transduction. Finally, the brain will be seen as a large organization of neural networks with potential for both extraordinary function and dysfunction. In addition to a number of laboratory investigations, the course will include visits with local experts, and some hands-on collaborative work with area institutions and organizations.

Skin Deep: The Evolution of Race through Literature & History
Have you ever wondered what race actually is and why it has such an important part in our world? Are you still confused about the differences between race, ethnicity, tribe, and nation? Or do you want to learn how to become an effective anti-racist advocate? If you answered any of these questions with a yes, then Skin Deep is the course for you. Using literature and history alongside each other, we will explore how race is truly a social construct and is not as old or universal as you might think. We will delve into how the idea of race originated in the medieval period, developed into its recognizable form as European Empires spread across the globe, and eventually came to be the default way to categorize people in our society—even though race is literally skin deep.

The Social Venture Lab
This course is for young entrepreneurs who want to learn how to develop a social venture enterprise and receive the mentorship, guidance, and, in some cases, funding to create and incubate
entrepreneurial ideas that offer solutions to urgent and complex societal challenges. This semester course will offer a series of modules that cover topics including an introduction to design thinking, business plan development, social impact investing, pitch preparation, concept development, and concept scaling and/or replication. Students will work as individuals or teams to identify solvable problems, test ideas, prototype solutions, and refine concepts. Throughout the course modules, which will be led by a team of GDS faculty members and an outside team of entrepreneur mentors, students will develop a wide range of skills required for entrepreneurial success, including creativity, persistence, communication, technical skill, collaboration, presentation, and risk-taking. At the culmination of the semester, students will participate in a pitch proposal to community stakeholders. Students will leave this course with a practical and inspiring foundation for building and scaling a social venture enterprise. While some students may choose to register for this course because they already have a social venture proposal in mind, this is not a prerequisite for this course. All that is required is a desire to think big and do good.

**Youth Participatory Action Research (YPAR)**

*Prerequisite: Permission of instructor*

YPAR (Youth-led Participatory Action Research) is an opportunity for students to engage in studying and improving school culture at GDS. This course teaches students how to conduct action research, which includes formulating research questions, conducting focus groups, writing surveys, and making recommendations. The course culminates with a collaborative event with other area schools.
MATHEMATICS

Graduation Requirement: At least three sequential years of math at the high-school level.

The Mathematics Department believes every student can develop a high level of skill and deep understanding of mathematics principles. To facilitate this, we offer a wide range of opportunities for each child. We work carefully to construct numerous course offerings and sequences with wide ranges of challenge, varied teaching approaches, and different assessment strategies in order to help each student find their path to success. When offered a variety of approaches, opportunities to adjust challenge from year to year, and varied opportunities to demonstrate knowledge, students will develop enthusiasm, confidence, skill, and comprehension in our math classes.

To provide maximum opportunity for students to learn at their optimal pace and to offer appropriate challenge and support to develop each student’s potential, the math department divides Geometry into two levels, and Algebra II and Precalculus into three levels. Extended and Honors sections spend less time introducing or reviewing topics and more time extending ideas and working on more difficult problems. While all of our sections include significant problem-solving, Extended sections often approach new topics through applications and projects, while Honors sections delve more deeply into the theoretical underpinnings of topics and proof.

Placement

Placement of students in classes is determined through a cooperative approach toward consensus among the student, the current teacher, the department, the student’s family, and the advisor. The math department engages students in the course selection process in order for students to learn how to make informed and appropriate decisions about their education. Yet it is often challenging for students to decide which course is right for them. It can be particularly challenging for students to know which level of a course is appropriate when they have not had experience in that course. The teachers in the math department have a broader perspective about our curriculum and the level that would be the best fit for the student, but they may not know the larger context of each student’s schedule and interest. This is why we believe it is essential for the registration process to be a conversation among teacher, student, family, and advisor.

Students sometimes want to sign up for an Extended or Honors course to ‘try it out,’ believing that they can drop down at any time if the course does not work out. Our goal is to ensure that students are registered for the appropriate courses initially, because switching courses or levels during the school year is usually not an easy process. While we try to schedule courses so that this process is possible, a change in a course or level may require a substantial change in a student’s schedule, or it may not be possible at all.

Level changes must first be discussed with the teacher of the course. After the initial discussion, the department chair and the Assistant Principal for Academics will be brought into the conversation to determine if such a move is possible and is in the student’s best interest. When a student switches levels, any grades he/she earned in the initial course will be included in the semester grade in the new course.

Summer or External Course Work

We believe that the mathematical maturation students develop over the course of a school year can rarely be fully attained in an abbreviated, condensed summer course. The only external math course we recognize for advancement in our course sequence is Geometry. Although summer courses vary widely both in approach and content, we have found that they often focus primarily on skills to the detriment of a deeper understanding of concepts. Our curriculum goes beyond skills to emphasize mathematical inquiry, discovery, critical thinking, problem solving, and making connections among concepts and skills—all of which require a full year of synthesis and development.

