

# MARET

2018–2019 CURRICULUM GUIDE

# MARET

NOSCERE VIVERE EST  TO LEARN IS TO LIVE

## MISSION

Maret is a vibrant, K–12, coeducational, independent school in Washington, DC. We ignite our students' potential; foster their academic, artistic, and athletic talents; and promote their well-being. We develop the mind, nurture curiosity, welcome challenge, embrace joy, and build community that is equitable and inclusive.

## PHILOSOPHY

Maret provides a vigorous and dynamic curriculum, created by a skilled faculty of lifelong learners. We instill a devotion to academic excellence and a love for discovery and exploration. From our inception in 1911, Maret has adopted proven educational tenets while pursuing innovative approaches to learning. At every grade level, our students receive a broad and deep educational experience that allows them to cultivate individual strengths and interests.

Maret believes that social and emotional development is central to students' well-being and success. We encourage our students to tackle challenges in a culture of nurtured risk taking. We want them to push beyond their comfort zone so they can build resilience, character, and robust problem-solving skills. We understand the need for balance in our lives and seek opportunities to infuse our school day with moments of laughter and surprise.

Maret is an inclusive community that embraces diversity of perspective, experience, identity, circumstance, and talent. Our size and single campus foster meaningful connections among students, faculty, and parents. Our historic campus and its location in the nation's capital are integral to our program. We engage in service opportunities that enhance students' sense of civic responsibility and leadership. Students graduate from Maret well equipped to excel in future academic endeavors and to lead confident and fulfilling lives in an ever-changing world.

## CORE VALUES

Maret's core values are respect, integrity, excellence, creativity, the individual, connectedness, and joy.

Maret School stands firmly behind the principle that the admission of students, the employment of faculty, the operation of programs, and the governance of the School be open to all who are qualified regardless of race, creed, color, national origin, ethnic origin, or sexual orientation. We believe that this principle is both firmly grounded in the spirit of American democracy and in keeping with the civil responsibilities of an independent school.

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# MARET | ESSENTIAL SKILLS

As our Mission states, “Maret School galvanizes the intellectual, analytical, creative, and physical capabilities of our students and equips them to excel in future academic endeavors.” Understanding the rapidly evolving world in which our students live and will mature, we recognize that it is important to move beyond the traditional canon of content to concentrate on the cultivation of skills. We believe that the core program should be used to develop students’ skills in academic, physical education, and social/emotional realms. Skills are carefully woven throughout the entire K-12 program with the goal that students will have these resources at their disposal to inquire and think critically in their physical, emotional, and intellectual lives. In particular, we focus on skills in the following domains:

## Communication

- Master multiple languages and effectively use oral, written, and multimedia formats to communicate vital ideas and information in ways that show an empathetic understanding of diverse audiences.

## Research, Exploration, and Problem Solving

- Develop a sophisticated understanding of problem-solving and the confidence to approach complex, open-ended problems that encourage deep questioning, analytical thinking, and real-world connections.

## Wellness

- Maintain a balanced, healthy, and happy life that emphasizes making appropriate and sustainable choices.

## Collaboration

- Welcome the perspectives of others and learn ways to collaborate creatively, effectively, and responsibly with a wide range of people from different cultures, interests, and talents.

## Leadership

- Embrace opportunities to see beyond one’s self and to think deeply and ethically about problems faced by communities both near and distant, and acquire and practice the leadership skills needed to responsibly address them.

## Creativity/Innovation

- Express unique perspectives effectively through original approaches to complex questions explored both independently and in collaboration with others.

## Information, Media, and Technology Literacy

- Thoughtfully, creatively, and responsibly use technology to explore, evaluate, and synthesize information and ideas from traditional sources and new media.

## Global Awareness

- Develop a nuanced understanding of global challenges and appreciate the impact of our decisions and actions, both as individuals and as citizens.

# MARET | STUDENT SUPPORT

## Guidelines for Academic Accommodations

At Maret, both our Mission Statement and our Core Values emphasize the individual and respect for different cultures, talents, and interests. We strive to nurture and encourage the intellect, creativity, love of learning, and pursuit of individual excellence in each of our students. We recognize that this may take different forms in different students, and we embrace and celebrate those variations within our school community.

Our appreciation of individual styles helps shape the way we guide the education of our students with learning differences. The Maret faculty understands that all of our children approach learning in their own unique ways, and that some of our children have specific and special needs. We address those needs within small class settings and a flexible curriculum, with the guidance of our student support team. While we are successful with many of our students with specific needs, we also realize that these supports are limited. Maret works to ensure that efforts to serve particular students are balanced between other students' opportunities to learn and realistic expectations for teachers.

Parents are expected to share any existing assessments or educational support plans which will allow us to determine if the School can successfully meet the needs of the student. This information will allow us to meet the child's needs from the beginning of his/her Maret career. During a child's attendance, parents are responsible for obtaining any services, assessments, or therapies that are recommended by a team of teachers, advisors, administrators, and student support team representatives. The School has designated funds to support those families on financial aid who need to obtain such outside services. Suggested accommodations that result from professional evaluations will be reviewed by the Maret team to determine the feasibility of their use in the classroom. The use and benefit of these accommodations will be reviewed periodically.

## Targeting Success

Some of the hallmarks of Maret's educational program include:

- Faculty who initiate close and trusting relationships with students
- Small class sizes
- A curriculum that offers breadth and affords considerable choice
- Classroom strategies that acknowledge multiple intelligences and different learning styles
- Possibilities for communication between teachers/advisors and parents beyond routine parent-teacher conferences
- Opportunities for extra help, such as the supervised study hall in Middle School or appointments with teachers
- Limited allocation of space in school for work with tutors, hired by parents
- Parent-teacher conferences and narrative evaluations that address the student as a whole person, honoring effort and improvement as well as achievement

## Addressing Student Needs

Parents who expect that accommodations may be necessary for a student to work successfully at Maret are advised to begin conversations with the division director, learning specialist, teachers and advisors as early as possible. Accommodations will be considered on an individual basis, as recommended by Maret faculty and/or professional evaluations, in the context of existing resources.

In the Lower School, accommodations could include, but are not limited to:

- Preferential seating
- Verbal prompts
- Previewing material
- Supportive technology

In the Middle and/or Upper School, accommodations could include, but are not limited to:

- Opportunity to use another student's notes or teacher's notes when available
- Note-taking on a laptop, provided by the parent
- Alternative test/assignment formats to demonstrate competence
- Enlarged font, to increase readability
- Extended time on quizzes, tests, exams
- Use of computer/laptop to take tests and exams
- Testing in an isolated environment for reduced distractions
- Modified schedule

### The College Counseling Office

The US Learning Specialist will assist parents and students with the College Board and ACT process to request accommodations. Students applying for accommodations on the College Board and/or ACT exams must have documentation on file that meets their respective guidelines. Students must be using the requested accommodations on school-based tests for at least four months prior to submitting the application to the College Board or ACT.

### Maret does not provide

- Individualized Educational Programs
- Constant monitoring or one-on-one instruction/attention
- Extensive attention to drill or emphasis on rote learning
- Written description of all class activities

### Learning Specialists

There are three Learning Specialists who support lower, middle, and upper school students, faculty and parents. They help interpret and summarize professional evaluations for teachers, attend parent conferences, and help plan how to best support students based on identified recommendations. The Learning Specialists act as a resource for parents and teachers by making connections to outside educational professionals when appropriate.

### Counseling Department

The Counseling Department serves as a resource to all members of the Maret community, including students,

faculty, staff, and parents. The school psychologist offers individual and group counseling for students on a short-term basis, acts as a consultant to faculty, and maintains an extensive network of referrals and resources based in the Washington metropolitan area. Students may receive these, or other, services offered by the school psychologist as part of our regular academic program. All services are confidential as appropriate. Under certain circumstances, confidential information may be shared with people who have a legitimate need to know it. The department is also actively involved with diversity programs, substance abuse education programs for students and parents, advisor/advisee groups, the assembly program, the human development program, and student activity groups.

### Early Release for Students

The Maret community understands that our children have diverse talents and that some of our children may have specific and special needs in relation to those talents. These needs may require modifications in our traditional academic schedule, including early release. We will work in partnership with families to determine if the school can successfully meet the needs of these students. However, this may not always be possible given other curricular demands. We will review annually schedule adjustments to assess their continuing benefits and feasibility.

# MARET | LOWER SCHOOL CURRICULUM

## THE JOY OF LEARNING

A joy of learning permeates Maret's Lower School. The curriculum inspires students to take risks, think creatively, and work collaboratively. Teachers value their students' backgrounds and experiences and create a meaningful and dynamic context for learning.

The lower school curriculum is thoughtfully integrated; academic content is sequenced from one grade to the next, and curricular connections are made across subject areas when there is a natural overlap of skills, content, or concepts. Language arts, mathematics, and social studies are taught in the homeroom. Science, Spanish, visual art, music, physical education, library, technology, and Social-Emotional Learning (SEL) classes are taught by specialists in classrooms designed for those subjects.

Lower school students benefit from the full range of Maret's K–12 campus facilities, including a playground, two libraries (one designated for the Lower School), two fully equipped gymnasiums, a theater, a movement studio, a lower school maker space, and a cafeteria. Teachers take advantage of Maret's location in Washington, DC; field trips throughout this historically significant and culturally diverse city, as well as to surrounding locations in Maryland and Virginia, enhance the students' learning experience.

Maret welcomes children with a range of abilities and interests. The small size of the lower school classes helps teachers support children at different stages of development. A lower school learning/reading specialist and a part-time math specialist provide additional support for students and faculty.

## LOWER SCHOOL CELEBRATIONS AND EVENTS

Whether it's an annual tradition, demonstration of academic or artistic achievement, an activity focused on community service, or a celebration, children develop confidence and deepen connections through the Lower School's many special events and activities. Some celebrations are class-specific while others span several grades, perhaps including parents, grandparents, and special friends. Recent lower school special events have included:

- Biographical Character Day
- Environmental Spirit Week
- Fictional Character Day
- Fun Run
- Grade 4 Greek Play
- Grade 4 Camping Trip
- Grandparents and Special Friends Day
- Intensive Study Week
- Martha's Table Partnership
- Martin Luther King, Jr. Day of Service
- Music performances
- Pajama Day—A Celebration of Reading
- Publishing Party
- Pumpkin Parade and Grade 8 Carnival
- ROY G BIV Week
- Science Week

## Community Engagement and Partnerships

Lower schoolers engage with their wider community in a variety of ways. Maret's longstanding partnership with Martha's Table Healthy Start Center (a preschool affiliated with a local non-profit organization) provides a weekly opportunity for our lower school students to work with preschoolers in a structured, one-on-one setting. Each of our lower school classes, from kindergarten through fourth grade, visits Martha's Table two or three times during the school year, helping our students see themselves as part of the greater Washington, DC, community.

Maret lower schoolers also have prepared soup ingredients for Martha's Table for many years. Each month, on designated Mondays, lower schoolers bring in the needed ingredients. An assigned class chops the vegetables, and students deliver the prepared vegetables during their visit. Soup-making duties rotate so that each class has a turn during the year.

In addition, specific grades have established community partnerships. For example, first graders, in partnership with upper school science students, raise and release shad into the Anacostia River. This project helps increase the shad population and is an example of the first grade's exploration of life cycles as part of their science curriculum. Fourth graders have worked at A Wider Circle as a part of their study on gentrification.

Lower School students also participate in numerous service activities. In honor of Veterans Day, Halloween candy and hand-written letters are sent to troops abroad through Operation Gratitude. Each year, a toy drive is held for Martha's Table during the winter holidays. At the Martin Luther King, Jr. Service Fair, an annual School-wide day of service, lower school students join their older peers to create light catchers for nursing home residents, prepare care packages, organize mancala games for Horizons, and more.

## Language Arts

### READING

*Kindergarten–Grade 4 meet daily in homeroom*

The Lower School uses the Teachers College Reading Workshop for its reading curriculum. The curriculum is naturally differentiated; children read and apply lessons to books at their independent reading level. Students are involved in authentic reading experiences that help them learn to read accurately and fluently while comprehending the meaning of the text.

Students tackle the challenging work of learning how to read in a predictable and supportive environment. Each Reading Workshop includes:

- A teacher-led mini-lesson that teaches reading skills, comprehension strategies, or habits of proficient reading.
- Independent reading time for students to practice and apply what they have learned to books of their choice that match their “just right” reading level.
- Reading conferences that provide targeted instruction to support each child's individual reading development.
- “Partner shares” where students think and talk together about text and support one another's reading goals.

There are four units of study for each grade which are structured to help students read, understand, and analyze fiction and nonfiction. Teachers emphasize the joy of reading and help students develop rich reading identities.

### Kindergarten

**Unit 1:** Kindergartners develop emergent reading skills, using story language to support their developing identities as readers.

**Unit 2:** Students learn a repertoire of strategies to help them read.

**Unit 3:** Students read increasingly difficult books with greater independence and begin to read with accuracy, fluency, and comprehension.

**Unit 4:** Children become avid readers of fiction with attention to character, setting, and plot. They also read nonfiction and become experts in a chosen topic. Students improve their fluency by reading poems and song lyrics.



### First Grade

**Unit 1:** First graders start the year reviewing the good reading habits they learned in kindergarten and developing new habits for word solving.

**Unit 2:** Children learn strategies for comprehending nonfiction.

**Unit 3:** Students read increasingly complex texts for fluency and comprehension.

**Unit 4:** Children concentrate on story elements by studying the characters and the life lessons the characters learn.

### Second Grade

**Unit 1:** Second graders grow from readers who focus on print to readers who focus on meaning.

**Unit 2:** Students shift from reading fiction to nonfiction, exploring a variety of different topics. After becoming proficient with nonfiction texts, students begin an in-depth and interdisciplinary study of birds.

**Unit 3:** Children focus on reading fluency and figurative language. They improve their comprehension through longer, more complicated books.

**Unit 4:** Students read fictional series in book clubs to study characters and the author's craft.

### Third Grade

**Unit 1:** Third graders develop comprehension checks for following a story's thread. They tackle multisyllabic words and figurative language and learn to envision and predict a story's evolution.

**Unit 2:** Students approach nonfiction with a focus on constructing mental summaries of the text, including big ideas and supporting information.

**Unit 3:** Students study fictional characters in depth. They develop theories about characters and follow them through the "story mountain." They consider the lessons characters learn and compare and contrast characters, settings, and themes.

**Unit 4:** Children form research clubs and read a collection of texts on a topic. They focus on synthesizing and organizing information.

### Fourth Grade

**Unit 1:** Fourth graders delve into higher-level texts and study the complexity of characters. They trace a theme through different parts of a story and work on skills such as inference and interpretation while studying different fictional genres.

**Unit 2:** Students focus on nonfiction reading. They learn to distill main ideas, summarize, and compare/contrast text structures. Students form research teams to read about different topics.

**Unit 3:** Children form historical fiction book clubs. Each club reads novels set within a historical time period as well as nonfiction texts about that era, enlarging their historical knowledge and gaining greater understanding of characters and their struggles, perspectives, and insights.

**Unit 4:** Students delve into stories that address social issues such as bullying, poverty, and physical challenges. They identify themes as they focus on the struggles characters face.

### WRITING

*Kindergarten–Grade 4 meet daily in homeroom*

The Lower School uses the Teachers College Writing Workshop for its writing curriculum. Students receive explicit instruction in the strategies and qualities of good writing, including spelling and conventions, as well as craft. They engage in daily writing practice, choosing their own topics within the genres of narrative, opinion, and informational writing. They rehearse, draft, revise, edit, and share their published pieces in writing celebrations at the end of each unit. One of the year's cherished events is an annual Publishing Party, when all lower school students present bound versions of their written work to the important adults in their lives.

The Lower School uses Words Their Way and Fountas and Pinnell for spelling instruction. These developmental spelling, phonics, and vocabulary programs teach students to examine words in order to discover patterns. Children gain word knowledge, rather than merely memorizing specific words. Through assessments, teachers determine each student's spelling stage and provide instruction based on individual needs. In addition to these programs, students master high-frequency words to build accuracy and automaticity for words beyond their pattern recognition.

### Kindergarten

**Unit 1:** Kindergartners tell stories from their lives through drawing, labeling, and writing.

**Unit 2:** Students begin to write with an audience in mind, putting more letters and words onto every page, editing their work, and using more conventional spelling.

**Unit 3:** Children write how-to books that teach the procedures for activities from their daily lives.

**Unit 4:** Students write persuasive letters and essays that rally people to address problems they see in the world around them.

### First Grade

**Unit 1:** First graders craft a collection of small-moment stories from their lives.

**Unit 2:** Students create nonfiction how-to chapter books about topics on which they are experts.

**Unit 3:** Children write their own folk tale structured on *The Gingerbread Man*.

**Unit 4:** Students use their narrative writing skills to create their own fictional books.

### Second Grade

**Unit 1:** Second graders study published texts, learning writing techniques to incorporate in their own written narratives.

**Unit 2:** Students write procedural texts, descriptions, and analyses about experiments they conduct in class.

**Unit 3:** Children write persuasive letters that share their opinions about characters, scenes, and whole books.

**Unit 4:** Students write poems using line breaks to express meaning and rhythm. They incorporate figures of speech to make their writing more powerful.

### Third Grade

**Unit 1:** Third graders write personal narratives that cycle through the complete writing process.

**Unit 2:** Students craft nonfiction chapter books about topics with which they are particularly familiar, such as a hobby or a daily routine. They incorporate main topics and subtopics.

**Unit 3:** Children write persuasive essays about causes they believe in, using evidence to support their arguments.

**Unit 4:** Students explore the writing of fairy tales with an emphasis on point of view and story structure.

### Fourth Grade

**Unit 1:** Fourth graders develop fictional characters and write carefully structured stories.

**Unit 2:** Children are introduced to a structure for writing essays called “boxes and bullets.” They use this format to organize ideas and evidence on topics they know well. Their opinion essays may be about issues they wish to change in their community.

**Unit 3:** Students write research reports, elaborating on a central topic.

**Unit 4:** Students study a complex text and write a literary essay on the topic.

## Library

*Kindergarten meets once weekly for 30 minutes; half class*  
*Grade 1 meets once weekly for 30 minutes; whole class*  
*Grades 2 and 3 meet once weekly for 40 minutes; whole class*  
*Grade 4 meets once weekly for 45 minutes; half class*

The Maret lower school library takes joy in developing a lifelong love of reading in students by providing them access to a wide range of diverse and up-to-date materials for pleasure reading and research. The lower school library houses a 10,000 volume print collection and access to robust online resources. A full-time librarian meets with the students once a week to guide them in making appropriate reading choices and teaching the research process through library lessons that are integrated with each grade’s curricular content.

### Kindergarten

Kindergartners become acquainted with library procedures, including book responsibilities such as returning books on time and taking proper care of them. Children learn about the different sections of the library and to identify the differences between fiction and nonfiction. By the end of the year they are able to name each part of a book: title, author, illustrator, front cover, back cover, spine, spine label, barcode, title page, dedication page, and copyright page. Students listen to and discuss stories related to classroom curriculum, including wordless picture books, songbooks, and fairy tales, and books about cultural heritage, animals, and habitats.

### First Grade

First graders build on skills gained in kindergarten library classes by reviewing library procedures and learning to locate library books independently. They access particular online resources independently including the library catalog and OverDrive e-books. Students listen to and discuss stories related to classroom curriculum, including small moments (Reader’s Workshop), communities, and animal life cycles. Students are encouraged to select a mix of personal choice and “just right” books that are appropriate for their reading levels.

### Second Grade

In second grade, students are introduced to the Fabulous 5 research model which teaches them to wonder,

investigate, create, express, and reflect upon their work throughout the rest of their time in Lower School. Children learn to independently use nonfiction resources in both print and online formats, including dictionaries, thesauruses, encyclopedias, and specialized databases. They listen to and discuss stories related to classroom curriculum, including cultural heritage, birds, persuasive writing, and picture/chapter series.

### Third Grade

Third graders continue to use print and online resources to complete research for class projects using the Fabulous 5 research model. They listen to, discuss, and analyze stories from specific fictional genres, including mysteries, fairy tales, and historical fiction related to their classroom curriculum. Children benefit from book talks on chapter books that might interest them. They begin preparing for the thorough research they will conduct in fourth grade by learning about nonfiction text features, summarizing, and paraphrasing.

### Fourth Grade

Fourth graders dive deeply into the research process and explore the library's various online and print resources. They learn to apply organizational tools to the research process, identify reliable sources, and distinguish between primary and secondary sources. They study plagiarism, copyright, and fair use, and they learn to create bibliographies for their work using the site NoodleTools. Students continue to listen to stories related to classroom curriculum as well as high-interest book talks.

## Mathematics

*Kindergarten–Grade 4 meet daily in homeroom*

The mathematics program emphasizes flexible thinking, skill building, and developing confidence with the ultimate goal of attaining deep, conceptual understanding. Students are encouraged to find an entry point to a problem based on their knowledge and work toward a solution. This open-ended and creative approach to problem solving engages students, inspires learning, and encourages risk-taking. Teachers use the Everyday Math program as the foundation for their curriculum and supplement it as they see fit. The following math values guide Maret's instruction:

- **Intentional Exploration:** Teachers begin units with open-ended investigations to help students see patterns, raise questions, and make discoveries.
- **Differentiation:** Teachers present and offer students

a variety of ways to approach a problem. They add scaffolds or increase rigor to meet students at their individual level.

- **Ownership:** Children's individual approaches to problem solving are acknowledged and valued. They are given choices about how to approach their work, opportunities to share their thinking, and real-world situations in which to apply their knowledge. Students come to see themselves as mathematicians.
- **Communication:** Students often work in partnerships and groups and learn from each other through their conversations.
- **Flexibility:** Children are encouraged to find multiple approaches to solving a problem. Ultimately, they find the most efficient/ideal strategy.
- **Justification:** Teachers require to reflect on the strategies they use to solve a problem and explain their reasoning orally and in writing.

### Kindergarten

With a focus on the use of manipulatives, students develop a strong sense of numbers, understand patterns, explain their reasoning, and practice flexible thinking when solving problems.

### First Grade

First grade math is hands-on, with active projects such as inventorying the reading library and running a lemonade stand. They use manipulatives to construct and solve novel problems and show their math thinking in more formal ways, such as in journal entries. They also practice math concepts in the context of partnered games to promote each other's understanding.

### Second Grade

Students deepen their understanding of place value and strengthen their fluency in addition and subtraction to work with larger numbers. They continue to develop skills in effective mathematical communication; they explain their thinking and the processes they use to come to conclusions. Students explore real-life scenarios such as making change with money, finding the perimeter of a space, and using a timeline. They consider multiple approaches to solving problems, develop a variety of strategies for future problems, and learn from their classmates' points of view.

### Third Grade

With an initial focus on addition and subtraction, students demonstrate mastery of facts and learn to use various methods (trade-first, borrowing, counting up, etc.) to find solutions to problems with multi-digit numbers.

Students are introduced to single-digit multiplication and division. They are encouraged to illustrate their work in multiple ways and to use manipulatives to practice grouping. Students explain their thinking, present their work, and double-check their computations.

### Fourth Grade

Students begin the year with a geometry unit designed to build mathematical language and spatial awareness. Gaining automaticity with basic facts, they multiply and divide by two digits and acquire an in-depth understanding of place value. They explore fractions, decimals, and percentages through real-life examples. Students' thinking broadens to abstract reasoning; they continue to justify their thinking using pictorial, verbal, and written responses for problem solving. Everyday problems and data provide opportunities for the students to analyze, organize, estimate, and calculate.

## Performing Arts

### MUSIC

*Kindergarten meets twice weekly for 30 minutes; half class*  
*Grade 1 meets twice weekly for 30 minutes; whole class*  
*Grades 2–4 meet twice weekly for 40 minutes; whole class*

Inspired by the Kodaly, Orff-Schulwerk, and Gordon philosophies, the music curriculum encourages a lifelong love of musical expression and performance. Children develop their voices as they learn tone production and range extension. Folk music is the foundation for singing and instrument playing. Multicultural choral works, traditional rounds, musical theater tunes, and other popular pieces enhance their experience of music. The learning experience connects with themes studied in other lower school subjects.

Students learn foundational skills— steady beat competence, kinesthetic awareness, and overall coordination of the body— through creative movement and rhythmic dance. All students learn to play Orff instruments; third graders learn ukulele, and third and fourth graders play the recorder. Basic musical literacy and theory are woven into the curriculum. Lower school students showcase their developing performance skills in two musical concerts and other special performances throughout the year.

### Kindergarten

Kindergartners build a solid musical foundation through exploration. Children learn to differentiate between their speaking and singing voices and explore the various ways to use the voice. They learn to identify, handle, and play un-pitched percussion instruments, and they practice using proper mallet grip and technique when playing Orff instruments. Students identify and maintain a steady beat in music and represent that beat using body percussion and instruments.

### First Grade

First graders explore pitch, tempo, and music dynamics through songs, stories, and movement. They study basic written music and create small compositions. By listening to and performing songs from different time periods and cultures, students appreciate and perform a wide variety of music.

### Second Grade

Second graders experience two-part singing through rounds and partner songs. Students begin to play instrumental music of greater complexity with varied rhythms and hand patterns. They appreciate the world's rich musical traditions by studying music from different time periods and cultures.

### Third Grade

Third graders develop as performers. They learn to read a basic octavo and follow their section throughout a piece. Their two-part vocal repertoire expands beyond rounds and partner songs to include independent melodies. In addition to Orff instruments, students learn to play the ukulele and begin to study the recorder.

### Fourth Grade

The culmination of lower school music is the performance of the fourth grade's Greek musical. Students learn songs connected to the theme of a Greek play and set the pieces to choreography. They perform complex instrumental pieces that serve as overtures and entr'actes.

## Physical Education

*K–Grade 4 meet four times per week for 30 minutes; whole grade*

Students take part in developmentally appropriate, sequentially based activities and experiences that contribute to their growth and development. As children

participate, they improve fitness and acquire knowledge, motor skills, social skills, and positive attitudes. They come to value regular physical activity as a foundation for a healthy, productive, and fulfilling life.

### Kindergarten

Kindergartners focus on moving within a provided space and in their own personal space while responding to verbal instructions. Once the students are able to move effectively in their space, equipment is added. Kindness and caring are emphasized in all lessons.

