

GRADE	HUMANITIES AND WORLD COURSE	LANGUAGE ARTS / ENGLISH	MATH	HIGH INTENSITY PRACTICE	SCIENCE	LANGUAGES	ART AND DESIGN	WELLNESS AND MOVEMENT
6	<p><b>CONTEMPORARY GLOBAL ISSUES AND HISTORICAL ANTECEDENTS</b></p> <ul style="list-style-type: none"> <li>Systems and sustainability</li> <li>Historic civilizations</li> <li>The impact of geography and environment</li> <li>Technological advances</li> <li>Investigation into visual and written primary and secondary sources</li> </ul> <p><b>ELECTIVES: HUMANITIES</b></p> <ul style="list-style-type: none"> <li>Global Events and issues</li> <li>Creative Writing</li> <li>Classics</li> </ul>	<ul style="list-style-type: none"> <li>Appreciation of world cultures</li> <li>Personal narratives</li> <li>Why do we tell stories and how do form and structure inform meaning?</li> <li>Dystopian literature</li> <li>Poetry analysis</li> <li>Literary terms and devices</li> <li>Genre studies</li> </ul>	<p><b>INQUIRY AND PROBLEM-BASED MATH</b></p> <ul style="list-style-type: none"> <li>Positive and negative numbers on a number line</li> <li>Greatest and least common factor</li> <li>Algebraic concepts, including simplifying and evaluating algebraic expressions</li> <li>Multiplying and dividing decimals and fractions</li> <li>Ratio (comparisons and equivalence)</li> <li>Rates and unit rates</li> <li>Percent</li> <li>Coordinate geometry</li> </ul> <p><b>ELECTIVE</b></p> <ul style="list-style-type: none"> <li>Math enrichment</li> </ul>	<p><b>HIP THINKING</b></p> <ul style="list-style-type: none"> <li>Fluid intelligence</li> <li>Problem solving</li> <li>Composition of thought</li> <li>Empathy</li> <li>Creativity</li> <li>Critical thinking</li> </ul>	<ul style="list-style-type: none"> <li>Resources of the earth and space</li> <li>Weather, kinetic energy, heat transfer, convection, air pressure</li> <li>River ecology</li> <li>Humans and the environment</li> <li>The future of Earth and other planets</li> </ul> <p><b>ELECTIVES: SCIENCE AND ENGINEERING</b></p> <ul style="list-style-type: none"> <li>Gardening and Sustainability</li> <li>Creative Computation</li> </ul>	<p><b>SPANISH AND CHINESE</b></p> <ul style="list-style-type: none"> <li>Authentic language use from and within contexts</li> <li>Utilizing language to accomplish real-world tasks</li> <li>Focus on advancing written and spoken communication</li> </ul> <p><b>ELECTIVES: LANGUAGE ENRICHMENT</b></p> <ul style="list-style-type: none"> <li>Spanish: Hispanic Culture and Community</li> <li>Chinese: Modern Times</li> </ul>	<p><b>ART</b></p> <ul style="list-style-type: none"> <li>Principles and elements of art</li> <li>Materials and methods</li> <li>Drawing lab</li> <li>Creative process journals</li> <li>Art history</li> <li>Art analysis</li> </ul> <p><b>MUSIC</b></p> <ul style="list-style-type: none"> <li>Vocal workshop: chorus</li> <li>Instrumentals: brass, woodwinds, strings, guitar</li> <li>Beginner ensemble</li> <li>School of Rock</li> </ul> <p><b>ELECTIVES: DRAMA</b></p> <ul style="list-style-type: none"> <li>Playmaking</li> <li>Elements of great storytelling: wants, conflict, change</li> </ul> <p><b>ELECTIVES: ARTS AND DESIGN</b></p> <ul style="list-style-type: none"> <li>Architecture</li> <li>Creative Construction</li> <li>Fiber Arts</li> <li>Graphic Design</li> </ul>	<p><b>CLINICS</b></p> <ul style="list-style-type: none"> <li>Saturday basketball</li> <li>Mini-tennis</li> <li>Morning comprehensive workout</li> </ul> <p><b>WELLNESS</b></p> <ul style="list-style-type: none"> <li>Character strengths</li> <li>Exercise science</li> <li>Sex and relationships</li> <li>Drugs/decision making</li> <li>Altruism</li> <li>Mindfulness</li> <li>Mindful eating</li> </ul> <p><b>MOVEMENT</b></p> <ul style="list-style-type: none"> <li>Rotations at Avenues, Chelsea Piers and Chelsea Park</li> <li>Functional movement capacities</li> <li>Speed, agility, quickness</li> <li>Functional movements</li> </ul> <p><b>ADDITIONAL ELECTIVE</b></p> <p><b>MASTERY</b></p> <ul style="list-style-type: none"> <li>Mastery: Play!</li> </ul>