Accelerating through the curriculum by taking Geometry over the summer is only encouraged in certain cases, and if a student decides to take a summer Geometry course with the hope of advancing in our sequence, they must:

• Inform their math teacher and High School math department chair by the end of the school year.
• Keep a portfolio of all summer work (assessments, assignments, syllabus, etc.) to turn in to the department chair in August (if taking the summer course outside of GDS)
• Pass the GDS summer course OR, if taking the course elsewhere, take and earn a satisfactory grade (B- or above) on the corresponding GDS midterm and final exams.
Important notes about taking Geometry over the summer:

- Summer courses not taken at GDS will appear on GDS transcripts in a special notes section.
- Students are responsible for completing all content and concepts covered in the GDS course, even those not covered in their summer course.
- Taking a summer course does not guarantee that a student will move on in the GDS course sequence. The department chair will consider the student’s portfolio of work as well as her performance on the GDS semester exams.

The Math Center
The Math Center offers assistance to students in all math subjects through one-on-one conferences on a drop-in request or referral basis. Students seeking help with assignments, concept comprehension, skill refinement, or study techniques are encouraged to visit the center. The Math Center is open during all periods and is staffed by a math teacher.

Use of Calculators
Calculators can be useful tools for learning and are used throughout the math curriculum for ease of extended accuracy, for the opportunity to manage complex operations, for data analysis, and for graphing and other visualizations. Understanding the mathematics behind solutions to problems is a principal goal for students in the mathematics program. The calculator can provide solutions to problems without fostering understanding of underlying concepts and therefore is not always used during class or on assessments. The Math Department provides all ninth graders and new students with a TI-84+ graphing calculator.

Algebra I
Algebra introduces variables into the operations of mathematics. Topics include linear and quadratic equations, inequalities, polynomials, exponents, formulas, and functions, with a strong emphasis on problem solving and graphing.

Geometry
Prerequisite: Algebra I
The study of geometry concerns the discovery, understanding, and proof of plane and space relationships based on the logical use of definitions and deductive reasoning. Topics include proofs, angle relationships, parallel and perpendicular lines, polygons, congruence, right triangle trigonometry, volume, and area. Use of algebra is integral to this course, and the course will include thorough review of algebra.

The extended level of this course is accelerated, includes a minimal amount of review, and moves steadily through the topics. The extended level requires increased independent thinking and a greater time commitment for homework and reflection.

Algebra II
Prerequisite: Algebra I and Geometry
This course focuses on functions and operations with functions, including transformations, inverses, composition, and functions as mathematical models. Students study algebraic and graphical representation of equations and inequalities in one and two variables, and perform operations with rational expressions, radicals, rational exponents, and complex numbers. The functions covered include linear, quadratic, exponential, logarithmic, and polynomial.

The extended and honors levels of this course are accelerated, include minimal amounts of review, and move steadily through the topics. The honors level is more abstract and focuses on the theoretical bases of the material. A demonstrated mastery of previous course material, a greater time commitment for homework and reflection, and increased independent thinking are essential.

Precalculus
Prerequisite: Algebra II
This course continues the study of advanced algebra, trigonometry, and other topics necessary for the study of calculus and statistics. Topics include exponential and logarithmic functions, trigonometry, and introductory probability and statistics. Depending on the level, other topics may include parametric equations, polar equations, conic sections and limits, sequences, and series and rational functions.

The extended and honors levels of this course are accelerated, include minimal amounts of review, and move steadily through the topics. The honors level is more abstract and focuses on the theoretical bases of the material. A demonstrated mastery of previous course material, a greater time commitment for homework and reflection, and increased independent thinking are all essential.

Statistical Analysis and Applications
Prerequisite: Precalculus or permission of department
This course covers the concepts and procedures in descriptive and inferential statistics of one and two variable data. The main
topics are data organization, inferential statistics, probability as it relates to distribution of data and the use of regression in mathematical modeling. Students engage in discovery of characteristics of data and in open-ended problem-solving through group work and projects. Students will use software, such as Excel, enabling them to analyze larger sets of data.

Statistical Analysis and Applications  
Prerequisite: Precalculus or permission of department
This course covers all the content in Statistical Analysis and Applications in addition to delving deeper into the mathematical foundations and theory of inferential statistics. This course requires strong analytical skills and a significant amount of reading and writing.

Calculus  
Prerequisite: Precalculus
These courses cover the foundational topics and skills of differential and integral calculus of one variable. Topics include distance, velocity, and acceleration relationships, slope functions and linearizations, area functions, differentiation techniques, and optimization. Calculus will explore applications from various fields, including physics and economics. The approach will be concept-driven, with open-ended problem solving playing a major role in the class.

Calculus - The extended and honors levels of Calculus are accelerated, include minimal amounts of review, and move steadily through the topics. These levels will cover more topics in integration, and the honors level covers additional topics including parametric equations, polar coordinates, sequences, series, and Maclaurin and Taylor polynomials. The honors level is more abstract and focuses on the theoretical bases of the material. A demonstrated mastery of previous course material, a greater time commitment for homework and reflection, and increased independent thinking are essential.