### First Grade

Students expand their movement skills to include concepts such as direction, speed, levels, and pathways. Proper form and technique for skills such as throwing, catching, and kicking are introduced. Courtesy and showing appreciation are highlighted.

### Second Grade

Students explore movement patterns with a partner to define movement in relation to another person, shape, or group. Response with the entire body occurs in motor movement, both with and without equipment. Self-control and respect for others and equipment are stressed.

### Third Grade

Students build both motor skills and the essential skills of specific sports such as soccer, volleyball, basketball, floor hockey, and more. The emphasis is on building skills rather than playing full-length games. Responsibility and helpfulness are underscored.

### Fourth Grade

Students review sport-specific skills. Small teams ensure that all students are involved in game play. Basic rules and game strategies are introduced. Encouragement and acceptance of personal differences are emphasized.

## Science

*Kindergarten and Grade 1 meet twice weekly for 30 minutes; half class*

*Grades 2 and 3 meet twice weekly for 40 minutes; half class*  
*Grade 4 meets twice weekly for 45 minutes; half class*

The lower school science program is inquiry based. Through hands-on activities, students experiment, observe, and test their hypotheses. In small groups of six to 10 students, children explore and investigate while

collecting accurate data and analyzing results. Open-ended assignments de-emphasize the “right” answer and encourage children to take creative problem-solving risks.

### Kindergarten

Children gather information about their environment through a study of the senses. They make observations about what they see, hear, taste, smell, and feel, and record observations in words and pictures. As students explore and investigate their different senses, they also learn how the senses work biologically in connection with the brain.

### First Grade

First graders study life cycles. They watch plants sprout from seeds, caterpillars change to butterflies, and chicks hatch from eggs. Students learn about the parts of a flower, pollination, and bees. The bee unit focuses on honeybee communities and aligns with the homeroom study of community jobs.

In the spring, first graders work hand-in-hand with upper school chemistry students to construct a shad fish hatchery, monitor the water quality of the system, care for the shad fry, and, ultimately, release them into a local river.

### Second Grade

Second graders explore interactions ranging from physical connections with circuits and magnets to environmental connections such as patterns in nature. They examine food chains and webs, particularly pertaining to birds. The bird unit culminates with embryology and the hatching of chicks in the class incubator.

### Third Grade

Third graders explore engineering by designing and constructing a Rube Goldberg contraption, which aids in their investigation of physical effects and the power of the simple machine. Students investigate various scientific mysteries, including a unit where students are challenged to identify an unknown substance.

### Fourth Grade

Students study the concept of isolating and controlling variables, important to their understanding of the experimental process. Through experimentation with various materials, students collect, average, and graph data, and they collaborate to draw conclusions from their results. Fourth graders design, build, power, and test cars

that they create out of wood. They also explore nutrition and the structures of the human body.

## Social-Emotional Learning and Community

*One period per week; whole class*

*Taught by the school counselor*

*Curriculum is introduced outside of the SEL classes as well, and strategies are practiced throughout the day.*

The Social-Emotional Learning (SEL) program helps students practice self-reflection and teaches everyday conflict resolution and emotion management skills. Through a sequenced SEL curriculum, students develop intra- and interpersonal skills. They think reflectively about themselves as individuals, as members of a small community (their classroom), and as part of the larger communities of Maret and the world.

The lower school SEL curriculum builds students' capacity in five main areas: social awareness, relationship skills, personal decision-making, self-management, and self-awareness. These competencies are at the core of each SEL lesson, which is designed to meet students at their developmental levels. Throughout Lower School, the curriculum spirals through these main areas, providing students with opportunities to revisit topics and address age-appropriate challenges. The SEL curriculum is responsive; it allows the flexibility to address particular issues or social dynamics that arise within a class or grade.

SEL classes meet weekly and are taught by the lower school counselor with participation from the homeroom teacher. Through guided discussions and well-planned lessons, students learn how to be a good friend, identify and manage emotions, address bullying, resolve conflicts, and build pro-social behaviors. Every grade has two lessons on appropriate physical boundaries and consent. The children practice effective communication skills and teamwork. Homeroom teachers support community building by creating norms and expectations with the students. Skills and strategies introduced during SEL lessons are reinforced by the homeroom teachers throughout the school day.

### Kindergarten

Students learn to understand themselves as individuals while learning to get along with each other. The focus is on identity and what makes each child unique. There is an emphasis on Maret's norms for social interactions (e.g.

sharing, kindness). Through these lessons, kindergartners learn to identify and regulate their emotions, calm their bodies, resolve conflicts with classmates, and assert boundaries.

### First Grade

SEL lessons in first grade are called Friendship meetings and discuss aspects of identity that make us unique and impact our experiences. Students develop conflict resolution skills with peers, relying less on adult intervention. Through an exploration of self-regulation, students learn that they can make choices about how to behave in a situation, recognize different opinions and perspectives, and maintain boundaries in relationships. Through our conversations, they better understand that who we are should not limit what we are allowed to do.

### Second Grade

Students recognize the importance of friendly behavior and of being inclusive in their social interactions. Teacher-led meetings encourage the development of appropriate social interactions. Students learn the acronym C.A.R.E.S (Cooperation, Assertion, Responsibility, Empathy, and Self-Control) and discuss ways to demonstrate these skills. They practice recognizing, naming, and expressing their emotions. Active listening, empathy, and building connections with classmates are also emphasized. Students learn and explore the difference between "fair" and "equal" and practice non-verbal communication skills to bring awareness to the intended and unintended messages they are sending.

### Third Grade

Children use games, activities, and friendly competition to practice teamwork, cooperation, and communication skills. As they solve problems collaboratively, they learn good sportsmanship. There is also a focus on building healthy relationships and interpersonal skills, such as active listening, conflict resolution, inclusion/exclusion, and managing emotions.

### Fourth Grade

Students deepen and expand upon their prior knowledge. They continue to explore boundaries and the complexities of emotions; they think about how, when, and why they may feel more than one emotion simultaneously and they consider why some emotions are harder to express than others. Children practice problem-solving skills and work with the concepts of escalating and deescalating conflicts. Passive, aggressive, and assertive communication styles, and the messages they send, are explored.

Each spring, Debbie Roffman, a nationally renowned sex educator, visits the fourth grade to begin the conversation about sexuality. The school nurse follows up with information on body changes; science and homeroom teachers continue these discussions.

## Social Studies

*Taught in homeroom*

*Topics integrated with other disciplines*

In lower school social studies, students explore a range of communities and cultures near and far, past and present. Starting with their community and broadening to the greater world, they develop cultural competence and gain an understanding of others' perspectives. As they learn about the connections between communities and cultures, they begin to appreciate interdependence based upon geography and resources. They have opportunities to reflect on their lives and the lives of others in their community and the broader world. Discussions and experiences are central to the curriculum. Teachers tap into the wealth of resources in the DC metropolitan area and the rich cultural diversity of our families.

### Kindergarten

Kindergartners study habitats, beginning with their own homes and classrooms. They learn about Maret by following the adventures of the Gingerbread Man as he travels our campus. They also pick an on-campus tree and watch how it changes with the seasons. Children study tropical rain forests and the ocean. Trips to the Audubon Society and Baltimore Aquarium enrich their understanding of these habitats.

### First Grade

First graders focus on the concept of community. Through parent presentations and career chats, they examine the interconnectedness of the roles of workers in the community. Students use Washington, DC, as a model for studying land use; they produce three-dimensional block models and drawings of typical neighborhood buildings. Students also explore neighborhood diversity through a study of playgrounds and other public spaces.

### Second Grade

Students gain a basic understanding of the US political structure by learning about the three branches of government. They learn beginning research skills as well as how to be a responsible digital citizen as they research a state of their choice. Teachers use Hispanic Heritage

Month, Black History Month, and Women's History Month as springboards for discussing America's rich cultural diversity and various ongoing struggles for civil rights. Picture books, nonfiction texts, photographs, and videos bring chapters of American history, such as Cesar Chavez's fight to improve conditions for migrant workers and the 1960 March on Washington, to life. Regular reading of *Scholastic News* prompts discussion of current events.

### Third Grade

Through the study of world cultures, students gain an appreciation of different communities and their customs. They learn regional geography and how to read and interpret maps. Children study Central and South America, the Asian and African continents, Europe, and colonial Jamestown. They use research skills to investigate the lives of notable historical figures and make art collages to accompany their oral presentations. Third graders also explore the extensive resources in Washington, DC.

### Fourth Grade

Students begin their study of ancient civilizations through archaeological exploration. They visit archaeological sites to gain first-hand knowledge about the past. During their study of ancient Egypt and Greece, students engage in two research projects that utilize their library, writing, technology, and presentation skills. They pose research questions, pursue independent interests, and communicate their learning in creative ways. Students read the children's version of the *Iliad* and the *Odyssey* in the Greek mythology unit. The unit culminates in a Greek play in which every student appears as an actor, singer, and dancer.

## Technology

*Kindergarten meets bi-weekly for 30 minutes; whole class  
Grades 1 and 2 meet weekly for 30 minutes; whole class  
Grade 3 meets weekly for 40 minutes; whole class  
Grade 4 meets weekly for 45 minutes; half class*

All lower school students participate in dedicated classes taught by the technology faculty. Through second grade, the emphasis is on discovery and exploration of the basic tenets of computer coding, design thinking, creating, and digital citizenship. In third and fourth grades, students continue to develop their coding knowledge and expand their technological skills, using different tools and applications to complement other curricular work.

### Kindergarten

Kindergartners learn technology basics: what technology is and how it works. They begin learning basic programmatic concepts using iPad apps and to control the actions of robots.

### First Grade

First graders focus on how technology works. Children use technology to reinforce classroom concepts and learn programming concepts through iPad apps and devices that can be controlled.

### Second Grade

Second graders focus on more complex programming concepts and use those concepts to reinforce classroom instruction. Children learn the basics of 3D printing and explore the idea of having a digital presence.

### Third Grade

Students continue to develop their coding skills using both iOS and web-based programs. They also begin to use specific software applications to create and complete digital projects for other classes. Children begin to learn keyboarding in third grade and are expected to practice regularly.

### Fourth Grade

The fourth grade technology curriculum is closely coordinated with the library curriculum, supporting and complementing the students' language arts and social studies classes. Digital citizenship and the responsible use of technology are emphasized; students receive access to their Google Drive accounts and use the GSuite applications to build their writing and presentation skills. Other topics studied include digital storytelling and stop-motion animation. Students develop more advanced coding skills through online platforms like code.org and through the controlling of miniature robots.

## Visual Art

*Kindergarten and Grade 4 meet twice weekly for 45 minutes; half class*

*Grades 1–3 meet twice weekly for 45 minutes; whole class*

The lower school art program is studio based. Children express themselves creatively as they explore a variety of approaches to making art. They engage in drawing, painting, collage, printmaking, and sculpting activities. Elements of art and principles of design are integrated

within each project to encourage visual literacy. Creative expression, experimentation, and exploration are encouraged. Students discuss their own work as well as that of various artists' experiences, subject matters, and distinct styles.

Studio art is linked to the academic topics and themes studied in other classes where appropriate. Museum visits enhance the understanding and enjoyment of art: by fourth grade, students will have visited as many as 10 local museums and participated in virtual visits to museums outside our region.

### Kindergarten

Students begin to answer the questions, "What do artists do?" and "How do artists think?" By exploring artists as varied as Mondrian, Alma Thomas, and Leonardo da Vinci, students learn about color, contrast, and composition. They have opportunities to experiment with different media.

### First Grade

First graders study artists and their influences (for example, how Picasso was influenced by war and African masks). They use a variety of media as they explore color, form, contrast, color mixing, composition, line, shape, and scale, working from both observation and imagination.

### Second Grade

Second grade artists experiment with a variety of media and learn about different art genres. Students begin to examine the intentional use of the elements of art and principles of design to achieve desired results. They create work based in folk art traditions, are influenced by the work of modern artists, and apply research to help accurately build 3-dimensional forms.

### Third Grade

Students create artwork inspired by their own experiences and begin to use the elements of art and principles of design like color, emphasis, line, and balance to creatively communicate personally meaningful ideas. Their studies of the concepts and techniques of modern and contemporary artists create additional support to their artmaking.

### Fourth Grade

Fourth grade artists create increasingly sophisticated works. They produce drawings and paintings that demonstrate their understanding of visual space and



display an illusion of depth on a 2-dimensional plane. Observational drawing skills are also honed through a series of detailed still life drawings.

## World Languages: Spanish

*Kindergarten Spanish is integrated into homeroom curriculum; minimum of two to three lessons per week*

*Grades 1–3 meet three times weekly for 30 minutes; whole class*

*Grade 4 meets four times a week for 30 minutes; whole class*

Lower school Spanish focuses on integrated content and language-driven elements. Rather than rote memorization of vocabulary, students study Spanish within a context, building authentic communication skills. They explore language through the study of people and cultures, which encourages oral facility, builds confidence, and nurtures creativity. Students connect their expanding knowledge of Spanish with other subjects studied in Lower School, including social studies, science, music, and math.

### Kindergarten

Young children study Spanish in their homeroom in conjunction with other subjects. Basic concepts such as numbers, colors, and days of the week are introduced in the Spanish language as well as in English. Students learn Spanish greetings and salutations, numbers through 30, and words associated with senses. They also explore Spanish through songs and videos.

### First Grade

First graders focus on presentational speaking and writing. Students make connections between Spanish and concepts covered in other subject areas. They study bees and the life cycles of butterflies through Spanish language activities that are integrated with the science curriculum. They use words and simple phrases to apply their growing Spanish vocabulary to everyday situations, such as describing the weather, identifying appropriate seasonal clothing, communicating how they feel, and talking about food. They also explore the sounds of the Spanish alphabet and work on spelling skills.

### Second Grade

The second grade curriculum focuses on interpersonal communication with continued work on presentational writing and speaking. As part of Maret's cross-disciplinary approach, students use their knowledge in other subjects to communicate authentically in Spanish. For example,

they write a Spanish bird description that is included in the bird book they create in writing workshop. Children master basic communication on everyday topics like weather, dates, telling time, and expressing feelings.

### Third Grade

Students focus on all forms of communication: listening, speaking, reading, and writing. They explore culture through the study of historical figures from Spanish speaking countries, and they conduct research in Spanish about Equatorial Guinea as part of their study of Africa. These cultural projects align with their social studies class. Students also learn about and discuss different family structures. They reflect on their identity while writing a Spanish composition about important family celebrations. Children perform in a Spanish skit at the end of third grade.

### Fourth Grade

Fourth graders work on all forms of communication. They also develop global awareness through the study of the culture and geography of Spanish-speaking countries. They improve their communication skills by learning and using vocabulary related to describing themselves and others, their family, daily routines, interests, and hobbies. In conjunction with Language Arts, fourth graders explore the world of poetry and create and recite poems. Fourth graders demonstrate their Spanish skills at an all-Spanish assembly where they present songs, short skits, and/or dramatic readings.

# MARET | MIDDLE SCHOOL CURRICULUM

## BUILDING COMMUNITY

Cultivating friendships; establishing cross-grade connections; collaborating with adults; and becoming engaged on campus, in the neighborhood, and across the world: the emphasis in Middle School is on building the students' sense of community.

Maret capitalizes on the spirit, energy, and curiosity of students in grades five through eight to create confident thinkers, innovative artists, healthy athletes, thoughtful social navigators, and proactive citizens. As students progress through the middle school program, they acquire the tools and skills they need to assume increased responsibility and to become independent young adults.

Middle school students study English, history, human development, Latin, library/research skills, mathematics, music, physical education, community engagement and partnerships, science, Spanish or French, technology, and visual art. The curriculum emphasizes broad exposure to each subject while systematically providing the basic skills for forthcoming upper school study. Teachers use a variety of approaches in the classroom that encourage creativity, collaborative work, and problem solving.

Each grade features curricular highlights: the American Experience Fair (history) and Science Fair in fifth and sixth grades, Global Issues Day (world cultures and geography) in seventh grade, and the Climate Change Conference (science) in eighth grade. Assemblies, advisor meetings, middle school houses, and extracurricular activities such as Jazz Band, Chess Club, Geography Bee, Art Club, MathCounts, and the Middle School Play offer opportunities for students to pursue their interests while building meaningful relationships. In addition, community engagement projects and partnership activities give students a broader understanding of local, national, and international communities.

## SOCIAL CURRICULUM

The middle school social curriculum incorporates activities that foster a positive social and emotional growth in students and Maret's core values: Respect, Integrity, the Individual, Creativity, Excellence, Connectedness, and Joy. Grade-level meetings and smaller advisor group gatherings help students gain a greater understanding of these values and how to live them

authentically. In addition, classes and group discussions on human development and social issues are interwoven throughout the middle school program to help adolescents deal with concerns facing them in today's society.

## CONVOCATION

The entire middle school community gathers together for a weekly convocation, during which eighth grade students share announcements for the week. Each advising group leads one convocation a year and is responsible for guiding students in Grades 5–8 through activities based on one of Maret's core values.

## MIDDLE SCHOOL HOUSES

Every student is assigned to one of four houses for the duration of their middle school years. Comprised of students from all four grades, houses are named after the four streets that surround Maret: Cleveland, Garfield, Klinge, and Woodley. A house dean leads the members through various congenial competitions during the school year, such as a four-way tug of war, a gingerbread house bake-off, charades, karaoke, scavenger hunts, and other team-building competitions.

## COMMUNITY-BUILDING EXCURSIONS

Among the highlights of Middle School are grade-specific overnight trips. These excursions foster independence and give students the opportunity to build deeper connections with their classmates and teachers. Overnight trips include Williamsburg (Grade 5), New York City (Grade 6), Mountainside Outdoor Adventures (Grade 7), and Philadelphia (Grade 8).

## COMMITTEES AND CIRCLES

In addition to after school clubs and extracurricular activities, every student joins a committee or circle. Committees are action-oriented; students acquire leadership experience while working on initiatives that benefit the school community. These student-initiated, small group gatherings meet once a month, during the middle school assembly period. With the help of middle school advisors, students work together to set the group's goals. Circles are interest-based, providing the chance to pursue a passion or discover a new one. Recent committees and circles have included:

- Current Events/News Committee
- Diversity Committee
- Hospitality Committee
- Itty Bitty Committee
- Library Committee
- Technology Committee
- Cooking Circle
- Dance Circle
- Debate/Public Speaking Circle
- Game Show Circle
- Meditation Circle
- Physical Fitness Circle
- Strategy Board Games Circle
- Theatre Games Circle

### INTENSIVE STUDY WEEK

Every February, middle school students and faculty embark on a week of “out of class” projects and trips during Intensive Study Week (ISW). All eighth grade students take “Adventures in the City of Brotherly Love,” an out of town excursion to Philadelphia. Additional ISW offerings vary each year; students in Grades 5, 6, and 7 have recently enjoyed:

- Architecture 101: Amazing Buildings
- Around the Asian Continent in Four Days
- Civil War Battlefields
- Connecting with the Lower School
- Engineering Extravaganza
- Film Making Frenzy
- The DC Experience

### ADVISORS

Each middle school student is assigned an advisor. In daily meetings, advisors discuss social concerns, monitor academic progress, and provide a supportive environment focused on the individual needs of the student. Advisors also lead activities based on Maret’s core values, with an emphasis on personal and intellectual growth. Each grade level has a dean who works with the advisors to ensure class unity and cohesion.

### COMMUNICATION WITH PARENTS

Communication between teachers, faculty advisors, and parents provides a strong support system for students. Parents meet with their student’s advisor at the beginning of each school year and may also meet periodically to discuss the student’s academic and social challenges. Twice a year, on designated conference days, parents meet with each of their student’s teachers. These in-person get-togethers build connections that facilitate open

communication. In addition, student progress reports and official report cards are sent home two times a year.

## COMMUNITY ENGAGEMENT AND PARTNERSHIPS

### Community Engagement and Partnerships 5

The fifth grade community engagement and partnership program centers around the Earth science curriculum. Students learn about the chemical properties of water, indoor and outdoor water consumption, and methods to conserve and purify water. They spend time examining their own role in water usage and reflect on how to be responsible global citizens. Working with a global partnering school, fifth-graders communicate through videos on a shared project about water purification. Maret students collaborate with their global partners to create aquifers and filters to be used in the partnering school’s community.

### Community Engagement and Partnerships 6

*What does it mean to be a member of a community? In which communities do we consider ourselves a part? How do small and large communities differ? How can we care for our communities and in turn be nourished by them?*

These are some of the many questions students address in the sixth grade community engagement and partnership program. Each Wednesday afternoon, one advisor group assists at SOME (So Others Might Eat), an interfaith, community-based organization that helps the poor and homeless Washingtonians. Students volunteer on a rotating schedule, sorting food, clothing, and kitchen items in SOME’s pantries. Every other Wednesday, Maret students are joined at SOME by peers from The Washington School for Girls (WSG), working in service and coming together for reflection and community building. Students from Maret and WSG also meet over the course of the year to learn about each other, develop friendships, and celebrate their community work.

### Community Engagement and Partnerships 7

The seventh grade program, taught in partnership with the National Park Service (NPS) and Rock Creek Conservancy (RCC), combines hands-on work with classroom content. This “Creek to Bay” class teaches how caring for Rock Creek can have wide-reaching effects on the health of the local watershed and the Chesapeake Bay. Each week, students are divided into four different pods, taught by a different teacher and focused on a unique

but related topic. Students rotate through the pods, experiencing all four pods every four weeks. The three on-campus pods are Chesapeake Choices: Watersheds and Keystone Species, Power of Words: Using Writing to Inform and Advocate, and In the Lab: Water Quality and Creek Ecology. The Stream Team pod takes students off campus to pick up trash in Rock Creek or remove invasive species from the surrounding area. Students also hear from guest speakers, attend related field trips.

### Community Engagement and Partnerships 8

Maret students collaborate with preschoolers at the Edward C. Mazique Parent Child Center in the eighth grade community engagement and partnerships program. Each trimester, a different group of eighth graders participates in three on-campus classes and seven off-campus visits to Mazique to work with their younger “buddies.” Visits to Mazique begin with a group introduction before buddies pair off for one-on-one work. Each Maret student partners with the same Mazique student each week to foster strong relationships as they work together on literacy, English, and developmental skills.

## HUMAN DEVELOPMENT

### Human Development 5

Fifth grade human development focuses on friendships, self-awareness, and decision making. A significant amount of time is spent teaching students about puberty, reproductive anatomy, and pregnancy, as well as gender identity and gender expression. Classes start with a “check-in,” giving students the opportunity to practice recognizing their own feelings and gain understanding as to how those feelings influence behavior. Check-in also allows students to practice empathizing with their peers. Through reflective activities, students explore and articulate their boundaries with regard to personal space, emotions, language, and behavior.

### Human Development 6

In sixth grade, students concentrate on friendships, peer dilemmas, self-awareness, peer pressure, and decision-making. Students continue to reflect on their feelings and gain empathy when they check in at the start of each class. The film *Let's Get Real* serves as a starting off point to discuss bullying and responses to bullying behavior. Short videos and discussions about puberty, pregnancy, birth, and reproductive anatomy expand upon the curriculum learned in fifth grade.

### Human Development 7

Students meet in gender-specific groups to discuss the effects of the emotional and physical changes occurring in their lives. They explore sexual growth and development as well as relationships with parents and friends. Students learn about stereotypes, body image, substance abuse, media messages, and the importance of developing clear communication skills. They learn to make decisions that show respect for themselves and others and take into account the possible consequences of their actions.

### Human Development 8

As they prepare to transition to Upper School, eighth graders explore sophisticated themes associated with human growth and development. Small and large group work, class assignments, and videos are used as the basis to discuss sexually transmitted diseases, substance abuse, relationships, decision making, sexual orientation, gender-based expectations, stereotypes, and digital citizenship.

## HUMANITIES

### Humanities 5

Fifth grade combines language arts and social studies in one interdisciplinary humanities period. The program uses *Readers' Workshop*, *Writers' Workshop*, and a range of history lessons as the basis for instruction. Students study the political and social diversity of American history, and broaden their understanding of issues by exploring historical texts and primary sources. The writing program includes creative work as well as written analysis and synthesis of key topics. “Identity” is the overarching theme. Students develop their sense of identity, family, community, and nation as they explore fictional characters, biographies of Americans, and the social and historical development of the United States. They also consider the theme of “freedom,” studying key moments in Colonial and Revolutionary American history: the writing of the Constitution; and the stories of Native Americans, African Americans, and others who contributed to the developing nation.

#### **Texts include:**

*Social Studies Alive! America's Past*  
 Carbone, *Blood on the River*  
 Fleischman, *Seedfolks*  
 Philbrick, *Freak the Mighty*  
 Schmidt, *Lizzie Bright and the Buckminster Boy*  
 St. George, *The Duel*  
 Woods, *My Name Is Sally Little Song*

**English 6**

Students expand their writing abilities by composing historical fiction, memoirs, short speeches, poetry, vignettes, and scenes for plays. They hone their research, note taking, paraphrasing, punctuation, and revising skills for analytical writing. Students read, discuss, and debate challenging works of literature.

**Texts include:**

Creech, *Walk Two Moons*  
 Gibson, *The Miracle Worker*  
 Goodrich and Hackett, *The Diary of Anne Frank* (play)  
 Lowry, *The Giver*  
 Salisbury, Graham, *Under the Blood Red Sun*  
 Taylor, *Roll of Thunder, Hear my Cry*

**History 6**

Sixth graders continue to explore the theme of “identity” as well as the theme of “the journey.” They read fiction and biographies about migrating/traveling characters, set against the backdrop of America’s complex journey from the pre-Civil War era to the present. Students study the nation’s evolution from an agrarian society to an industrialized world power, and its ongoing growth from an imbalanced democracy to a more inclusive one. They go on field trips to national landmarks and historical sites as well as to local DC neighborhoods and community centers. They explore the role their city has played in American history and learn how DC’s diverse population has striven to achieve freedom, autonomy, and identity. In the spring, the class travels to New York City to visit Ellis Island and other pertinent sites. They also participate with the fifth grade in an American Experience festival that incorporates historical research and oral history.

