

# Waring School Course Catalog 2019-2020

## The Core Program (6th & 7th Grade)

Core is a two-year program that seeks to introduce younger students to the culture of Waring School and to work on those skills which students need for continued success at Waring. For this reason, although the content of our curriculum varies from year to year, the skills we emphasize remain constant. In order to help students with the transition from their primary school environment, where they have usually worked in a self-contained classroom, Core students have a team of teachers who are responsible for Humanities, French, Science, Math, Writing, Music, Art, and Theater classes.

One of the primary overall objectives in Core is to strengthen organizational skills, which are key to success in Waring's program. We stress such skills as keeping an assignment book, keeping handouts and readings organized, turning in assigned work on time, bringing necessary equipment to class (pencils, pens, notebook, readings, etc.); taking notes, reading in the content area, undertaking research, writing neatly and legibly, typing and word processing, and, last but not least, budgeting time.

As in the upper school program, Core Humanities classes integrate history and literature, along with elements of art history and music. We work on content skill areas such as interpretive reading, group discussion, listening, notecard writing, "chronological literacy," note taking, and memorization. Core Science, which includes both life sciences and physical sciences in alternating years, stresses investigation, accurate observation, analysis of data, and communication. Core Math is an integrated program that emphasizes problem solving and number sense to offer a bridge from arithmetic to algebra for students so that they have a strong foundation for our upper school mathematics program. Students begin French, approaching it through listening, imitating, and speaking, which lead to the addition of reading and writing from their second semester onward. In Core Writing, students begin the process of finding their written voice, which we find so important for our students.

Other parts of the Core program introduce our students to a diverse set of skills and experiences. They begin to draw from observation, they learn Theater technique, and they study music, first through dance and rhythm and later by learning the basics of Music Theory. Many Core students will begin the study of a musical instrument. Others will continue to improve skills they already have. All students sing together in Core Chorus.

A unique feature of the Core years is our French Immersion program. We introduce students to French in our regular French classes. In addition we teach two to three other class periods in French. These classes are activity and task oriented. Our Music/Dance classes for first-year Core students focus on dance and rhythm, which can be easily demonstrated and imitated. There are also two Immersion classes per week in Humanities and Music Activities. We teach geography and the culture of Africa or Asia (in conjunction with the African or Asian curriculum of our regular Humanities program) in French, using hands-on activities. In Musical Activities, students study composers and the orchestra.

For more detailed information on Core classes please refer to the Course Descriptions below, which are listed by department.

## **Humanities**

*Know then thyself, presume not God to scan,  
The proper study of mankind is man.*  
—Alexander Pope

All students at Waring spend a substantial part of the week in Humanities class. What is considered "Humanities"? Anything which falls within the sphere of human activity. In practical terms we focus our studies on what humans of the past have written, how they have lived, and what they have done. In conventional terms, this means that we spend most of our time studying literature and history. However, our mission also includes philosophy, art and music history, comparative religions, anthropology, mythology, cultural history, the history of science, and current events.

In Core and Group 1, the overall department goal is for students to learn the skills needed to study Humanities in more depth as they grow older: how to critique literature, how to discuss history, how to explore the myriad questions that human behavior can elicit.

Through these studies, we hope to gain a better understanding of who we are and where we come from: as 21st century humans, as members of the Waring School, as members of all sorts of sub-groups, and as individuals. Such an understanding seems the proper end to a course of study called Humanities.

### **Humanities: Honors Level Guidelines**

(for students in Group 3 and above)

#### **Preparation**

An honors level student...

- thoroughly and consistently completes assignments on time, in the proper format, and without the assistance of others (including parents) unless collaborative work is made acceptable by the teacher; all work is original and unplagiarized;
- produces thorough annotations that demonstrate thoughtful reading, note key developments, accentuate nuance, make connections between texts, include personal reactions, and ask questions;
- looks closely at the text, subtext, and context of readings, and pursues supplemental research when necessary;
- independently reviews current events and connects current events to classroom content;
- takes useful notes during class;

#### **Engagement & Leadership**

An honors level student...

- demonstrates knowledge of, growing mastery of, and genuine curiosity for course content;
- works towards creating an inclusive, positive, and actively engaged learning environment;
- demonstrates a thorough understanding of historical content, vocabulary, literary and philosophical ideas in written work, in class discussions, tests, and other course projects;
- contributes regular, clear, relevant, fresh, and insightful commentary and questions that advance the conversation and enhance engagement;
- listens actively and engages courteously with fellow learners; respectfully incorporates, builds on, and/or presents counterpoints to the ideas of others;
- consistently finds textual support for concepts and claims; appropriately references course texts;
- shows a willingness to volunteer and take risks;
- completes assigned research or mini-projects that arise from discussions;
- is punctual, present, and focused;
- participates in all-school meetings and brings class topics to a wider audience;
- completes honors level assignments;

### **Skill & Responsibility**

An honors level student...

- adeptly synthesizes Humanities disciplines (literature, history, philosophy, the arts, and culture) and makes cross-curricular connections;
- views challenge as an opportunity to develop understanding;
- demonstrates organization, sophistication, originality, and polish in essay writing;
- independently seeks support in reading or writing where and when necessary;
- demonstrates purposeful development in reading, writing, and speaking;
- presents written work that is precise, grammatically sound, and properly cited according to MLA (English) or APA and Chicago (History) standards;
- initiates at least 1 meeting with the teacher each quarter to check on honors status;

### **Core African Studies, 2019-2020**

We begin our year by studying African culture and history. Our first unit is on storytelling and oral culture. We continue by reading *The Dark Child*, by Camara Laye, and introduce a subsidiary theme of rites of passage. We study topics in the history of West Africa, including the slave trade and European imperialist ventures in Africa, and do a simulation about different forms of colonialism. After the winter break, we read *Cry the Beloved Country* by Alan Paton and do an overview of South African history, which we follow with Harper Lee's *To Kill a Mockingbird* and a look at parallel racial issues in the United States. We end with a unit on Ancient Egypt, reading *Akhenaten* by Naguib Mahfouz. We also read and discuss short stories, some by well-known Western writers and others by African writers from various countries.

Core students also memorize poetry each week. The poems we choose often connect to the topics we are studying and are another way by which we hope to help students expand their vocabulary as well as increase their appreciation of poetic language.

Finally, in the spring, students also undertake a long-term project on the towns they live in, which allows them to begin learning how to conduct primary and secondary research and manage a multi-phase project.

In order to receive Credit, students must complete their daily homework and long-term projects satisfactorily, keep up with reading assignments, participate in class activities, and show evidence of growth in the skills we have targeted.

The Core Humanities program is ambitious and demanding. We assign regular homework and give periodic tests and quizzes. We develop skills in reading, discussion, notetaking and test taking. We assign several essays and work with students to help them organize their thoughts and write in a structured way. We also plan trips and develop projects in an effort to involve students personally in their study as much as possible. We rely upon the support and involvement of parents, and we value the trust that parents place in us to guide their children.

*Yasmine Fraser, Anita Richardson*

### **Core India/China(Not offered 2019-2020)**

We will begin our year by studying Indian culture and history. We will read Indian literature from several sources, including a modern prose version of the *Ramayana* and selected short stories by Indian writers such as Rabindranath Tagore, Jhumpa Lahiri, Salman Rushdie, and Chitra Banerjee Divakaruni. We will practice note-taking by listening to several Indian history lectures and we will undertake a simulation of the negotiations that took place regarding India's partition into India and Pakistan at Independence in 1947. Over the course of this semester and next, we will also memorize several poems in order to deepen our understanding of poetry and poetic forms. During the second semester we will study Chinese history and culture. We will read *The Good Earth* by Pearl Buck, short stories by Ha Jin, and a modern novel. We will use *China's Later Dynasties* by Suzanne Strauss to study Chinese history, and we will visit the Yin Yu Tang House at the Peabody Essex Museum.

In the spring, students will complete a multi-step project on an immigrant family member or close friend. This project involves both primary and secondary research. Each week students write up their findings, and they conclude the project by collecting their research in booklet form. The unit will culminate with an immigrant celebration where the students present their projects.

In order to receive Credit, students must complete their daily homework and long-term projects satisfactorily, keep up with reading assignments, participate in class activities and show evidence of growth in the skills we have targeted.

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## **Group 1 Humanities 2019-2020**

Group 1 Humanities will spend much of the year studying American history, literature, civics, and current events. Building on Henry David Thoreau's quote that "it is the province of the historian to find out, not what was, but what is," we will study key events in American history in order to more fully understand America in 2019.

In terms of skills, we will work on listening, discussing, developing vocabulary, note taking, analyzing text, expository writing, and researching.

The summer reading was *The Grapes of Wrath* by John Steinbeck. After finishing the novel we will begin a unit on the Declaration of Independence and the Constitution. Future works under consideration this year include: *The Narrative of the Life of Frederick Douglass*, *Incidents in the Life of a Slave Girl* by Harriet Jacobs, *A Raisin in the Sun* by Lorraine Hansberry, and selections from the Old and New Testaments. We will also spend time studying the 2020 elections.

*Josh Webb, Anita Richardosn*

## **Group 2-3, 2019-20: Modern Europe**

This course focuses on the history, culture, arts, and literature of Modern Europe from the Reformation to the present day. We look at the meaning of European identity over the centuries, paying particular attention to the theme of modernity, and asking: "What is 'the modern'?" Using a mix of primary source texts, works of literature, essays, music, and painting, we study such topics as the Reformation and Elizabethan England, the Enlightenment and the French Revolution, Romanticism and the Industrial Era, colonialism and imperialism, World War I and Modernism, World War II and the Holocaust, and Europe today.

Students will work on developing the following skills: close reading, analytical writing, researching, delivering oral presentations, and participating in discussions. We read *Go, Went, Gone* by Jenny Erpenbeck over the summer and will read *Hamlet* by William Shakespeare as our first major work of literature. Among other works under consideration are *Candide*, *Jane Eyre*, *All Quiet on the Western Front*, and *Night*.

Michelle Ramadan, Jill Sullivan, Josh Webb

### **Group 2-3: Medieval Course (Not offered 2019-2020)**

We hope to weave together two strands over the course of the year. First, we will study the three "Abrahamic" faiths: Judaism, Christianity and Islam. We will study the sacred texts, the history, the rituals and the mysteries of each of these religious traditions. We hope to meet with and learn from different religious communities on the North Shore and in the Boston area. Second, we will study European history and literature from the declining Roman Empire through the Renaissance.

While reading medieval literature and studying medieval art, we will discuss themes such as the sacred, conversion experiences, the hero journey, pilgrimage, and humanism. We will study historical topics including the Norman Conquest of England, the Crusades, the Plague, and the emergence of the modern world.