UPPER LEVEL SEMESTER ELECTIVES IN MATH

Linear Algebra I (Fall)  
Prerequisite: UL Calculus and permission of the department
This course follows calculus and requires a good deal of rigor and abstract reasoning. It includes the following topics: matrix arithmetic, dot products and cross products, inner product spaces, fundamental spaces of matrices, eigenvalues and eigenvectors, and linear transformations. Students will also independently read on a topic of their choice in advanced mathematics and present a lesson on their reading to the class.

In past years, topics have included Fermat’s Last Theorem, the Riemann Hypothesis, Godel’s Completeness Theorem, and graph theory.

Linear Algebra II (Spring)  
Prerequisite: Linear Algebra I
Students of introductory linear algebra will continue their study in this advanced course. Topics include QR- and SVD-decomposition; orthogonal diagonalization; Jordan Canonical Form; Unitary, Normal and Hermitian matrices; quadratic forms; linear programming; and various applications such as least squares approximations, Markov matrices, and solving differential equations.

Differential Equations (Spring)  
Prerequisites: UL Calculus
This course teaches the techniques of how to solve a variety of differential equations from those of the standard first-order and higher to other types requiring a more sophisticated and integrated approach. Necessary topics from calculus and linear algebra not covered in other courses will be taught as needed. Students should be comfortable working independently and be disciplined problem-solvers.

Multivariable Calculus (Fall)  
Prerequisite: UL Calculus
The course continues the study of calculus begun in AP Calculus. Topics include partial derivatives, directional derivatives, vector-valued functions, maxima and minima of functions of several variables, double and triple integrals, and line and surface integrals, and Green’s and Stokes Theorems.

Mathematics Seminar (Spring)  
Prerequisite: Calculus or UL Calculus or permission of the department
This course will introduce students to a variety of topics outside of the typical high school curriculum, including several usually found in college-level mathematics elective courses. Topics might include, but are not limited to, point-set topology, paradoxes, group theory, and formal logic. The course will emphasize the power and beauty of mathematics through the study of these topics and by encouraging exploration and self-discovery of some of the important ideas. Students are expected to complete weekly problem sets as well as complete a presentation on an independent topic outside of the curriculum.
PHYSICAL EDUCATION

Graduation Requirement: Two years of physical education

The goal of the Physical Education Program is to teach students the knowledge and skills necessary to live a healthy life: to embrace physical activity, to think critically, to cooperate across difference, and to solve problems rationally. Health education is integrated into both ninth grade P.E. and P.E. II. The health curriculum content areas include personal health and fitness; family life education; nutrition; disease prevention and control; growth and development; sexuality education; mental, social, and emotional health; safety and injury prevention; prevention of substance abuse; and community health. The themes of responsible decision-making, respect for the worth and integrity of each individual, respect for and understanding of the diverse populations within our community, and consumer awareness run throughout the program.

Physical Education I
All 9th grade students participate in physical education. The main goals of this program are to develop problem-solving skills, increase self-confidence, encourage group cooperation, and teach lifetime health and movement skills and knowledge. These goals are met through the Project Adventure Curriculum, which includes cooperative games, group problem-solving activities, and individual and group trust and initiative activities. Students are introduced to a wide variety of team and individual sports, methods of physical conditioning, CPR, and first aid. Grades are based on effort, improvement, positive attitude, and cooperation. Various health topics are covered as well, including nutrition, sexuality, drugs and alcohol prevention, and social, emotional, and mental health.

Physical Education II
All 10th grade students complete a second year of physical education. The program focuses on the maintenance and improvement of health-related physical fitness; e.g., cardiovascular endurance, muscular strength and endurance, flexibility, and body composition. Students acquire the skills, knowledge, and positive attitude necessary to assess and improve upon one's own level of health and wellness. Stress management and intervention techniques such as biofeedback, yoga, and nutritional education as related to sport performance and body composition are integrated with sport, dance, and exercise as the means to achieve and maintain health and wellness.

Resistance through Sport (Fall)
This course will examine a variety of times in history where sports assisted in social justice changes. Students will identify themes related to the intersectionality between sports, race, gender, culture, economics, and resistance and social justice.
SCIENCE

Graduation Requirement: Three years, to include one life science (9th grade biology) and one physical science.

The goal of courses in the science department is to help students gain a sophisticated understanding of the natural world using the scientific method of hypothesis-driven inquiry and mathematical description. Science literacy requires both an understanding of the fundamental concepts that underpin all of nature and the investigative skills necessary for their discovery. Ideally, the students’ selection of science courses should combine the broad scope of scientific disciplines with an in-depth comprehension of at least one field. The introductory biology course required for all ninth-grade students provides the foundation of scientific concepts and skills for the other science courses. Courses in the life sciences, physics, and chemistry at the intermediate level offer an investigation of relevant concepts in much greater depth. Finally, Upper Level courses in biology, physics, environmental science, and chemistry offer students the opportunity to learn science at the most intense and comprehensive level.