**Texts include:**

Fleischman, *Bull Run*

**English 7**

Students consider empathy, integrity, and the politics of belonging. Students read novels centered on the themes of belonging and inclusion, nonconformity and justice, and individuality and identity. They make connections between the novels’ characters and their own lives. Students practice proper writing mechanics while developing their voices as writers. They write formal essays and explore informal free writing and creative writing. Students learn to express themselves orally through debates, formal and informal presentations, dramatic recitation, and reading aloud. They use textual evidence to craft and support their written and oral arguments. Students explore abstract thinking and make thematic connections between their ideas and evidence from texts.

**Texts include:**

Jimenez, *The Circuit*  
 Lee, *To Kill a Mockingbird*  
 Lai, *Inside Out and Back Again*  
 Bradbury, *Fahrenheit 451*  
 Shakespeare, *A Midsummer Night’s Dream*  
 Various authors, *America Street*

**Summer Reading:**

Ryan, *Esperanza Rising*

**History 7**

Students take a regional approach to the world’s physical and cultural geography. They examine the diverse geography, history, cultures, and economies of Latin America, Africa, Asia, and the Middle East, while building reading, writing, and research skills. Students discover how the physical environment shapes human cultures, and vice-versa. They seek to understand contemporary global challenges, such as overpopulation, poverty, political oppression and revolutions, and water shortages. Students hone their skills through essays, formal reports, debates, and collaborative projects. They engage in a Prezi project on the Arab Spring. They also research water issues and potential solutions for a country of their choice and present their work at the seventh grade Global Issues Day.

**8th Grade Humanities**

*The content of English 8 and History 8 is contextually aligned, providing multiple entry points for students to understand the thematic material of each course. The essential questions of each course present a platform for students to consider many different aspects of the cultures they study. Reading and writing skills taught in these courses complement one another as students engage in a variety of assessments that prepare them for Upper School.*

**English 8**

Eighth grade students examine the hero’s journey in a variety of social, historical and political contexts. They focus on the concept of heroism and how this idea evolved based on geography, race, gender, sexuality, religion, and social constructs. Students improve their annotation skills and develop a more nuanced approach to paragraph development and sentence structure in their analytical writing. They engage in creative projects such as writing a short story, creating a podcast, and crafting and performing a segment of an oral history.

**Texts include:**

Arni, *Sita’s Ramayana*  
 Bendis, *Miles Morales*  
 Euripides, *Medea*  
 Homer, *The Iliad* (excerpts)

Kang, *Hong Gildong*  
 Malcom X, *The Autobiography of Malcolm X*  
 Miller, *The Song of Achilles*  
 Niance, *The Epic of Sundiata*  
 Okorafor-Mbachu, *Binti*  
 Wilson, Ms. *Marvel*  
 Yang and Liew, *The Shadow Hero*

**Film:**

*Princess Mononoke*

**History 8**

Eighth grade students survey the development of civilization from Paleolithic times through the High Middle Ages. They focus on the complex and evolving relationships between humans and the environment, humans and other humans, and humans and ideas. They question how we know what we know, where historical information originates, and how we determine if it is reliable. Students study Egypt, Mesopotamia, India, China, Greece, Rome, medieval Europe, and Africa. They focus on the interconnection of ancient civilizations through the Uluburun Shipwreck project, a VoiceThread project on African cultures, the Pixton project about creation myths, and a project on the Silk Road. Students study world religions and philosophies from a historical perspective, including Hinduism, Judaism, Buddhism, Confucianism, Daoism, Christianity, and Islam.

**LIBRARY STUDIES****Library 5**

Fifth graders develop a lifelong love of reading and build upon their information-literacy skills. They read an array of book genres, themes, and formats, sharing their opinions in weekly theme-based meetings. Using print as well as digital resources, students study the research process: how to find different types of library resources, extract information from those resources, ask good research questions, find answers to those questions, and organize and present findings.

**Library 6**

Students focus on digital information literacy, building upon work in their core academic classes to practice using, selecting, and differentiating between different types of information sources; asking and answering research questions, and organizing and presenting their findings. They explore various genres and discuss books through reading aloud, student book recommendations, and book talks.

**Library 7**

Seventh graders explore the research process from start to finish: how to ask pertinent research questions, find answers, organize findings, and synthesize information into a cohesive product. They focus on using and evaluating digital sources.

**Library 8**

Students engage in free-choice reading, selecting their own books to ensure that pleasure reading continues to be part of their daily lives. They listen to book recommendations and discuss books with classmates.

**MATHEMATICS****Math and Science 5**

Fifth grade combines mathematics and science in one interdisciplinary period. Students conduct hands-on experiments and numerous project-based activities. They take measurements, collect data, find ways to display that data effectively, and examine patterns in order to draw conclusions about real-world phenomena. Students study patterns, puzzles, and problems that encourage creativity. They learn Earth science, including geology, water cycles, weather, and astronomy. Fifth grade students keep observations, write solutions, and document their understanding of concepts and problem-solving strategies in personal math/science journals. They conduct and report on an original scientific experiment as part of the annual Science Fair.

**Math 6**

Students become confident, competent problem solvers, exploring new ideas and strengthening their fundamental mathematical skills while addressing interesting problems. Students work independently and within groups and present their work not only on paper, but also formally before their peers. Communication and presentation skills are developed. They study numbers and operations, measurement, geometry, data analysis, and introductory algebra skills. Unit projects let students delve deeply into various topics, using technology as an investigative tool.

**Math 7 and Advanced Math 7**

*Placement is made in consultation with sixth grade mathematics teachers and/or the chair of the Math Department.*

**Math 7**

Students in Math 7 develop problem-solving strategies and prepare for algebra. They address thought-provoking

challenges and apply their mathematics skills and strategies in novel, interesting contexts. Seventh graders continue their study of operations with fractions, decimals, and percentages; probability; algebraic expressions, equations, and inequalities; functions and graphs; and two- and three-dimensional geometry. Modeling algebraic functions with data and the use of those models are also learned.

### Advanced Math 7

Students in Advanced Math 7 work through the standard Math 7 core curriculum at a faster pace. They engage in enrichment activities and are challenged with more sophisticated and complex problems. When appropriate, the advanced course will cover a significant portion of the Algebra 1 curriculum.

### Math 8: Algebra 1, Advanced Algebra 1, Advanced Math Topics

*Placement is made in consultation with seventh grade mathematics teachers and/or the chair of the Math Department.*

#### Algebra 1

Students explore the general concept of a function, a fundamental concept in advanced mathematics. Linear and quadratic functions, in particular, are studied in depth. They work through robust exercises that require them to apply their knowledge to various situations without a preconceived notion of outcome. Topics are spiraled; students build upon their knowledge to address problems that increase in complexity and difficulty. Students use graphing calculators to visualize problems and enhance understanding.

#### Advanced Algebra 1

Advanced students focus on the same Algebra 1 concepts but grapple with complex problems that require them to synthesize ideas and incorporate a variety of problem-solving strategies. Teachers may introduce additional topics to continue to challenge students and foster an enthusiasm for mathematics.

#### Advanced Math Topics 8

Students in this course have completed the conventional Algebra 1 curriculum prior to eighth grade. They continue to study algebra and concurrently explore complex geometric principles and relationships. Students develop creative and analytical problem-solving skills and are challenged to apply those skills to interesting problems that help them grow as mathematical thinkers.

## PERFORMING ARTS

### Performing Arts 5

Fifth graders choose to participate in either an instrumental or choral ensemble. Skills are introduced through sequential development in technique, music theory, and performance practices. Both ensembles build upon these skills and techniques while acquiring broad musical experiences through a challenging and varied repertoire. Both fifth grade music ensembles perform in two concerts a year.

### Performing Arts 6

Students explore the elements of music by participating in either an instrumental or choral ensemble. Their skills improve through sequential development in technique, music theory, and performance practices. Both ensembles build upon these skills and techniques while acquiring broad musical experiences through a challenging and varied repertoire. The two sixth grade music ensembles perform in two concerts a year.

### Performing Arts 7 and 8

All seventh graders take Drama 7, a semester-long course. They also choose a full-year, mixed-grade performing arts course: Guitar, Middle School Chorus, or Middle School Band. Eighth graders choose between these three options and Drama 8 and Technical Theatre 8. Students may opt to try one course in seventh grade and a different course in eighth grade, or they may continue to pursue the same course of study for both years.

**Drama 7:** Students learn the basics of stagecraft. They play improvisational games, perform monologues, and develop acting skills.

**Drama 8:** Students build upon acting skills learned in the seventh grade. They write original monologues and scenes, study improvisation, and stage an improv show for a middle school assembly.

**Guitar:** Students learn the basics of acoustic guitar and perform in a guitar ensemble in winter and spring concerts with the middle school choirs.

**Middle School Chorus:** Students in this three- and four-part mixed ensemble perform music chosen from the standard choral repertoire combined with pieces arranged specifically for them.

**Middle School Band:** Music for this ensemble, featuring wind, percussion, and string instruments, is selected

from the standard instrumental repertory, combined with additional compositions arranged especially for the group.

Repertoire selected for both chorus and orchestra spans many different cultures, historical periods, and styles of musical compositions. Students increase their knowledge of musical notation, form, and stylistic interpretation. Both ensembles perform in two concerts as well as an adjudicated music festival.

**Technical Theatre 8:** Students learn the fundamentals of lighting, sound, and other technical features of the stage.

## PHYSICAL EDUCATION/ ATHLETICS

### P.E. 5

While learning the fundamentals of major and minor games, students develop physical and social skills. Fifth graders are encouraged to maintain a positive attitude toward health and fitness.

### P.E. 6

Sixth graders continue to learn and participate in a variety of games, focusing on skill building and team work. Small side team competitions are incorporated into many units allowing students to deal with winning, losing, and the importance of exhibiting superb sportsmanship regardless of the intensity of a game. Most activities are self-officiated by the students.

### Athletics 7 and 8

Students in Maret's interscholastic physical education/athletics program develop physical, emotional, and cognitive skills that enable them to become effective team members.

Participation is emphasized and all team members are guaranteed playing time. Some sports field an A and a B team, which are divided by skill level. Cuts may be made on some teams depending on the number of students trying out and the skill level. The A teams play 8–10 games per season; B teams play 4–8 games per season. Middle school sports are practiced during the school day; game time extends beyond the end of the school day.

A noncompetitive activity is offered if enough students choose not to compete on a team. This general physical education class offers a variety of team and individual activities that allow students to develop a wide range

of physical, emotional, and cognitive skills. By learning the principles of health and fitness, students develop a positive attitude for lifetime physical activity.

## SCIENCE

### Math and Science 5

Fifth grade combines mathematics and science in one interdisciplinary period. Students engage in hands-on experiments and numerous project-based activities. They take measurements, collect data, find ways to display that data effectively, and examine patterns in order to draw conclusions about real-world phenomena. Students study patterns, puzzles, and problems that encourage creativity. They learn Earth science, including geology, water cycles, weather and astronomy. Fifth grade students keep observations, write solutions, and document their understanding of concepts and problem-solving strategies in personal math/science journals. They conduct and report on an original scientific experiment as part of the annual Science Fair.

### Life Science 6

Students delve into the major themes of life science: ecological interactions, structural and functional relationships within plants and animals, and genetics. The variety of activities and projects requires both individual effort and cooperative group skills. Role-playing, laboratory investigations, lab reports, modeling, and oral, visual, and written presentations provide a framework for development of understanding about concepts. Students learn basic microscope skills to connect the visible features of organisms to the basic structures and functions of cells from plants, animals, and fungi. Exploration of experimental design begins with experiments on yeast and continues with data-collection activities, including baking, growing plants, and classifying animals. Students also study the workings of their organ systems and their genetic make-up. Sixth graders develop a Science Fair project that involves research, data collection, and analysis.

### Physical Science 7

Students explore conceptual physics with an emphasis on problem solving through controlled experimentation and practical engineering. Using basic physics concepts, students build musical instruments, roller coasters, electronic quiz boards, and more. They learn proper documentation of the experimental process: identifying variables, creating graphs to analyze data, and supporting statements with evidence. Students build Lego robots and



program them to perform a set of tasks for the Robotics Challenge. Students also apply their engineering skills to build a Rube Goldberg machine.

### Chemistry 8

Students study the fundamentals of chemistry, including physical and chemical properties, chemical bonding, the periodic table, and chemical equations. They also explore connections between chemistry and the environment. Students build upon their skills of investigation by keeping a lab notebook of the collection, organization, and analysis of their own data. They complete an extensive climate change project in which they act as representatives of a variety of countries, NGOs, and businesses. At the conference, students publicly present their research, and build consensus on climate change proposals.

## TECHNOLOGY

### Technology 5

This class meets once a week, all year. Fifth grade students continue to use Google Docs for creating documents and presentations and are assigned school email accounts. They learn more about being good digital citizens, the responsible use of technology, and the guidelines for technology use as a member of the Maret community. Other class topics include coding and design thinking, as well as making-focused projects that utilize materials and equipment in Maret's MakerSpace.

### Technology 6

The sixth grade technology class meets once a week during second semester. The main areas of focus are promoting positive behaviors online in terms of internet safety, awareness of one's digital footprint, and cyber bullying. Students also learn coding and problem solving while using design thinking, robotics, and various pieces of coding software.

### Technology 7

Meeting weekly for one semester, students build on skills from the previous year while exploring new concepts. Starting with a focus on digital citizenship, they learn ways to identify and protect themselves from internet hackers and scam artists. They learn about the consequences of their actions when using social media and posting information on the web. Students explore coding concepts and learn to build their own programs and design their own games using block-based programming languages.

### Technology 8

Eighth grade technology class meets once a week during the second semester. There are three main units of study: the Maret network, digital citizenship, and computer programming. Students are challenged to think critically, evaluate information independently, and gain problem-solving skills that are transferable to other disciplines. They work to answer the essential question, "How do you maximize the use of technology while limiting the potential to do harm?" Students use technology tools such as Scratch, iMovie, Text Edit, and HTML to demonstrate understanding and communicate ideas effectively.

## VISUAL ART

### Visual Art 5

Fifth graders experiment with various materials and techniques commonly found in visual art. They explore the elements of art using two- and three-dimensional projects that utilize the formal properties of line, shape, value, texture, and color. Students are encouraged to find imaginative solutions to visual problems. They also develop critical thinking skills by asking—and answering—*Does it work and why?* Activities include drawing, painting, printmaking, and clay modeling.

### Visual Art 6

Students build on their understanding of the elements of visual problem solving. Through hands on projects, they explore a variety of materials used in both two-dimensional and three-dimensional formats. They use line, shape, color, value, and texture to develop imagery in a systematic manner, while remaining open to creative possibilities. Students plan and execute projects in a logical sequence as they work toward completing their own unique art pieces.

### Visual Art 7

Seventh grade art is divided into three segments: two-dimensional art, three-dimensional art, and public art within the Maret setting.

In the two-dimensional portion of the course, students use the reduction method of printmaking to create an edition of multicolor block prints. They discuss design, composition, and color theory.

In the three-dimensional segment, students explore the language of architecture as it applies to form and space. Through sculpture projects, students investigate figure and ground relationships. They acknowledge and

establish scale determinations along with other formal considerations of mass, volume, and composition. Shop techniques in wood construction guide students through their projects.

For the public art segment, seventh graders plan and execute a site-specific public art installation that becomes a permanent addition to the campus. Students examine the role of public art and explore how location affects design, subject matter, and the selection of materials. They choose from a variety of media and resources and work as a group to develop and produce their own design.

### Visual Art 8

Eighth grade art is divided into three segments: drawing, three-dimensional art, and painting.

In the drawing segment, contour and value studies facilitate the understanding of form and volume. Students create a self-portrait done in the manner of artist Chuck Close, using graphing as a means of image enlargement. They develop observational skills, eye-hand coordination, and the use of value.

The three-dimensional segment focuses on language—lyrical and poetic—and its physical form. Working in the style of graphic designer Martin Venezky and using his hands-on methods of working with letters and words, students sculpt concrete poems. They employ a variety of materials and experiments so that the shapes of the words and phrases in space become integral to the meaning of the language in their sculptures.

In the third portion of the class, students explore the fundamentals of painting and painting techniques. They examine formal concepts of composition and color, and conceptualize and produce an image that engages and informs the viewer.

## WORLD LANGUAGES

### CLASSICS

#### Latin 6

In this theme-based class, students focus on vocabulary building and interdisciplinary connections. They learn numbers, geography, and parts of the body and they begin the study of basic Latin grammar, including singular and plural noun and verb endings. Students explore themes such as: *What is a Romance language? How does learning*

*Latin support the learning of other languages and subjects? and What do foundation stories and myths reveal about a culture?*

#### Latin 7

Students who demonstrate interest and ability in Latin begin an accelerated classics sequence. They study the material in the *Cambridge Latin Course, Unit 1*, which focuses on vocabulary, grammar, and culture through a single narrative about a Roman family living in Pompeii. Students begin their study of Latin vocabulary, noun case endings, verb endings for three tenses, and basic Latin sentence structure. They continue to study English language derivatives and the history and culture of the ancient world. Learning occurs through games, projects, plays, dialogues, digital activities, and internet research.

#### Latin 8

Eighth graders continue their study of Latin language and culture by completing the *Cambridge Latin Course, Unit 2*. Students read stories set in Roman Britain and ancient Alexandria; they learn about the relationships between first-century Rome and its provinces, including the shared and dissimilar aspects of their cultures. Students further develop their knowledge of indicative verb forms. They expand their mastery of noun cases, adding the genitive and ablative cases. Games, projects, plays, dialogues, internet research, and audiovisual resources enhance the students' familiarity with linguistic and cultural material.

### MODERN LANGUAGES

#### Spanish 5

*All fifth grade students take Spanish.*

Students expand their understanding of Spanish with a thorough look at the language's structures. They also work on the aural and oral aspects of Spanish. Students explore how to interact in the language on a daily basis through exercises such as role-playing. They study several Hispanic cultures through the use of audiovisual materials, special projects, and games. Students participate in a reading program using authentic Spanish-language texts and magazines.

#### French 6

*Returning Maret students may choose to continue with Spanish or begin French. Students new to Maret take French in sixth grade. (New students who have had previous Spanish language study may continue to take Spanish with the approval of the department chair.)*

Students learn basic concepts of French grammar and vocabulary and develop basic communication skills. Students develop their oral and aural skills through projects that highlight the geographic and cultural aspects of the language, comparing French and American daily life. In addition to a textbook, students use workbooks, and audiovisual materials to supplement in-class activities.

### Spanish 6

*Returning Maret students may choose to continue with Spanish or begin French. (New students who have had previous Spanish language study may continue to take Spanish with the approval of the department chair, or begin French.)*

Students continue to build on the material presented in the fifth grade. They engage in projects that highlight the geographic and cultural aspects of the language. Games and role-playing reinforce the material. Students read authentic Spanish texts, building their vocabulary and understanding of Spanish grammar. Students also write storybooks and short stories.

### French 7 and Spanish 7

*Students new to Maret begin their study of a modern language. (If the student has studied French or Spanish before coming to Maret, they continue to study that language.)*

In French and Spanish classes, students expand their communication skills while continuing to learn formal grammar. They review and consolidate concepts previously studied, learn complex features of Spanish and French grammar, expand their vocabulary and speaking skills, and learn the complete set of simple tenses of regular and irregular verbs. They develop more complex notions of syntax.

### French 8

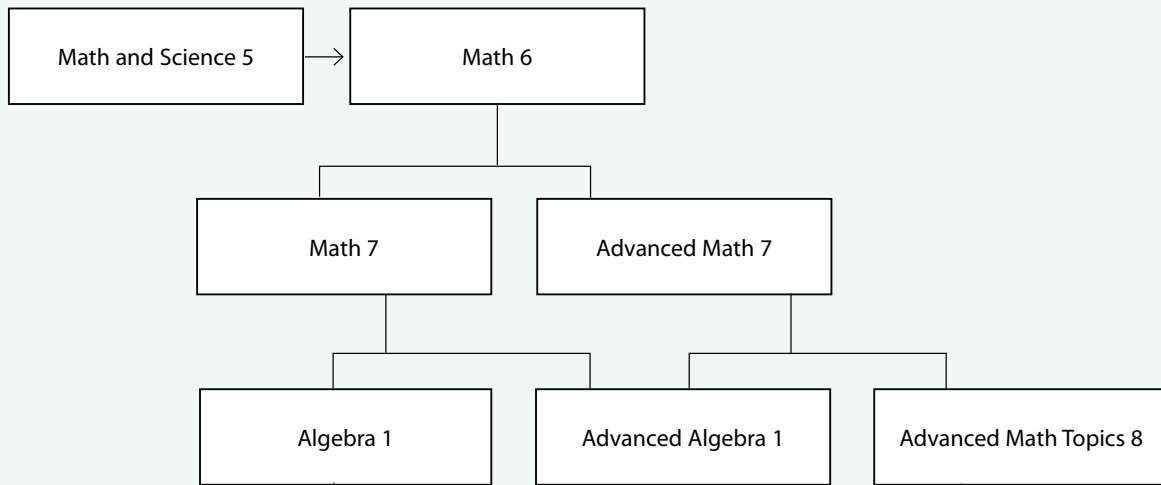
Students learn all the verb tenses, including conditional and subjunctive, gaining skills that enable them to express themselves clearly and confidently. They speak and write about choosing clothes, exercising, staying fit, traveling, the environment, and making plans.

### Spanish 8

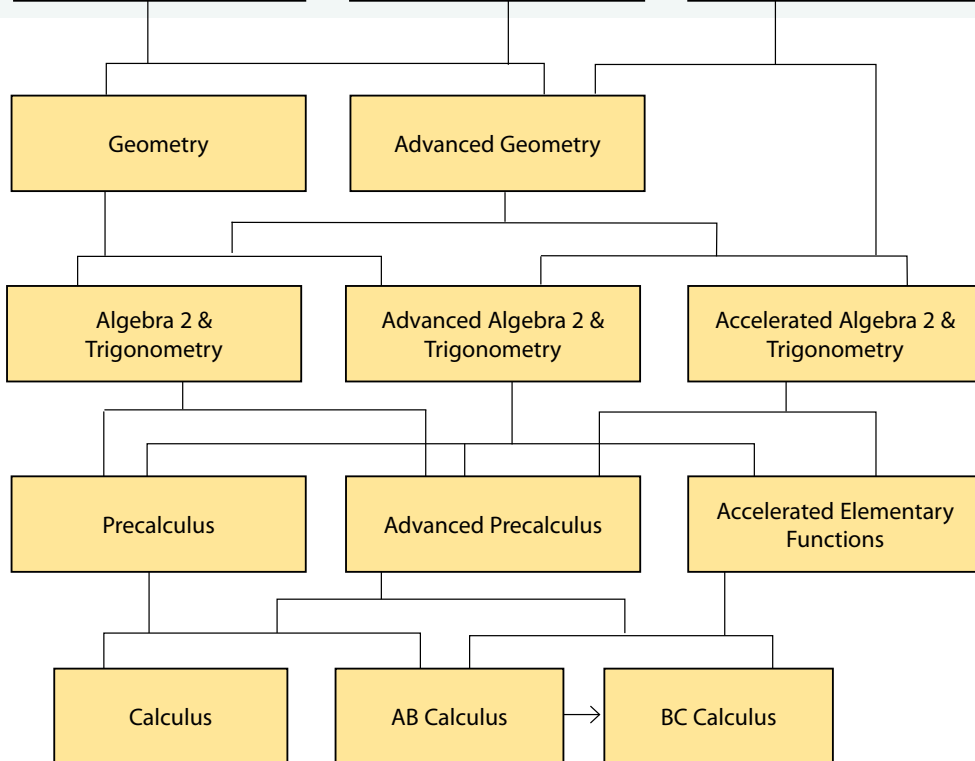
Students review and consolidate concepts previously studied, learn complex features of Spanish grammar, expand their vocabulary, and develop their speaking skills. Students develop mastery of the complete set of simple and perfect tenses of regular and irregular verbs. They develop complex notions of syntax and an expanded vocabulary base.

**MIDDLE SCHOOL AND UPPER SCHOOL MATHEMATICS SEQUENCE**

Middle School



Upper School



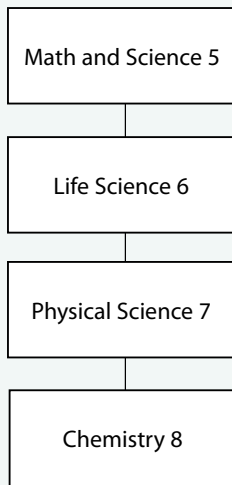
Advanced Mathematical Modeling, Statistics, and Design Thinking: Making & the World

MSON Offerings: Multivariable Calculus, Linear Algebra, Advanced Applied Math Through Finance

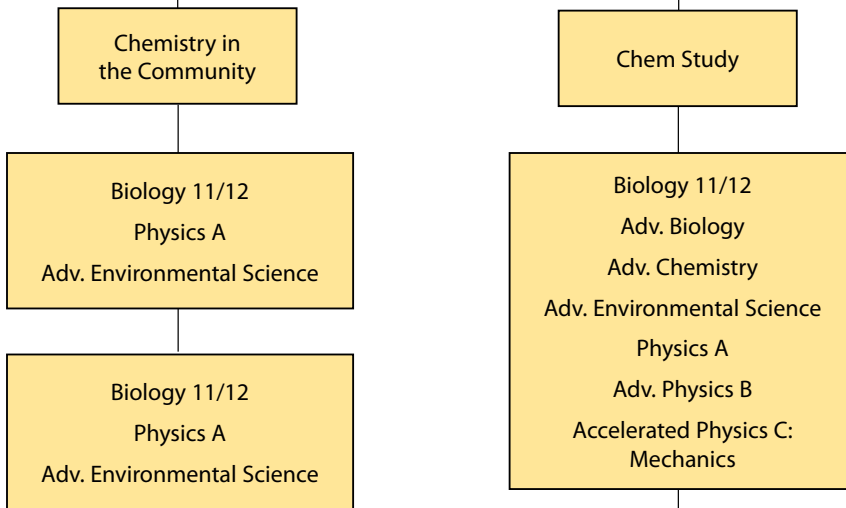
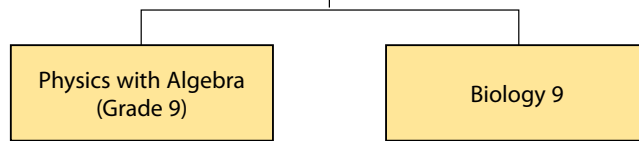
**MIDDLE SCHOOL AND UPPER SCHOOL SCIENCE SEQUENCES**

Three upper school science credits are required for graduation. One course each in biology, chemistry, and physics is required. Most Maret students take four years of upper school science, and some juniors and seniors take two science courses concurrently.