At the beginning of the year we discussed *I Am Malala*, and excerpts from *A Short History of Myth* by Karen Armstrong. Our next text will be Robert Alter's translation of *Genesis*. Additional texts may include *Beowulf*, *Sir Gawain and the Green Knight*, *The Canterbury Tales*, and *The Inferno*. We will also read excerpts from *The Woman Who Named God* by Charlotte Gordon, *The Middle Ages* by Morris Bishop, and *A Distant Mirror* by Barbara Tuchman. We plan to conclude the course with a contemporary novel or nonfiction work that reflects on themes from the year.

The trip to Angers, France in March will provide Group 2 students with experiences that will make the Medieval and Renaissance periods come alive. We may visit medieval cathedrals in Paris, Rouen, Amiens and Angers, the Joan of Arc museum in Rouen, the Mont Saint-Michel, the chateau at Angers (with its world famous 14th century Apocalypse Tapestry), the Abbey of Fontevraud, and Renaissance chateaux in the Loire Valley.

### **Group 4-5, 2019-20: American Studies**

This year's Humanities class studies American history through examining diverse historiographies, chronology, literature, and culture, asking students to explore the question: "Who are we as Americans and how did we get this way?" Among many other topics, we discuss the history of Native American nations in their own right, the history of slavery, the story of women in the United States, race in North America, and the movement of peoples across borders both now and in the past.

Over the summer, students read Scott Momaday's *Way to Rainy Mountain* as well as the introduction to Jill Lepore's *These Truths*. Other authors under consideration include: James Welch, Joy Harjo, Ernestine Hayes, Toni Morrison, James Baldwin, Anne Bradstreet, Wendell Berry, Thomas Jefferson, Harriet Jacobs, Henry Thoreau, Frederick Douglass, Ralph Emerson, Walt Whitman, Emily Dickinson, Tommy Orange, William James, Flannery O'Connor, Louise Erdrich, Willa Cather, Charlotte Perkins Gilman, Ta Nehisi Coates, Zora

Neale Hurston, William Carlos Williams, Tony Kushner, and Imbolo Mbue. We also hope to make good use of visual art, film and music.

*Gallaudet Howard, Joshua Scott-Fishburn*

### **Group 4-5: Classical Studies (Not offered 2019-2020)**

The Classical course looks at the history and literature of Ancient Greece and Rome, asking questions including "What role does transformation play in mythology and in our lives?" and "What is the difference between polis and empire?" The course begins with an overview of Greek mythology and a discussion of Karen Armstrong's *A Short History of Myth*. We read selections from three epic poems: *The Iliad* and *Odyssey* of Homer, and *The Aeneid* of Virgil. We will consider the nature of mythology, the need for self-transcendence, the nature of the sacred, the rise of the *polis*, and the development of Athenian and Spartan forms of government (and, of course, their conflicting worldviews). We will also study a bit of Greek philosophy and a bit more of Greek drama. We plan to read a classical play and examine the great Greek historians on the Persian and Peloponnesian wars. We will study institutions of the Roman Republic, concepts of virtue and family, city planning, the Punic Wars, the careers of Julius Caesar and Augustus, the roots of Christianity, and the transition from pagan to Christian empire. Throughout the year we will frequently include art and architecture in our studies, always aiming to understand the ongoing influence of the Classical World on our lives. Authors may include Homer, Sappho, Herodotus, Thucydides, Plato, Aristotle, Euripides, Sophocles, Aristophanes, Virgil, Livy, Ovid (Ted Hughes translation), Horace, and others. In addition, as always, we will try to understand our own time and ourselves (and especially our process of democracy) in relation to their Classical roots. Students will complete a major research project in the second semester.

## **Science**

In addition to the classroom learning experience, the science program strives to both inform and challenge students through conducting scientific experiments and field research. We seek to equip students with scientific knowledge and methodology, as well as creative problem solving skills. Our science program encourages students to develop a personal relationship with nature and lays the foundation to understand sustainability and the importance of environmental stewardship. This connection to nature supports the student's natural enthusiasm, wonder and pursuit of knowledge, and sets the stage for them to continue this pursuit beyond Waring. Waring science teachers model open mindedness and fact based reasoning by presenting scientific discoveries in context, and encouraging students to draw conclusions based on rigorous study, observation, experimentation and experience. We blend academic study with experience in an effort to help students understand the fundamental concepts and related technologies in the natural sciences. Waring places a high value on educating our students to be scientifically literate and informed about the environment and climate systems. Therefore, the high school science curriculum offers the following course progression:

Group 2 - Biology;  
Group 3 - Chemistry;  
Group 4 - Physics;  
Group 5 - Capstone Course in Environmental Sciences (including independent research and poster presentation).

## **Core, 2019-20: Biological Science**

Core Science follows a two-year cycle alternating between life sciences and physical science, with topics from Earth Science incorporated throughout both years. The current year is a study of biological science. While studying selected topics in biology, ecology and geology, students learn skills such as data collection, microscope observation, graphing and interpretation of data, independent research, lab report writing, note-taking, test-taking and experimental design. In addition, students hone their communication skills by presenting their work to the class at frequent intervals. We pay special attention to the biology and basic ecology of Africa (to integrate with the Core Humanities study of Africa) as well as our local environment.

Textbooks supporting the life sciences course are *Wild Africa—Exploring the African Habitats*, as well as Prentice Hall's *Science Explorer: From Bacteria to Plants*.

In addition to subject content, a major goal of Core Science is to help students develop the basic skills necessary to participate in scientific study. These skills include how to observe and ask questions, how to measure and analyze data, and how to use basic laboratory equipment. Mathematics and technology are regularly integrated into classwork and homework assignments. Students learn to keep good notes in an organized scientific notebook and have ample opportunity and support to improve test-taking skills, prepare presentations, summarize and communicate conceptual understanding in writing, and analyze data collected from long-term projects.

Credit is based on class participation, citizenship, timeliness and quality of homework, quiz and test scores, as well as neatness and completeness of a student's notebook. Required materials: bound notebook devoted exclusively to science class, accordion folder to organize hand-outs and returned quizzes/tests, metric ruler, graph paper, calculator, pen/pencil, and eraser.

*Edith Fouser, Rich Stomberg*

## **Core: Physical Science (Not offered 2019-2020)**

Core Science follows a two-year cycle alternating between life sciences and physical science; Physical Science will be offered next in 2020-21. Core Physical Science focuses on three major concepts: motion, forces, and energy. Within each concept we introduce the students to related topics - statics, simple machines, buoyancy, electricity and magnetism, to name a

few - through labs, films, demonstrations, and other hands-on activities. Each unit will culminate in a larger project in which the students will have an opportunity to demonstrate their understanding of the principles we've been studying in a creative way. The course is supported by Prentice Hall's text entitled *Science Explorer: Motion, Forces, and Energy*.

## **Group 1 Science:**

Group 1 science is offered as two one semester courses. All students take both classes, either taking STEM first and Python Programming second, or visa versa.

## **STEM**

The purpose of Group 1 STEM is to allow students to work collaboratively on open-ended projects that use technology-based techniques. These projects allow students to work on collaboration, iteration, documentation and presentation. As the students work on the projects, they learn new technical skills. Our major project will be the design, construction and testing of balloon powered cars. The Balloon Car project teaches students to use 3D modeling software and 3D printers to design and then print the parts for a car powered by a balloon. Other projects we may take on use molding and casting in silicone, metal wire-work, Arduino programing, and basic electronics. The course is set up to emphasize a design-build process in which small teams create a design, refine it, test elements, redesign and retest iteratively, until the project reaches its final form. The students document this process and present their work to the whole class. Each group creates an ongoing record of their work including pictures, programs, and written reflections on what they did during class, why, and what they plan to do in the next class. These documentation/reflection pieces will be shared in presentations. Individual evaluation in this class will be based on the quality of documentation, presentations, and products along with a student's ability to work productively in a group.

*Francis Schaeffer*

## **Introduction to Computer Programming**

Waring's Programming course is an introduction to the principles and practices of coding. Students first use Scratch, a visual, block-based language intended for teaching coding to young audiences. Through Scratch, students become acquainted with the principles of programming structure like loops, conditions, and modules. In addition, they quickly learn the value of naming variables and functions sensibly for future use, as well as healthy and necessary practices like debugging. After programming a game or interactive animation in Scratch, students begin studying Python, a high-level programming language. Students continue the threads of earlier concepts like functions and recursion, and Python offers them more versatility manipulating data like strings and lists. Here too, students will engage in open-ended projects like writing their own algorithms, simulations, and games. Throughout the course, students engage with a partner or in a small group to ask one another questions

and share their own breakthroughs, so that they can be responsible for their own creations and participate in the success of others. Their success is gauged both through their finished products and the journey they spent in class working to get there: Their in-class engagement will reflect a healthy give-and-take of brainstorming new ideas and asking for help, and their code will demonstrate their grasp of coding logically, efficiently, and with the spirit of elegance. Technology to support the class are Acer Chromebooks. In addition students are using the online textbook *Think Python*, 2nd ed.

*Anton Fleissner*

## **Group 2: Biology**

The biology course stresses the importance of careful observation and note-taking and the use of scientific principles and techniques in the exploration of the living world. The class uses the text as our backbone, following a path that surveys all of the major topics in Biology. The year begins with an investigation into the fields of ecology and environmental science. Next we delve into learning the basics of chemistry to understand the roles of the major types of biological molecules. We continue the year by studying cells at the same time becoming comfortable with one of the most important tools to a biologist—the microscope. We move from studying the cell to learning about the chemical processes that are important to living things such as cellular respiration, photosynthesis, and protein synthesis. The unit that follows delves into the complexities of genetics. We focus on cancer as a model for understanding many of the mechanisms of genetic control and the effects of genetic mutations on cells and whole organisms. We study the theory of evolution by considering the contributions from a variety of scientific disciplines. We study taxonomy and do a student-driven survey of the six kingdoms with a concentration on the Plant and Animal Kingdoms. The final portion of the class is devoted to human anatomy and physiology. In France during their multi-week homestay, students follow a curriculum designed to further their work in the class while at the same time taking advantage of the local resources available to them in Angers. We incorporate hands-on activities regularly and have one double period every week for extended learning opportunities and labs.

Students rent the textbook, *Biology*, 2010 ed., by Miller & Levine. Credit is based on satisfactory completion of the course and requires completion of readings and homework assignments, satisfactory results on quizzes and tests and active participation in all classroom activities and discussions.

*Rich Stomberg*

## **Group 3: Chemistry**

Group 3 Science will study basic principles of chemistry. This course will give students a foundational understanding of matter that is essential for other scientific disciplines like physics, human anatomy and environmental science. We begin with an introduction to data collection techniques, and review the math and handling of units needed for problem solving

in chemistry. We then delve into the atom, and proceed to study electron configuration, chemical bonding, chemical reactions, chemical nomenclature, stoichiometry, solution chemistry, gases, thermochemistry, kinetics, and acid/base chemistry. Data collection and exposure to the chemical concepts through weekly laboratory experiences are a priority. Laboratory skills are introduced and students practice utilizing these skills through their own experiment design, often in follow-up experiments. Whenever possible, connections are made between our coursework and to other disciplines and to the world around us. In addition to laboratory teams, hands-on activities and group work are used in class through project and guided-inquiry activities.