LIFE SCIENCE OFFERINGS

Biology 9 (Grade 9)
This introductory course for all ninth grade students emphasizes student-centered, active learning. The course covers many aspects of biological organization, beginning at the molecular level and progressing in complexity all the way up to interactions at the level of the biosphere. Main topics will investigate biomolecules, cell structure and transport, genetics and ecology. Integrated into the course are basic biological themes including evolution, unity and diversity of living things, homeostasis, and the relationship between structure and function. Additionally, the course exposes students to the basic laboratory techniques required for further study in the sciences and introduces the skills involved in scientific writing.

Cellular & Molecular Biology UL
Prerequisite: Chemistry
This lab-intensive course will give students a comprehensive and rigorous overview of foundational topics in the discipline of cellular and molecular biology. Students will conduct an in-depth exploration of the cell as a dynamic center of complex processes such as cell proliferation, differentiation, signaling, DNA Replication, and Protein Synthesis. This course will also include a significant lab component, where students will have opportunities to design experiments, collect data, apply mathematical routines, and refine testable explanations and predictions. Students will engage with protocols and techniques associated with the units of study that provide varied opportunities to explore real-world challenges, learn about careers in biotechnology and health, and address bioethical questions. Engaging in open-ended investigations will emphasize and develop critical thinking skills. A strong background in chemistry is necessary.

Energy and Resources: Science, Technology, and Culture
Prerequisite: Chemistry
This course explores how humans have harnessed energy and resources throughout history and how cultures have developed around their use. The course will cover the scientific and technological aspects that make energy and resource use possible and examine why we use energy and resources and how cultural identities are tied to their use. The course draws from the three core scientific disciplines of biology, chemistry, and physics and integrates them with the humanities and social sciences, creating a unique interdisciplinary course that will allow them to deeply explore the intersectionality of culture and science. The course relies heavily on experiential learning with students performing unique labs and visits to energy and resource facilities to increase the depth of their understanding. Note: This course does NOT fulfill the life science requirement.

Environmental Science: Analysis of Science and Policy UL
Prerequisite: Chemistry
This laboratory course allows students to delve into not only the science but also the politics, policies, and laws behind major environmental topics. Topics may include, but are not limited to, climate change, population growth, air and water pollution, nutrient cycles, and field and stream ecology. Field studies that emphasize a hands-on, interdisciplinary approach to environmental assessment will enrich the classroom experience.

Genetics and Evolutionary Biology
Prerequisite: Biology 9
This course is designed for students with a keen interest in biology from an evolutionary viewpoint. The content of the course will begin with an exploration of Darwin’s Theory of the Origin of Species, the basis for an understanding of the complexity and richness of life on earth. This course will be divided into the following themes: the historical framework of evolutionary biology and, more substantially, the organic framework of evolution, which includes cell division, genes
and chromosomes, Mendelian genetics, molecular genetics, origins of variation, genetic basis of microevolution, patterns and processes in macroevolution, and the origins and diversity of life. In the first semester, molecular genetics will be the underlying principle. In the second semester, controversies surrounding the origins of life on Earth will be discussed and students will examine the phylogeny of six Kingdoms in depth. The capstone of the course will focus on human evolution.

Neuroscience
See listing under Interdisciplinary Department.

Physiology (Grades 11, 12)
Prerequisite: Chemistry
This course explores the key biological concepts as illustrated by specific diseases. Each year, a new disease is examined from multiple perspectives including clinical reasoning, genetic etiology, and pathological cell biology. Students will learn various concepts, including the relationship of protein structure to function, the mechanism of action for various drug treatments, and the regulation of cell behavior by various proteins. The emphasis of the course is on experiential learning (such as simulated disease outbreaks), open-ended lab investigations into designing novel antibiotics, and solving social problems (such as vaccine hesitancy, equitable access to health care, and other health policy issues). Diseases studied in previous years include the Covid-19 pandemic, pediatric cancer, autism, HIV/AIDS, Alzheimer’s, diabetes, and sickle cell anemia.

Research in Biology (Grade 12) UL
Prerequisites: A second life science, Chemistry I Extended or permission of the department
This research methods course teaches students how to think like a scientist through hypothesis-driven inquiry and authentic research investigations. Specific skills taught include understanding scientific literature, designing experiments, conducting contemporary biotechnological methods, using statistical and graphical analysis of data, and writing professional scientific reports. The first semester consists of conducting long-term, open-ended investigations in which these skills are learned and applied. The students will learn to write an effective research proposal on a topic of their interest, which is then conducted in the second semester. Their discoveries will be presented in a scientific manuscript suitable for publication in a professional journal.

Applied Research in Environmental science
See listing under science electives.

PHYSICAL SCIENCES OFFERINGS

Levels in Chemistry
To provide the maximum opportunity for students to learn at their optimal pace and to offer enough challenge and support to develop each student's potential, Chemistry I and II are divided into two levels each: Chemistry I or Chemistry I Extended, and Chemistry II or Chemistry II UL.