Middle School



Upper School



SEMESTER ELECTIVES:	
Adv. Topics in Chemistry (MSON)	Gravitational Astrophysics
Biotechnology	Intro. to Organic Chemistry (MSON)
Comparative Ecosystems (MSON)	Lab Research in Biology
Forensic Science (MSON)	The Quantum Mechanical World (MSON)
Genetics and Genomics (MSON)	Waves, Optics, and Musical Physics

Summer program (grades 10–12):  
Sanibel Subtropical Marine Ecology

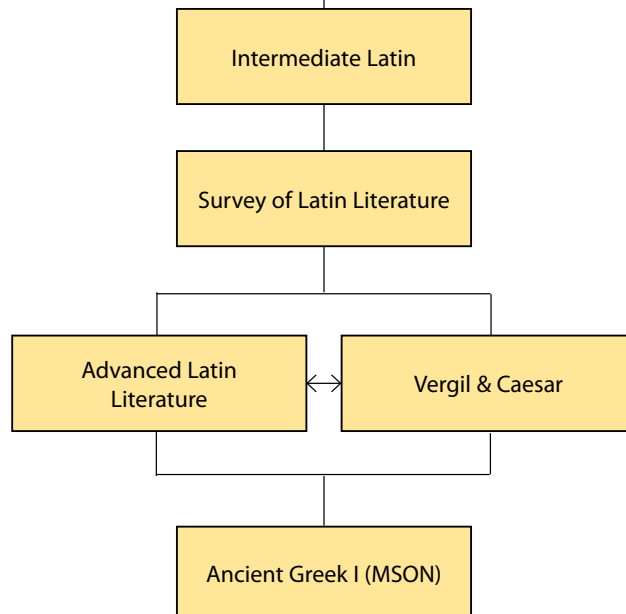
### WORLD LANGUAGES CLASSICS SEQUENCE

Language placement for students is reassessed at the end of each academic year.

Middle School



Upper School

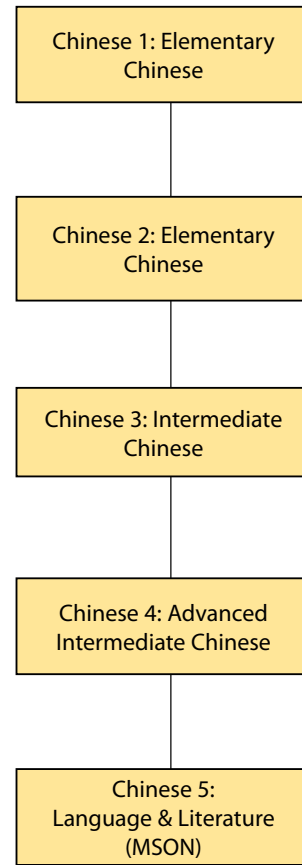
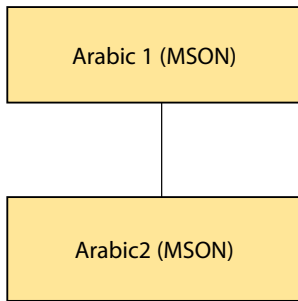


**WORLD LANGUAGES  
ARABIC SEQUENCE**

Language placement for students is reassessed at the end of each academic year.

**WORLD LANGUAGES  
CHINESE SEQUENCE**

Upper School

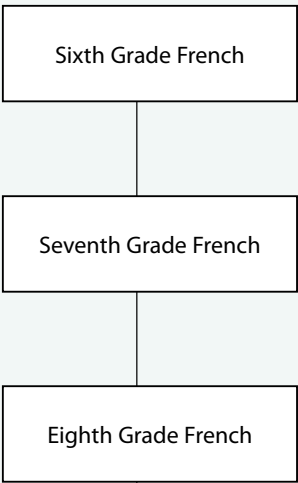


Summer program:  
**Maret in Taiwan**  
Typically students participate after ninth or tenth grade.

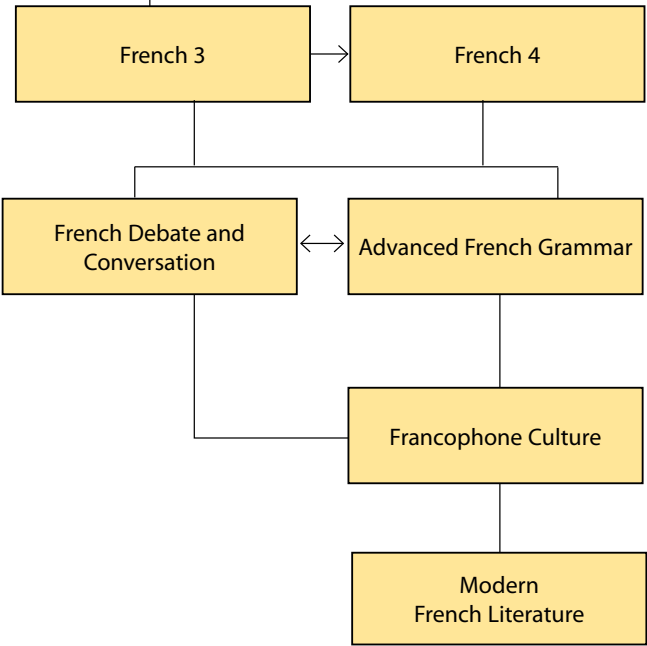
**WORLD LANGUAGES  
FRENCH SEQUENCE**

Language placement for students is reassessed at the end of each academic year.

Middle School



Upper School



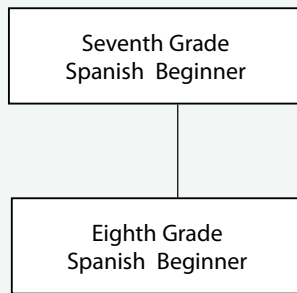
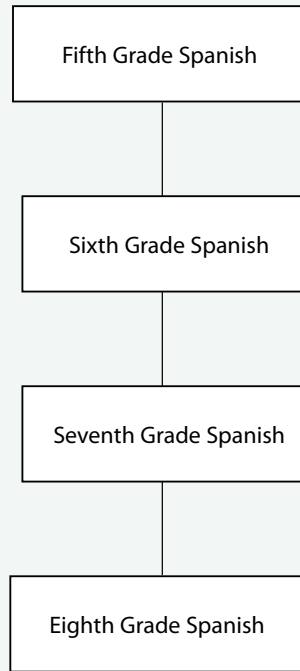
Summer program:  
**Maret in France**  
Typically students participate after ninth or tenth grade.



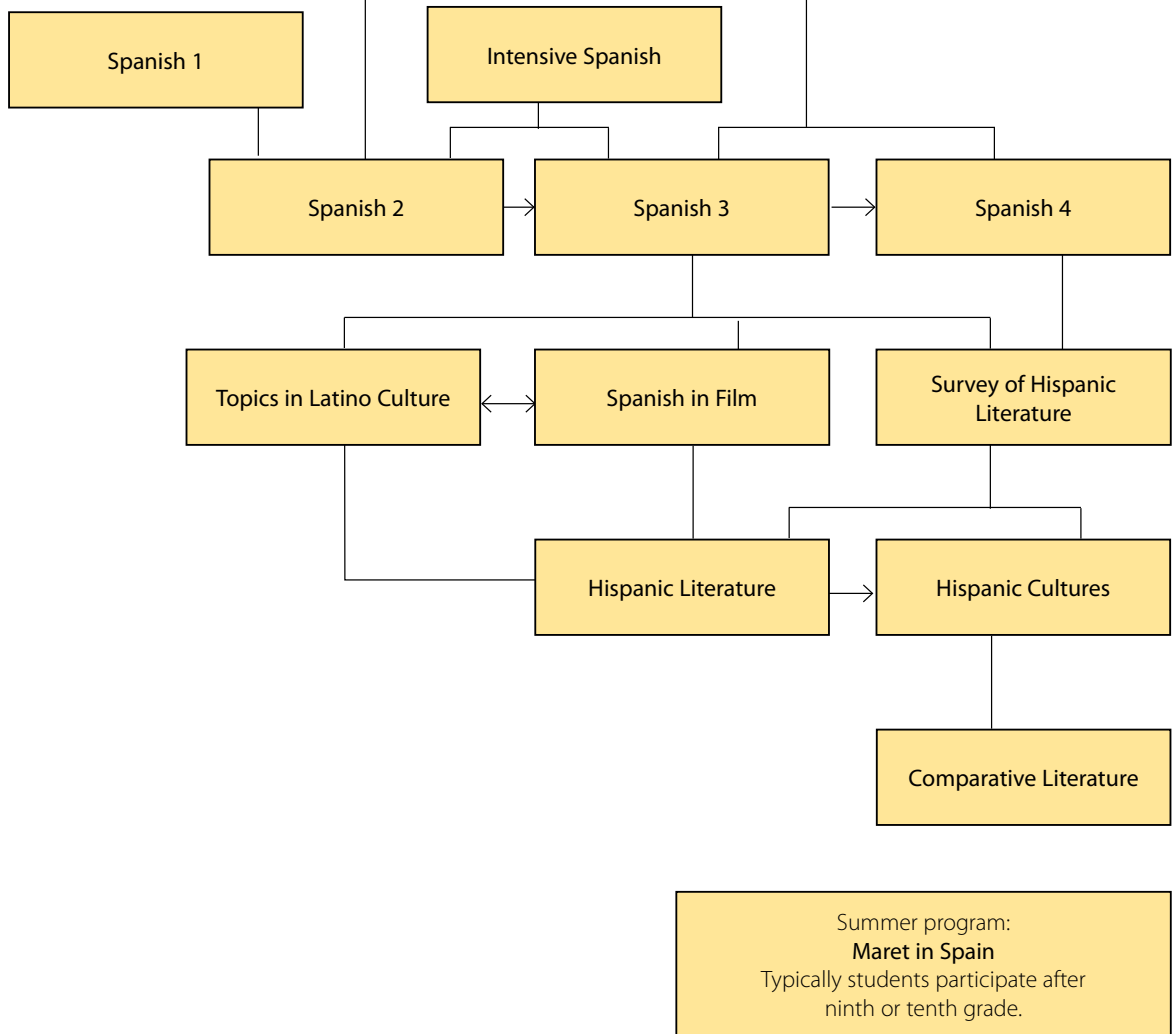
**WORLD LANGUAGES  
SPANISH SEQUENCE**

Language placement for students is reassessed at the end of each academic year.

Middle School



Upper School



Summer program:  
**Maret in Spain**  
Typically students participate after ninth or tenth grade.

# MARET | UPPER SCHOOL CURRICULUM

## INTRODUCTION

Maret's upper school curriculum is rich, challenging, and exciting. Upper school students prepare for college with intentional instruction in analytical reading and writing, study skills, laboratory work, and research methods. Working with faculty advisors, students craft a course of study that is appropriate and engaging.

Students in ninth grade take core English and history classes. In upper grades, they choose electives based on their abilities and interests. Some students take advanced classes through MSON seminars with peers from across the country. Students may enrich their education through immersive summer courses.

Upper school students develop as thoughtful, healthy, empathetic, and engaged adults who are involved in their communities. Maret's core values (Respect, Integrity, The Individual, Connectedness, Creativity, Excellence, and Joy) become second nature to our students. Faculty, administrators, and staff ensure that

- Students are respectful of each other and of adults
- Harassing or offensive comments or acts are recognized, addressed, and corrected
- Students are academically honest and understand and avoid plagiarism
- Fair play and sportsmanship are encouraged in athletics
- Open debate and differing points of view are respected
- Creativity is celebrated

Students expand and enrich their thinking through assemblies, which include outside speakers, films, and performing groups. In each grade, upper school students have increased freedoms and are encouraged to take intellectual risks.

## SCHEDULE

Ninth grade students generally take five academic courses: a foreign language, Biology or Physics with Algebra, mathematics (often Geometry), History 9: Shaping of the Modern World, and English 9: Elements of Literature. They also take two half-credit courses in the arts—one in visual art and one in the performing arts. Students are aided in the design of their academic programs; division directors and department chairs work with ninth grade students to build a challenging yet manageable schedule. Ninth grade families are invited to join in early discussion of the students' upper school schedules.

In tenth and eleventh grades, students usually take five academic courses and one non-homework class. Non-homework classes include visual and performing arts and some technology courses. Tenth graders typically take courses in a foreign language, English 10, US History, science, math, and either art or music. Eleventh grade students take five academic courses, which typically include two humanities electives, a foreign language, science, and math. Juniors and seniors have between five and 10 free periods a week. Faculty members aid students in the crafting of their academic schedules.

With the help of division heads and advisors, seniors design their schedules to meet their individual interests and needs. Seniors must take at least four homework courses; many elect to take five. The options are flexible. Students who take four academic courses may drop foreign language or, less typically, a science course. However, some seniors choose to take three humanities courses and a language course.

## REQUIREMENTS

Students are required to complete 21 credits; a credit is defined as a two-semester course.

### Discipline Requirements

Humanities	7 credits (including 4 literature credits)
Mathematics	Completion of math progression through Precalculus or 4 years of mathematics
Science	3 credits, at least one credit in each discipline of biology, chemistry, and physics.
World Languages	3 credits in 1 language OR 2 credits in each of 2 languages
Visual Art and Performing Arts	2 credits total: ½ credit in each discipline plus 1 additional credit in visual or performing arts
Physical Education	11 of 12 seasons, or participation on 2 Maret team sports per year
Community Service	30 hours

### CERTIFICATE OF COMPLETION

Students unable to complete senior year due to unusual circumstances (medical or otherwise) may be awarded a certificate of completion in lieu of a diploma. The certificate indicates that the student successfully completed Maret's rigorous graduation requirements in non-traditional ways.

### ADVANCED AND ACCELERATED COURSES

Maret's flexible and rigorous high school curriculum lets students explore many challenging topics in depth. Although some advanced and accelerated courses are similar in rigor and complexity to conventional Advanced Placement (AP) classes, none are designated as AP. That designation signifies adherence to an externally prescribed curriculum that might offer fewer benefits than Maret's student-centric program. However, Maret recognizes that colleges and universities may utilize AP exam results to determine placement, especially in math, science, and languages.

Students in some advanced Maret classes opt to take an AP exam upon successful completion of a specific course. Others sit for AP exams for which Maret's coursework has equipped but not explicitly prepared them. Maret students routinely excel in AP exams, including Calculus (AB and BC), Chemistry, Computer Science, Economics, English Language, English Literature, Environmental Science, French Language, Latin, Physics C: Mechanics, Spanish Language, and US History.



The Malone Schools Online Network (MSON) is a consortium of schools funded by the Malone Family Foundation. Gifted and talented high school students (generally juniors and seniors) can participate in a variety of superior online courses, taught by subject experts. Students benefit from the courses' commitment to excellence, small class sizes, and personal relationships with fellow students nationwide. To qualify for enrollment, students demonstrate sufficient independence and the commitment to succeed in a virtual discussion seminar setting.

### MSON COURSES

MSON courses blend synchronous instruction—real-time video conferencing seminars and discussions—with asynchronous instruction—recorded lectures and exercises, which students complete outside of the class. Each course enrolls a maximum of 16 students allowing for a virtual discussion seminar, and is delivered in high-definition classroom set-ups that allow students and teachers to see one another, interact throughout class, and form meaningful relationships. Thirty-four courses are offered in the 2018–2019 academic year, spanning the humanities, math, performing arts, science, technology, and world languages.

### MSON PARTNER SCHOOLS

Brownell Talbot School (NB)  
 Canterbury School (IN) Casady School (OK)  
 Casady School (OK)  
 Chadwick School (CA)  
 The Derryfield School (NH)  
 Fort Worth Country Day School (TX)  
 Hopkins School (CT)  
 Indian Springs School (AL)  
 Manlius Pebble Hill School (NY)  
 Maret School (DC)  
 Mounds Park Academy (MN)  
 Newark Academy (NJ)  
 The Prairie School (WI)  
 Porter-Gaud School (SC)  
 The Roeper School (MI)  
 St. Andrews Episcopal School (MS)  
 Severn School (MD)  
 Stanford Online High School (CA)  
 Trinity Preparatory School (FL)  
 University School in Nashville (TN)  
 Waynflete School (ME)  
 Wilmington Friends School (DE)  
 Winchester Thurston School (PA)

## INDEPENDENT STUDY

Students who wish to pursue an academic interest not available at Maret or through MSON may seek approval for an independent study in that subject, arranged with the department chair, the director of academic affairs, and the director of Upper School. Any extra costs incurred through independent study are the responsibility of the family.

## SENIOR OPTION

Seniors may broaden their studies by creating a senior option course with the approval of the director of upper school. These courses do not involve homework and earn a pass/fail and a credit. Recent senior options have included coaching middle school sports, studying child development as an assistant in the Lower School, and working on a presidential campaign.

## ACADEMIC AND LEADERSHIP AWARDS

Students in the top 20 percent of their graduating class are eligible for election to the national Cum Laude Society. A faculty committee representing various disciplines selects students based on engagement in intellectual inquiry, the level of courses taken, and demonstrated academic excellence. Maret also recognizes seniors' achievements through the School's annual Core Value Awards. The School selects the class valedictorian based on cumulative GPA, rigor of academic course load, and intellectual curiosity.

## SERVICE LEARNING

Upper school students apply newly acquired academic skills and knowledge in real-life situations that promote awareness of and involvement in the larger community. Service learning projects are conducted collaboratively between the School and community organizations and are designed to meet identified needs of community partners. Students engage in short-term and sustained service learning initiatives with local, regional, national, and global communities. In the classroom, students reflect on, discuss, and write about their experiences. They develop communication skills, educational competence, and a sense of personal and social responsibility.

The ninth grade history course focuses on hunger and its relationship to major historical events. Ninth graders participate in a service retreat, serving in soup kitchens, homeless shelters, food banks, and children's centers. They also raise funds to build schools and help AIDS orphans in Ethiopia. Upper grades engage in service learning through electives such as Chemistry in the Community, Precalculus, Civil Liberties, Advanced Spanish I, World Literature, and Advanced Environmental Science.

## CO-CURRICULAR PROGRAMMING

At the beginning of the week, all upper school students gather together in Morning Meeting to share news of the week, athletics results, and other important information. Longer assembly periods twice a week allow students to appreciate musical performances, hear speakers from outside of school, gather for discussions on issues of current interest, and meet with their academic advisors.

Upper school students participate in over 35 student-led clubs. Faculty advisors help student leaders manage the clubs, substantively and logistically. Many clubs meet weekly during breaks; other clubs meet less frequently or seasonally.

## INDEPENDENT STUDY WEEK (ISW)

ISW provides enriching educational experiences outside the traditional classroom format. Students select their top five choices and are placed in a program by the ISW chair. The School covers most ISW costs; qualified students may request financial aid for any additional fees.

## FATEH LIBRARY AND CENTER FOR INQUIRY

Students develop effective research and inquiry practices through the Center's innovative information-literacy programs. Students cultivate a lifelong love of reading and can peruse the vast online catalog of offerings on their hand-held devices.

The director of the Center supports teachers through the creation of curriculum resource programs; trains faculty in current research and information-processing techniques; and shares with other independent schools current methodologies, ideas, and best institutional and educational practices.

## 2018–2019 COURSE LISTING

### HUMANITIES

#### Required Courses

English 9: Elements of Literature  
 History 9: Shaping of the Modern World  
 English 10: American Literature  
 History 10: United States History

#### History and Social Science Electives

Accelerated United States History  
 Advanced Economics (MSON)  
 African History: Panoramas, Portraits, Perspectives  
 The American Food System:  
     Past, Present, Future (MSON), spring  
 Are We Rome? (MSON), fall  
 Building Utopia (MSON), fall  
 Civil Liberties  
 Debate Local, Think Global (MSON), fall  
 Diversity in a Global Comparative Perspective (MSON), fall  
 Economics  
 Environmental Bioethics (MSON), spring  
 Ethics in the Digital Age (MSON), fall  
 Globalization and the Modern World  
 History of Nonviolence  
 Human Geography: Understanding Our World  
     Through Spatial Relationships  
 Imperialism and Empire  
 Man's Inhumanity to Man: Genocide and Human Rights  
     in the 20th Century (MSON), spring  
 Law, Culture, and Society  
 Medical Bioethics (MSON), fall  
 The Original Papers—A "Journal Club" of Biological  
     Literature (MSON), spring  
 Positive Psychology (MSON), spring  
 The Power of Story  
 Topics in Psychology  
 Revolutions  
 Writing Herself In: US Women's History and Literature

#### Literature Electives

American Voice, American Speech: Word as Action from  
     Anne Bradstreet to Donald Trump (MSON), spring  
 Comedy and Satire  
 Comparative Literature  
 Contemporary American Literature  
 Creative Non-Fiction Writing Workshop: If Only You Could  
     See This Place (MSON), spring 2020  
 Creative Writing in the Digital Age (MSON), fall  
 Etymology of Scientific Terms (MSON), fall  
 Exploration of Ethics through Literature  
 James Joyce's "Ulysses" (MSON), spring  
 Law, Culture, and Society  
 Literature and Theories of Knowledge  
 Media and Literature: Critical Approaches to MEdia,  
     MEssages, and ME, spring  
 Modernism (MSON), fall  
 Philosophy in Pop Culture (MSON), spring  
 The Power of Story  
 Religion and Literature  
 Speech Matters: Public Speaking in Everyday Life, fall  
 The Truth is a Funny Thing: African American  
     Autobiography After 1940  
 World Literature  
 Writing Herself In: US Women's History and Literature

### MATHEMATICS

Geometry  
 Advanced Geometry  
 Algebra 2 & Trigonometry  
 Advanced Algebra 2 & Trigonometry  
 Accelerated Algebra 2 & Trigonometry  
 Precalculus  
 Advanced Precalculus  
 Accelerated Elementary Functions  
 Advanced Mathematical Modeling, Statistics, and Design  
     Thinking: Making & the World  
 Calculus  
 AB Calculus  
 BC Calculus  
 Multivariable Calculus (MSON)  
 Linear Algebra (MSON), fall  
 Advanced Applied Math Through Finance (MSON), spring

## PERFORMING ARTS

### Introductory Courses

Basic Acting Technique  
 Concert Band 9  
 New: Concert Choir 9  
 New: Introduction to Music Theory (MSON), fall  
 Introduction to Technical Theatre

### Advanced Courses

Concert Band 10–12  
 Concert Choir 10–12, spring or full year  
 Film Production  
 Musical Theatre Seminar  
 Technical Theatre, fall or full year

## PHYSICAL EDUCATION AND ATHLETICS

### Interscholastic Program

Boys	Girls	Coed
Baseball, spring	Basketball, winter	Cross Country, fall
Basketball, winter	Lacrosse, spring	Golf, fall
Club Ice Hockey, winter	Soccer, fall	Swimming, winter
Lacrosse, spring	Softball, spring	Track and field, spring
Football, fall	Tennis, fall	Ultimate Frisbee, spring
Soccer, fall	Volleyball, fall	
Tennis, spring		

### P.E. and Lifetime Activities

Dance, winter  
 Running, winter  
 Step Team (student run group), winter and spring  
 Strength and Conditioning, all seasons  
 Yoga, fall and winter

### Independent P.E.

## SCIENCE

### Biology

Biology 9  
 Biology 11/12  
 Advanced Biology

### Chemistry

Chem Com (Chemistry in the Community)  
 Chem Study  
 Advanced Chemistry

### Physics

Physics with Algebra  
 Physics A  
 Advanced Physics B  
 Accelerated Physics C: Mechanics

### Science Electives

Advanced Environmental Science  
 Advanced Topics in Chemistry (MSON), spring  
 Biotechnology: Techniques and Applications, fall  
 Comparative Ecosystems (MSON), spring  
 CSI: MSON Forensic Science (MSON), spring  
 Genetics and Genomics:  
 Diving into the Gene Pool (MSON), fall  
 Gravitational Astrophysics, spring  
 Introduction to Organic Chemistry (MSON), fall  
 Lab Research in Biology, spring  
 The Quantum Mechanical World (MSON), spring  
 Waves, Optics, and Musical Physics, fall

### Summer Science Elective

Subtropical Zone Ecology

## TECHNOLOGY

Programming and Design Fundamentals  
 Computer Science and Programming in Java  
 Advanced Mathematical Modeling, Statistics, and Design  
 Thinking: Making & the World  
 Data Structures and Design Patterns (MSON)  
 Independent Study: Special Topics in Computer Science

## VISUAL ART

### Grade 9 Core Courses

Clay Core  
 Drawing and Painting Core  
 Mixed Media Core  
 Photography Core  
 Sculpture Core

### Advanced Courses

Advanced Clay  
 Advanced Computer Graphics (fall, spring, or full year)  
 Advanced Drawing and Painting  
 Advanced Mixed Media  
 Advanced Photography  
 Advanced Sculpture  
 Advanced Art Seminar: Photography  
 Advanced Art Seminar: Studio Art  
 Advanced Art Courses: Levels II and III

## WORLD LANGUAGES

### CLASSICS

Intermediate Latin  
Advanced Latin Literature  
Vergil and Caesar  
Ancient Greek 1 (Language and Literature) (MSON)

### MODERN LANGUAGES

#### Arabic

Arabic 1 (MSON)  
Arabic 2 (MSON)

#### Chinese

Chinese 1: Elementary Chinese  
Chinese 2: Elementary Chinese  
Chinese 3: Intermediate Chinese  
Chinese 4: Advanced Intermediate Chinese  
Chinese 5 (MSON)

#### French

French 3  
French 4  
French Debate and Conversation  
Advanced French Grammar  
Francophone Cultures  
Modern French Literature

#### Spanish

Spanish 1  
Intensive Spanish  
Spanish 2  
Spanish 3  
Spanish 4  
Comparative Literature  
Hispanic Cultures  
Hispanic Literature  
Spanish in Film  
Survey of Hispanic Literature  
Topics in Latino Cultures

#### Summer Language Electives

Maret in Spain  
Maret in France

## Humanities

*Requirements: 7 credits*

*Chair: Nicholas Michalopoulos*

*Reading lists are subject to change.*

### OVERVIEW

Maret's humanities courses explore the human condition in a variety of forms, including literature, history, art, psychology, anthropology, economics, philosophy, religion, and film. The Humanities Department strives to broaden and deepen students' understanding of the universality of ideas, themes, and images, while emphasizing the unique qualities of individual works and events.