Our primary textbook for this class is *General Chemistry: The Essential Concepts* by Chang and Overby. Laboratory resources are *Laboratory Experiments for World of Chemistry*, by Zumdahl, Zumdahl, DeCoste.

*Credit* in this course requires that students demonstrate proficiency on all written work; that they participate actively in class discussions and activities; that assignments are complete and submitted on time. *Credit at the honors level* requires excellence on all problem sets and tests; active participation in class and ownership of the learning that we are doing together; neat, detailed and thoroughly written lab work. All students are expected to come to class on time, be prepared, and remain engaged. As usual, more than six late or missed assignments per semester are grounds for No Credit.

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## **Group 4: Physics**

In Physics we study the most fundamental concepts in our understanding of nature—motion, forces, energy, and matter. *The physics course is offered in two sections which take different approaches to the same material. One course is more mathematically demanding than the other.*

Physics (mathematical approach) has a particular focus on the mathematical relationships between these concepts. We work to develop a conceptual understanding of physical phenomena and describe these in the language of mathematics. As part of this effort we learn to apply mathematical models of physics to solve quantitative problems. Our class involves formal lab experiments, informal activities and demonstrations, lectures and discussions, and steady practice with problem solving. Over the course of the year we study the mechanics of linear and rotating systems, sound and other wave phenomena, electricity and magnetism, and optics. Our primary textbook for this class is *Physics: Principles with Applications* by Douglas Giancoli.

To receive Credit in this course, students must maintain at least a 70% average on the credit-level scored problem sets, pass the credit-level tests, perform well on labs, and consistently participate in class. Students who are working at the Honors level must demonstrate a strong command of the material as well as deep and serious engagement with the class. Students working at the Honors level will be given different, more

challenging problems on their scored problem sets and tests. In the past students have needed to achieve an 85% average on the problem sets to pass the honors offering of the course, however, sometimes this is lowered depending on how the whole class is doing. Besides performing well on the more difficult homework and tests, they must show diligence, thoroughness, and excellence in all their written work, and they must be strong and active participants in class.

Physics (conceptual approach) – the same fundamental physics concepts are studied in this class. Students will see that simple principles lie behind a wide range of phenomena that they can explore. Students will have the opportunity to develop a conceptual understanding of these principles by working with concrete, hands-on activities paired with classroom discussions, demonstrations, and on-line simulations. Students will develop intuitions about the way the world works and correct their mis-intuitions or misconceptions as they attempt to explain and understand what they see. Students will explore and identify the fundamental principles acting in our physical world and learn to model them mathematically. Students will then learn to explain other phenomena in terms of the fundamental physics principles and to test their ideas. Comprehension will be assessed with homework sets, laboratory and project reports, and regular concept tests. Our primary textbook for this class is *Physics: Principles with Applications* by Douglas Giancoli. We may also supplement this text with Paul Hewitt's *Conceptual Physics*.

To receive Credit: satisfactory performance on classroom activities, labs, quizzes and tests; interest and involvement in classroom activities, discussions, labs, and projects are essential to this class. To receive Credit with Honors: Students must demonstrate a strong command of the material as well as a deep and serious engagement with the class. Credit requirements plus consistently above-average homework, test scores, and lab project summaries with an 85% average are necessary. Students taking the course at the Honors level will generally be asked to take Honors level tests and problem sets.

*Francis Schaeffer*

## **Group 5: Oceanography and Marine Biology**

Oceanography and Marine Biology is the capstone course in the science program that gives students the opportunity to develop a deeper understanding of how terrestrial, oceanic and atmospheric systems interact. We will study oceanography through model systems such as the Gulf of Maine, the Gulf of Maine watershed, the Great Marsh and the Atlantic and Arctic Ocean. Furthermore, Students will develop their personal scientific interests through a research project and a presentation given at the Waring Science Fair at the end of the academic year. Lab work will primarily be conducted in the field and will take place at a variety of locations including Maritime Gloucester and the Great Marsh. Types of data include, but are not limited to, marine debris analysis, plankton studies, water quality analysis, sediment studies, lobster life cycles and sea level rise. While all projects must be grounded in at least one area of Oceanography and Marine Biology, students who are interested in human impact on the environment and related social, political and economic issues may develop those interests as well. Throughout the year the class will be based on

participatory lectures, field trips and associated activities. Presentations will be given by visiting research scientists and professionals active in the field. Readings from selected texts and journal articles will be assigned throughout the semester.

Performance in the class will be evaluated, in part, on the basis of tests, short writing pieces and the independent research project. Credit in the class requires that students demonstrate proficiency on all written work; that they participate actively in class discussions, lab activities and field trips. Credit at the honors level requires excellence on all written work, active participation in class, ownership and leadership of the learning that we are doing together. All students will do a research paper and related presentation at the Waring Science Fair in May.

Textbook: *Essentials of Oceanography (11<sup>th</sup> edition)* by Allan P. Trujillo and Harold V. Thurman.

*John Wigglesworth, Tim Te*

## **French**

Students at Waring spend up to seven years studying French. There are some goals which we hold for all students: we want them to feel comfortable using French both orally and in writing; we want them to be surrounded by French in the school; we want them to become curious about French and Francophone cultures. During their time at Waring, each student moves at his or her own pace in progressing toward our overall goals. French classes are grouped into two large groups: Core and Groups 1-5. Within these, we subdivide classes into smaller groups of students according to skill and ability.

Gradually students learn to speak and write about their lives and the topics and literature they study. We teach them to read with the goal of being able to read in French on their own for pleasure. We discourage translation and introduce them to simple texts from which they learn to handle more and more challenging works. In school, we try to surround students with French both in and outside of the classroom. Students and teachers speak to each other in French as often as possible. We regularly conduct all-school meetings in French, have French announcements, publish French writing in *Le Temps Retrouvé*, and present French skits or plays. Students will also participate in the annual *Concours de Poésie* in which they memorize and recite a French poem and compete with other students.

We integrate Francophone culture with our program by encouraging contact with France and Québec. Since the fall of 1999, we have taken Group Two to Angers, France, for an immersive homestay/school experience each year. This year, three French teachers and 28 French 9th graders will spend three weeks in October and November on the Waring campus. They will stay with Waring 9th graders, who will in their turn go to Angers for four weeks in March. This program is one of the mainstays of our curriculum and actively promotes French fluency and cultural awareness. We also often offer our students the opportunity to go to Québec. We encourage students to travel and do exchanges with French students in the

summer or during the school year, as well as to watch French films, listen to French music, and read online French magazines and newspapers.

When students leave Waring School, we hope that French will have become an important part of their lives on which they can build a language and culture which they have grown to love and understand and which they will never lose.

### **Honors Levels (Groups 3-5):**

Students taking French courses at the Honors level are asked to consistently perform tasks at a higher level of proficiency and sophistication, typically at the levels Intermediate III and above.

Occasionally, students may take an Intermediate II course at an Honors level if they have already skipped a level and/or if their performance and contributions are excellent. This will be brought before the French department on a case by case basis.

To challenge students taking a course at the Honors level, the teacher will provide alternative expectations, individualized assignments, and / or evaluations. In all cases, students will be expected to contribute to the class fully and positively and act as a role model striving to excel.

A student wishing to take a course at the Honors level must be invited to request such special status by his/her teacher by mid to late October.

After the student and teacher have discussed the Honors course parameters and agreed upon them, the candidate for Honors will sign a contract / calendar written by his/ her teacher. By the end of October at the latest, the student's status must be confirmed by the teacher's assessment of the student's performance and attitude. At this time, a student not meeting the Honors expectations will only be eligible for Credit at the end of the semester. A similar calendar and set of rules will apply for the second semester.

### **Core Débutants I**

Students in these classes have very little or no previous knowledge of French. Until January, their classes do not use written language. Classes are conducted entirely in French and students are given useful, everyday language contexts in which to understand and use the language. Students learn to talk about the weather, their likes and dislikes, their families, their homes. Nightly homework assignments require students to record sentences and conversations, which they have practiced in class. They should record for a minimum of 2 minutes each evening following their French class. After the transition to written French, students receive regular written assignments.

The topics covered in classroom conversation parallel the progress of the textbook, *Adomania*, which is used starting in January. At that time students review the same topics and structures covered in the fall, using the textbook, so that the transition to written

language can be made smoothly. At every level we guide them in conversation. We ask them to listen to and act out skits and scenes, memorize poetry, read simple texts in French and begin writing and reading.

In order to receive Credit for the first semester, students must complete their homework (an audio recording for every day French class meets: Monday through Thursday), participate actively and appropriately in class conversations and show evidence of growth in their ability to use oral French. Students need to make sure that their attendance and punctuality are in good standing.

In order to receive Credit in the second semester, students must complete their daily homework, listen attentively, participate actively and appropriately in class, and show evidence of growth in their ability to use oral and written French. Students need to come to class on time and prepared.

Required material: A computer or phone enabled to make voice recordings.

*Maureen Gedney*

## **Core Débutants II**

This second-year French class aims at consolidating the gains from the prior year. During the course of the year, students increase the fluency and sophistication of their spoken French and make progress in their ability to read and write efficiently. We emphasize oral French through role-plays, conversations, songs, talking about pictures, and excerpts of films.

We begin with a review of basic grammatical concepts using magazines and the new textbook, *Zénith 1*. New concepts include the use of most common irregular verbs, the immediate future, and past tenses. We learn about various Francophone countries, regions of France, and major landmarks in Paris. We also look at contemporary French family life.

In order to receive Credit, students must complete their daily homework, listen attentively, participate actively and appropriately in class, and show evidence of growth in their ability to use oral and written French. Students need to come to class on time and prepared.

*Anna Marie Smith*

## **Immersion Humanities**

The French Immersion Humanities and Musical Activities course is broken into three rotating modules. The course covers numbers and the metric system, general geographical concepts, African geography and culture, and classical music.

At the start of the course, our main focus is on becoming comfortable using French numbers and the metric system. Farther into the trimester, we devote most of our time to geography, looking at geographical terms, latitude and longitude, seasons, climate, and physical features. We examine the political and physical maps of Africa, all in French, complementing the regular Humanities curriculum. The culture component looks at family

life, belief systems, traditional vs. modern practices, Francophone-African music, and holidays and festivals. All students should have colored pencils. A French atlas will be supplied.

We also spend one trimester focusing on classical music, again entirely in French. This is an enrichment experience which draws upon students' sensory and emotional responses to music listening and uses visuals to explore music history through the study of composers and instruments.

