Grade 8 Curriculum Descriptions  
Second Semester, 2014-2015

English
After Winter Break, students finished reading Harper Lee’s “To Kill a Mockingbird,” and wrote literary essays on the book. Each student developed his or her own thesis, drawing on what he or she found compelling about the book. Emphasis was on process, with the essay as the final step of an exploration of the text through the lens of the thesis. Students delved into the difference between a topic and a thesis, practiced strategies for going back into the text with a specific focus, studied different models for structuring their essays, and crafted essays where form followed function in a cogent manner. We continued practicing writing skills worked on during our short story unit and our personal essay unit earlier in the year, including clarity, specificity, fluidity and richness of writing. To these, we added lessons on supporting contentions, and on integrating evidence and quotations into a piece of writing. The goal of this writing project was less a ‘perfect’ essay than an authentic one.

Following our work on “To Kill a Mockingbird,” we did a unit on basic parts of speech, sensitizing students to the variety of ways we put together phrases and sentences. Our poetry unit straddled Spring Break; students read a wide range of poetry, and wrote ten different kinds of poems, drawing on a rich variety of poetic tools and devices. Many of the poems we read tied in with our year-long theme of social justice. Our vigorous independent reading program has continued throughout the year. Our next unit will be a reading of Art Spiegelman’s seminal graphic narrative, “Maus.” This is an interdisciplinary unit with art and Social Studies on WWII/the Holocaust and graphic storytelling. We will focus on visual literacy as we read. If time allows, we will conclude our year by going back to Richard Wright’s “Black Boy,” and/or doing a final creative writing unit.

Mathematics
Students began the second term using motion sensors to investigate distance, rate of speed, and time in the coordinate plane. This deepened their understanding of slope of a line and how it is calculated. Then they explored lines in the coordinate plane, their functions, and the properties of parallel and perpendicular lines. Students subsequently used this knowledge and their ability to solve equations to solve systems of equations graphically and algebraically. Applying what they learned about inequalities and absolute value in the fall, the students were able to graph inequalities in the coordinate plane and solve systems of inequalities graphically while also inferring the solution sets from these graphs.

After exploring lines, students dove into polynomials, learning how to add, subtract, and multiply them. They mastered how to factor quadratics and apply the quadratic formula in order to solve quadratic equations efficiently. They then used this knowledge to graph quadratic functions in the coordinate plane and analyzed the features of these graphs to create parabolas.

In the coming weeks, students will investigate radical and rational expressions and gain a basic understanding of trigonometry as it relates to right triangles. Some students will end their course in Algebra I preparing for the NYS Integrated Algebra Regents Examination while others will review what they have already learned in Geometry in preparation for their high school mathematics courses.
Performing Arts: Elective
Students continue to participate in their yearlong Performing Arts Elective. The following courses are offered: Concert Band, Concert Choir, Drama, Instrument Ensemble, Jazz Ensemble, and Dance Ensemble. Groups are comprised of students from the entire middle division and each group performed at two evening concerts during the school year. Students are expected to participate actively with a positive and respectful attitude, be prepared with instruments or other necessary materials, willingly take risks, and demonstrate that they’ve made personal progress with regard to relevant skills.

Performing Arts: Music
During the second semester of music class the Grade 8 students dedicated their time and energy to the production of “Oklahoma!,” the 9th annual Grade 8 musical performed at Columbia University’s Miller Theatre. During this unit, each child studies all aspects of the theater including costumes, set-making, publicity, lighting, sound, vocal production and staging.

Science
This spring we continued building on the work we did in the fall, applying our newfound understanding of atomic theory and structure. We began by exploring the series of discoveries that led to our current understanding of atomic structure. Then, we investigated how atoms bond to form molecules, studied both ionic and covalent compounds, and learned how the molecular structure of each dictates the properties of the actual substance.

Throughout our study, hands-on lab experience and critical analysis skills were stressed. Careful observation and analysis was regularly required. For example, we examined ionic crystals under a microscope, and used our understanding of the compound’s formula to interpret the differences in crystal pattern. We also tested the conductivity of various liquid compounds and aqueous solutions, and used our data to determine whether the substances were likely to be bonded ionically or covalently.

In the following unit we applied our understanding of chemical bonding to a study of chemical reactions, learning how to preserve the law of conservation of matter by balancing chemical equations. In recent weeks, we have wrapped up our formal chemistry study with an examination of five types of chemical reactions, and an investigation into the role of catalysts, reaction rates and limiting reactants.

We will spend our final classes focusing on issues of environmental chemistry and environmental justice, in connection with the 8th grade theme of social justice. On May 19th we spent the day sailing on the Hudson River on the 110’ schooner Mystic Whaler, and studying the chemistry of the estuary.

Throughout the year, the students have been required to share their understanding and their conclusions both through written lab analyses, and by articulating their ideas aloud during class discussions. Content mastery was assessed through a combination of their lab work, class work, oral and written participation, and formal tests and quizzes.