The range of courses meets the needs of students with varied backgrounds, interests, and abilities. Careful reading; crisp, clear writing; critical thinking; research; and articulate speaking are the goals of every course. Students will:

- Improve reading comprehension, interpretation, analysis, and synthesis
- Develop clear, persuasive, accurate, and imaginative ways of writing
- Engage in critical thinking through close analysis, rigorous questioning, and lively debate
- Practice public speaking through discussion, debate, speeches, and oral presentations

The Humanities Department encourages respectful in-class dialogue and advocates creative approaches to analysis, writing, and problem solving.

### REQUIREMENTS

Seven humanities credits are required for graduation, four of which must be English and three of which must be history. Most students accrue eight or nine credits. Of these, English 9: Elements of Literature, History 9: Shaping of the Modern World, English 10, and US History are required for every student.

In all courses, students are expected to write frequently and at length, through journals, short essays (1–2 pages), and longer analytic or interpretive essays (5–10 pages). English 10, US History, and most electives require at least one substantial research paper. All electives expand on the core skills acquired through tenth grade. Electives typically require students to engage in a variety of assessments including diverse forms of writing, presentation, and varied depths of research. In certain electives, students conduct lengthier, original research projects and present them as part of Maret's Capstone on the last day of school.

Students confer with their advisors before deciding upon electives that are appropriate to their interests and needs.

## REQUIRED COURSES

### English 9: Elements of Literature

Students read, discuss, and write about literature from the Renaissance through the twenty-first century to enjoy the diversity of human experience and to understand the literary techniques that animate them: setting, characterization, point of view, motif, theme, symbolism, and the elements of style. Students refine their critical reading abilities by learning to value—and analyze—textual patterns and writers’ decisions about language. They advance their writing skills, focusing on clear organizational structure, effective use of evidence in analytical writing, and powerful stylistic choices infused with their own emerging voices. They also learn to appreciate the craft of writing through creative pieces inspired by the texts they read. Students develop the interpersonal skills necessary for effective classroom discussion, debate, and performance.

#### Texts:

Baldwin, “Notes of a Native Son”  
 Dargan, selected poems  
 Díaz, “Invierno”  
 Fugard, *My Children, My Africa*  
 Hurston, *Their Eyes Were Watching God*  
 Sedaris, “Us and Them”  
 Shakespeare, *Macbeth* (or alternate play)  
 Sijie, *Balzac and the Little Chinese Seamstress*

#### Summer Reading:

Students choose two novels from a broad list of classic and contemporary works.

### History 9: Shaping of the Modern World

This survey of 1400 to the present provides a global-scale outlook on how the world gradually became modern. Students study political, economic, social, intellectual, and cultural aspects of this modernizing process, examining how societies both interacted with each other and changed internally. They also learn how issues look different when viewed from different perspectives. Students use course content to hone essential skills: active reading, critical thinking, historical and comparative analysis, effective research, strong oral presentation, and clear and well-organized writing. The course’s service learning theme is how wealth, poverty, and hunger have changed over the past 500 years and continue to persist today, despite the world’s unprecedented overall wealth. Along with studying these patterns, students partner with outside organizations and take advocacy steps to address hunger and poverty issues.

#### Text:

Strayer, *The Ways of the World*, vol. 2

#### Summer Reading:

Kamkwamba, *The Boy who Harnessed the Wind*

### English 10: American Literature

This course introduces a diverse range of texts that span American literature and examines the techniques, themes, values, and ideas that shape America’s literary tradition. Students deepen analytical reading skills, structure and support complex written arguments, and polish their ability to effectively use vocabulary and grammar by frequently writing short and long essays. A longer research paper, which places a work in historical and cultural context, hones note-taking, bibliography, and revision skills.

#### Texts:

Selected American poetry  
 Selected turn-of-the-century short stories by women  
 Fitzgerald, *The Great Gatsby*  
 Jacobs and Douglass, *Incidents in the Life of a Slave Girl*  
 & *Narrative of the Life of an American Slave*  
 Walker, *The Color Purple*  
 Yang, *American Born Chinese*

#### Summer Reading:

English 10 and History 10 combine summer reading to give students a choice of reading two texts from a large list of classic and contemporary American literature.

### History 10: United States History

Students gain a conceptual understanding of the issues, events, and personalities that have shaped American history from colonial times to present day. They explore the tension between individual freedom and majority rule; analyze the causes and consequences of major events and developments; draw parallels between past and current events; and explore multiple perspectives on the construction and meaning of “history.” Students are encouraged to challenge their biases and preconceptions and to reach their own conclusions about American history. Students are evaluated through quizzes, tests, papers, group discussions, class projects, and short, informal writing exercises. Themes and topics in this course complement those in English 10.

#### Texts:

Foner, *Give Me Liberty*  
 Kilborne, *Woodley and its Residents*  
 Selected primary source materials

#### Summer Reading:

History 10 and English 10 combine summer reading to give students a choice of reading two texts from a large list of classic and contemporary American literature.



## HISTORY AND SOCIAL SCIENCE ELECTIVES

### Accelerated United States History

Grades 10–12

*Prerequisite: departmental recommendation*

In this accelerated course, students cover American history from indigenous history to the present. Students are exposed to extensive primary and secondary sources and to the interpretations of various historians. Class participation through discussions and debates is required. Special emphasis is placed on critical reading and essay writing to help students prepare for college history courses. The course is structured chronologically, divided into nine units. Each unit includes one or more of the nine periods and/or key concepts outlined in the AP US History curriculum framework. Students are introduced to archival work and participate in historical research.

*Texts:*

Foner, *Give Me Liberty*

*Summer Reading:*

Zinn, *A People's History*

### Advanced Economics (MSON)

Grades 11–12

*Prerequisite: Precalculus (prior or concurrent)*

*Teacher: Kelly Aull, Trinity Preparatory Day School*

Advanced Economics covers basic concepts in macroeconomics, the study of economic systems, and microeconomics, the study of individual economic actors. Specific topics include the study of economic performance measures, the financial sector, stabilization policies, economic growth, international trade, the nature of product and factor markets, game theory, and the role of government in promoting efficiency and equity in the economy. Students deliberate on these topics, manipulate economic models, and practice “thinking like an economist.” Course completion prepares students to sit for the AP Economics exams if they wish, but this course does not strictly follow the AP curriculum.

### African History: Panoramas, Portraits, Perspectives

Grades 11–12

This course spans from the origins of humanity to Africa's present-day prospects and challenges. It addresses both developments within Africa and Africa's relationship to the wider world. Broad *panorama* topics include the spread of peoples, languages, and technologies; the rise of large and small-scale states; local and world religions; slavery and slave trading; colonialism; and contemporary successes and struggles. Students use biographies and case studies for more sharply drawn *portraits*. Topics may include medieval Angola; slavery, gender, and early

colonialism in West Africa; Liberia's history; the Rwandan genocide of the 1990s; and Chinese-African connections. *Perspectives* also matter. Students consider how different groups, including students and teachers in the course, hold particular perspectives about Africa's past, present, and future. They examine what differing perspectives can tell us about Africa, and what they can tell us about the perspective holders.

### The American Food System: Past, Present, Future (MSON)

Spring; Grades 11–12

*Teacher: Regina Assetta, The Derryfield School*

The American Food System consists of the interrelated components of how we get food from “farm to fork,” including the producing, harvesting, processing, transporting, marketing, distributing, and the eating of food. Through a humanities-based, interdisciplinary approach, the course examines the political, social, economic, and environmental aspects of the system, as well as the challenges and opportunities in moving from our current industrial food system to a more sustainable one. Students engage in a variety of projects, allowing them to understand their regional and local food systems, while learning from their classmates throughout the country. Topics include animal agriculture, organic farming, local production and distribution, the debate over GMOs, the marketing of unhealthy food to children, and the problem of hunger in America.

### Are We Rome? (MSON)

Fall; Grades 11–12

*Prerequisite: US History (prior or concurrent);  
background in classics not required*

*Teacher: Michael Leary, The Derryfield School*

Inspired by Cullen Murphy's 2007 book of the same name, *Are We Rome?*, examines the similarities between the Roman Empire and the United States. This course is a capstone for study in classics and history. The interdisciplinary nature serves as a vehicle by which students of Latin and history can expand their knowledge and apply that knowledge in an intercultural comparison. Since 1776, from our system of government to the architecture of government buildings, the United States has created many institutions using Rome as a model. This course is structured around one basic question: How can the United States learn from Rome? In our discussions, we examine, among other things, political and social ideologies, privatization, globalization, borders, and exceptionalism. Taking our beginnings from the founding of these two nations, we discuss the governing practices and bodies, the rhetoric of politics, and the public view

of governmental institutions with emphasis on how these progress and change. The course culminates with analysis of the most recent political and social events in the United States, and students form a final conclusion on our topic. Class discussions center around primary sources from both Rome and the US. Weekly reading and writing assignments are required.

### **Building Utopia (MSON)**

**Fall semester; Grades 11–12**

**Prerequisite:** None; background in ancient and European history recommended

**Teacher:** Mary Ellen Carsley, Severn School

Utopia, “a good place,” as defined by the Greeks, is a term coined by Sir Thomas More referring to a fictional ideal island society. The act of intentionally shaping one’s environment to be “a good place” modeled after sustainability, economy, and delight is a uniquely human endeavor. Students examine the course of Western architecture from the ancient Egyptians to the 21st century through the lens of the primary philosophic ideas that have been the drivers of aesthetic vision of Western civilization architecture through the ages. The course offers an introduction to design principles, the visual language of architecture, and design analysis. The necessities, desires, and spiritual beliefs which go into the shaping of a culture’s aesthetic vision of their ideal environment are examined in a series of seven units:

1. Forming the Human Universe: Mark Making and the Necessity of Shelter
2. Creativity and Humankind: Beauty Defined and the Building of Civilizations
3. Immortality and the Gods: Building for the Greater Glory
4. Getting Perspective: Perfect Geometry in Design and Building in the Humanist and Rational World
5. Power and Production: Society and the Machine
6. Modern Utopia and the Architect’s Vision: Shaping an Individual World
7. Back to the Future: Palimpsest and Irony

### **Civil Liberties**

**Grades 11–12**

This course explores the range of freedoms and rights guaranteed by the U.S. Constitution and the government’s role in protecting them. Students examine such controversial topics as hate speech, prayer in schools, gun control, equal protection, abortion, and the death penalty to determine the boundaries of personal rights protected by the Constitution. Students read and analyze leading Supreme Court cases and legal commentary to develop their conclusions. Current event topics also help

to shape the curriculum. Students are required to rely on both personal opinion and grounded analysis in their decision-making process. Class time centers on student dialogue and debate; all members of the class are expected to contribute actively to discussions. Students participate in local mock trial and moot court competitions, and create political videos for national competitions. Students work in teams to develop Social Venture Projects as part of LearnServe’s Seeding Social Innovation program, so they not only learn about how others have effected change but become change agents themselves. Field trips to the Supreme Court and lower level courts, as well as a wide range of guest speakers, further enrich students’ understanding of the political system. Through the content of the class, students cultivate their analytic, writing, research, and oral advocacy skills.

**Text:**

Epstein and Walker, *Constitutional Law for a Changing America*

**Summer Reading:**

Stewart, *The Summer of 1787*

### **Debate Local, Think Global (MSON)**

**Fall; Grades 11–12**

**Teacher:** Dan Jacobs, Roeper School

Water justice. Gentrification. Housing. Education. Race Relations. Public Safety. Environmental Issues. *Is it wrong to shut off water service to households that are delinquent on their water bills? Should a city invest limited funds in education or public safety? Should cities and states focus more on improving neighborhoods or enticing business investments? When in conflict, should environmental issues take priority over the needs of businesses? What about mandating affirmative action quotas when a large, national business moves into a low-income neighborhood?* Many cities in the United States (and around the world) struggle with these and numerous other conflicts. Students use their own local experiences to take deep dives into the facts and philosophies underlying the challenges, values, and perspectives that shape our cities, neighborhoods, and homes, and that form the foundation of our experiences within them. The city of Detroit is the starting point to explore the relationship of a government to its people, of rights and responsibilities of citizens, of the balance between environment and economic activity, and more. Students delve into an overview of different issues, choose debate topics, and vet different ideas in the crucible of critical thinking, focusing on using debate as a tool for deeper understanding, and not simply as a means to win a competition. Post Detroit, students teach others in the course about important topics in their own neighborhoods, towns, and states, with the goal of running other debates in the class about their own local topics.

### **Diversity in a Global Comparative Perspective (MSON)** *Fall; Grades 11–12*

*Teacher: John Aden, Canterbury School*

This course examines the ways our human family has sought to create, marshal, contest, and maintain identities through culture and relations of power. These identities can be appreciated through “lenses of analysis.” The course critically engages the traditional “Big Three” lenses of analysis: race, class, and gender, understanding that culture serves as an important backdrop against which these identities emerge. Once students appreciate the important ways the social sciences have engaged with, written about, and debated these three core modes of analysis, the course expands to incorporate other, equally rich, lenses: age, ableism, intellectual diversity, geographic diversity, cognitive and neurological diversity, and the business case for diversity, as well as how to study synergistically intertwined phenomena. Film and critical film studies, as well as the role colonialism has played in the major conflicts of the last 500 years, each serve to enrich student understandings of diversity.

### **Economics** *Grades 11-12*

This yearlong course provides a broad view of the social science of economics. It builds on real world applications so that students can gain a basic understanding of economic concepts and our economic system. Students will explore both micro- and macroeconomics and relate these systems to familiar, real world situations. Students will be introduced to the basics of economic principles, and will learn the importance of understanding different economic systems. They will be presented with economic applications in today’s world in order to understand, analyze, and interpret economic concepts such as the laws of supply and demand, market systems and structures, money and banking, domestic and global economic performance and trade, monetary and fiscal policy interventions, and unemployment and inflation. Upon completion of this course, students should be able to:

- Explain the basic concepts of economics
- Compare and contrast traditional, command, market, and mixed economic systems
- Evaluate how supply and demand work together to determine market prices
- Describe economic factors involved in business, including product markets and factor markets
- Discuss components of the US economy and ways to measure domestic economic performance
- Students will also use their learning to:
- Analyze the traditional role of markets in order to predict future trends and issues.

- Make educated strategic decisions that contribute to the ideal climate for the success of business.
- Justify banking and financial decisions that impact personal and business solvency.
- Develop and justify policy recommendations that provide for the optimum health of the US economy.
- Develop and justify policy recommendations to promote necessary changes to the international economic system.

### **Environmental Bioethics (MSON)**

*Spring; Grades 11-12*

*Teacher: Ellen Johnson, Wilmington Friends School*

This course focuses on such cases as environmental sustainability, global energy, and food resources, gathered from sources in literature, journalism, and film. The academic study of ethics examines how people make decisions. Curricula builds on a foundation of theoretical moral theories, more specifically, how one makes decisions when faced with complex, often controversial, issues. No prior knowledge of philosophy is assumed; however, authentic assessment of students’ initial facility with logical analysis will ensure that all students are challenged to grow and deepen their theoretical and practical understandings of the subject.

### **Ethics in the Digital Age (MSON)**

*Fall; Grades 11–12*

*Teacher: Joyce Lazier, Canterbury School*

In the age where anonymity is prevalent and trolls abound, the study of ethics is more imperative than ever. Why be good if the world’s gone bad? This course provides students with the tools necessary to better make difficult ethical decisions in our digital age. To achieve this goal, we study and critically evaluate several different ethical theories including Egoism, Relativism, Divine Command Theory, Utilitarianism, Virtue Ethics, and Deontology. We examine several current events and evaluate them in terms of the ethical theories we are covering. The course culminates in a debate where we apply ethics to a real world issue that the students choose. Topics may include: Should Twitter ban hate speech? Should Facebook be responsible for the content of its users? It is the concept of Snapchat unethical?

### **Globalization and the Modern World**

*Grades 11–12*

Globalization is very much in the news. After decades of political and economic elites around the globe widely agreeing upon globalization’s value, those advocates are now on the defensive. But what does globalization

actually mean politically, economically, and culturally? How has it affected societies and individuals—materially, in overall well-being, in the routines of daily life, and in the construction of identities? Through a wide variety of readings, discussions, projects, writing, and activities, students are introduced to and analyze many different aspects of globalization. Through different units, students examine the political economy, how people make culture in the globally connected age, economics and trade, current issues, and reflect on the impacts of globalization in the USA and the world at large. Students also prepare a case study and research paper on either China’s or India’s globalization. The course uses a variety of assessments, ranging from traditional to unusual.

### History of Nonviolence

#### Grades 11–12

Students in this seminar-style class examine the history, theory, and current day practices of nonviolence in social and political environments around the world. They engage in lively discussions as they learn the proper way to approach a seminar class and explore and analyze nonviolent techniques, ranging from strikes, to boycotts, to the removal of entire government systems. This course will challenge students to think about the methods of conflict resolution not only on a national or international scale, but also on an interpersonal level and the impact that true resolutions—not simply concessions— can have. Students study three major case studies from the 20th century and ask, “did the methods used during this time period actually ‘work?’” and “how do we know it ‘worked?’” Coursework includes written essays, whole class and small group discussions, journaling, and a capstone project where students will investigate and propose nonviolent solutions to modern day problems to explore, “is this a viable method of resolving current systemic, national, or international conflicts?”

### Human Geography: Understanding Our World Through Spatial Relationships

#### Grades 11–12

Technology has connected the world and magnified the need for an awareness of spatial relationships. Human geography explores the influence of physical landscape, location, and spatial connections on human cultural expressions and economic activities. Students deepen their basic geographic knowledge, strengthen their analytical skills, and develop empathy for the experiences of people in communities throughout the United States and the world. Students develop their independent

reading and research skills as they investigate and explain the patterns of human activities through questions such as:

- What brought my family to the Washington, DC area? Where will I eventually live?
- What are the most effective approaches for improving health and standards of living?
- How can we explain cultural, economic, and political differences among U.S. communities?
- How is the role of nation-states changing in a world of influential networks of cities?
- How do pop culture fashions and trends spread; how does traditional folk culture persist?
- Why are some places more congested? Why are some places more pedestrian-friendly?
- Why do people speak with different accents and dialects? How do languages develop?
- Where does my electricity come from? How will changes in energy infrastructure affect me?

#### Texts:

Chinni and Gimpel, *Our Patchwork Nation*  
Cline, *Overdressed: The Shockingly High Cost of Fast Fashion*

Estabrook, *Tomatoland*

Maathai, *The Challenge for Africa*

Marshall, *Prisoners of Geography: Ten Maps That Explain Everything About the World*

Neufeld, A.D., *New Orleans After the Deluge*

Rifkin, *The Third Industrial Revolution*

Rubenstein, *The Cultural Landscape*

Speck, *Walkable City: How Downtown Can Save America, One Step at a Time*

#### Summer Reading:

Students choose an enjoyable geography-related nonfiction text from a list of options.

### Imperialism and Empire

#### Grades 11–12

Students will study the impacts and consequences of imperialism over time and across the world. Throughout human history, societies have employed a myriad of justifications for expanding their territories and world influence. Although such expansion invariably spurred technological advancement and shrank the “unknown,” the extension of power across different regions through political, cultural, economic, and military might, has, in many instances, resulted in devastating repercussions for the people living under its domain.

To gain a foundational understanding, students will read different theoretical frameworks for assessing

imperialism, including conservative, liberal, Marxist and realist perspectives. The class will also develop counter-narratives for imperialism, focusing particularly on the resistance of subjugated peoples and the ethical consequences of territorial expansion. Students will gain a deeper understanding of the impacts of imperialism on both the oppressor and the oppressed, as well as obtain knowledge about the pervasive effects of imperialism today. Topics include the Ethiopian Empire, Ottoman Empire, Russian Empire, colonialism vs. imperialism, European expansion into Latin America, neo-Imperialism in Africa and Asia, impact of the World Wars and American Imperialism. Students will use both primary sources (text, art, video and literature) and secondary sources. Assignments include essays, projects, debates, and tests.

### **Man's Inhumanity to Man: Genocide and Human Rights in the 20th Century (MSON)**

*Spring; Grades 11–12*

*Teacher: George Dalbo, Mounds Park Academy*

The story of genocide in the 20th century stands in stark contrast to the social progress and technological advancements made over the last 100 years. As brutal culmination of nationalist and racist attitudes and policies, as well as a poignant reminder of both the cruelty and resilience of human beings, these genocides punctuate modern history with harsh reality. This course explores the many facets of genocide through the lenses of history, literature, art, sociology, and law. We attend to understanding the framing of genocide as a legal concept. Using the holocaust as our foundation, we examine examples of additional genocides from the 20th century. Ultimately, we train our attention to the enduring legacy of genocides around the world, especially as we consider attempts to recognize, reconcile, and memorialize genocide from the individual to the collective. Students read and analyze primary source material, secondary historical accounts, genocide testimony and memoirs, and examine individual fictional and artistic responses and the collective memories and memorials of whole societies.

### **Law, Culture, and Society**

*Grades 11–12*

*May also be taken as a literature elective*

Debate over the role of law in our society is not limited to courtrooms and newspapers; it is waged in literature, on stage, in movie theaters, on radio and television, and online. This course explores the nexus of law, society, and culture. Students study how cultural expression influences public perceptions of the law and justice. Students examine the meaning of justice, the relationship

between law and morality, the difference between justice and revenge, and the proper aims of the criminal justice system, while digging into legal controversies around race, gender, social class, and sexuality. They work as historians and as cultural critics, analyzing a wide range of works such as Bryan Stevenson's memoir *Just Mercy*, the play *The Laramie Project*, *The Stranger*, the documentary *Making a Murderer*, the TV series *Orange is the New Black*, and the classic legal film *The Verdict*. Students will hone their research and writing skills through literary and cultural analyses, creative projects, position papers, closing statements, document investigations, essays, and op-eds. The class is highly interactive, with discussions, debates, oral and media projects, and Socratic seminars.

### **Medical Bioethics (MSON)**

*Fall; Grades 11–12*

*Teacher: Ellen Johnson, Wilmington Friends School*

The academic study of ethics examines how we make decisions. This course focuses on such cases as medical practice, medical research and development, and health care policy, examined through a wide array of case studies, gathered from sources in literature, journalism, and film. Curricula builds on a foundation of theoretical moral theories; more specifically, how we make decisions when faced with complex, often controversial, issues. No prior knowledge of philosophy is assumed; however, authentic assessment of students' initial facility with logical analysis will ensure that all students are challenged to grow and deepen their theoretical and practical understandings of the subject.

### **The Original Papers—**

#### **A "Journal Club" of Biological Literature (MSON)**

*Spring; Grades 11–12*

*Prerequisite: Introductory high school biology*

*Teacher: Eric Witzel, Severn School*

So, what exactly is a journal club? Around the world, journal clubs have a long-standing tradition at many colleges and universities. Members of these academic communities regularly join together and consider current, published, research papers. Students read and discuss classic scientific papers from biologists such as Mendel and McClintock, as well as cutting edge papers that push the boundaries of our current understanding of life, papers that utilize techniques such as CRISPR. By engaging in our journal club, students become more adept at reading biological literature, understanding the current landscape of biology research, and analyzing scientific literature in general. These skills translate to seeking out internships/mentorship in science research and preparing to conduct

scientific research. Join us and seek mastery of this primary method of scientific communication.

### Positive Psychology (MSON)

*Spring; Grades 11–12*

*Teacher: Blake Keogh, Waynflete School*

This course provides a historical context of positive psychology within broader psychological research, and helps explain why the field is of particular importance to those in a high school or college setting. Students are introduced to the primary components and related functions of the brain in order to understand the biological foundation of our emotional experiences. Current research is used to develop a broader sense of what positive psychology is and is not, and how it can be applied in students' own lives. Additionally, students gain an understanding of basic research methods and their application to the science of psychology. This course will require substantial reading (sometimes on par with 100 level college courses) and writing. Students are asked to reflect regularly on their individual experiences in order to integrate course material into their daily lives. One of the key learning outcomes is to have each participant identify his or her own strengths while simultaneously recognizing and respecting the attributes others bring to the course.

### The Power of Story

*Grades 11–12*

*May also be taken as a literature elective*

“The purpose of a storyteller is not to tell you how to think, but to give you questions to think upon.”  
Brandon Sanderson, *The Way of Kings*

Stories are essential ways we come to know ourselves and the world around us. Stories affirm who we are and where we have been, and allow us to experience the similarities and differences between ourselves and others. This course examines how we choose to tell stories, whose stories get told, and the impact of these decisions on how we learn history. This course first focuses on the art of storytelling, looking at the building blocks of what makes a strong narrative. Students then study different vehicles for storytelling, including literature, film, oral traditions, art, animation, radio, and newer digital platforms. We use experts from the field to deepen our understanding of the elements of compelling storytelling and participate in storytelling events in the community. In addition, students experiment with a range of mediums to tell their own stories, those of others, and those of history, both past and current. This course is largely student-driven and project based, providing class members the opportunity to pursue content that is interesting and exciting to them.

This course emphasizes and develops students' analytic, research, communicative, creative, and collaborative skills.

### Summer Reading:

A memoir and graphic memoir of the student's choice

### Topics in Psychology

*Grades 11–12*

*What type of learner am I?*

*What motivates me?*

*How does my brain influence my behavior?*

*How do I better use my memory and intelligence to improve my performance for that next test?*

*What type of personality do I have?*

*How do social interactions affect my individual decision making?*

Students ponder these and other questions about the human mind, the individual, and real-world behavior. They seek to understand the mind's capacities and limitations in biological, cognitive, developmental, and sociocultural senses as well as how individual minds vary.