In order to receive Credit, students must complete their homework, listen attentively, participate actively in class using French appropriate to their level, and show mastery of the content of the course. Students need to come to class on time and prepared.

*Maureen Gedney, Yasmine Fraser, Anna Marie Smith*

## **Immersion Music/Music Theory**

First-year Core students study music and dance, conducted entirely in French. We focus on dance, movement, and rhythm early in the year. Later, we cover topics in music theory and sight-singing using a sight-singing book that they will use through 9th Grade. Second-year students continue to study music theory, sight-singing, and composition in English. The sections meet together at times to listen to and discuss works of music, periods of music, and specific composers. The focus is on classical music, though examples from other styles of music are included as well. Core attends an open rehearsal of the Boston Symphony Orchestra as well as another performing arts opportunity during the year. In Immersion Music/Dance class, students study the music that they will later hear at the open rehearsal.

To earn Credit, students must participate actively in class. They must successfully complete homework assignments (given more often to the second-year students), and perform satisfactorily on quizzes and tests.

*Renée Becker, Rob Bradshaw*

## **Débutants I**

Students in this class have little to no previous knowledge of French. Until January, their classes do not use written language. Classes are conducted entirely in French and students are given a useful context in which to understand and use the spoken language. Students learn to talk about their families, their homes, the weather, activities, food and drink, and their likes and dislikes. Nightly homework assignments require students to record sentences and conversations which they have practiced in class. They record every evening, following their French class, and email the recording to their teacher. After the transition to written French, students receive regular written assignments, though recordings may still be used, often to practice reading aloud.

The topics covered in classroom conversation parallel the progress of the textbook, *Adomania*, which is used starting in January. At that time students review the same topics and structures covered in the fall, using the textbook, so that the transition to written language can be made smoothly. At every level, we guide them in conversation. We ask them to listen to and act out skits and scenes, memorize poetry, read simple texts in French and begin writing and reading.

In order to receive Credit, students must complete their homework (audio recording) every day that French class meets (Monday through Thursday), and participate actively and appropriately in class conversation. They must also show evidence of growth in their ability to use spoken French, and, in the second semester, written French. Students need to make sure that their attendance and punctuality are in good standing.

Required material: A computer enabled to make voice recordings.

*Yasmine Fraser, Renée Becker*

## **Débutants II**

This second-year French class aims at consolidating the gains from the prior year. During the course of the year, students increase the fluency and sophistication of their spoken French and make progress in their ability to write and read efficiently. Emphasis is placed on oral French through role-play, conversations, games, songs, talking about pictures, and excerpts of films.

We begin with a review of basic grammatical concepts using our textbook, *Zénith 1*. New concepts include the use of most common irregular verbs, the immediate future, and past tenses. We learn about various Francophone countries, regions of France, and major landmarks in Paris. We also look at contemporary French family life.

In order to receive Credit, students must complete their daily homework, listen attentively, participate actively and appropriately in class, and show evidence of growth in their ability to use oral and written French. Students need to come to class on time and prepared.

*Anna Marie Smith, Anita Richardson*

## **Intermédiaires I**

This class moves from the relatively simple beginner level to increasingly complex grammar and vocabulary. Classes are conducted in French and students are expected to improve in their ability to speak and write accurately. This level of French focuses on everyday conversations in francophone countries (in the home, at school, at the hotel, at the cinema, etc.), on new cultures, and on writing short but accurate paragraphs. The aim is to build concrete vocabulary and a command of the basic verb tenses. Some of the important

grammatical topics will be the study of gender rules, pronoun usage, a more in-depth review of the *passé composé*, and learning the *imparfait* and the future tense.

Video segments are used as well as contemporary documents and popular music. As the year progresses, students begin to read more challenging texts such as folktales, abridged versions of classical stories by French writers, current events articles, Jean de la Fontaine's *Fables* and more modern tales as a way to help build vocabulary. We will use the *Grammaire progressive du Français* as our main textbook as well as resources from a number of other textbooks in order to offer a well-balanced grounding in grammar, culture, and vocabulary.

To receive Credit, students must complete their daily homework, participate actively and appropriately in class discussions, and show evidence of growth in their ability to use oral and written French. Students need to make sure that their attendance and punctuality are in good standing.

*Stéphanie Williams, Maureen Gedney, Anna Marie Smith*

## **Intermédiaires II**

In this class, students increase the fluency and the sophistication of their spoken French and make significant progress in their ability to read and write in French. The class is conducted entirely in French. To start off the year on solid ground, we spend part of our time reviewing basic elements of grammar and verb tenses. We learn more about the future and past tenses and how to use the *imparfait* and *passé composé* to narrate an event in the past. We focus on the practical skills needed to carry on everyday conversations in France and introduce abstract concepts for the time. This involves building both concrete and abstract vocabulary as well as improving comprehension, pronunciation, and intonation.

Students are expected to bring both their oral and written command of the language to a much higher, more accurate and sophisticated level. They are asked to write regularly, more comprehensively, and to revise their writing, with an eye toward catching repetitive errors.

We use two main textbooks, *Grammaire progressive du Français* and *Zénith 2*. We regularly use video segments and contemporary cultural readings from a number of sources: current events articles, poems, songs, and excerpts from *Anne Frank* and challenging literature readings such as Antoine de Saint Exupéry's *Le Petit Prince* or Eric-Emmanuel Schmitt's *M. Ibrahim*.

In order to receive Credit, students must complete their daily homework, participate actively and appropriately in class discussions, and show evidence of growth in their ability to use oral and written French. Attendance and punctuality must be in good standing.

On a case-by-case basis, this course may be taken at the Honors level as detailed in the department's Honors description.

*Renée Becker, Anita Richardson, Stéphanie Williams*

### **Intermédiaires III (Part 1)**

This course will begin by consolidating and reinforcing concepts covered in Intermédiaires I and II, with the aim of increasing students' accuracy in both speaking and writing. We will devote a good deal of time to sorting out confusion around tense construction and usage before adding new tenses, as well as increasing students' mastery of the various pronouns. Readings will include a number of articles from various online news sources reflecting the French speaking world, short stories, and several poems. We will start by reading large excerpts of the *Déclaration universelle des droits de l'homme* and discuss how it could be re-written to adjust to today's societal issues. We will read two complete novels: Jean Giono's *L'Homme qui plantait des arbres* and Louis Malle's *Au revoir les enfants*. We will of course watch a couple movies and sing songs..

Students are expected to bring their command of the language to a higher, more accurate level. There are nightly homework assignments. Regular writing assignments, with required revisions, allow the students to improve their ability to express themselves fluently. The emphasis is on developing good habits in speaking and writing, which will serve students throughout their study of French.

Students must complete their daily homework, make constructive and systematic use of resources such as dictionaries, our grammar text, *La grammaire progressive du français*, and verb book, *Le Bescherelle*, or its electronic equivalent, participate actively and appropriately in class discussions, and show evidence of growth in their ability to use oral and written French. They must also make sure that their attendance and punctuality are in good standing.

This class may be taken at an Honors level with teacher approval. Additional requirements for Honors will include writing both more extensively and with a more meticulous degree of accuracy, taking a consistent role of leadership in day-to-day class activities, and demonstrating consistent mastery of past and current language concepts in both writing and speaking. An additional project may be required in either or both semesters.

*Christiane Jedryka-Taylor*

### **Intermédiaires III (Part 2)**

The Intermediate III (Part 2) course comprises a thorough and wide-ranging review of grammar including the use of pronouns, verb tenses, but also such seemingly simple yet important notions as how to ask questions depending on the speech register: colloquial, standard, and literary. Such consolidation of concepts aims at increasing students' accuracy in both speaking and writing. Students will be asked to produce a great deal of writing, expository and creative, enriching their vocabulary as much as possible. They will go beyond

the concrete to discuss abstract topics in culture and literature. Students will continue polishing their pronunciation through songs and skits. They will work on debating and carrying on abstract conversations as they would in a Humanities class.

Readings will include excerpts from contemporary francophone authors, a number of poems, and short-stories by Maupassant and Daudet, among others. In order to study cultural and linguistic puns we will read scripts by Belgian stand-up comedian, Raymond Devos as well as Urderzo's and Goscinnny's *Le tour de Gaule d'Astérix*. We will read at least one complete novel, Schmitt's *Oscar et la dame rose*. We will keep abreast of French news coverage of world events to learn more about Francophone thinking and cultural perspective. We will of course watch a couple movies and sing songs.

Students are expected to bring their command of the language to a higher, more accurate level. There are nightly homework assignments. Regular writing assignments, with required revisions, allow the students to improve their ability to express themselves fluently. The emphasis is on developing good habits in speaking and writing, which will serve students throughout their study of French.

Students must complete their daily homework, make constructive and systematic use of resources such as dictionaries, our grammar text, *La grammaire progressive du français*, and verb book, *Le Bescherelle*, or its electronic equivalent, participate actively and appropriately in class discussions, and show evidence of growth in their ability to use oral and written French. They must also make sure that their attendance and punctuality are in good standing.

This class may be taken at an Honors level with teacher approval. Additional requirements for Honors will include writing both more extensively and with a more meticulous degree of accuracy, taking a consistent role of leadership in day-to-day class activities, and demonstrating consistent mastery of past and current language concepts in both writing and speaking. An additional project may be required in either or both semesters.

*Christiane Jedryka-Taylor*

## **Séminaires**

The Séminaires I, II, III course comprises a deepening of all aspects of French learned so far. Critical revisions will focus on three modes of communication: interpersonal, interpretive, and presentational. The course will take a thematic approach to these revisions, with thorough revisions in grammar being accompanied by units on various aspects of culture and literature of the francophone world. The students having reached this sophisticated level, choices of cultural aspects to study will be defined as the year progresses to reflect their interests and passions. Culture from throughout the francophone world will be explored in order to better understand the practices and perspectives of the countries studied. The Séminaire III students, being the most advanced and being capable of independent study, will be working primarily with the class but will also at times act as an independent unit. They will read *L'élégance du hérisson*. They will write an in-depth *Essai* on

a topic of their choice, requiring rigorous research as well as written form. All students will read a number of novels from current day literature, including one by Eric-Emmanuel Schmitt, *Oscar et la dame rose* and also *Le livre de recettes* by Jacky Durand. Both novels touch upon abstract, spiritual, deeply personal topics that will be the seeds of many explorations for discussions in class and as well in writing assignments.

Students will hone their skills to speak spontaneously in both conversations as well as impromptu speeches. They will participate in frequent debates. They will learn to communicate properly in both formal as well as informal letters and emails. We will use literary as well as journalistic texts from highly regarded news sources. We will listen to radio podcasts, watch newscasts, become familiar with different accents from the francophonie. Students will learn to write persuasive essays that will provide different viewpoints on a topic, as well as the student's viewpoint that he or she will defend.