Social Emotional Learning
The Social and Emotional Learning (SEL) curriculum presents students with opportunities to participate in dialogues regarding issues affecting positive social interactions. Working in groups with grade-level teachers and The School’s psychologists, students progress toward SEL objectives in areas of self-awareness, self-management, social awareness, relationship management, decision-making, and responsibility. The Grade 8 Life Skills curriculum focuses on the transition to high school. The objective is to help students develop both academic and social skills necessary to navigate this transition, including how to effectively weigh risks and
develop healthy strategies for dating and relationships, drug and alcohol abuse prevention, sexuality and disease prevention. Students will also learn and have the opportunity to practice stress management and communication strategies.

Social Studies
After Winter Break in Social Studies we continued to examine the social, political and economic foundations of the United States by exploring the United States Constitution, the American Civil War, and the Civil Rights Movement. The complex topic of “equal protection” under the law, with the equal protection clause of the Fourteenth Amendment, was used as a vehicle to understand the fictional bill S. 1789, “Fund to Promote Excellence and Opportunity in Intermediate and Secondary School Athletics Act.” Culminating this study was a rich and heated senatorial debate that took place in a Brooklyn courthouse. Students used their research and understanding of key court cases to defend their position. Ultimately, the bill was not passed by our senators. After a brief examination of the Civil War, students were compelled to consider the concept of resistance as they studied the Civil Rights Movement. Students read “Warriors Don’t Cry,” Melba Patillo Beals’ memoir of her junior year as one of the “Little Rock Nine” in Central High School, in 1957. Students also conducted independent research in formulating their Civil Rights Movement essay which required them to defend their thesis.

Concluding the year, we examined the causes of World War II and the Holocaust. We analyzed and studied the rise of totalitarian dictatorships and the events that led to the Holocaust. Furthermore, we considered the importance of personal reflection as we discussed how these powerful world events shaped our understandings of social justice and inspired us to promote equality in our own communities.

Spanish Language/Literacy
During the second part of the year Spanish students completed two units of study. In the first, Latino NYC, eighth graders engaged in a study of Latino communities in our city. They answered questions such as, Where do Latinos live in NYC and why? Why would a group of people choose to move to the same community? What are the cultural indicators we look for to find out where people in a specific neighborhood come from? Students explored Dulce Pinzon’s photography through the exhibit Latino Superheroes, at Columbia’s Center for Race and Ethnicity. They were challenged to think about reasons that Ms. Pinzon might dress undocumented immigrants as superheroes. During this unit students studied and applied city and food-related vocabulary. They learned how to form and apply both affirmative and negative commands and how to use direct object and reflexive pronouns with commands.

Our second unit of study, Los latinos y la lucha por los derechos civiles (Latinos and the fight for civil rights) developed in tandem with the students’ exploration of the Civil Rights Movement in Social Studies. Students discussed what civil rights are, and different ways to stand up for and defend our rights. They discussed the groundbreaking case Méndez v. Westminster, the Indignados movement in Spain, Spanish language music of the Civil Rights Movement and, finally, the life and works of César Chávez. During this unit of study students were introduced to the past tense, discussed the different usages of the preterite and the imperfect and learned to identify each tense in their text.

During the rest of the school year students will be learning about poetry of the Spanish-speaking world from Latin American poets such as Pablo Neruda, through US Latino poetry such as Gina Valdés and ending with poetry from Spain written around the time of the Spanish Civil War.
Visual Arts
Grade 8 students begin the second semester on an integrated project with social studies. Students visually interpret the Constitutional Amendments using a variety of materials. Next, students choose from four elective courses: Transformation Project, Introduction to Fiber Art, Stop Motion Animation, and The Secret Life of Drawing. During IPW, Grade 8 students weave together their original sketches to create the set and props of the class production of Oklahoma. Returning from spring break, students have the opportunity to choose a second elective: Altered Books, Cartooning, Stop Motion Animation, Painting and You. To finish the year, students explore visual narratives and how to share an idea or story using images. They create graphic novels of their own in connection with English and their study of visual literacy.

Wellness
During the second half of the year, Grade 8 students in Wellness had the unique opportunity to experience a variety of different games and activities. The students were able to work together in small groups to create their own unique game or activity through our Create-A-Game unit. These projects gave students the chance to create a game by combining the skills, strategy and rules from previous sports or activities they have participated in during Wellness classes. The content included teamwork, the components of fitness (muscular strength, muscular endurance, flexibility and cardiovascular). The goal for our students in this final semester is for them to leave The School at Columbia University with the ability to maintain their physically active lifestyles as the move forward in their lives and understanding of the seven dimensions of wellness, (physical, intellectual, emotional, social, spiritual, occupational and environmental). We concluded the semester with the sport of rock climbing. We emphasized the safety and teamwork of challenging our limits of physical and mental ability while creating a safe environment.