The course balances inquiry and story to engage students in discussion- and activities-based approaches and examinations of topics including:

- Biological bases of behavior, sensation and perception, and consciousness
- Learning and human development
- Memory and language
- Thinking and intelligence
- Motivation and emotion
- Stress and health
- Gender and sexuality
- Personality and psychological disorders, and their treatments
- Social cognition, influence, and interactions

Students also learn to apply psychological knowledge by exploring case studies, developing observational skills, creating and administering surveys, and running small experiments. They select topics for independent research and presentation such as how psychology affects and is affected by class status, gender, sexuality, race, and ethnicity; work environments; sports and entertainment; schools and prisons; health; driving and traffic; evolution; religions; social media, etc. Students design and report on their own experiment for the Maret Humanities Capstone event.

**Texts:**

Branagh, *Shakespeare's Hamlet with Screenplay, Introduction and Film Diary*  
 Licht, Hull, and Ballantyne, *Scientific American: Psychology*, 2nd Edition (rental available; required with LaunchPad access)  
 Marcus, *The Norton Psychology Reader*

**Film:**

Branagh (dir.), *Hamlet* (1996)

**Revolutions****Grades 11–12**

Are revolutions an effective means of social change, or do they merely reproduce the problems of the past? In this interdisciplinary course, students examine historical and cultural revolutions through a historical lens, taking a multi-pronged approach to analysis, and exploring complex questions without clear answers. Students evaluate social revolutions by developing an understanding of their own identity and how this affects the way we perceive historical and social changes. Students utilize historical texts, philosophical documents, music, art, and film to analyze revolutions and social movements from a variety of times and places. Main units include: the Russian Revolution, the Cuban Revolution, the Chinese Cultural Revolution, the dismantling of Apartheid in South Africa, the Iranian Revolution, and Arab Spring. Students will improve their writing and critical reading skills and produce assignments such as oral presentations, possible film projects, and ethnographies. Some units will culminate in an open-ended essay topic through which students will explore and think critically about a variety of materials in their search for understanding.

**Writing Herself In: US Women's History and Literature****Grades 11–12**

*May also be taken as a literature elective*

The course moves beyond a compensatory or contributory model of social history to unearth and examine the experiences of women from all backgrounds throughout US history. Using writings by women from a variety of fiction and non-fiction genres, students will investigate the civic, economic, and activist strains of women's public lives from the precolonial era to the present. Women who write often defy simple characterizations of being either literary or historical, ethnographic or personal. The course focuses on the role of gender and sexual identity, paid and unpaid labor, political exclusion and participation, and racial and ethnic identity through the experiences of women who have recorded and kept their own histories. Students will work together to bridge the past and present

through reflective writing, analysis of current events, historical research, hosting guests, and collaborative digital projects.

**LITERATURE ELECTIVES****American Voice, American Speech: Word as Action from Anne Bradstreet to Donald Trump (MSON)**

**Spring; Grades 11–12**

**Prerequisite:** *US History (prior or concurrent)*

**Teacher:** *Sharon Louise Howell, Indian Springs School*

Students listen across history to the American voice—from Bradstreet and John Winthrop, through Franklin, Thoreau, Whitman, Dickinson, Jacobs, Douglass, Twain, Cole Porter, James Baldwin, and Gertrude Stein, to MLK, Dylan, Steinem, and Obama. We listen to music, look at art and film, and consider the more tangled “voice” of advertising, television, and political theater. Even as it has proliferated and transformed, the American voice has maintained an urgent ambivalence about what it means to speak the truth, who should speak it, and to what end. Some of our guiding questions are: *What does it mean to speak as an American—to have an “American” voice? Does it have a distinctive character? Does it want to cause trouble, or solve problems, or both? Does it need to interact with history?* We look at the ongoing, central tension in much of American speech between the individual and the democratic collective, and also consider the related tension between reflection and action as conditions of possibility. We also investigate what forms of speech are surrounding our students and how we might replicate them in order to understand them. Among other writing assignments, students maintain an ongoing analytical blog and submit a final paper on a topic of choice in consultation with the teacher.

**Comedy and Satire**

**Grades 11–12**

In addition to making people laugh, comedies and satires often raise provocative questions about society and its treatment of individuals. In this course, students learn and use theories of humor to explore classic and contemporary comedic works and their own senses of humor. Students interrogate whether humorists challenge or reinforce societal values relating to gender, race, sexuality, and social class. As they investigate the often-controversial nature of comedy and satire, students consider whether there are lines that these works should not cross. Units often team older and newer works, such as Shakespeare's original romantic comedy *Much Ado About Nothing* with contemporary film rom-coms, Plautus's plays with modern

films involving stock characters, and Lorraine Hansberry's drama *A Raisin in the Sun* with the satire *Clybourne Park* that picks up where Hansberry's play ends. Students write both analytically and imaginatively, honing their powers of persuasion in formal essays and developing their creative flairs in comedic pieces. Students engage actively with one another through in-class discussions, online discussion forums, peer feedback, formal presentations, and debates.

### Comparative Literature

**Grades 11–12**

*May also be taken as a Spanish elective*

Students connect contemporary Spanish-speaking authors with international counterparts through a comparative study of their works that isolates and explores common literary and philosophical concepts. Literary works are grouped by theme and studied concurrently. Selected units explore the topics of tension between individual and society; narrative ambiguity; tension between individual and family; the nature of reality; the role of mathematics in literature; and Cain and Abel's allegory in literature and film. Class discussions are in Spanish. Spanish works can be read in English translation. Papers are written in English.

#### Texts:

Borges, *Fictions*  
 Camus, *The Plague*  
 García Márquez, *Chronicle of a Death Foretold*  
 García Márquez, *Eyes of a Blue Dog*  
 Kafka, *The Trial*  
 Kafka, *The Metamorphosis*  
 Unamuno, *Abel Sánchez*  
 Unamuno, *Don Manuel Bueno Mártir*

#### Viewings:

*Abre Los Ojos*  
*Amadeus*

#### Summer Reading:

García Márquez, *One Hundred Years of Solitude*

### Contemporary American Literature

**Grades 11–12**

Students consider how authors interrogate the “politics of identity” in order to make their works compelling, effective, and critical. Through study of form and content, students explore how writers encounter boundaries and use their characters as vehicles to reconcile the limitations imposed on them as authors. Throughout the course, students discuss how and why marginalized writers create, collapse, and capitalize on hybridized identities to enrich their writing. The texts scrutinize various versions of “Americanness” and explore racism, privilege, and power.

The coursework includes expository and creative writing assignments, oral presentations, interviews, and play-acting. Students practice defining and shaping workable, original, and complex thesis statements. Emphasis is on constructing strong, well-supported, and compelling arguments that join social theory with original thought and careful analysis. All the while, students explore their own identities and how they intersect with those identities explored in books.

#### Texts:

Lahiri, *The Namesake*  
 Bulter, *Kindred*  
 Diaz, *The Brief Wondrous Life of Oscar Wao*  
 Dillard, *Teaching a Stone to Talk*  
 Wolfe, *The Colored Museum*  
 Lorde, *Zami: A New Spelling of My Name*  
 Wallace, *Consider the Lobster*

#### Summer Reading:

Alexie, *Flight*

### Creative Non-Fiction Writing Workshop: If Only You Could See this Place (MSON)

**Spring 2020; Grades 11–12**

**Teacher: Susan Conley, Waynflete School**

How do we write great non-fiction (and this includes all flavors of essays—college essays, literary journalism, memoir, and more), so that our stories have an injection of narrative tension that invites the reader to sit down inside our stories and stay a while? This workshop helps you become a better writer so that your stories contain an electrical charge that starts at the sentence level and travels through the entire piece. This tension, or electrical charge, is the engine that great non-fiction runs on. Students search the places in one's life that have mattered most, and using a series of fun writing prompts, generate new writing, using place as a portal to help land on the life stories that students' most want to tell. Later, the class moves into workshops of each student's work. Each session also looks at other specific craft aspects: primarily beginnings, endings, and the weaving of multiple story lines in one essay. Students also read some fantastic published works.

### Creative Writing in the Digital Age (MSON)

**Fall; Grades 11–12**

**Teacher: Julia Maxey, Severn School**

Storytelling is as important today as it was hundreds of years ago. What has changed, in many cases, is the media through which writers tell their stories. Today's literary artists take advantage of digital tools to spread their messages and tell their stories in new ways that combine narrative and contemporary form. Students begin with the



traditional forms of poetry, short prose, and literary non-fiction and then go beyond those forms to explore how contemporary tools can enhance expression. Students study master writers in each of the traditional forms and are inspired by their examples. Then, they look at how communication in the 21st century has provided us with even more ways to share our thoughts and to be creative. Possible explorations include hyperlinked narratives, social media as inspiration and tool, animated text, audio, videos, and all manner of non-linear narrative. The class asks an essential question: What happens when communication becomes wider and has an instant audience? The class routine, based around writing, reading, and discussion, includes weekly critiques of student work and required writing, including in some non-traditional, contemporary formats.

### Etymology of Scientific Terms (MSON)

*Fall; Grades 11–12*

*Teacher: David Seward, Winchester Thurston School*

The purpose of the course is, to quote the textbook, “By teaching ... the root elements of medical terminology—the prefixes, suffixes, and combining forms of Greek and Latin ... not only to teach students modern medical terminology, but to give them the ability to decipher the evolving language of medicine throughout their careers.” This is in many ways a language course, and deals with elements that are used to create terms to meet the specific needs of medical scientists. As material is introduced, students complete practice exercises during each class meeting, as well as complete approximately one quiz per week. Outside of class, students are expected to analyze and define fifty terms each week. Additional material deals with especially complex etymologies, the history of our understanding of certain aspects of medical science, and relevant material from Greek and Latin texts.

### Exploration of Ethics through Literature

*Grades 11–12*

This course uses literature to examine complex moral dilemmas which evade simple, “right” answers. Students explore readings by a variety of classical and modern thinkers to glean a deeper understanding of ethics, a field of philosophy which strives to clarify how we ought to behave. The texts raise questions such as: *What is justice? Who is in my universe of obligation? What is a creator’s responsibility to his or her creation? Can external structures mitigate an individual’s responsibility for his or her actions?* In this discussion-based seminar, readings draw from classical and contemporary world literature, including novels, plays, and current articles. The texts and discussions may, at times, evoke feelings of discomfort or confusion because they grapple with complicated issues and murky solutions.

In unpacking these nuanced concepts, students work to arrive at a better understanding of themselves when confronted with moral dilemmas, especially as the outside forces that accompany them challenge their reasoning and decision-making. Over the course of the year, students will expand their thinking and continue cultivating their voices through reflective journaling, debates, thoughtful discussions, and analytical essays.

### James Joyce’s *Ulysses* (MSON)

*Spring; Grades 11–12*

*Prerequisite: Modernism (MSON)*

*Teacher: Aaron Lehman, Porter-Gaud School*

If novels were mountains, James Joyce’s *Ulysses* would be Everest: massive, daunting, awe-inspiring—and, at times, responsible for making people surrender. Joyce created the most beautiful—and perhaps the most maddeningly difficult—literature of the 20th Century, prose that has thrilled and often intimidated readers for generations, and his 1922 masterpiece changed the landscape for the novel as a whole. This course unpacks the mystery and loveliness of Joyce’s work, giving students the close-reading tools to appreciate and make sense of Joyce’s particular literary power, to scale the edifice of *Ulysses* to see it for what it truly is: a marvel of stylistic achievement, a testament to the ways in which language shapes us as we shape it, and, at its core, a gorgeous love story and an exploration of the everyday heroism that we often overlook.

In particular, students explore how Joyce tried to render the authentic human experience through language: how Joyce wanted literature to look and feel more like life than like art, how he wanted literature to mirror the texture of the actual thinking and feeling mind. To that end, while the course gives students an intensive look at arguably the greatest literary mind since Shakespeare, it also has us—teacher and student alike—consider what it means to inhabit fully our hearts, minds, and selves in the modern world.

### Law, Culture, and Society

*Grades 11–12*

*May also be taken as a history and social science elective*

Debate over the role of law in our society is not limited to courtrooms and newspapers; it is waged in literature, on stage, in movie theaters, on radio and television, and online. This course explores the nexus of law, society, and culture. Students study how cultural expression influences public perceptions of the law and justice. Students examine the meaning of justice, the relationship between law and morality, the difference between justice

and revenge, and the proper aims of the criminal justice system, while digging into legal controversies around race, gender, social class, and sexuality. They work as historians and as cultural critics, analyzing a wide range of works such as Bryan Stevenson’s memoir *Just Mercy*, the play *The Laramie Project*, *The Stranger*, the documentary *Making a Murderer*, the TV series *Orange is the New Black*, and the classic legal film *The Verdict*. Students will hone their research and writing skills through literary and cultural analyses, creative projects, position papers, closing statements, document investigations, essays, and op-eds. The class is highly interactive, with discussions, debates, oral and media projects, and Socratic seminars.

### Literature and Theories of Knowledge Grades 11–12

In this philosophy-based literature course, students develop a coherent approach to learning and understanding through thoughtful inquiry into different ways of knowing and different types of knowledge. They focus on how reality is perceived, with emphases on Plato’s and Aristotle’s doctrines. Students question their assumptions about reality through diverse philosophical and literary texts, and try to answer this seminal question: *What level of certainty, if any, can I assign to a given assertion of knowledge?* Through diverse readings in various genres, students reflect on their own experiences as learners and discover how different academic disciplines are interconnected. They read literary works that explore realms of knowledge spanning the arts to mathematics, and make connections between and across ways of knowing and areas of knowledge. They read a combination of excerpts from philosophical works and complete works from various literary genres, including Aristotle, Cantor, Descartes, Frege, Gödel, Heidegger, Hume, Kierkegaard, Kant, Leibniz, Locke, Machiavelli, Maimonides, Nietzsche, Pascal, Plato, Rousseau, Russell, Sartre, and Wittgenstein.

#### Summer Reading:

Watch: Andy and Lana Wachowski, *The Matrix*  
Nolan, *Inception*

#### Texts:

Carroll, *Through The Looking Glass*  
Doxiadis, *Logicomix: Epic Search for Truth*  
Hesse, *Narcissus and Goldmund*  
Mann, *Death in Venice*  
Murakami, *Hard-Boiled Wonderland and the End of the World*  
Machiavelli, *The Prince*

### Media and Literature: Critical Approaches to Media, Messages, and ME

#### Spring

Students examines the relationships between the various mass media which flood their daily lives, the messages that they intend as opposed to the message actually received, and their effects on us as we attempt to make sense of them all. Studying the evolving ethical dilemmas society faces as more media technologies and media cultures are developed, students debate questions such as:

- Why, over time, have television shows tended to be so similar?
- Should the difference between reality and media simulations matter to consumers?
- How has the Swoosh, the trademark of the Nike Corporation, become so important in many people’s lives?
- Why has social media become the driving force in most people’s day?
- Does reality television do more harm than good for its audience?
- How does the choice of media affect or reflect the intended message?

Students closely read fiction and nonfiction, examine various types of media, and learn several critical approaches to media studies, developing answers about the role media had and can come to play in shaping the individual understandings and moral value of “me.” Students write in class and prepare longer, well-crafted and supported analytical essays. They also engage in several creative writing projects and presentations, including the creation of an advertising campaign.

#### Texts:

Berger, *Ads, Fads, & Consumer Culture* (5th Edition)  
Huxley, *Brave New World*  
Media, Ethics, and Literature packet (TBD)  
Ott and Mack, *Critical Media Studies* (2nd Edition)  
Wilson, *The Story*

#### Film:

*Terms and Conditions May Apply*  
*The Truman Show*

### Modernism (MSON)

#### Fall; Grade 12

**Prerequisite:** AP Literature (prior or concurrent)

**Teacher:** Aaron Lehman, Porter-Gaud School

Literary Modernism, that period dating roughly from 1910 until World War II, was at once totally thrilling and utterly strange. At their core, Modernist writers challenged all forms of certainty, all forms of accepted knowledge—exploding our notions of what poems and novels should look like, of what the human self was, of the very nature of

experience—in attempts to, as Ezra Pound declared, “Make it new.” In this course, students explore that thrilling and strange literature of Modernism, investigating how its poets and novelists created forms and textures and works—at times confusing and shocking—that the world had never seen before. Looking at the poetry of Yeats, Pound, Eliot, Moore, Williams, and Stevens and the fiction of Hemingway, Faulkner, Woolf, and Joyce, students consider the ways in which the Modernists both shaped and were shaped by the world around them—and how they managed to produce work that feels, even some hundred years later, so exciting, innovative, real, and human.

### Philosophy in Pop Culture (MSON)

**Spring; Grades 11–12**

*No prerequisite, but some familiarity/experience with logic helpful*

**Teacher: Joyce Lazier, Canterbury School**

Have you ever had a realistic dream that you were sure was true and then woke up confused? How do you know that you are not in the Matrix? What is real and what is not? This course investigates the nature of existence. It combines classic philosophic works, like Descartes, with contemporary movies like *The Matrix* and *Inception*, to contemplate what it is to exist and what the meaning of life is or should be.

**Materials required:**

Netflix subscription.

### The Power of Story

**Grades 11–12**

*May also be taken as a history and social science elective*

“The purpose of a storyteller is not to tell you how to think, but to give you questions to think upon.”

Brandon Sanderson, *The Way of Kings*

Stories are essential ways we come to know ourselves and the world around us. Stories affirm who we are and where we have been, and allow us to experience the similarities and differences between ourselves and others. This course examines how we choose to tell stories, whose stories get told, and the impact of these decisions on how we learn history. This course first focuses on the art of storytelling, looking at the building blocks of what makes a strong narrative. Students then study different vehicles for storytelling, including literature, film, oral traditions, art, animation, radio, and newer digital platforms. We use experts from the field to deepen our understanding of the elements of compelling storytelling and participate in storytelling events in the community. In addition, students experiment with a range of mediums to tell their own stories, those of others, and those of history, both past and current. This course is largely student-driven and

project based, providing class members the opportunity to pursue content that is interesting and exciting to them. This course emphasizes and develops students’ analytic, research, communicative, creative, and collaborative skills.

**Summer Reading:**

A memoir and graphic memoir of the student’s choice

### Religion and Literature

**Grades 11–12**

Students explore some ways in which religious faith—both inside and outside of organized religion—has shaped writers and their literary works in different times and places. Some texts celebrate orthodox viewpoints, others critique them, and still others offer complex perspectives on how religion can interact with race, gender, sexuality, and other cultural markers to influence identity and expression. Students explore stories in which characters grow out of and into belief, as well as those that raise questions about how religion helps—or hinders—those seeking to make sense of our challenging world. Along with analytical essays and research projects, students have opportunities to explore their own religious (or secular) perspectives and to write personally and creatively about their views.

**Texts (subject to change):**

Adichie, *Purple Hibiscus*

Akhtar, *The Who and the What*

Atwood, *The Handmaid’s Tale*

Baldwin, *Go Tell It on the Mountain*

Narayan (tr), *Ramayana*

Ozeki, *The Face*

Potok, *The Chosen*

Sidhwa, *Cracking India*

### Speech Matters: Public Speaking in Everyday Life

**Fall**

“Speech is power: speech is to persuade, to convert, to compel.” —Ralph Waldo Emerson

“I’ve learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.” —Dr. Maya Angelou

Students examine the significance of public speaking throughout history and in our contemporary world. Students also study the art and craft of speech as the coalescing of words, voice, and body to create a powerfully unique connection to the audience. The course guides students to intentionally develop public speaking skills that will give them advantages in communications and leadership throughout their lives.

Students discuss rhetoric and public discourse by reading, watching, and studying historic speeches from world figures like Pericles, Queen Elizabeth, Sojourner Truth, Adolf Hitler, Angela Davis, Lou Gehrig, Barry Goldwater, Benazir Bhutto, Nelson Mandela, Angela Merkel, and Emmanuel Macron. Students also focus on delivery of informative speeches, persuasive speeches, and speeches for special occasions. Studying various prepared and extemporaneous delivery styles, including TED Talks, toasts, inaugurations, debate, and storytelling, students practice speechmaking in different real-world situations. They also engage in exercises where improvisation, taking risks, and messing up help build their confidence before an audience. Throughout the course, students reflect on their growth as speakers, listeners, readers, and learners. As writers, they craft creative composition, face personal fears of public speaking, and develop stronger voices. Students conclude the course with a culminating speech performance of presentation.

**Texts:**

- Fraleigh and Truman, *Speak Up!: An Illustrated Guide to Public Speaking* (4th edition)
- Shakespeare, *Julius Caesar*
- Course packet, selected readings and speeches

**Film:**

- Hooper (dir.), *The King's Speech*
- Washington (dir.), *The Great Debaters*

**The Truth is a Funny Thing: African American Autobiography After 1940**

**Grades 11–12**

The autobiography is a freaky literary form: reads like fiction, feels like fiction, but is authentic...and that authenticity depends entirely on how forthcoming the author intends to be. It is also the form for which there exists an unwritten contract between writer and audience that reads, "I will tell you the truth, and you should believe it." Why should we believe it? Do we hold some truths to be more self-evident than others? What happens when the veracity of a story comes into question, especially if it's the author her or himself who brings it into question? Students will explore these questions of the interplay between the writer and the listener in autobiography, particularly as it speaks to the variety of African American experiences in the United States. Topics will include: believing "the Black" story, multiple identities, intersectionality, Black people and the economy, queerness, faith and formations, race and performance, the silencing of Black voices, and the body. Students will write both short responses and long-form critical essays and design a final project exploring their own intersectional autobiographical identities.

**Readings:**

- Blow, *Fire Shut Up in My Bones*
- Hurston, *Dust Tracks on a Road*
- Angelou, *Heart of a Woman*
- Thurston, *How to Be Black*
- Robinson, *You Can't Touch My Hair*
- Rae, *Misadventures of An Awkward Black Girl*
- Walker, *Black, White Jewish*
- Alexander, *Light of the World*

**Excerpts and Essays:**

- Does Your Mama Know? An Anthology of Black Lesbian Coming Out Stories*
- Angelou, *Hallelujah! The Welcome Table: A Lifetime of Memories with Recipes*
- Jenkins, *This Will Be My Undoing*
- Cullors, *When They Call You a Terrorist*
- McBride, *The Color of Water*
- Hughes, *The Big Sea*
- Lewis, *The Mother of Black Hollywood*
- Haddish, *The Last Black Unicorn*
- King, *Letters from a Birmingham Jail*
- Baldwin, *The Fire Next Time*
- Listen Up! Voices from the Next Feminist Generation*  
Vols. 1 and 2
- Taylor, *The Body is Not an Apology*
- Mock, *Redefining Realness*
- Black on Both Sides: A Racial History of Trans Identity*
- Humans of New York*
- Modern Love*
- Selected articles

**Documentaries:**

- What I Want My Words to Do to You*, T-Rex, *A Ballerina's Tale*, *Step*, *Good Hair*, *The Black List: Volume 1*, *Dark Girls*, and *Paris is Burning*

**Autobiographically-Based Film:**

- I am Not Your Negro*, *Pariah*, and *Moonlight*

**World Literature**

**Grades 11–12**

Our world is currently experiencing massive population movement, as people on every continent flee war, political unrest, climate change, and poverty to seek shelter and safety in other lands. All too often, instead of refuge, migrants encounter dangerous journeys and hostile strangers. Since those who flee must settle in to both new places and new identities, journeys across borders, whether ancient or modern, are both physical and psychological. In this class, students explore classic and contemporary literature from around the world that highlights the intersections between migration and identity. As students study both fictional and actual migrations, they examine how those who seek refuge have been viewed by those whose lands they enter, and how their views of themselves

have changed as a result of their experiences. Through a variety of activities, including literary analysis, discussion, and creative assignments, students explore the techniques writers and filmmakers use to convey their ideas about and shape our responses to characters on the move.

**Texts may include:**

Greder, *The Island*  
 Hamid, *Exit West*  
 Narayan, *Ramayana*  
 Nguyen, *The Refugees*  
 Satrapi, *Persepolis*  
 Shakespeare, *The Tempest*  
 Shelley, *Frankenstein*  
 Urrea, *Into the Beautiful North*

### Writing Herself In: US Women’s History and Literature

**Grades 11–12**

*May also be taken as a history and social science elective*

The course moves beyond a compensatory or contributory model of social history to unearth and examine the experiences of women from all backgrounds throughout US history. Using writings by women from a variety of fiction and non-fiction genres, students will investigate the civic, economic, and activist strains of women’s public lives from the precolonial era to the present. Women who write often defy simple characterizations of being either literary or historical, ethnographic or personal. The course focuses on the role of gender and sexual identity, paid and unpaid labor, political exclusion and participation, and racial and ethnic identity through the experiences of women who have recorded and kept their own histories. Students will work together to bridge the past and present through reflective writing, analysis of current events, historical research, hosting guests, and collaborative digital projects.

## MATHEMATICS

**Requirements: Completion of the math progression through Precalculus or four years of mathematics**

**Chair: Susan Lenane**

*See chart on page 26 for sequence of math courses.*

Mathematics at Maret is innovative, exciting, rigorous, and challenging. Students at all levels grapple with complex problems, work collaboratively, and present solutions. They acquire content, practice skills, think creatively, synthesize ideas, and master a range of problem-solving techniques. Our students are encouraged to notice and wonder about interesting problems, to tinker with them, to rise to

challenges, and to be willing to make mistakes that they can learn from on their way to finding elegant, interesting, and creative solutions. Throughout the program, students utilize technological resources appropriately to gather, analyze, and explore real data, model natural phenomena, and solve complex equations.

The mathematics program reflects a range of abilities, learning styles, and interests. The department offers regular, advanced, and accelerated courses; placement is made through consultation with students, families, and teachers. The program is flexible; students choose an appropriately challenging schedule each year and are not locked into a specific math track. Most Maret students take four years of high school mathematics.

### Geometry

Students learn about the patterns and shapes that form the foundation of the physical world. They explore two- and three-dimensional shapes and participate in inquiry-based activities that require a synthesis of ideas. Traditional two-column proof is deemphasized; students make conjectures and prove theorems using algebra and coordinate geometry. They practice skills while studying patterns, points, lines and angles, triangles, trigonometry, quadrilaterals, polygons, circles, solids, and non-Euclidean geometry. During the second semester, students broaden computational and design-thinking skills through a programming unit. They gain basic understanding of creating a program using Python, test code, and then students create an interactive project that uses Python to solve a geometric problem.