We will not rely on one grammar handbook to propel our grammar revisions, but will rather pool from a wealth of top notch handbooks accumulated for this purpose. Students will write an essay each week on a topic that invites them to dive into a meaningful subject, to find their own voice and express it, then to share it in class where they will discuss the different points of view in small groups.

As this class comprises of three levels of Séminaires, assignments as well as expectations will be tailored to reflect the students' level of French.

This class may be taken at an Honors level with teacher approval. Additional requirements for Honors will include writing both more extensively and with a more meticulous degree of accuracy, taking a consistent role of leadership in day-to-day class activities, and demonstrating consistent mastery of past and current language concepts in both writing and speaking. An additional project may be required in either or both semesters.

*Maureen Gedney*

## **Mathematics**

Mathematics is a language for understanding our world. At Waring our goal is to empower our students to reason quantitatively, make an effective mathematical argument, solve challenging or unfamiliar problems, and represent a math idea in multiple ways. We do this with small classes, problem-solving, and collaborative learning. Students are expected to offer not only a reasonable "answer" but also explain or demonstrate the mathematical processes that got them there. We assess student learning through traditional quizzes and problem sets, but also in how students demonstrate their understanding through collaborative group work, oral presentations, class activities, individual conferences, projects, and reflection portfolios. Moving through our course sequence, students build their capacity as learners and doers of mathematics.

Waring students complete a program of study in college preparatory mathematics, beginning with a two-year course offering students in our Core program (grades 6 and 7) a bridge to Algebra, three years of Foundational mathematics with an emphasis on algebra and geometry, followed by two years of advanced mathematics with an emphasis on function theory, trigonometry, statistics, and data analysis. Advanced students are able to study Calculus at the Advanced Placement level and/or pursue an independent Intensive course in mathematics. All students are expected to take mathematics for all of their years at Waring. Group 5 students who have successfully completed Precalculus, however, may petition for a Senior Intensive in another discipline. Students move through the program at a pace that is based on a thoughtful evaluation of their ability and their learning style.

To earn Credit in all math courses, students must keep up with assigned homework and demonstrate proficiency in written work, class participation, and in-class assessments and projects. When appropriate, students may re-submit their written work or do supplemental problems. Students are expected to come to class on time and be prepared. More than six late or missed assignments per semester are grounds for No Credit in a course. Students in groups 3 and up are eligible to earn Credit at the Honors level. In order to earn this distinction, a student must meet all the requirements for Credit in the course, as well as excel in written work and problem-solving, and perform well on assessments and projects, and take a leadership role in meeting course goals.

Co-curricular opportunities for students in math include Math Cafe elective and Math Peer Tutor Program. The Math Cafe elective allows students to do problem-solving and get math help with a classroom teacher. Advanced math students may train as Math Peer Tutors and work one one one each week to assist other students' learning and in the Math Cafe. Students who are Math Peer Tutor Leaders are trainers and resources to our Peer Tutor cohort and they may also teach workshops during Focus/Flex periods.

## **Core Math 6**

This course allows students to further develop their numerical reasoning and algebraic thinking, and also emphasizes the understanding of the arithmetic of rational numbers. Students compute with, apply, and picture decimals, percents, fractions, integers, scientific notation, and powers. Special attention is paid to fractions and negative numbers. There is also an emphasis on dealing with data sets and geometry. The math is used to model real world situations. Variables appear as a way of describing generalizations, as a language for formulas, and as an aid in solving simple equations. Students will use the TI-34 multiview calculator to develop a more robust understanding of the relationships between numbers in decimals, fractions, and scientific notation. The text for this course is the *University of Chicago School Mathematics Project, Pre-Transition Mathematics*(1st edition).

*Anton Fleissner*

## **Core Math 7**

This course is a bridge from Arithmetic to Algebra, strengthening mathematical foundations, with a focus on problem solving, deep understanding, representing mathematical ideas visually, numerically, symbolically, in tables, and graphically. We will investigate real world problems in mathematical ways. It is intended to prepare students for success in an Algebra course in Group 1 (8th grade). Skills covered include exponential notation, fractions, decimals, ratios, percentages, signed numbers, basic plane and solid geometric figures, probability, coordinate graphing and solving linear equations. The TI-34 multiview calculator will be used occasionally, but the emphasis will be on ensuring that students are secure in number sense and computation, the foundation of math fluency, while becoming confident mathematical thinkers. We will use teacher-selected materials, hands-on investigations, problems and packets.

*Julie Nelson*

*Upon successful completion of the Core Math program students will be ready for a full year Algebra course.*

## **Algebra (Foundations Year 1)**

This course allows students to develop algebraic reasoning skills through the study of linear equations and inequalities, systems of equations, and functions. Students extend their understanding of proportional relationships and slope as a rate of change. The linear function is used to help students understand function notation, graphing in the coordinate plane, modeling data using linear regression, and appropriate use of a graphing calculator, to prepare them for success in secondary school math. The course emphasizes building computational fluency and number sense involving integers, fractions, decimals, exponents, and square roots. Quadratic and exponential functions are introduced as time permits. Visual and analytical models are used to help students understand what it means to be a "solution" to a problem. Activities offer students opportunities to build their confidence and skills in mathematical problem-solving and communicating their thinking, as well as collaborating with others in pairs and groups. Resources for this course include: *The University of Chicago School Mathematics Project, Algebra (3rd edition)*; *Algebra Basics*; *Algebra Success (5th edition)* published by Learning Express; and other teacher-selected materials.

*John Ferrick, Joan Sullivan*

## **Integrated Geometry (Foundations Year 2)**

This course focuses on Geometry while also incorporating topics from Algebra as time permits. This integrated approach will allow for continuity of our program and foster student understanding of algebraic reasoning, mathematical arguments, spatial reasoning and geometric relationships. Constructions are taught as a precise method for visualizing spatial relationships with hands-on tools. We will use transformations for definitions of congruence,

similarity, and symmetry with a focus on triangles, quadrilaterals and circles. An introduction to right-triangle trigonometry in the spring will include opportunities for field projects. Algebra will continue to be integrated with Geometry in our discussion of the coordinate plane and Pythagorean theorem. We will also study perimeter, area, surface area, and volume in two-dimensional and three-dimensional figures. We will introduce proof as a tool to develop students' logical reasoning. The text for this course is *The University of Chicago School Mathematics Project, Geometry*(2nd edition), in addition to a strong emphasis on problem-solving in other teacher-selected materials. A TI-84-family graphing calculator is required.

*Edith Fouser*

### **Advanced Algebra (Foundations Year 3)**

Advanced Algebra extends the ideas of Algebra with an emphasis on quadratic and linear functions, equations, inequalities and their inverses, and linear systems. Students will practice operations on numbers and expressions, such as powers, absolute value, and radicals. Representations of all of these ideas in the coordinate plane are explored at length. We will study rational numbers and variation. New ways of organizing real numbers using sequences and matrices will be explored as time permits. The exponential and logarithmic functions are introduced. We will build on the ideas of right triangle trigonometry introduced in Geometry using the coordinate plane and the Unit Circle. The text for this course is *The University of Chicago School Mathematics Project, Advanced Algebra*(3rd edition). Students are required to have a TI-84 family graphing calculator.

*Julie Nelson, Timothy Te*

### **Precalculus**

Precalculus will cover a study and review of essential basic skills, advanced algebra, complex fractions, and function theory. The course is designed to give a balanced preparation for advanced mathematics courses in either Calculus or Statistics. A significant aspect of the class is that it will emphasize a better understanding of functions and their application to real problems and how functions are used to model data sets. The structure of the class will be a blend of lecture, small group workshop, discussion, independent investigation, problem sets and use of online resources. In general, the class will follow the content outlined in *Precalculus (9th edition)* by Michael Sullivan. Required technology for the course is the TI 84 family calculator.

*John Wigglesworth*

### **Statistics and Introduction to Calculus**

Statistics offers an introduction to the tools and thinking used for analyzing data in such diverse fields as the sciences, manufacturing, economics, and politics, and making decisions based on that analysis. The course begins with descriptive statistics, analyzing univariate and bivariate data and characterizing their distributions quantitatively. From there, the class continues with methods of collecting data and strategies for minimizing biases, followed by probability as a tool for modeling distributions and simulating real populations. Finally, the course concludes with inferential statistics, using confidence intervals to estimate a statistic and hypothesis testing to verify the likelihood of claims.

In the spring semester, Introduction to Calculus provides a strong foundation to study calculus at the AP or college level. The term begins with a global review of Precalculus topics in function theory, algebra, and analytic trigonometry. Advanced function theory topics in parametric or polar equations will be covered if time permits. The course will end with Calculus topics in limits and the derivative, as time permits.

The textbook for the fall semester is *Statistics and Probability with Applications (3rd edition)* by Daren Starnes and Josh Tabor. In the second semester, resources include selections from *Precalculus (9th edition)* by Michael Sullivan, *Rogawski's Calculus for AP, Early Transcendentals (2nd edition)* and other teacher-selected materials. Students are required to have and make regular use of the TI-83/84 Plus graphing calculator.

*Anton Fleissner*

## **Calculus 2 (AP)**

Calculus 2 is the study of change, accumulation, infinity, and mathematical logic. The course builds on the fundamental concepts of limits, continuity, derivatives and integrals that were introduced in Calculus 1, with an emphasis on problem solving to foster intuitive understanding and flexible thinking. The course will cover advanced techniques of differentiation and integration, applications of the integral, differential equations and slope fields, parametric and polar equations and their derivatives (if time), and the five main theorems of Calculus. Students who enroll in this course have the opportunity to take the Advanced Placement Calculus AB examination, with time allowed within the curriculum for comprehensive preparation for the AP Exam. However, the primary goal is to ignite in students a passion for mathematics and strong understanding of Calculus as the study of change and accumulation. Additional topics may be covered as time permits. The textbook for this class is *Rogawski's Calculus for AP\*, Early Transcendentals (2nd edition)* by Jon Rogawski. Students are required to have a TI-84 family graphing calculator.

*Joan Sullivan*

## Writing

The writing program at Waring helps students to discover and develop authentic, personal voices. At all levels of the program, students write poems, stories, dialogues, plays, and personal essays, among other genres. Whatever the genre, they write every week of their Waring career, and by doing so develop both imagination and self-knowledge. We are certain that the writing program helps our students to speak personally and memorably at Convocation and Graduation every year; more important, it helps them to explore inner resources that they might not have discovered otherwise.

Writing, like any discipline, is partly a matter of habit, so we help students establish regular writing habits first. At every level of the program, classes meet twice a week: students present their work to an audience of peers and teacher, and the audience critiques it. Audience, in fact, is at the center of the program. Over time, the writing class audience becomes sophisticated in their critical comments; writers, in turn, increasingly understand how their work affects the audience. Put another way, whether a student has just entered the Core program or is about to complete the senior year at Waring, writing classes are workshops; students write, critique each other, revise, polish, and create portfolios. They also publish pieces in the school magazine and at times share their work with the community at All School Meeting.