Each level builds a solid foundation of chemistry and covers the subject matter that is required for students to continue in the science curriculum. However, the Extended and UL Chemistry sections spend more time understanding concepts and models in a more in-depth manner in addition to focusing on math-intensive problems. Students in the Extended and UL courses should feel comfortable spending less time practicing problems in order to move through the material at a more accelerated pace. The Extended class is strongly recommended for students interested in pursuing a UL science or who are considering taking more Chemistry. Students select levels themselves with the advice from their current teacher and the science department.

Chemistry I or Chemistry I Extended
In chemistry, we seek to understand what matter does by understanding how electrons, atoms, and molecules interact. This is accomplished through a study of atomic theory, stoichiometry, gas laws, thermodynamics, and equilibrium. In addition, students will apply these concepts through experimentations in the laboratory. The learning in both the classroom and the laboratory includes an environment of self-discovery and discussion.

Chemistry II
Chemistry II Prerequisite: Chemistry I or Chemistry I Extended
This course is designed to provide students with an opportunity to explore chemical principles as applied in the real world. Chemistry concepts will be examined in the context of various themes, such as forensic science, art, cooking, and environmental science. This course also entails an introduction to organic chemistry and biochemistry, which includes hydrocarbons, organic functional groups, carbohydrates, lipids, proteins, enzymes, and nucleic acids.
Chemistry II

*Prerequisite: Chemistry I Extended or permission of the department*

This course is designed to provide a more in-depth study of key chemical principles such as chemical bonding theory, thermodynamics, kinetics, equilibrium, electrochemistry, colligative properties, and an introduction to organic chemistry. Students will also study acid-base chemistry, valence bond theory, molecular orbital theory, experimental design, and data analysis.

Students will be expected to master analytical techniques and develop technical writing skills in the form of lab reports. They will also develop their own procedures and design their own experiments to collect, analyze, and interpret data. The goal of this course will be for students to understand the key fundamentals of chemical structure and reactivity, and to be able to interpret data at the molecular level.

Electricity and Magnetism

*Corequisite: Calculus*

*Prerequisite: Physics or Corequisite: Mechanics*

Electricity and Magnetism covers electrostatics, conductors, capacitors, dielectrics, electric circuits, magnetic fields, and electromagnetism. Calculus is used throughout the course to formulate physical principles and apply them to physical problems. The primary focus is on improving the student’s analytic problem-solving skills. Students are encouraged to take Mechanics prior to taking this class.

Physics

*Corequisite: Algebra II*

This course uses observation and inquiry to develop physical concepts. Students observe phenomena, model it mathematically, and use models to predict outcomes. The course emphasizes a conceptual understanding of the laws of physics with a moderate amount of mathematical problem solving, relying on skills developed in Algebra II. Topics include selections from kinematics, force, energy, momentum, electricity and magnetism, optics, light, heat, waves, and circuits.

Physics I Extended

*Prerequisite: Algebra II*

This course uses observation and inquiry to develop physical concepts. Students observe phenomena, model it mathematically, and use models to predict outcomes. Extended Physics spends less time introducing and reviewing topics and more time extending ideas and focusing on math-intensive problems. This physics course assumes that students are proficient at using algebra and trigonometric functions with minimal support, allowing the class to grapple with more complex applications of physics laws and pursue more open ended experiments. Topics include selections from kinematics, force, energy, momentum, electricity, optics, light, heat, waves, and circuits.

Physics Mechanics

*Corequisite: Calculus*

This course provides a systematic development of the main principles of physics, emphasizing problem-solving and helping students develop a deep understanding of physics concepts. Specifically, the class will cover kinematics, Newton's laws, work, energy, power, linear momentum, circular motion and rotation, oscillations, and gravitation. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus; the class will include a laboratory component. Students are encouraged to take Mechanics prior to taking Electricity and Magnetism.

Quantum Mechanics and Special Relativity

*Prerequisite: Calculus, AP Physics, or permission of the department*

This course focuses on two primary topics in modern physics: special relativity and quantum mechanics. Special relativity involves time and spatial descriptions of physical phenomena when speeds approach the speed of light. The quantum mechanics section will focus on models in wave mechanics that form the basis for much of modern physics and physical chemistry. The course will also review experiments conducted in the early 20th century that led to the development of quantum mechanics as a field of research.

Semester Electives in Science

Applied Research in Environmental Science—Field Ecology (Fall)

This course is designed for students who wish to engage in the scientific study of ecology and environmental science through extensive field investigations and experiments in the laboratory. We will explore topics such as water quality, biodiversity, and forest ecology, within the context of our need to feed, house, and provide energy for a growing global population. While there will be a significant amount of fieldwork and hands-on
investigations over the course of the year, we will also spend a considerable amount of time discussing current events relating to these topics. Students will have the opportunity not only to build skills in the use of the scientific method, critical analysis, and the interrogation of data, but also to design and carry out their own experiments in the laboratory and in the field. One overnight trip is likely to be included as part of the course depending on student availability and scheduling.