### Advanced Geometry

Students are challenged with complex problems that require creative thought and a willingness to persevere when solutions are not apparent. They focus on the development of algebraic and geometric problem-solving strategies, and effectively and efficiently communicate through oral presentation of their work. During the second semester, students broaden computational and design-thinking skills in a programming unit. They gain basic understanding of creating a program using Python, test code, and then create an interactive project that uses Python to solve a geometric problem. Geometer’s Sketchpad and other software programs are used as exploratory and problem-solving tools.

### Algebra 2 & Trigonometry

Students explore families of functions: characteristics, graphs, and real-world applications. They review operations with rational numbers and study rational

functions, asymptotes, and graphs. With the aid of a graphing calculator, students represent functions graphically, numerically, and algebraically. They examine the applications of function using hands-on labs, videos, and interactive websites.

### **Advanced Algebra 2 & Trigonometry**

Students explore a variety of functions—exponential, polynomial, rational, and trigonometric—with a focus on the patterns in function behavior. Students apply their knowledge to unique problems that do not lend themselves to an algorithm. They develop learning strategies, critical-thinking skills, and problem-solving techniques vital in a data-driven world.

### **Accelerated Algebra 2 & Trigonometry**

Students take part in a rigorous, enriched survey of advanced algebra concepts, skills, and applications. They undertake an in-depth study of functions—exponential, polynomial, rational, and trigonometric. Students analyze the graphs of functions as visualizations of mathematical models. They are challenged to stretch their mastery of skills by applying knowledge to novel situations.

### **Precalculus**

Students reinforce and extend their problem-solving and analytical skills. They continue to explore families of functions, focusing on the relationships between functions and their inverses. They study probability and statistics and the fundamental ideas of calculus. Students work with Maret lower school students as Math Buddies, reinforcing their own understanding of mathematics concepts by explaining them to young children.

### **Advanced Precalculus**

Students gain a deep understanding of the fundamental concepts and applications of functions. Students build upon their knowledge to creatively incorporate algebraic and geometric concepts when solving novel problems. Students dive into the study of probability and statistics, exploring data displays, descriptive statistics, and probability theory. The course culminates in a survey of the fundamental ideas of calculus.

### **Accelerated Elementary Functions**

Using a problem-solving format, students work on challenging multistep problems, utilizing geometry, trigonometry, and algebraic skills. They learn about vectors, parametric equations, and polar coordinates as they explore new ways to convey mathematical ideas. Students engage in lively dialogue and exhibit conceptual

understanding. Students dive into the study of probability and statistics, exploring data displays, descriptive statistics, regression, survey design, and compound probability theory. The course culminates in a survey of the fundamental ideas of calculus.

### **Advanced Mathematical Modeling, Statistics, and Design Thinking: Making & the World**

Using creative and collaborative problem-solving skills and applying them to real world situations, students are introduced to the concepts of design thinking and the maker movement. Applying mathematical principles, students deepen their statistical skills by gathering, analyzing, and utilizing data to identify and understand issues in their local, regional, national, and global communities, with the goal of developing solutions that could tackle those issues. Beginning with understanding the fundamentals of design and fabrication using equipment such as 3D printers and laser cutters for prototyping and incorporating the application of mathematical theory, students also explore the principles behind design thinking and how those principles are used in an iterative process to bring ideas to fruition. This interdisciplinary course is co-taught by members of the mathematics and technology faculty and incorporates guest lecturers. This course is for artists, thinkers, doers, writers, mathematicians, statisticians, scientists, designers, and others who are excited about the opportunities to deepen their understandings and apply their skills to make a positive impact.

### **Calculus**

Students explore the fundamental concepts and problem-solving techniques of calculus and study limits and derivatives in depth. Students are introduced to the basic mechanics and applications of integration. Using a conceptual approach to calculus, students review prerequisite mathematics and problem-solving strategies. Successful students will be prepared for introductory college calculus.

### **AB Calculus**

The ancient Greek philosopher Heraclitus said, “The only constant is change.” Students learn the basic mathematical methods used to analyze phenomena that change. Through the study of limits, derivatives, integrals, and differential equations, students model population growth, profit maximization, and dynamic motion. Successful students may take the AP Calculus AB Exam.

**BC Calculus**

This college-level course is a study in single-variable calculus. Students explore differentiation and its applications; integration techniques and problems utilizing the integral; differential equations; and infinite sequences and series. They also study the history of calculus. Successful students may take the AP Calculus BC Exam.

**Multivariable Calculus (MSON)**

*Grades 11–12*

*Prerequisite: BC Calculus*

*Teachers: Section A, TBD, Stanford Online High School; Section B, Erika Amaya, Chadwick School; Section C, Joshua Link, Maret School*

The mathematics of three dimensions is the emphasis of this college-level course. Multivariable Calculus explores the geometry of three-dimensional space, including vector arithmetic. It also explores three-dimensional surfaces, using the tools of derivatives and integrals expanded into multiple dimensions. A robust unit on differential equations allows students to review the topics of single-variable calculus. The emphasis throughout the course is on problem solving and on real-world applications of the tools students learn in fields such as economics, astronomy, physics, engineering, and medicine.

**Linear Algebra (MSON)**

*Fall; Grades 11–12*

*Prerequisite: BC Calculus*

*Teacher: Jon Gray, Indian Springs School*

StA standard treatment of linear algebra as presented to university-level science and engineering majors. Course topics include row-reduction, matrix equations, linear transformations, matrix operations, invertibility, LU-factorization, subspaces of Euclidean space, dimension, rank, determinants (elementary product definition, expansion by minors, and row-reduction), vector spaces, null and column spaces, linear independence, bases, change of basis, Eigen-theory, algebraic and geometric multiplicity, diagonalization, inner product, length, orthogonality, orthogonal sets, projections, the Gram-Schmidt process, QR-factorization, and the method least-squares. Time-permitting, the remainder of the course will be spent exploring applications of linear algebra to various disciplines. Regular problem sets will allow the students to practice and master the techniques introduced in class. Topic mastery will be exhibited through both written and oral exams.

**Advanced Applied Math Through Finance (MSON)**

*Spring; Grades 11–12*

*Prerequisite: Algebra II*

*Teacher: Julien H. Meyer III, Severn School*

Students explore a mathematical and conceptual framework with which to make important personal financial decisions using algebraic tools. Specifically, the class will investigate i) the time value of money (i.e., interest rates, compounding, saving, and borrowing) using exponential functions; and ii) the characteristics and risk/reward tradeoff of different financial instruments/investments, such as stocks, bonds, and mutual funds, using algebra, probability, and statistics. Other financial algebra topics selected with student input may include financial accounting, depreciation methods, and foreign currency exchange. The course will stress use of the TI-83/84 calculator, Excel spreadsheets, and iPad apps. Students should be comfortable with exponential growth models and, preferably, the concept of the number  $e$  for continuous compounding. They should exhibit an interest in mathematical reasoning and display a hefty dose of curiosity about the language and problem-solving nature of personal finance.

**PERFORMING ARTS**

*Requirements: ½ credit in performing arts, plus one additional credit in either advanced art or music.*

*Chair: Charles Owens*

The Performing Arts Department develops self-expression through theatrical and musical arts. By creating, performing, analyzing, and critiquing dramatic and musical performances, students broaden their view of the world.

Through music, students develop vocal, compositional, and instrumental technique. They also examine the basic elements of music: melody, harmony, form, rhythm, texture, and timbre. Participating in performing arts ensembles, students develop aesthetic sensitivity, advance their vocal and instrumental skill, and experience success in a group structure.

In drama, students view and construct dramatic works and study performance techniques in large group settings. Maret's theatrical productions introduce students to acting technique, dancing, and singing, set building and design, and aspects of life set in historical periods.

## INTRODUCTORY LEVEL COURSES

½ credit

### Basic Acting Technique

Grade 9

Students acquire basic acting techniques and terms through performance exercises that acquaint them with the fundamental tools of acting: voice and body. Students learn how to analyze a script as an actor, identify the circumstances of a scene, and develop a character's physical actions. They perform monologues and scenes for the class and finish the year with a performance in front of a small audience.

### Concert Band 9

**Prerequisites:** *Two or more years experience playing a standard string, wind, or percussion instrument (or department approval)*

Students develop their playing skills by rehearsing scales, etudes, and standard band repertoire. They practice correct posture, instrument-specific playing techniques, rhythmic/tonal literacy, and musicianship. Students participate in two major on-campus concerts, off-campus performances, and a short tour during ISW.

### Concert Choir 9

Students develop their vocal ability and enhance their sense of style. They study sight-reading, solo singing, and performance technique and explore a varied repertoire in accompanied and a cappella works. They participate in two major on-campus concerts, off-campus performances, and a short tour during ISW.

### Introduction to Music Theory (MSON)

Fall; Grades 11–12

**Prerequisite:** *Basic music literacy (rhythm and note reading (at least in one clef)) required*

**Teacher:** *Janet MacKay-Galbraith, Canterbury School*

Music theory deepens the knowledge and intellectual understanding of the building blocks of music: scales, rhythms, chords, formal analysis, counterpoint, musical forms, and the different stylistic periods of music history. This class is geared primarily for musicians who are serious about music performance, improvisation, and/or composition, but also perhaps just interested in pursuing a deeper understanding of the theoretical components of music. During the course of this class, students will learn to:

- Identify all notes in both clefs and all key signatures
- Learn and identify all forms of minor scales
- Learn to transpose within different keys

- Learn and identify time signatures
- Aurally and visually identify major, minor, augmented, and diminished chords
- Practice and attain proficiency in rhythmic and melodic dictation
- Learn the basics of voice-leading
- Harmonize a simple tune
- Practice rhythmic and melodic dictation
- Chord analysis
- Discuss and identify different characteristics of Medieval/Renaissance/Baroque/Classical/Romantic eras, as well as cover some of the compositional techniques of the 20th and 21st centuries
- Discuss and identify major composers within the above noted eras

#### **Required:**

Access to a keyboard, even an inexpensive, roll-up one

### Introduction to Technical Theatre

Grade 9

Students gain introductory technical experience in stage carpentry, lighting, and sound. They learn the skills necessary to work backstage for a live production and are encouraged, but not required, to work on the fall and/or spring tech crew for a Maret theatrical production.

## ADVANCED COURSES

### Concert Band 10–12

**Prerequisite:** *Two or more years experience playing a standard string, wind, or percussion instrument (or department approval)*

Students develop their playing skills by rehearsing scales, etudes, and standard band repertoire. They practice correct posture, breathing, instrument-specific playing techniques, rhythmic/tonal literacy, and musicianship. Students participate in two major on-campus concerts, off-campus performances, and a short tour during ISW.

### Concert Choir 10–12

Spring or full year

Students in this advanced singing ensemble refine their vocal ability and enhance their sense of style. They study sight-reading, solo singing, and performance technique and explore a varied repertoire in accompanied and a cappella works. They participate in two major on-campus concerts, off-campus performances, and a short tour during ISW.



## Film Production

### *Grades 10–12*

Students acquire technical, creative, artistic, and historical background in the fields of video, broadcasting, and film production, as well as an understanding of the essential elements for a live production and how content is consumed by contemporary viewers. They gain experience in audio production, lighting technique, video editing, story development, special effects, and production management while learning to operate a variety of camera systems. Students produce films in several categories including documentary, commercial, and traditional film styles.

## Musical Theatre Seminar

### *Grades 10–12*

Students explore the repertoire and history of the American musical theatre and develop analytical and performance skills through collaborative participation. Using films, images, recordings, libretti, and musical scores, students consider the musical as a reflection of American popular culture. Students analyze, prepare, and perform material from a range of musicals. After completing this course, students will be able to identify, interpret and perform material from the American musical theatre, taking into consideration character, context, and performance practice; analyze and break down a song into text, rhythm, and notes; understand the history and leading figures in American musical theatre; and relate the development of musical theatre to its social and political context. Field trips may include outings to view musical theatre productions as well as research trips to the Library of Congress.

## Technical Theatre

### *Fall or full year; Grades 10–12*

Students with an interest in technical theatre learn all major facets of stagecraft. They take part in hands-on class projects, work on Maret productions during class time, and are encouraged, but not required, to spend time outside of class working on Maret productions.

# PHYSICAL EDUCATION/ ATHLETICS

*Chair: Liz Hall*

## OVERVIEW

Maret's physical education and athletics programs center on student achievement and enjoyment. Through a variety of team and individual physical activities, students learn good sportsmanship and self-discipline. Students develop skills, learn basic rules and strategies, and gain an understanding of the importance of lifelong physical fitness.

The school year is divided into three athletic seasons. Students partake in a combination of physical education and/or interscholastic team sports 11 of the 12 seasons between Grades 9 and 12. Students who successfully complete 11 seasons may choose a one-season exemption during senior year. An exception is made to this requirement for students who participate in two team sports in one year: They have the option of taking the third season off.

## Interscholastic Team Sports

Twenty-nine Maret junior varsity and varsity teams participate in interscholastic competition:

### Fall

Cross Country, Coed Varsity  
Football, Boys Varsity  
Golf, Coed Varsity  
Soccer, Boys JV and Varsity  
Soccer, Girls Varsity  
Tennis, Girls Varsity (boys in spring)  
Volleyball, Girls JV and Varsity

### Winter

Basketball, Boys JV and Varsity  
Basketball, Girls JV and Varsity  
Club Ice Hockey, Boys Varsity  
Swimming, Coed Varsity

### Spring

Baseball, Boys JV and Varsity  
Lacrosse, Boys Varsity  
Lacrosse, Girls JV and Varsity  
Softball, Girls Varsity  
Tennis, Boys Varsity (Girls in fall)  
Track and Field, Coed Varsity  
Ultimate Frisbee, Coed Varsity

Girls compete in the Independent School League (ISL) and boys compete in the Mid-Atlantic Athletic

Conference (MAC). Participation on interscholastic teams is encouraged. Tryouts are required for team sports; selection is based on ability.

### Physical Education and Lifetime Activities

Students choose activities that promote lifelong physical fitness and pleasure. All activities are held after school and include:

#### Fall

Strength and conditioning (T, TH 3:30–5:00 p.m.)

Yoga (M, T, TH 3:30–4:30 p.m.)

#### Winter

Dance (M, F 3:30–5:00 p.m.)

Step Team (student run group; M, T, TH 3:30–4:30 p.m.)

Strength and conditioning (T, TH 3:30–5:00 p.m.)

Yoga (T, TH 3:30–5:00 p.m.)

#### Spring

Step team (student run group; M, T, TH 3:30–4:30 p.m.)

Strength and Conditioning (M 3:30–5:00 p.m. and W 2:00–3:30 p.m.)

### Independent Physical Education

**Prerequisites:** *Department approval*

Students who wish to pursue an activity not offered at Maret may apply for an independent P.E. program, including verification of time fulfilled and instruction received. Three hours of supervised instruction per week are required.

Recent independent P.E. programs include horseback riding, crew, dance (jazz, ballet, and modern), martial arts, and rock climbing.

## SCIENCE

**Requirements:** *3 credits; at least one credit in each discipline of biology, chemistry, and physics*

**Chair:** *Reyna Pratt*

*See chart on page 27 for sequence of science courses.*

Maret's upper school science program includes a wide selection of courses in each discipline, geared to a range of scientific abilities and interest. Students have several options for progressing through the program; see the accompanying sequence chart for possible scenarios.

The Science Department provides students with challenging hands-on experience and instruction. Three years of science are required; most students complete

four or more courses. Some juniors and seniors take two sciences concurrently. Students are required to take a course in each discipline of biology, chemistry, and physics. Some courses develop the advanced knowledge and laboratory techniques needed to excel in college science; others provide students with the breadth of scientific knowledge and problem-solving skills needed in real world situations.

Maret has three fully equipped upper school science labs. Every science course is laboratory-based and is designed to encourage critical analysis and the application of mathematics at a level appropriate to the course. Technology is used to enhance data collection and analysis.

## BIOLOGY

### Biology 9

#### Grade 9

Students develop the scientific writing, research, and analytical thinking skills required to succeed in numerous disciplines. Students engage in activities, laboratory investigations, and discussions to develop their understanding of the unifying themes of modern biology. Topics include:

- Ecology
- Evolution
- Cell Biology
- Cell cycle, mitosis and meiosis
- Mendelian Genetics
- Photosynthesis and respiration
- Human physiology and reproduction

Students collect and analyze data using a variety of tools, including computer-based lab probes, spreadsheets, and graphing software. Lab exploration includes basic microscopy, dissection, and models of biological processes. Students demonstrate their understanding of the material with research-based lab reports, models, and other projects.

### Biology 11/12

#### Grades 11–12

Using evolution as the unifying theme, students study human biology. They study the structure and function of cells, genetics, the major physiological systems, and human ecology, all with an emphasis on human health and disease. Lab work is used to illustrate key concepts and to develop analytical and reasoning skills using the hypothetico-deductive methodology of science. Students will organize and assimilate large amounts of material into

coherent dynamic models that represent human biology at multiple levels of scale from cell to ecosystem.

### Advanced Biology

#### **Prerequisite:** *Chem Study*

Students come to understand biology in the context of evolution and homeostasis from the molecular to the organismal levels; develop their analytical thinking skills as biologists; and prepare for college-level biology. This comprehensive, college-level survey of general biology covers:

- Evolution/speciation/origins of life
- Biomolecules
- Cellular biology
- Metabolism
- Molecular genetics and heredity
- Molecular biology
- Biodiversity, ecology, conservation biology
- Organ systems of *Homo sapiens*

Students acquire laboratory skills such as experimental design, instrument use, technique, data collection and interpretation, analysis, and writing experimental conclusions. Six weeks of lab are devoted to *Drosophila melanogaster* crosses and the interpretation of the results.

## CHEMISTRY

### Chem Com (Chemistry in the Community)

This course emphasizes the everyday impact of chemistry as students explore the important role that it will play in their personal and professional lives. Class discussions, laboratory activities, and exercises in decision making and problem solving develop students' aptitude in understanding major chemistry concepts and applying important scientific skills. Units include water, chemical resources, petroleum, food, nuclear chemistry, air and climate, and health. The approach to learning major chemistry concepts is application-based and integrates a service-learning component.

### Chem Study

#### **Prerequisite:** *Current science teacher recommendation*

Students engage in a quantitative approach to chemistry. The course integrates chemical theory, quantitative approaches, and experimental observations. Students acquire problem-solving skills and use particle level models to describe the theoretical material. Topics may include:

- Basic stoichiometric relationships
- Gases and their ideal behavior

- Development of modern atomic theory from a historical perspective
- The periodic table
- Bonding and molecular structure
- Equilibrium
- Acid-base reactions

Students use laboratory experiments to understand and reinforce principles of chemistry. Students considering enrolling in Advanced Biology or Advanced Chemistry should take Chem Study.

### Advanced Chemistry

#### **Prerequisites:** *Biology, Chem Study*

Taught at the college level, this course covers topics included in the AP Chemistry Curriculum. Students learn essential lab techniques necessary for college science. They work independently, in small groups, and with lab partners. Lab work constitutes about 35 percent of the course. Topics covered include an in-depth study of equilibrium, thermodynamics, kinetics and bonding, quantum mechanics, acid base chemistry, and electrochemistry. College-level lab experiments involve acid base titrations, qualitative analysis, gravimetric analysis, redox titrations, spectrophotometry, and other techniques. Students may take the AP Chemistry Exam, but it is not required.

## PHYSICS

### Physics with Algebra

Students develop a strong understanding of fundamental physics topics and their applications to everyday science through hands-on laboratory exercises and activities, problem solving using algebra, and group discussions of concepts seen in action. They delve into many branches of classical physics, including motion and energy, the nature of waves, light and sound phenomena, and electricity. Students receive ongoing support in note taking and organization as well as a great deal of practice in solving multistep problems.

### Physics A

#### **Co-requisite:** *Precalculus, Calculus, or AB Calculus*

Students explore the theory and application of classical mechanics, energy, electrostatics, and circuits. Equal emphasis is placed on studying the concepts of physics, problem solving, and applications to the real world. Students learn to recognize both explicit and implicit

information, and they use graphical techniques and vector analysis to more deeply understand and analyze physical systems.

### Advanced Physics B

**Co-requisite:** *Advanced Precalculus, Accelerated Elementary Functions, or AB Calculus*

Students are exposed to classical mechanics, electrostatics, and circuits on a level similar to that presented in an introductory college physics course. Study of the underlying concepts of physics, multistep problem solving, and applications to the real world are emphasized. Students will learn to use graphical and algebraic representations of functions to model the physical world, make predictions, and discover patterns. Labs and lecture demonstrations occur throughout the course and involve qualitative and quantitative analysis of experimental results. Topics covered include the graphical description of motion, constant acceleration, two-dimensional motion, forces and Newton's Laws of motion, conservation of energy, electrostatics, and circuits.

### Accelerated Physics C: Mechanics

**Co-requisite:** *AB Calculus or BC Calculus or beyond*

This mathematically rigorous college-level introduction to physics is intended for students likely to pursue college science or engineering. Students study classical mechanics, the analysis of motion, Newton's laws, projectiles, momentum, friction, springs, energy, gravity, and rotational motion. They demonstrate their understanding by making predictions, solving problems, and performing labs. Labs occur every two weeks and emphasize finding and analyzing patterns in data. Second semester tests are cumulative to help students prepare for the AP Physics C: Mechanics Exam.

## ELECTIVES

### Advanced Environmental Science

**Prerequisites:** *Biology and either Chem Study or Chem Com*

Using a systems approach, students study the ways in which humans impact and are impacted by the environment. They explore the science behind major environmental issues and ask how humans can live more sustainably. Students review ecology and evolution as well as:

- Human population
- Environmental health

- Energy (including fossil fuels, nuclear, and alternative sources)
- Urbanization
- Water resources and their pollution
- Soil and agriculture
- Air pollution
- Global climate change

Students achieve a deeper understanding of current environmental issues and improve their ability to rationally judge environmental arguments. Students may choose to take the AP Environmental Science Exam.

### Advanced Topics in Chemistry (MSON)

**Spring; Grades 11–12**

**Prerequisite:** *Chem Study*

**Teacher:** *David Walker, Maret School*

Students explore real-world applications to chemistry that are often skimmed over or omitted in most chemistry courses. Possible topics include nuclear, medical, atmospheric, industrial, food, water, and consumer product chemistry. Students learn how a nuclear power plant works, how fuels are chemically altered for vehicles, and what chemicals are added to drinking water. The class explores the history and life events of scientists who discovered the chemical elements and have impacted the history of the world through chemistry. This course is heavy in applications and theory, leaving out much of the problem-solving found in other courses. Students explore the periodic table for daily applications and technologies, from cell phones to photovoltaic cells to medical treatments.

**Materials required:**

Laptop

### Biotechnology: Techniques and Applications

**Fall**

**Prerequisites:** *Biology, Chem Study (or Chem Com and instructor's permission)*

Students explore the many techniques used in a biotechnology setting and develop an understanding of how these techniques are used in scientific research. Students must be able to function relatively independently in the laboratory (after directions and demonstrations are provided) and to complete independent follow-up. The course mimics an NIH (National Institute of Health) internship experience. Students perform hands-on techniques including the extraction and electrophoresis of DNA and proteins; restriction digestion of DNA; amplification of DNA using the polymerase chain reaction; and the cloning of DNA. They share their study of fluorescence and its many applications (e.g., microscopy, DNA sequencing, and microarrays) in oral presentations.

They are introduced to the use of computer software to conduct bioinformatics research. Students discuss how these techniques help solve real-world problems. They also learn how to use the biomedical research bibliographic database PubMed and begin the transition from using online resources to primary scientific literature. Students choose a final research paper or project accompanied by an oral presentation.

### **Comparative Ecosystems (MSON)**

*Spring; Grades 11–12*

*Prerequisite: Biology*

*Teacher: Marks S. McWhorter,  
St. Andrews Episcopal School*

Students study and understand large-scale interactions between biological communities and their physical environments on a global scale. Students study geological processes, soils, and nutrient availability, analyze how these characteristics shape environments, and examine nutrient cycling, weather and climate, water cycles, and organismal interactions among these systems. Students engage in interactive lab-based projects examining ecosystems within their own environments, and compare these results with their peers, as well as data from ecosystems around the globe. This style of analysis creates an opportunity for students to compare and contrast data and understand how statistics and collection methods are used to appropriately study communities and ecosystem processes. Students also collect data on the environment in which they live. By studying material in an immersive setting, students see how ecological interactions occur and appreciate how climate systems connect these habitats on a global scale.

**Materials required:**

Lab kit (provided to each school)

### **CSI: MSON Forensic Science (MSON)**

*Spring; Grades 11–12*

*Prerequisites: Completion or concurrent enrollment in  
Chem Study or Biology and Algebra II*

*Teacher: Carrie Lopez, Trinity Preparatory School*

This course is designed for those interested in learning the discipline of forensic science and crime scene investigation. Students are introduced to some of the specialized fields of forensic science and topics include blood spatter and pattern analysis, death, ballistics, trace and glass evidence, toxicology, entomology, anthropology, serology, and DNA fingerprinting. Students explore the forensic analysis of substances such as glass, soil, hair, bullets, gunpowder, blood, and drugs. This class includes a mixture of laboratory experiments, demonstrations, and expert speakers.

**Materials required:**

Lab kit (sent by teacher)

### **Genetics And Genomics:**

#### **Diving Into The Gene Pool (MSON)**

*Fall; Grades 11–12*

*Prerequisites: Chem Study and Biology*

*Teacher: Audrey Yeager, Manlius Pebble School*

This course emphasizes classic Mendelian genetics, molecular genetics, and population and evolutionary genetics. Topics include structure and function of genes (and the genome), biological variation, and regulation of gene expression. Subsequently, the course explores current genome analysis methods and genome manipulation technologies such as CRISPR. We will also discuss the implication of our use of this information in society. Topics include recombinant DNA technology, mathematical models, and statistical methods for data analysis. Papers from current and classic literature will supplement lecture materials.

**Materials required:**

Access to compound microscope, laptop

### **Gravitational Astrophysics**

*Spring; Grade 12*

*Prerequisite: Algebra 2 & Trigonometry and any  
physics course (concurrent or prior)*

Students delve into the concepts and mathematics of Newton's Law of Universal Gravitation within the context of astrophysics. Topics include orbital motion of satellites and planets, ocean tides on Earth, gravitational potential energy, black holes, and the search for exoplanets. Students will engage in periodic physics lab experiments, virtual labs on the computer, and independent projects.