Our students enter various competitions such as the Beverly Public Library Teen Poetry Contest each year. In March, Waring holds a Young Writers Conference, which draws published authors from around the country and high school writers from the Boston area, including a group of students from Waring. In May, we send one or two juniors to the New England Young Writers' Conference at Bread Loaf, in Ripton, Vermont.

### Some Guidelines for Credit and Honors Requirements in Writing

Specific requirements for credit and honors in Writing depend on the specific class. However, in general, CREDIT in Writing requires at least the following:

- Alert, empathetic class participation and regular in-class reading from your own work
- On-time responses to prompts and assignments
- Satisfactory completion of revision assignments for the portfolio

HONORS in Writing asks students to consider the following:

- **Preparation for class:**  
Do the given assignments, and turn them in on time. Write often, preferably every day, even if it's only 75-150 words. Read your fellow students' work when it's assigned, and prepare specific, craft-based comments which will help them with revisions. Study readings with an eye toward the writer's craft, and pick up as many tools as you can. If you find exercises, prompts, or readings which are generative, bring them to class and share them.
- **Class participation:**  
Be there, and be there on time. Show leadership in class participation. Speak regularly in discussion. Listen actively and engage respectfully with your fellow learners. Ask questions and listen to the answers. Take notes during classroom discussions. Share own struggles with writing, and be receptive to others. Take risks—read in-process, strange, or otherwise unorthodox work; be open to new prompts and activities; let the class hear your written voice. Honors students may be

asked to lead a class period, complete an additional assignment, or undertake a special project.

- **Growth in skill and understanding as a Writing student:**

Show development of skill in reading, writing, and speaking about the texts we study and the student work we read. Admit to your own weaknesses, and pursue help with your writing where necessary. Write often enough to discover your own process as a writer: learn how you generate ideas, how you outline, how you make rough drafts, and how you revise. Use proper spelling, punctuation and grammar in your writing.

- **Public demonstration of leadership:**

Make noticeable effort to bring writing into contact with the world outside the classroom, and vice-versa. When we meet in a large group or divide into small groups, act as a leader. Tutor others in writing, or seek tutoring for yourself. Try attending a writing conference. Submit your work to the school paper, to an online or print journal, and to contests. Read your work in all-school meetings, coffee houses, or other venues that bring your writing to a wider audience.

## **Core Writing**

Core Writing is an introduction to the Waring writing program. Students are introduced to the free-write, the technique of giving back-language, and the aesthetics of good writing. They regularly read pieces to an audience of their peers and gradually learn to become helpful and sensitive critics. Students should be prepared to read their work each week in class. Throughout the year, each student works toward creating a portfolio of highly-revised, finished pieces. Students are also expected to read their pieces at least once at an All School Meeting. Teachers of Core writing give frequent assignments in order to help students improve their skills.

*Christiane Jedryka-Taylor, Laura Bitler, TAs*

## **Group 1 Writing**

Group 1 Writing is based on a workshop format: students read their pieces to each other each week in class in order to learn how to give and receive criticism. Students also learn how to listen to and critique (both in writing and verbally) the writing of others. In general, in the fall, one of the weekly classes is conducted as a whole-group workshop which will include lessons on vocabulary, grammar, and syntax. The class workshop class will often divide into sections after each lesson. The other weekly class is given over to sharing and critiquing pieces in sections led by Teaching Assistants (TA's). As the year progresses both days become TA led. Throughout the year, all students work toward creating a portfolio of highly revised pieces.

The focus of the first half of the year is learning and practicing various genres: fiction, non-fiction, journalism, dialogue, and poetry. We give frequent assignments in order to help students improve their skills; we also encourage public readings and publication in Waring's magazine, *Le Temps Retrouvé*. In the winter, all students will be asked to submit to the Beverly Library Poetry Contest. In the second semester we will concentrate on observation and character description, culminating in a major written portrait of a Waring Senior (or two) which will be read at two all-school meetings at the end of the year.

*Harold Wingood, TAs*

### **Group 2-3 Writing**

Group 2-3 Writing is based on a workshop format: students read their pieces to each other in order to learn how to give and receive criticism. Students should be prepared to read their work each week in class. Throughout the year, all students work toward creating a portfolio of revised pieces.

The year focuses in part on journal writing, which helps students deepen their precision and flexibility as writers. Portfolio pieces grow out of the raw material in each student's journal, and may include a mixture of genres. Many classes open with a brief reading, and during the course of the year, students become familiar with the writing of several genres, which may include: fiction, poetry, personal essay, drama, critical reviews, and descriptive essays.

*Bob Braile, Edith Fouser, Joshua Scott-Fishburn, Jill Sullivan, Josh Webb*

### **Group 4-5 Writing: Fiction**

We're living in an ironic moment, culturally. While we've become remarkably expressive, we've also become remarkably incoherent, lacking penetrating, illuminating stories that resonate through the din and blur of streaming disinformation to reveal who we are at heart. In this class, students write such stories, seeking to understand themselves and their world through fiction. They study its forms, such as the short story, novella, and novel. They study its elements, such as characterization, voice, setting, structure, style, and theme. They study its craft, from conceiving to drafting to revising to critiquing. They write stories that bring coherence to the incoherence, stories that bring stillness and clarity to the din and blur, stories that resonate through the sheer persistence of their eloquence.

*Bob Braile*

### **Group 4-5 Writing: Le Temps Retrouvé**

In this semester course, students work to keep the school's oldest literary journal alive. Students report on school events, write narrative nonfiction articles about Waring life, profile interesting members of the Waring community, compose editorials on school issues, and publish many polished works in LTR and on Waring's website. The course uses a workshop format—students discuss current news publications, write their own journalistic articles, and comment on the work of their peers. Through revision and peer editing, LTR students turn their writing into snappy, story-driven articles ready for publication. Students also collect pieces from across the Waring community for inclusion in LTR, and learn editing, layout, and digital publishing skills.

*Graham Pearsall*

### **Group 4-5 Writing: Personal Essay**

The Personal Essay is a semester course designed to help students find and develop their voices as writers and to understand the subtext of their written work. The course uses a workshop format: students read published essays, write their own essays, and comment on the essays of their peers. Class time is devoted to discussing published work and student work. We stress the process of revision so that each student produces a number of revised

essays, showing progress through responses to teacher and student commentary. For seniors, the Personal Essay course is also intended, directly and indirectly, to assist students in writing their essays and supplementary statements for college admissions.

*Tim Averill*

### **Group 4-5 Writing: Playwriting**

Playwriting is a semester course designed to help students explore the dramatic mode and in so doing discover the importance of subtext in human interaction. The course uses a workshop format: students read published plays, attend performances, write their own plays, and both comment on and perform in their peers' plays. Students will write the plays that will constitute part of the Waring Spring Theatre production. Class time is devoted primarily to reading and commentary, and also performing scenes to further explore their arcs. Students will explore playwriting techniques and respond to prompts designed to help them develop their dramatic writing voices and to identify deeply felt material as inspiration for their plays. In addition, all students will participate in the Boston University Young Playwrights' Festival and will receive mentorship from a local playwright mentor from the *New Noises* program.

*Elizabeth Gutterman*

### **Group 4-5 Writing: Experimental Personal Narrative**

In this semester course, students play with innovative narrative structures to expand the notion of what a personal essay can be. Students write in weekly "invention journals"; they read published essays to see how writers play with storytelling, form, and craft, and to measure the effectiveness of those writerly choices; and they engage in a variety of revision strategies and hybrid workshop experiences to develop not only polished essays, but also reliable and transferable writing processes. The course encourages students to view writing as play: a space where they can experiment, explore, and stretch. While playing with writing, students can discover untapped modes of thought and new registers of voice.

*Jill Sullivan*

## **Art**

Waring's art program is founded on the idea that the world can be interpreted visually, and that during this process of seeing and drawing/painting/creating students more fully process what they see around them. Drawing is taught as a skill – or language – that everyone can access. It is the Art Department's goal that each and every student (regardless of when they arrive at Waring) will move beyond basic skills in drawing to a fluency that allows them to express themselves visually with confidence. In honing the ability to draw from direct observation the student learns to take the time to actively see the world with greater depth and clarity. The Art program is designed to build skills year to year through a progressive and linked series of curricula. By the time Waring students graduate, they should feel confident in their visual voice, drawing from direct observation with relative ease and having an appreciation of and critical vocabulary for discussing visual art.

Building basic confidence and skill by drawing from direct observation is the hallmark of the lower levels of the art program. To this end, black and white is used primarily until the student reaches the tenth grade level. During the tenth grade year, students begin to explore both color theory and how color impacts their expressive possibilities. Weekly sketchbook assignments provide a means for students to more personally explore concepts presented in class, and students are also encouraged to use their sketchbooks in a way that feels personally relevant. The final two years of the art program are given over to elective offerings, and students choose a course that will allow them to explore a particular process or concept in depth. Qualified juniors may also apply to take the AP Studio Art class during the winter afternoon activities time block, allowing more studio time and rigorous critiques to help them develop as artists. Additionally, qualified seniors may petition to create a Senior Intensive: a class of their own design that allows exploration of a creative endeavor of interest to them. In the tenth through twelfth grades, students are also given the option of taking art class at the Honors level. While each teacher may have specific requirements, it is understood that an Honors Art student will demonstrate an ongoing desire to push their creative process forward and a commitment to expanding and improving their visual vocabulary and skill level.

When students leave the Waring Art program they should be confident and interested in engaging with art both as makers and connoisseurs of visual culture.

### **Core Art: Foundation**

Art in grades 6 and 7 is intended to build observational drawing skills, foster expression through the visual image, develop a relationship with the sketchbook, and explore art materials through various projects. Emphasis is on composition and using shape and line effectively within the picture plane. Using primarily black and white media, students practice drawing contour, proportion and value. Other projects include mask-making and 2- and 3-dimensional design projects and are often cross-curricular. Regular critiques allow for sharing ideas, examining the work of others, and building a vocabulary and ease in evaluating and appreciating artwork. Sketchbook assignments support concepts and techniques explored in class.

*KB Breiseth, Marika Whitaker*

### **Group 1: Interpretation & Process**

Group 1 Art focuses on integrating and strengthening drawing and observation skills and encouraging a more interpretive take on the world. The connection between two- and three-dimensional form is introduced through work with clay, and portraiture is explored. Work continues primarily in black and white media, with landscape, the human form, and still life as subject matter. The media is varied, and includes charcoal, graphite, paint, clay and printmaking. Students participate in art critique and hone their ability to express visual ideas verbally. Sketchbook assignments support concepts and techniques explored in class.