**Applied Research in Environmental Science—Climate Science and Environmental Justice (Spring)**
Similar to the fall semester (see description above), this course will also use a hands-on approach to build the skills enumerated above, but the topic will be narrowed to the science behind climate change and its relationship to social justice. If time permits, we will also learn about toxicology—another topic that is at the forefront of the social justice movement—through various laboratory and field experiments as well as case studies (e.g., Flint, Michigan).

**Astronomy (Fall) (not offered in 2022-23)**
This course is a scientific exploration of the human place in the universe. We study the origin and history of the universe in addition to the formation of the Earth and the solar system. We compare the Earth's properties with those of the other planets and explore how the heavens have influenced human thought and action. Students will study the properties of light and matter as well as the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe, and the search for extraterrestrial life. Note: This course does NOT fulfill the physical science requirement and it is NOT a prerequisite for Astrophysics.

**Astrophysics (Spring) (not offered in 2022-23)**
*Prerequisite: Algebra II*
This course focuses on how the physical laws determine the structure and evolution of stars, galaxies, and the universe as a whole. Emphasis is placed on understanding how observational evidence allows us to understand the universe. Topics will include the evolution of stars, galaxies and the universe as a whole. We will dig deep into the topics of gravity and spectroscopy to understand these cosmic processes. Students will analyze real data taken from astronomical objects. This is a fast-paced course that often uses algebra and trigonometry to model our universe and its laws. Facility and comfort with these mathematical topics is a must. Note: This course does NOT fulfill the physical science requirement.

**Forensic Science (Fall or Spring)**
This course explores the science behind crime scene evidence. Students learn how to secure and record evidence at a crime scene. Additional topics include exploration of DNA collection and its replication through PCR, the movement and patterns of fire in arson investigations, and the use of chromatography as a confirmatory test for many different types of trace evidence. Application of knowledge will be completed through numerous crime scene scenarios and labs. The content for each semester will be independent of the other; one semester is not required in order to take the other, and students may take both semesters without having material repeat. Please note: Forensic Science does NOT fulfill the physical science requirement.

**Game Theory (Fall or Spring)**
*Prerequisite: Algebra II*
This semester-long course is designed for students to develop their ability to make and analyze strategic decisions during interactions (or as we call them: games). Students will learn to solve classic games, such as “chicken,” while refining their strategies for more complex games, such as the repeated prisoner’s dilemma. As we progress through the semester, we will study more advanced ideas such as strategic moves, ultimatums, Nash equilibriums, and strategic irrationality. The semester will conclude with a discussion of how to relate our understanding of game theory to real-life situations, ranging from navigating the internet to decision making during the Cuban Missile Crisis.

**Simulated Physics**
See listed under Innovation and Computer Science.
WORLD LANGUAGES

Graduation Requirement: At least two successive years of the same language completed in high school.

The World Languages Department offers sequential courses, from introductory to upper level, across four language programs: Chinese, French, Spanish, and Latin. As students progress in their language study, they gain competency in auditory and oral skills, in reading and writing, and sociocultural awareness connected to the themes studied.

The World Languages Department seeks to have students sufficiently proficient to ensure successful passage to the next sequential course. While a student with a low passing grade may advance to the next level, under such a circumstance the department strongly recommends that such students pursue significant remedial study prior to beginning a new course. Questions regarding study options may be directed to the department chair.

Placement
Initial placement of new-to-GDS students in language classes is determined by a language placement test given by the department. The placement test includes a written and an oral component. The goal is to determine the course that best develops each student's potential and continued growth, while also providing an environment in which the student is comfortable taking the academic risks that are essential to that growth.

Foundations I in Chinese
This course is designed both for students who have had no previous work in Chinese and those who need to perfect their elementary skills before proceeding to Foundations II. Students strive for pronunciation accuracy by learning Pinyin romanization and tones. The course helps students develop basic communication skills by building a strong foundation of introductory vocabulary, phrases, and sentence structures. While the instructional emphasis is on oral communication, we introduce and engage in the reading and writing of simplified Chinese characters at this time. Authentic resources such as Chinese music, film, and videos provide comprehensible input to expand interpretive skills, while the use of varied in-class tasks and presentations promote communicative output. Chinese culture is one of the core elements in this first year of study.

Foundations II in Chinese
While continuing to focus on the development of oral/aural skills in communicative contexts, students work to improve their tonal precision, expand their vocabulary, and add to their library of key structures. Through focused practice in speaking, reading and writing, students broaden their interpretive, interpersonal, and presentational skills. Reading selections, music, art, videos, and hands-on experiences further familiarize students with the culture of China.

Chinese Language & Culture
In this intermediate course, students continue to develop proficiency in speaking/listening and reading/writing on a wide variety of current themes and issues by learning advanced vocabulary and grammatical structures. The course’s audio/visual material introduces students to everyday situations and to cultural traditions in the Chinese-speaking world. Great emphasis is placed on developing the students’ skills in writing and presenting in Chinese.