### **Introduction to Organic Chemistry (MSON)**

*Fall; Grades 11–12*

*Prerequisite: Chem Study*

*Teacher: David Walker, Maret School*

This course provides useful background information in organic chemistry by covering topics not typically found in high school chemistry courses. Students gain insight into the importance of the chemistry of carbon compounds to our daily lives. Topics covered include organic nomenclature, structural formulas, stereochemistry, bonding, reaction mechanisms, and chemical transformations of functional groups. Completion of the course should make students more confident in their chemical background when entering college biology or chemistry courses.

## Lab Research in Biology

*Spring semester*

**Prerequisites:** *Biology and Chem Study required.*

*Advanced Biology (fall semester) or Biotechnology recommended.*

In this laboratory-based class, students learn the practical implementation of the scientific method as applied to an experiment of their own design. They use one of two invertebrates: *Caenorhabditis elegans* and *Drosophila melanogaster* as model eukaryotic organisms for study. An introduction to PubMed and the critical reading of primary literature assist the students' developing understanding of the importance of a sound hypothesis. Students discuss several real world experimental designs before designing an appropriately controlled experiment, preferably using one of the model organisms. They utilize the same processes used by working scientists to conduct a valid study. Students produce data that can be quantitatively analyzed for its biological implications rather than a demonstration of a fundamental principle. Self-motivated students will take instruction, stay organized, and maintain an accurate record of their laboratory experience.

## The Quantum Mechanical World (MSON)

*Spring; Grades 11–12*

**Prerequisite:** *Accelerated Physics C, or equivalent, and AB Calculus*

**Teacher:** *Andrew Blechman, Roeper School*

This class is designed for students who have a firm introduction to classical (Newtonian) mechanics and would like to see how things change when working on the atomic/sub-atomic scale. The first third of the class begins with a review of some of the important facts from classical mechanics, and follows a historical introduction to how we learned that there was more going on than what Newton's Laws suggest. While we learn of these discoveries, we will begin to introduce some of the mathematics needed to understand quantum mechanics, such as complex numbers and probability theory. In the second third of the course, we will begin to study some of the consequences of the principles of quantum physics by solving the trapped "particle in a box" problem. We will use this system to understand many of the difficult concepts of quantum physics in a definite setting, such as the probability interpretation, expectation values of observables, and the uncertainty principle. In the last third of the course, we will study the issues of Quantum Theory that caused Schrodinger to say, "I don't like it, and I'm sorry I ever had anything to do with it!" We will consider the EPR Paradox, the Measurement Paradox, Bell's Inequalities, and survey some "Quantum

Philosophies" such as the Copenhagen, Many-worlds, and Hidden-variables interpretations.

## Waves, Optics, and Musical Physics

*Fall; Grade 12*

**Prerequisites:** *Algebra 2 & Trigonometry and any physics course (concurrent or prior)*

Students examine the theory and applications of waves, sound, and optics. They use the theory of traveling and standing waves to study the properties of sound waves and their relationship to the Doppler effect and to musical instruments. Students explore the nature of light along with everyday examples of physical optics such as polarizing sunglasses and soap bubbles. They use the ray model of light, the foundation of geometrical optics, to explain the physics of mirrors and lenses. Labs involving quantitative data analysis are a significant component of this course; students work independently on research projects throughout the semester.

## SUMMER ELECTIVE

### Subtropical Zone Ecology

*Grades 10–12*

*Sanibel Island and Florida Keys, Florida*

Students take advantage of the unique ecological characteristic of Sanibel Island and the Florida Keys during this five-week course. They study the marine subtropical ecology of the intertidal and neritic zones, with additional investigations of dune, mangrove, mud flat, and grass flat ecosystems. Students snorkel in order to directly examine marine flora and fauna, which is followed by thorough analysis in the laboratory. They also prepare and submit a field research project. Extensive reading and discussions of environmental literature, as well as visits by guest speakers enrich the experience.

## Technology

**Chair:** *Jean-Philippe Fontaine*

Technology education at Maret teaches students to use computers to improve academic writing and research skills, develop and reinforce programming aptitude, and express creativity. Students also develop computer skills necessary for coursework in other departments.

Students achieve competence in word processing, spreadsheet calculations, multimedia, web-based research, and presentation software. They study programming,

understand a computer's strengths and limitations, and learn technology skills for college and beyond.

Maret has a fully equipped computer laboratory and campus-wide wireless network. Computers are also available in the library, science lab, and many locations around campus; several laptop and tablet carts support computer use in the classroom. Students use their own Maret email accounts, accessible on and off campus.

### Programming and Design Fundamentals

Students new to computer programming explore the design process from concept through software creation. They study simple and complex system designs and learn fundamental concepts of programming using various coding methods. Students create their own games and programs, incorporating object-oriented programming skills, such as defining parameters and variables, if/then statements, looped processes, and recursive statements.

### Computer Science and Programming in Java

Students study the syntax and organization of Java, the use of object-oriented programming concepts, and the standard constructs of arrays, recursion, searching, and sorting. They write many small programs and proceed to larger projects, such as graphical games through applets, small database applications, graphing calculators, web-based email, and calendar checkers. Students learn through a self-paced online course (open courseware) with seminar-style classroom support. They program independently and work in small groups to practice techniques and to build a code portfolio. Successful students may opt to take the AP Computer Science A Exam.

### Advanced Mathematical Modeling, Statistics, and Design Thinking: Making & the World

*May be taken as a mathematics credit*

Using creative and collaborative problem-solving skills and applying them to real world situations, students are introduced to the concepts of design thinking and the maker movement. Applying mathematical principles, students deepen their statistical skills by gathering, analyzing, and utilizing data to identify and understand issues in their local, regional, national, and global communities, with the goal of developing solutions that could tackle those issues. Beginning with understanding the fundamentals of design and fabrication using equipment such as 3D printers and laser cutters for prototyping and incorporating the application of mathematical theory, students also explore the principles behind design thinking and how those principles are used

in an iterative process to bring ideas to fruition. This interdisciplinary course is co-taught by members of the mathematics and technology faculty and incorporates guest lecturers. This course is for artists, thinkers, doers, writers, mathematicians, statisticians, scientists, designers, and others who are excited about the opportunities to deepen their understandings and apply their skills to make a positive impact.

### Data Structures and Design Patterns (MSON)

*Grades 11–12*

*Prerequisite: AP Computer Science or equivalent*

*Teacher: J.D. DeVaughn-Brown, Chadwick School*

This course gives advanced students the strong foundation needed to build complex applications using object-oriented principles. It covers the design and implementation of data structures including arrays, stacks, queues, linked lists, binary trees, heaps, balanced trees (e.g. AVL-trees), and graphs. It also serves as an introduction to software design patterns. Each pattern represents a best practice solution to a software problem in a specific context. The course covers the rationale and benefits of object-oriented software design patterns. Numerous problems are studied to investigate the implementation of good design patterns.

**Materials required:**

Laptop

### Independent Study:

#### Special Topics in Computer Science

Students with exceptional talent in computer science may submit a proposal for independent study in computer science for approval by the department chair and a faculty sponsor.

## Visual Art

**Requirements:**

**Grade 9:** ½ credit

**Grades 10-12:** one additional credit in an advanced art or performing arts

**Chair:** Cynthia Hutnyan

Our goal is to create visually literate students who understand the role of the artist in society. Students broaden their understanding of visual art and their ability to think creatively and express themselves visually by studying specific art disciplines within our year-long, studio-based curriculum. Teachers emphasize fundamental techniques and creative problem solving, and guide each

student to discover their personal artistic voice. Students build greater competence and deeper understanding through a curriculum that is progressively more complex and challenging. Differentiated teaching allows for individual modes of expression and ensures that students reach their full potential.

The program instills an appreciation of historical and contemporary art and how artists communicate diverse ideas and experiences. Across all grade levels, students acquire the vocabulary used for analysis, interpretation, and discussion of art. Students further their understanding of the historical, technical, and aesthetic aspects of artistic expression through visits to the many museums and galleries in the DC area. The critical thinking and creative problem-solving that we nurture in our K–12 students are life-long skills that are essential to both their artistic growth and personal development.

Ninth graders choose from several half-credit core courses and examine the concepts and techniques in that specific concentration. Students in upper grades select advanced courses and explore the structural, formal, and creative challenges of a medium while expressing creative potential.

## GRADE 9 CORE COURSES

*½ credit*

### Clay Core

Students explore the various uses of clay as an art medium. They learn the fundamentals of working with clay from functional and sculptural approaches. Students study the hands-on techniques of coil, slab, press molds, modeling, and the potter's wheel. They develop a strong sense of design and craftsmanship and a personal direction in clay.

### Drawing and Painting Core

Students master the basic techniques of drawing and painting in acrylic, pastel, pencil, ink, charcoal, and watercolor media. They hone their observation skills and work from life, still life, landscape, and abstraction.

### Mixed Media Core

Students work with a broad range of techniques and materials in both two- and three-dimensional formats. They experiment with painting, drawing, printing, transfer, casting, and assemblage, and explore various methods for using foam, wire, Celluclay, sculpey, plaster, and found objects. Students study technical and conceptual concerns and work to develop a personal artistic vision.

### Photography Core

Students study black-and-white film photography as both an art and a craft and express their ideas with imagination and clarity. They master camera controls and basic darkroom techniques, study lighting and composition, and investigate portraiture, landscape, and still life photography. This course requires the use of 35mm cameras with manual controls. Cameras are available to students on loan for the duration of the year.

### Sculpture Core

Students express themselves through a variety of sculpture materials and techniques. They learn carving, modeling, casting, and fabrication using materials that may include plaster, clay, wood, and stone.

## ADVANCED COURSES

*1 credit*

### Advanced Clay

Students embark on an in-depth study of the technical and conceptual aspects of clay work. They develop fundamental skills and explore both functional and sculptural approaches. Students are introduced to various clays, glazes, and finishing techniques. They use plaster molds, coil, slab, modeling, extruded, and potters' wheel methods of clay construction. Students develop a personal direction in clay, acquire a strong sense of design and craftsmanship, and understand and appreciate the expressive potential of clay.

### Advanced Computer Graphics

*1 credit for full year or ½ credit per semester*

*Fall: Photoshop and InDesign*

*Spring: Illustrator and 3D design*

Students examine methods of creating computer art. They learn basic principles of art and design—such as composition and use of text—as well as the fundamentals of color, optics, and resolution for printing. Students generate original images for drawn graphics, scanned objects, digital photos, and the 3-D printer, and produce print and online portfolios using a variety of software including Photoshop and InDesign (fall semester) and Illustrator and 3D design (spring semester).

### Advanced Drawing and Painting

Students build skills while exploring ideas in a variety of drawing and painting media. Subject matter ranges from landscapes to still life, the figure, and abstract work. Students visit DC-area galleries and museums for inspiration.



**Advanced Mixed Media**

Students explore the expressive possibilities of resists, textural techniques, printmaking, encaustic, and three-dimensional assemblage. They create observational drawings from the figure, still life objects, and the real world and use these drawings as a springboard for their creativity. Students maintain a sketchbook as a source of inspiration.

**Advanced Photography**

Students learn the art and craft of black-and-white film photography. They master basic camera and darkroom techniques so that they can express their ideas and begin to develop a personal style and vision. Students study composition, design, natural light portraits, landscape, and photo essays. This course requires the use of 35mm cameras with manual controls. Cameras are available to students on loan for the duration of the year.

**Advanced Sculpture**

Students translate ideas three-dimensionally, using traditional sculpture techniques such as carving, fabrication, mold making, and casting. They experiment with stone, wood, plaster, clay, and cement to acquire a strong sense of design and craftsmanship. Inspired by the work of various artists, students develop a personal vision for their work.

**Advanced Art Seminar: Studio Art**

*Prerequisite: Two or more classes in a given art discipline*

This course is for students who are ready for a more rigorous and demanding studio art curriculum. The seminar format of the class focuses on ideas and group dynamics. Students generate a conceptually coherent body of artwork based on personal inquiry and self-reflection. They develop a fluent, art-based vocabulary and participate in group critiques and discussions.

**Advanced Art Seminar: Photography**

*Prerequisite: Two or more classes in photography*

This course is for students who are ready for a more rigorous and demanding photography curriculum. The seminar format of the class focuses on ideas and group dynamics. Students work in their choice of photographic format(s), honing their creative vision through personal inquiry and self-reflection. They develop a fluent, art-based vocabulary and participate in group critiques and discussions.

**Advanced Art Courses: Levels II and III**

*Prerequisite: One year of advanced-level art*

These courses feature greater individualized attention and increasingly rigorous expectations as students build on their experience. Students pursuing a third year of study in a chosen medium produce a coherent body of work demonstrating personal expression, quality of ideas, conceptual ability, and technical mastery.

**World Languages**

*Requirements: 3 credits of one language or 2 credits of two languages*

*Chair: Jaime Estrada*

*See charts on pages 28–31 for sequence of world language courses.*

**OVERVIEW**

Maret requires three language credits for graduation; however, many students study language all four years. Class placement is based on individual learning style, skill development, level of interest, and performance in a current language course (for returning Maret students) or on placement tests and data in the admissions files (for students new to Maret).

**CLASSICS**

Students of Latin examine the language, culture, and ideas of some of the earliest architects of Western civilization and consider their influence on modern language, culture, literature, and philosophy. Learning ancient languages helps cultivate attention to detail, memory, logic, and critical reasoning. Maret's Latin courses elicit an appreciation of the subtlety and power of language. Students learn to analyze ancient prose and poetry through a variety of literary and linguistic techniques, improving their ability to read, write, and think critically.

**Intermediate Latin**

Intermediate Latin students prepare to read original Latin texts by expanding their knowledge of Latin vocabulary, grammar, and idiom while honing their reading skills. In addition to grammar lessons, they read stories of increasing difficulty set during the first-century Flavian dynasty. Students master the fundamentals of Latin grammar while encountering the nuances of more complex syntactical structure. Latin readings are supplemented by translations of contemporary Roman

authors, lectures, films, and projects that increase students' familiarity with Roman culture, institutions, and history.

### Advanced Latin Literature

*This course can be taken as either a pre-Vergil or a post-Vergil class*

Students expand their classical repertoire by reading substantial prose and poetry passages by authors in several genres: history (Julius Caesar); oratory (Cicero); short poems and invective (Catullus); and mythological tales in their original form (Ovid). In addition to the Latin readings, students consider the *why* and *how* of a translator's work as they analyze contemporary translations of several original works. Students examine style, diction, rhetorical devices, metrical patterns, and overall approach as they consider the political, historical, and cultural milieu in which each was composed.

### Vergil and Caesar

Through an intensive study of Vergil's epic poem, *The Aeneid*, students appreciate poetic modes of expression, including use of imagery, figures of speech, sound, and metrical devices. Students learn about the life, historical context, and poetic tradition of Rome's most influential poet. Students will:

- Acquire the ability to read Latin poetry in its original form
- Develop a familiarity with the lives, historical context, and poetic tradition of the Augustan Age
- Cultivate an appreciation of the characteristic features of Vergil's modes of expression
- Practice discussing orally and in written form particular motifs or general themes suggested by the passages studied
- Learn to mark the scansion of studied poems

Superior mastery of these skills readies students for the AP Latin Exam.

### Ancient Greek 1 (Language and Literature) (MSON)

*Grades: 9–12*

*Teacher: John Anderson, Hopkins School*

This is a beginning course for students who have not studied ancient Greek before or whose background in Greek is not sufficient for more advanced work. Students proceed through a study of grammar and vocabulary to the reading and writing of sentences and short narratives in the language of Athens of the fifth century B.C.E. Selected topics in Greek history and art are also considered.

### MODERN LANGUAGES

Students develop effective communicative skills and acquire a general understanding of some of the cultures that speak those languages. Specifically, students learn to:

- Understand the language when spoken at a normal speed on a topic within the range of the student's experience
- Communicate efficiently with a native speaker on a topic within the range of the student's experience
- Write using authentic patterns of the language and appropriate registers of speech
- Read and understand materials on general-interest topics without recourse to translation or dictionary

Advanced-level courses provide an introduction and exploration of literary analysis in a modern language. For students who wish to study abroad, Maret offers summer programs in Spain (Spanish), Taiwan (Chinese), and France (French).

### ARABIC

#### Arabic 1 (MSON)

*Grades 9–12 (juniors receive priority)*

*Teacher, Section A: Farha Mohamed, Hopkins School*  
*Teacher, Section B: Kaveh Niazi, Stanford Online High School*

This course is an introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students learn to read and write the Arabic alphabet and develop beginning proficiency in the language. Through frequent oral and written drills, students develop their basic communication skills.

#### Arabic 2 (MSON)

*Grades 10–12*

*Prerequisite: Arabic I*

*Teacher: Farha Mohamed, Hopkins School*

This course is a continuation of the introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students learn to read and write the Arabic alphabet and develop beginning proficiency in the language. Through frequent oral and written drills, students develop their basic communication skills.

### CHINESE

#### Chinese 1: Elementary Chinese

Beginning students are introduced to Mandarin Chinese using the Pinyin system of Romanization and simplified characters. They learn standard Mandarin pronunciation,

tones, and basic grammatical structures through oral/aural and written exercises. Substantial use of audiotapes and internet-based materials are required. Units on Chinese culture and customs complement the language instruction.

### Chinese 2: Elementary Chinese

Building on their foundation, students accelerate acquisition of characters. There is further emphasis on Mandarin pronunciation and tones as well as consistent review of grammatical structures. Units on Chinese culture and customs complement the language instruction.

### Chinese 3: Intermediate Chinese

Students continue to expand their vocabulary, study and review grammar, and gain increased language fluency through classroom activities and reading and discussing simple texts and articles. Increased emphasis on writing, with frequent, short writing assignments such as reports and correspondence. Readings and assignments based on Chinese history and culture are an integral part of the course.

### Chinese 4: Advanced Intermediate Chinese

Students continue to study grammar and broaden their vocabulary through intermediate textbook readings and authentic materials—including articles on current social topics, plays, and short stories—of increasing complexity. Students improve their listening comprehension skills and understanding of Chinese culture by watching a Chinese television series. They participate in class discussions and prepare written assignments. Students may have the opportunity to use their language skills by helping recent immigrants from China navigate life in their new community. This course requires a significant time commitment outside of class.

### Chinese 5 (MSON)

*Grades 11–12*

*Prerequisite: Chinese 4 or honors level*

*Teacher: Lan Lin, Hopkins School*

This intermediate-level course, conducted entirely in Chinese, involves reading authentic texts of modern Chinese society and culture. Students explore current cultural topics through stories, dialogues, and documentaries using multimedia materials ranging from the internet, television, and films to traditional textbooks. Throughout the year, students write papers, critique films, and participate in oral discussion and debates.

## FRENCH

### French 3

Students consolidate and integrate high-intermediate second-language skills. Students develop significant accuracy in reading, writing, and spoken communication and receive a sound linguistic base for further study of advanced concepts. They discuss short stories, magazine articles, video news clips, and internet sources and engage in an intensive review of grammar. Students are introduced to contemporary topics in French culture with opportunities for enjoyment, creativity, and intellectual stimulation.

### French 4

This class anchors advanced French skills. Students study the intricacies of French grammar through extensive oral and written practice to improve accuracy and enhance understanding of French language structure. Students read literary and journalistic texts in French as a basis for literary analysis and as models for writing assignments that demand stylistic skill and sophistication. These assignments include compositions and critical essays.

### French Debate and Conversation

Students consolidate and integrate their language skills to communicate effectively in French, primarily through conversations and debates. The intermediate-level course focuses on contemporary controversial topics viewed through different cultural lenses within the Francophone world. Students research different sides of topics, present their findings both orally and in writing, and engage in open dialogue and debates.

### Advanced French Grammar

Students consolidate and integrate advanced skills. In addition to completing an extensive grammar review, students develop significant accuracy in their reading, writing, speaking, and listening skills. Materials include audio-visual reports, documentaries, and newspaper articles covering current events. Students actively participate in class discussions and prepare a number of special presentations.

### Francophone Cultures

*Grades 11–12*

Students develop high proficiency in speaking, reading, listening, and writing. They improve their ability to understand spoken French in various contexts and express themselves coherently, resourcefully, and with reasonable fluency and accuracy. They develop a sufficiently ample vocabulary for reading newspapers, magazine articles,

and literary texts. This course emphasizes a better understanding of the civilizations and cultures of the Francophone world. Successful students are prepared to take the AP French Language and Culture Exam.

### Modern French Literature

#### Grades 11–12

In this study of French literature, students become adept in literary criticism in a foreign language. Students develop their proficiency in fundamental literary analysis in order to read and understand prose and verse of moderate difficulty and mature content. They analyze the themes and styles that appear in the texts and express critical opinions in correct oral and written French.

#### Texts:

Vian, *Les Fourmis*  
 Sartre, *Huis-Clos*  
 Anouilh, *Antigone*  
 Ionesco, *La Leçon*  
 Maupassant, *Le Horla*  
 Voltaire, *Candide*  
 Saint-Exupéry, *Le Petit Prince*  
 Beaudelaire, *Les Fleurs du Mal*  
 Rimbaud, *Une Saison en Enfer*

#### Summer Reading:

Camus, *La Peste*

## SPANISH

### Spanish 1

Students focus on fundamental spoken and written Spanish. Intensive classroom discussions are conducted almost exclusively in Spanish. Students use the *Descubre* textbook and multimedia program in conjunction with other audio-visual materials. They read short stories and simple magazine articles, and complete writing exercises on topical subjects.

### Intensive Spanish

Students who have had some exposure to Spanish but have not yet reached an elementary level, sharpen and acquire elementary Spanish skills at an accelerated pace. Depending on their development, students are placed in either Spanish 2 or 3 the following year.

### Spanish 2

Building on work begun in Spanish 1 or Intensive Spanish, students build their mastery of oral and written language and learn about issues of current interest in the Hispanic world. Reading and writing activities are more complex and sophisticated. Consistent vocabulary and grammar review, verb formation and use, and word

building are integral to this course. A comprehensive multimedia program complements the course work.

### Spanish 3

Students consolidate and integrate high-intermediate second-language skills. They develop significant accuracy in reading, writing, and speaking as they read and discuss short stories, magazine articles, video news clips, and internet sources. Students review grammar intensively and learn about contemporary topics in Latin American culture.

### Spanish 4

A sound understanding of standard Spanish grammar that facilitates creativity and clarity of expressions helps develop students' writing skills in Spanish. They achieve extensive vocabulary acquisition and are expected to recall and apply the grammatical rules in context. In addition, students are introduced to Hispanic literature and study the fundamentals of advanced composition.

### Comparative Literature

#### Grades 11–12

#### May also be taken as a humanities credit

Students connect contemporary Spanish-speaking authors with international counterparts through a comparative study of their works that isolates and explores common literary and philosophical concepts. Literary works are grouped by theme and studied concurrently. Selected units explore the topics of tension between individual and society; narrative ambiguity; tension between individual and family; the nature of reality; the role of mathematics in literature; and Cain and Abel's allegory in literature and film. Student papers and class discussions are in Spanish. Spanish works are read in the original Spanish text.

#### Texts:

Borges, *Ficciones*  
 Camus, *The Plague*  
 García Márquez, *Crónica de una Muerte Anunciada*  
 García Márquez, *Ojos de Perro Azul*  
 Kafka, *The Trial*  
 Kafka, *The Metamorphosis*  
 Unamuno, *Abel Sánchez*  
 Unamuno, *Don Manuel Bueno Mártir*

#### Viewings:

*Abre Los Ojos*  
*Amadeus*

#### Summer Reading:

García Márquez, *Cien Años de Soledad*

### Hispanic Cultures

Students significantly increase their vocabulary and strengthen their advanced grammar skills. Regular oral presentations and frequent essays help students attain fluency. Readings include newspaper editorials and literary selections. Successful students may take the AP Spanish Language and Culture Exam.

### Hispanic Literature

#### *Grade 12*

Students survey Spanish-speaking world literature from the *Siglo de Oro* to the present, with an emphasis on short stories and poetry. They read such authors as Quevedo, Quiroga, Borges, García Márquez, and others. Students become well versed in literary analysis in a foreign language while they explore Spanish and Latin American narratives.

### Spanish in Film

Students in this intermediate-level Spanish course develop their listening, speaking, reading, and writing skills by examining cultural and historical issues depicted in Latin American and Spanish films. In addition to analyzing and discussing films shown in class, students read and write reviews, critiques, and essays

### Survey of Hispanic Literature

Students acquire comfort and fluency at a sophisticated and conceptual level by becoming immersed in a fast-paced, Spanish-speaking environment. Students develop significant accuracy in their reading, writing, speaking, and listening skills through the incorporation of new materials and are evaluated on their spontaneous class participation as well as extensive reading and writing assignments. Students read two novels, write well-constructed essays on abstract topics, and complete an overview of Spanish and Latin American literature.

### Topics in Latino Cultures

Students acquire language proficiency through the exploration of Latin American history through historical documents, literary works, films, and visual arts. This intermediate-level Spanish course includes the African, the Indigenous, and the Iberian cultural heritages in Latin American history, and seeks to show how these strands have combined to produce a unique Latin American culture. Students also explore the relationship to Anglo-America, and especially the United States, on a cross-cultural basis.

## SUMMER ELECTIVES

### Maret in Spain

Students acquire language through linguistic and cultural immersion in this one-month program. Maret students experience a full-immersion environment, learning Spanish in context through daily life, interactive lessons, and cultural experiences. They reside in two renovated farmhouses near Burgos and Granada. The morning and evening lessons interact with the environment and setting. Students also learn the language through activities and field trips, communicating solely in Spanish. Activities include cooking lessons; learning from local cheese makers, potters, and olive growers; hiking and other outdoor activities; and numerous cultural field trips.

### Maret in France

During this four-week linguo-cultural immersion experience, students focus on language acquisition. They live together in a rural house in Poitou-Charentes, about two hours from Bordeaux, with the presence of French students and assistant staff. Students participate in numerous day and overnight excursions to interact with local people and explore the history and culture of France from its “Gaulois” roots to modern times.