*KB Breiseth*

## **Group 2: Representational Studies (French Immersion)**

Group 2 Art builds on the techniques and materials explored in Group 1 to develop drawing skills and explore the connection between two and three dimensions. Using primarily black and white media, there is an emphasis on sketchbook practice, the human figure, and perspective, as well as on how to visually convey experiences and ideas through line, composition, scale, and scope of subject. The Group 2 year in Art is conducted in French, and regardless of proficiency level each student benefits from French immersion in advance of the Angers trip. Critique takes place in a structured way and is based on the work done in class, and students develop verbal communication around art-related ideas and their visual work. Sketchbook assignments support concepts and techniques explored in class, and sketches completed while traveling in France provide the inspiration for 2-D and 3-D work done when the class returns from their exchange abroad.

*Stéphanie Williams*

## **Group 3: Color Media**

Art 3 is an in-depth exploration of color using a variety of media, with a continued emphasis on drawing and composition. Building on previous years' neutral value work, students begin the year working from observation, using a variety of media while also continuing to exercise dynamic compositional choices through color relationships within the picture plane. Color theory is presented and explored, as is the color wheel and properties of color such as color temperature, harmonies and mixing. As one of the most expressive of the art elements, color often elicits a direct and visceral reaction, much like music. As such, in the spring semester, Group 3 students continue their investigation of color by working intuitively and constructing images based on personal expression and exploring emotional impact of color in art. Throughout the year, work by relevant artists is presented and discussed throughout the course, offering students an art historical context. Sketchbook homework supports the development of concepts. Critique builds skills in articulating and exchanging ideas effectively using an art-specific vocabulary.

*Marika Whitaker*

## **Group 4-5 Overview**

Groups 4 and 5 choose from different art courses each semester for a more in-depth studio experience. The courses may explore a particular approach, or be media-based, including sculpture, painting, drawing, printmaking, mixed-media and/or photography.

### **Group 4-5 B&W Photography (Semester 1)**

In Black and white photography class students investigate camera controls, lighting conditions, film developing, and enlargements from negatives, as well as ways their photographic images express ideas and observations. For students taking 35mm black and white film photography for the first time, basic camera techniques, film processing, printing and darkroom procedures are introduced. Returning students are challenged to develop their art technically and conceptually at a more advanced level.

Class time is reserved primarily for darkroom use, with some critiques and presentations. Photographs are critiqued in terms of proper exposure to achieve a full range of values, composition, expression of a subject, and craftsmanship. Work outside of class involves taking pictures, researching and keeping a journal on photographers, personal reflections, and/or photographic processes. The class also introduces a very brief history of photography over the last 300 hundred years.

*Stéphanie Williams*

### **Drawing for Expression (Semester 1)**

What makes a compelling drawing? Is it simply an accurate recording of what was seen, or something a bit more complicated than that? This class will explore the infinite expressive possibilities inherent in the act of drawing. Working directly from various forms of life (the figure, landscape and still life to start) and using charcoal, graphite and more experimental sources of mark making, students will discover ways to make their drawings more expressive and emotionally resonant. Other media (from paint to ink to oil pastels) will be added in to challenge the boundaries of where a drawing ends and mixed media and painting begin. Sketchbook assignments and art historical references will encourage students to further hone their understanding of what "good" drawing means to them, as well as push them to more effectively – and personally -- communicate with the viewer.

*KB Breiseth*

## **Performing Arts**

The Performing Arts Program was launched in the 2013-2014 academic year as a way to bridge the already well-established programs of Music and Theater as well as the variety of performance opportunities that are available to Waring students. By virtue of restructuring the Music/Theater Performance programs into a single department, students are encouraged to make connections between many areas of performance, including instrumental and choral programs, Theater performances, larger school-wide concerts, and musical Soirées. In addition, the Performing Arts faculty seek to make connections across the curricula, encouraging collaboration between students (and faculty) in various areas of the larger Waring program. For example, students who do music or theater projects in other departments (from Humanities, to French, to Science) are encouraged to perform their work, collaborate with choruses or ensembles, or find any other appropriate venues to

take their work further.

Students in Groups 3, 4 and 5 are eligible to pursue honors tracks in Music, Theater, or both. Students who wish to work at the honors level should discuss this with their PA block teacher for music honors, or with the Theater Director for theater; they will serve as a liaison between the student and the other Performing Arts faculty. A student's honors program is a mix of core honors requirements (enumerated for both Music and Theater tracks) and also a program that is fitted for the particular student and his/her strengths, interests and needs.

### **Performing Arts: Music Program**

Waring students experience and learn about music in a variety of settings, from private instrument lessons to small and large ensembles, from Music and Humanities classes to all-school settings such as Music Listening meetings and All-school Chorus. In addition, we occasionally have guest artists come in and perform for the school community. Likewise, students regularly attend concerts or rehearsals, such as with the BSO. Finally, students have many opportunities to share what they have learned at informal performances during the school day or more formal evening recitals, called *Soirées Musicales*.

Through the many aspects of our music program we hope to foster understanding and appreciation for music and the interconnectedness of styles loosely defined as 'classical', 'folk', 'jazz', 'contemporary' - and the myriad styles in-between.

Music Honors is awarded on a department-wide basis (see *Performing Arts* description, above).

### **Private Music Lessons**

The school is committed to encouraging students to study a musical instrument. Many aspects of music are best learned by creating music rather than by merely listening to it. Since music is a performing art, it is a goal of the school that students reach a level of aptitude where they can perform on their instrument for the school community. Private lessons during the school day are available to students who demonstrate the desire, commitment and discipline necessary to profit from this opportunity.

Expectations for participants include commitment to:

1. Consistent lesson attendance.
2. Regular practice.
3. Eventual performance in a soirée or other appropriate venue.

Participation in small ensembles, group lessons, class presentations or other collaborations will be encouraged in motivated students.

Music Honors students are typically expected to be engaged in private music lessons and to perform regularly.

Any interested students should contact the Lessons Coordinator:  
(Renée Becker: [rbecker@waringschool.org](mailto:rbecker@waringschool.org))

Lessons teachers: Renée Becker, Robert J. Bradshaw, Susan Burnett-Halling, Tim Deik,

*Peter Fedele, Andrea LeBlanc (Trisha Craig subbing for Andrea Le Blanc in Fall 2019), John Hyde, Martha Leven, Shaylor Lindsay, Kristina Martin, Jason Miele, Kristen Miller, Nat Simpkins, Susan Slowick*

### **Core Music I/French Immersion**

For one period each week, first year Core students study music and dance, conducted entirely in French. New students focus on dance, movement, and rhythm early in the year. Some of the dances learned in class are performed at Core Night in November. Later in the year, the students begin to study topics in music theory and sight-singing.

To earn Credit, students must participate actively in class and show progress learning the skills and materials covered.

*Renée Becker*

### **Core Music II**

Returning CORE students continue with Music class conducted in English, which meets for one period each week. In the first semester, they cover the History of Western European Music and in the second semester, they cover the History of American Popular Music. This class also serves as an introductory class to the music classes they will have in Grades 8 and 9. Material covered includes an introduction to music terminology and basic music theory, intervals, major and minor scales and solfège.

*Robert J. Bradshaw*

### **Music 1/French Immersion**

Music 1 meets 2 periods a week for one semester. This course explores significant instruments and composers in French. The immersion style approach offers the students the opportunity to use their French skills to deepen their historical knowledge of music. The course meets twice per week for one semester and unites diverse levels of French from beginner to intermediate.

*Renée Becker, Anna Marie Smith*

### **Music 2**

Music 2 is a full-year course that meets one 50-minute period each week. The course continues sight-singing/ear-training practice while adding to the program important building blocks in Music Theory, analysis, form and hands on composition. The class will continue use of Mike Campbell's *Sight-Singing Book* and will also use visual in-class aids from MusicTheory.Net as well as miniature white lapboards with music staves for hands on practice with notation, intervals and ear-training. Additionally, students will use *Noteflight's*

online software for composition and notation. In some cases, the teacher might supplement units with exercises from the textbook *Music in Theory and Practice*.

*Robert J. Bradshaw, Anna Marie Smith*

## **Performing Arts Block**

Music-making together is a longtime tradition at the Waring School. Valued for its contribution to general health and well-being as well as social and academic growth, it begins at the opening camping trip on the shores of Mirror Lake. On campus it becomes a part of the regular academic curriculum when all students in Groups 1-5 are assigned to one of a variety of ensembles, which meets twice each week during the Performing Arts Block for formal instrumental or choral training. Rehearsals for each ensemble culminate with a performance at the Winter and Spring concerts. New this year, the Orchestra will meet for both 1<sup>st</sup> and 2<sup>nd</sup> semesters; the choral groups will include CORE Chorus, three Group 1-5 choruses and the small auditioned ensemble, Madrigals. All students will participate in rehearsals and performances of the All-School-Chorus piece(s) as well.

**CORE CHORUS** is designed to help young students build awareness and confidence in their voice as a viable musical instrument, at any stage of development. Techniques for posture, breath, resonance, and diction help to optimize the student's individual sound and strengthen their ability to blend in unison or harmony with other singers. Music sight-reading and listening skills are used to facilitate the learning of new music. Interest in song origin and language is encouraged to enhance knowledge and enjoyment of a song, for both singer and audience.

Performances: Core Night (Nov.), Winter Concert (Dec.), Spring Concert (May)

*Kristina Martin /Shaylor Lindsay, accompanist*

### **CHORUS #1 - Around the World:**

With curiosity and respect for the many diverse cultures of the world, this ensemble will become acquainted with some of the sounds and rhythms of various countries, while at the same time learning fundamental vocal/performance techniques, music sight-reading and listening skills to fortify general musicianship and appreciation for the chosen repertoire.

*Kristina Martin*

### **CHORUS #2 - Folksongs of the USA and FRANCE**

This ensemble interacts with rich folk song traditions in both English and French, with the goal of expanding students' aural skills and practical understanding of basic music theory. Class time includes activities focused on listening, quick learning, and improvisatory singing in a large-group context. While some songs will require division by voice part, most of the repertoire sung in the first part of the semester features interchangeable parts, giving students opportunities to interact with a given piece in a variety of different ways.

*Renée Becker*

### **CHORUS #3 - Choral Classics, traditional and contemporary**

The choral classics group focuses on pieces from the rich choral traditional, old and new. We sing

works that challenge singers rhythmically and vocally, with an array of work from the SATB genre. This year, this chorus is working on a choral favorite, Geographical Fugue by Ernst Toch, a rhythm-only fugue that cultivates a sense of ensemble through a challenging call for precision amidst overlapping fugal counterpoint. In addition, we are working on a collaboration with the Waring Orchestra on Winter Song, by Sarah Bareilles, a piece that offers singers a range of harmonies and melodic expression. Like the other singers (Groups 1-5), this chorus is working on two pieces by Waring favorite, Nick Page, one for the full chorus ensemble, and one specific to this group. In rehearsal, we begin with an array of vocal warm ups, working on pitch, rhythm, ensemble and healthy technique.