Chinese Language & Culture II
Prerequisite: Chinese Language & Culture
This class is designed for students who have completed Chinese Language & Culture I. Students continue to work with the Far East Chinese for Youth series and to hone their ability to discuss cultural topics with greater proficiency in the target language. Technology plays a key role in teaching, learning, practicing, and developing outreach projects, including a pen pal program, video conferences, multimedia resources for the use of learning, and computer-based assessments.

Advanced Topics in Chinese Studies
This college-level course will focus on the Chinese history, philosophy, literature, and culture. Students will explore Chinese history, culture, philosophy, and society as it has been presented in the 20th and 21st centuries through the medium of film and literature. By engaging the contemporary uses of the Chinese language, students will work to improve their skills in the language and to broaden their awareness of its roots in a very rich and ancient past as well as the current issues of our day.

Advanced Topics in Chinese Studies II
Prerequisite: Advanced Topics in Chinese Studies
This course aims to help students continue building a solid foundation of four basic skills—listening, speaking, reading, and writing—in an interactive and communicative learning
environment. Organized in eight units by cultural themes over two semesters, students will have ongoing and varied opportunities to acquire extensive language skills and broad cultural exposure that reflects the rich diversity of Chinese language and culture. Following the guidelines from the American Council on the Teaching of Foreign Languages (ACTFL), students will demonstrate their Chinese proficiency across the three communication modes (interpersonal, interpretive, and presentational) and the five World Readiness Standards for language learning (communication, cultures, connections, comparisons, and communities). With a focus on current events and contemporary Chinese culture, the course deepens students’ grounding in linguistic and cultural competencies and prepares them for advanced college-level study of Chinese.

Foundations I in French
This course is designed both for students who have had no previous work in French and those who need to perfect their elementary skills before going on to Foundations II. Primary emphasis is on acquisition of vocabulary and mastery of basic verb forms. All four skills—understanding, speaking, reading, and writing—are emphasized. Reading selections and videos introduce students to the geography and culture of France and of other French-speaking areas of the world.

Foundations II in French
While continuing the development of oral-aural skills, students undertake a comprehensive study of grammar and build a large practical vocabulary. Students are also introduced to the narrative voice in the present and past. Reading selections and watching videos introduce students to the geography and culture of France and of other French-speaking areas of the world.

French Language & Culture
Students continue to develop proficiency in speaking and writing on a wide variety of current themes and issues by learning to use advanced vocabulary, verb forms, and grammatical structures. Oral skills are enhanced through viewing and discussing selected videos. Reading skills and cultural awareness are developed through the study and discussion of articles from French periodicals and excerpts from French and Francophone literature.

Introduction to French Literature
This course introduces students to the study of major French literary works and authentic videos to develop their listening comprehension skills. Through the discussion of literary texts, videos, and cultural themes, students will review and expand grammatical concepts and acquire an extensive vocabulary. Emphasis is put on oral and written proficiency and students are encouraged to speak and write more critically and analytically.

Advanced French Language and Culture
This course is designed for those students who have completed Introduction to French Literature. The course, through units of cross-cultural study, allows students to explore various themes such as family, education, and immigration. It uses films, readings, and related art forms as a springboard for discussion, presentation, and improvisation as well as creative and analytical writing. Comprehensive grammar review and vocabulary building exercises are included.

Francophone Literature & Culture
This upper-level course focuses on the Francophone world while further developing language skills and imparting a greater facility in speaking, reading, and writing in French. Emphasis is also placed on vocabulary acquisition. Following a historical introduction and a study of French authors, the diversity of Francophone cultures and voices is explored through the works of writers from Canada, the French Antilles, and Western and Northern Africa. This course explores various themes such as loss, exile, identity, and gender.

Foundations I in Latin
This course is designed for students with no experience in Latin or for those who need to strengthen their knowledge of the basics. Students learn Latin through a natural language approach by reading, writing, listening, and speaking. This course covers the Cambridge Latin Course (CLC) Units 1 and 2, introducing students to an understanding of Roman daily life in ancient Pompeii and Britannia. During this first year, great emphasis is placed upon building a strong vocabulary and the fundamentals of the Latin noun and verb systems.

Foundations II in Latin
This course is designed for students who have completed Foundations I or who have demonstrated the equivalent level of proficiency. Foundations II introduces students to more complex constructions of Latin, especially to its very flexible verb system and love of subordinate clauses. Building a strong
vocabulary and comprehension skills remain primary goals. Students pick up where they left off at the end of CLC Unit 2 in Roman Egypt, and study Britannia and the city of Rome in CLC Unit 3. Students continue learning the foundations of Roman culture across the Empire.

**Latin Language & Culture**
This intermediate-level course completes the student’s introduction to the Latin language. Students continue developing proficiency with a focus on comprehension, vocabulary, and critical thinking skills. Picking up in the middle of CLC Unit 3 and continuing with CLC Unit 4, students learn about the culture of the ancient Mediterranean, especially the political and military structures of the Roman Empire, to prepare them to read and discuss authentic Classical Latin literature the following year.