*Tim Bakland*

## **Madrigals**

Madrigals is a select mixed group of 12 singers, chosen for vocal and musical abilities. The ensemble performs primarily *a cappella* music at Waring events such as soirées, Graduation, and the Winter and Spring concerts. Members are given challenging repertoire, and are expected to work at a high level both in rehearsal and performance. Attendance at extra events and rehearsals is required, as is some amount of individual practicing outside of rehearsal. Madrigals is an opportunity for motivated singers to work closely together as a group, and share in the joy of blending their voices in complex harmony.

*Shaylor Lindsay*

## **Orchestra**

In the Spring Semester, the Waring Orchestra meets twice per week, during the choral periods. Orchestral instrumentalists in Groups 1-5 who have completed at least one year of private instruction on their instrument participate in the ensemble. WSO members are active in the school community including collaborating with other ensembles, performing in ASMs and on the Quad, hosting a banquet, traveling to Boston to hear the BSO, and performing in the Spring Concert.

*Robert J. Bradshaw*

## **Additional Ensembles, Chamber Groups**

There are many opportunities for small ensembles and chamber music work. During Monday Focus Flex, the Jazz Ensemble rehearses for 40 minutes each week. Vocal Ensemble serves to prepare interested voice students for District Auditions as well as performances in the all-school concerts. Instrumentalists may opt to have chamber group lessons or small ensemble sessions during focus/flex - these sessions last several weeks (depending on the group and undertaking). Honors music students are required to do some amount of ensemble work each year and all others are encouraged to do so when the time is appropriate. Other ensembles offered in the past have included Music Skills, Strings Ensemble, Guitar Ensemble, Improvisation, Performance Nerves, and a Contemporary Pop Band.

## **Performing Arts: Theater Program**

The Theater program at Waring is focused on nurturing students' artistic impulses, thereby enabling them to flourish in multiple performance roles and as confident lifelong learners who create fully realized and inclusive theatrical experiences. Waring Theater is an ensemble-based program that encourages students to participate in multiple design aspects while simultaneously fully developing their onstage potential. Through exercises, improvisation, and scene study, students increase their range of physical and vocal expression. The Theater Department has strong ties with Humanities, and we strive to produce plays that dovetail with the themes and periods being covered in the upper level Humanities courses.

The Theater Department currently produces four plays each year including a collection of student-written plays written in the fall semester Playwriting class, plays for Core Night, and the Core Winter Theater production. Currently, the Theater Department offers a yearly musical in the upper school.

### **Core Theater**

Core Theater introduces students to the fundamentals of theatrical experience. Students participate in multiple exercises designed to hone their skills as listeners, observers, and collaborators. Drawing inspiration from artwork, poetry, and folk tales, as well as their Humanities readings, students create several plays and perform a selection of these at the Core Night presentation in November. During the winter elective term, CORE students have the option of participating in the Core play which provides an opportunity for motivated students to immerse themselves in a customized theatrical production (typically including elements of music and choreography), performed the Thursday evening and final afternoon before Spring Break. Our craft exploration resumes in the spring, when students read and analyze plays and then create and devise their own pieces inspired by our readings.

*Elizabeth Gutterman*

### **Group 1 Theater**

Group 1 Theater builds on the foundations established in CORE Theater. The course begins second semester and meets 2 periods per week as well as during allotted Group 1 Humanities periods. Students participate in several character and ensemble-building exercises building toward a final production developed in collaboration with their Humanities class.

*Elizabeth Gutterman*

## **Athletics**

**"Sound Body, Sound Mind"**

The Waring School athletics program fosters the development of character and personal responsibility through sports. It promotes teamwork, sportsmanship, fitness, and individual mastery of athletic skills. As an integral part of Waring's mission, athletics promotes the leadership and interpersonal skills necessary to a community built on respect, camaraderie,

stewardship, sacrifice, discovery, and pride in individual accomplishment. The athletics program cultivates lifelong habits for good physical health, enhances mental alertness and emotional stability, and encourages students to excel to the best of their ability.

Students participate in team and alternative sports throughout the academic year. Team sports include soccer and cross-country in the fall, basketball in the winter, and club ultimate and lacrosse in the spring. Alternative sports are available to students in groups 1-5 throughout the winter and spring. These sports include YMCA, kick-boxing / self defense. Theater is also available to students in groups 1-5 in the fall.

### **Fall sports**

Fall sports offers boys and girls varsity, junior varsity, and middle school, "building the foundation" soccer. The varsity boys compete in the Mass Bay Independent League and the varsity girls compete in the Independent Girls Conference. Varsity and junior varsity cross-country is offered to students in groups 1-5. Theater is another offering to groups 1-5.

### **Winter sports**

Winter sports consist of varsity and junior varsity basketball. Middle school basketball for both girls and boys is built into the academic day. Waring also offers kick-boxing / self defense, as well as strength and conditioning through the YMCA for groups 1-5. Theater is also an option for groups 1-5. Students in groups 3-5 can opt out of winter sports but need to demonstrate another athletic activity that would produce similar benefits gained as participating in one of the Waring winter sport options. A proposal form must be filled out. These can be found in the Director of Athletics office.

### **Spring sports**

Spring sports consist of varsity, junior varsity, and middle school "building the foundation" lacrosse. Waring also offers kick-boxing /self defense. Club Ultimate Frisbee is an option and is co-ed, competing against other schools in the MBIL and IGC. Waring will explore a spring track option this year and may be limited to groups 3-5. Theater is also an option for students in groups 1-5.

## **Health**

In line with Waring's mission, the Health program takes an interdisciplinary approach to the subject, integrating wellness education, leadership and team building, and health information into the curriculum. Because research has shown that adolescents make healthy lifestyle choices based not only on information but also on relationships with their families,

peers, coaches, and teachers, the health program sets out both to inform the students of the possible outcomes of different choices they may face, and to help students examine and understand the influences and relationships which affect them. We make space for students to think, talk, and learn about crucial topics, including intimacy and sexuality; relationships with family, peers, and romantic partners; substances and addiction, including drugs, alcohol, and social media; mental health; and what we call "staying alive," which includes everything from exercise and nutrition to self defense and first aid. The program engages with these subjects at age-appropriate levels for each class, and in each area, we blend pre-existing curricula with specific lessons we've developed ourselves over the years. We use a host of different approaches, including speakers, role-playing, videos, discussions, readings, and a multitude of activities ranging from privilege walks to art-making to anonymous written questions to serial testimony.

## **Core Health**

Core Health focuses on topics such as friendships, self-confidence, basics of nutrition, introduction to sexual education and puberty, basic anatomy and physiology, the brain, addiction, hygiene and self care, team-building, movement, meditation and mindfulness, and other interests that students have. The program strives to create an environment where all students to feel that their opinion counts and that what they say will be heard. Students often find that speaking publicly about their feelings and personal experiences is difficult at first, but becomes easier through the year as their comfort with their classmates and the setting increases and their trust in one another grows.

*Cory Grant, Colleen Jenkins*

## **Group 1 Health**

Each year Group 1 Health uses the overarching question, "Am I Normal?" to deal with a wide variety of topics ranging from advertising and media influences, personal identity, and family structures, to academic and personal ethics, bullying, sexuality, nutrition, peer pressure, and drugs and alcohol. There is also a focus on mindfulness, meditation, and happiness. The units on sexuality, nutrition, and drugs and alcohol are usually presented by outside professionals with specialized experience in the subject matter.

*Meg Ferguson Sauder*

## **Group 2 Health**

Group 2 Health continues and expands on the topics addressed in Group 1 and continues to cover sexuality, including consent, gender, and healthy relationships; substance use, including addiction, and recovery; relationships with peers, family, and romantic partners; mental health including anxiety and depression; and self care, including nutrition, exercise,

first aid, mindfulness, and use of social media. The course employs a variety of approaches, including discussion, small group work, lectures, guest speakers, videos, radio, and role playing. Students also learn stress management, with an emphasis on mindfulness and meditation as they prepare for group travel and adjusting to the upper school.

*Meg Ferguson Sauder*

### **Group 3 Health**

Group 3 Health continues and expands on the topics addressed in Groups 1 and 2 and covers intimacy and sexuality, including consent, contraception, gender, LGBTQIA+ related issues, and healthy relationships; substance use, including addiction, and recovery; relationships with peers, family, and romantic partners; mental health including anxiety and depression; and self care, including nutrition, exercise, first aid, mindfulness, and use of social media and technology. The course employs a variety of approaches, including discussion, small group work, lectures, guest speakers, videos, radio, podcasts, readings, and role playing. Classes typically begin and end with guided group meditations and students are encouraged to bring their experience and information gathered from external resources to larger group discussions.

*Cory Grant, Colleen Jenkins*

### **Group 4 Health**

Group 4 Health meets during the first semester and continues the topics which students have been discussing in Groups 2 and 3. The course is largely driven by the students. They decide which topics they need information about, and through discussion, reading, research, and submission of anonymous questions which we answer as a group, the class raises their own and others' awareness about the nuts and bolts of staying healthy. Topics include intimacy and sexuality, relationships (peer, family, romantic), social media, substance use, mental health with a focus on stress management, leadership, and meditation and mindfulness. Team building activities are also a part of class as students prepare for group travel.

*Colleen Jenkins*

### **Group 5 Health**

Group 5 Health meets during the second semester and continues the topics which students have discussed throughout their time in Health at Waring. This course is largely driven by the students. They decide which topics they need information about, and through discussion, reading, research, and submission of anonymous questions which we answer as a group, the class raises their own and others' awareness about the nuts and bolts of

staying healthy. Topics tend to include intimacy and sexuality, relationships (peer, family, romantic), social media, substance use, mental health with a focus on stress management, leadership, and meditation and mindfulness. This course also focuses heavily on current events related to health and wellness and brings media into the classroom with a focus on utilizing appropriate resources to gather information.

*Colleen Jenkins*

## **Electives**

The Elective Program is an opportunity for students to be introduced to a new skill, to delve more deeply into an area of interest, and to take risks intellectually and/or creatively in an area of their choice. All Electives take place at the end of the day on Mondays. As Monday Electives are after the academic day, students not participating in an Elective are free to go home. On Mondays if they are staying on campus (for carpool reasons) but not participating in an Elective they must sign up for the supervised study.

The offerings are varied and reflect nearly all areas of the Waring program. This year offerings include Debate, Ceramics, Math Café, Green Thumb, Film, First Lego League, Sewing, Small-sided Lacrosse, Open Studio Art, and Building Character (a Theater offering). In addition, a Supervised Study period is offered if students wish to work together collaboratively or get a head start on homework. Some electives are restricted to students in Groups 1-5.