**Introduction to Latin Literature**
This course introduces students to the study of ancient Latin poetry and prose by authors including Ovid, Catullus, Horace, Vergil, and Pliny, among others. Focus is placed on reading and translating authentic Latin texts of increasing complexity, in addition to discussing and analyzing the cultural, historical, and mythological contexts of those texts. Students will review and expand grammatical concepts, acquire an extensive vocabulary, and be introduced to different meters and literary devices of Latin poetry in order to improve their interpretive reading skills. Through the critical lens of social justice and anti-racism, students will analyze both authentic Latin literature and secondary Classical scholarship in order to broaden their perspective and engage ethically with the ancient world.

**Advanced Latin Literature**
This course offers students the opportunity to read a variety of authentic ancient Latin poetry and prose by authors including Ovid, Catullus, Horace, Vergil, Livy, and Pliny, among others. Focus is placed on reading and translating authentic Latin prose and poetry, in addition to discussing and analyzing the cultural, historical, and mythological contexts of those texts. Driven by inquiry, students will explore some of the great themes of ancient civilization that continue to confront us such as gender and social inequality, the place of religion, civic duty, and morality. Building upon their work in Introduction to Latin Literature, Advanced Latin Literature students will continue to analyze both authentic Latin literature and secondary Classical scholarship with the critical lens of social justice and anti-oppression in order to broaden their perspective and engage ethically with the ancient world.

**Foundations in Spanish**
Designed for students who have had no previous experience in the language or for those who need to reinforce basic skills, this course simultaneously builds all four language competencies (listening, speaking, reading, and writing) at the novice level. Students learn how to communicate on very familiar topics using a variety of practiced/memorized words, phrases, and simple sentences. Through various media, students encounter aspects of diverse cultures of the Spanish-speaking world, building respect and openness to practices and perspectives beyond their own. This course is taught primarily in Spanish.

**Integrations in Spanish**
Designed for students who have completed Foundations or who have demonstrated the equivalent level of proficiency, this course continues building all four competencies (listening, reading, speaking, and writing). Through a series of simple sentences in given contexts, students navigate everyday situations and begin creating personal meaning with the language. Emphasis is placed on not only students’ further engagement with materials from Spanish-speaking cultures, but also with social justice themes related to thematic content. This course is taught primarily in Spanish.

**Applications in Spanish**
Designed for students who have completed Integrations or who have demonstrated the equivalent level of proficiency, this course reviews and reinforces the four language skills (speaking, listening, reading, and writing) thereby strengthening all modes of communicating: interpreting, conversing, and presenting. Students practice maintaining conversations with one another, as well as understanding and expressing information across multiple timeframes on a variety of topics. These include aspects of everyday life, personal interests, cultural material, and social justice. This course is taught entirely in Spanish.
Spanish Language & Culture
This course is designed for students who have completed Applications or who have demonstrated the equivalent level of proficiency. Emphasis is placed on developing more advanced structures in various timeframes and expanding vocabulary, applied to more extensive oral and written presentations, both individually and in groups. Students explore in greater depth socio-cultural, historical, and literary topics, often addressing issues of social justice and marginalization through authentic supplementary resources. This course is taught entirely in Spanish.

Introduction to Spanish Literature
This course is designed for students who have completed the Spanish Language & Culture course or have taken a specific placement exam to demonstrate the equivalent level of proficiency. This course introduces students to the study of writers from Latin America and Spain such as Jorge Luis Borges, Pablo Neruda, Gabriel García Márquez, Ana María Matute, and Isabel Allende, among others. Focus is placed on readings and discussions of literary texts and diverse cultural, historical, and social themes. Students expand their vocabulary and refine their oral and written expression through informative class presentations, creative compositions, and persuasive and analytical essays. Authentic resources such as films, documentaries, interviews, and short videos enhance students’ interpretive skills. This course is taught entirely in Spanish.

Advanced Topics of the Spanish-Speaking World
This course is designed for students who have completed Introduction to Spanish Literature. Works by authors from Spain, Latin America, and the Caribbean provide a base for cross-cultural exploration and discussion of cultural, historical, literary, and sociopolitical issues. Students further integrate critical thinking skills with their language proficiency in order to explore social and political justice themes in the context of the Spanish speaking world. Course work includes analysis of African and indigenous cultural concepts. In addition, students examine topics related to cultural identity, immigration, gender issues, contemporary political trends, and the environment. The course stresses proficiency in reading, writing, listening, and speaking at an advanced level through various cultural genres, including music, film, literature, and journalism. Emphasis is placed on advanced vocabulary expansion and acquisition.

Advanced Spanish Literature UL
Prerequisite: Permission of the department
This course offers advanced Spanish students an opportunity to read literature on a college level from a variety of Hispanophone cultures. The year is devoted to Latin American literature and literature from Spain. Readings are selected from contemporary works and include poetry and prose from writers such as José Martí, Rubén Darío, Juana de Ibarbourou, Luis Palés Matos, Gabriel García Márquez, Juan Rulfo, and Federico García Lorca. Authentic movies and music enhance the study of topics such as feminism, black literature, and magical realism.