# Upper Division Curriculum: Grades 7-8

2019-20

GRADE	HUMANITIES AND WORLD COURSE	LANGUAGE ARTS / ENGLISH	MATH	HIGH INTENSITY PRACTICE	SCIENCE	LANGUAGES	ART AND DESIGN	WELLNESS AND MOVEMENT
7	<p><b>THE WORLD CONNECTED</b></p> <ul style="list-style-type: none"> <li>Journeys of discovery</li> <li>Global connectivity</li> <li>Navigation and encounters between civilizations</li> <li>Systems and sustainability: culture, government, economics and technology</li> <li>Physical and human geography</li> <li>Geographic literacy</li> <li>Mapping historical information</li> </ul>	<ul style="list-style-type: none"> <li>Exploration of change</li> <li>Dilemmas and change</li> <li>A lens on historical fiction, short story, persuasive writing, narrative nonfiction and drama</li> <li>Composition: Understanding of organization, purpose, voice, audience and conventions</li> <li>Appreciation of world cultures</li> </ul>	<p><b>INQUIRY AND PROBLEM-BASED MATH</b></p> <ul style="list-style-type: none"> <li>Number systems and theory</li> <li>Ratio and proportional reasoning</li> <li>Integer operations</li> <li>Algebraic expressions</li> <li>Algebraic equations and inequalities</li> <li>Data and statistical reasoning</li> <li>Geometry</li> </ul>	<p><b>HIP THINKING</b></p> <ul style="list-style-type: none"> <li>Fluid intelligence</li> <li>Problem solving</li> <li>Composition of thought</li> <li>Empathy</li> <li>Creativity</li> <li>Critical thinking</li> </ul>	<ul style="list-style-type: none"> <li>Cells and the human body</li> <li>Photosynthesis and respiration</li> <li>Combustion and climate change</li> <li>Structure, function and health of body systems</li> <li>Energy transformation</li> </ul>	<p><b>SPANISH AND CHINESE</b></p> <ul style="list-style-type: none"> <li>Authentic language use from and within contexts</li> <li>Utilizing language to accomplish real-world tasks</li> <li>Interperative listening and reading, presentational speaking and writing; interpersonal communication</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Spanish: Hispanic Culture and Community</li> <li>Chinese: Modern Times</li> </ul>	<p><b>ART</b></p> <ul style="list-style-type: none"> <li>Principles and elements of art</li> <li>Materials and methods</li> <li>Drawing lab</li> <li>Creative process journals</li> <li>Art history</li> <li>Art analysis (7)</li> <li>Germination of an idea in multiple media (8)</li> <li>Distortion/exaggeration representation</li> <li>Abstraction art (8)</li> <li>Original project design (8)</li> </ul> <p><b>MUSIC</b></p> <ul style="list-style-type: none"> <li>Vocal workshop: chorus</li> <li>Instrumentals: brass, woodwinds, strings, guitar</li> <li>Advanced ensemble</li> <li>School of Rock</li> </ul> <p><b>ELECTIVES: ART AND DESIGN</b></p> <ul style="list-style-type: none"> <li>Art History &amp; Art Making</li> <li>Architecture</li> <li>Creative Construction</li> <li>Fiber Arts</li> <li>Graphic Design</li> </ul> <p><b>ELECTIVES: DRAMA</b></p> <ul style="list-style-type: none"> <li>Playmaking</li> <li>Elements of great storytelling: wants, conflict, change</li> </ul>	<p><b>INTERSCHOLASTIC ATHLETICS</b></p> <ul style="list-style-type: none"> <li>Practice 4x a week and some Saturdays</li> </ul> <p><b>WELLNESS</b></p> <ul style="list-style-type: none"> <li>Sexual health relationships/puberty</li> <li>Flourishing/PERMA/positive psychology</li> <li>Resilience</li> <li>Character strengths</li> <li>Growth mindsets</li> <li>Mindfulness techniques</li> <li>Social-emotional life skills</li> </ul> <p><b>MOVEMENT</b></p> <ul style="list-style-type: none"> <li>Rotations at Avenues, Chelsea Piers and Chelse Park</li> <li>Movement literacy</li> <li>Functional movement</li> <li>Running mechanics</li> <li>Sports-specific skills</li> <li>Sport leadership</li> <li>Nutrition</li> <li>Exercise science</li> </ul> <p><b>ADDITIONAL ELECTIVES</b></p> <p><b>MASTERY</b></p> <ul style="list-style-type: none"> <li>Mastery: Play! (7)</li> <li>Mastery Seminar: Introduction to Mastery (8)</li> </ul> <p><b>SOCIAL IMPACT</b></p> <ul style="list-style-type: none"> <li>Design 4 Impact (7 AND 8)</li> </ul>
8	<p><b>CHANGE AND REVOLUTION</b></p> <ul style="list-style-type: none"> <li>The Industrial Revolution</li> <li>Societies &amp; systems</li> <li>Revolutions</li> <li>Civil rights, human rights</li> <li>Democracy</li> <li>Global citizenship</li> </ul> <p><b>ELECTIVES: HUMANITIES (7 AND 8)</b></p> <ul style="list-style-type: none"> <li>Global Events and Issues</li> <li>Creative Writing</li> <li>Classics</li> </ul>	<ul style="list-style-type: none"> <li>Exchange</li> <li>A lens on memoir, poetry, investigative journalism, analytical essay, speech</li> <li>Composition; adjusting purpose, tone, audience, and genre</li> <li>Appreciation of national and international classic literature</li> </ul>	<p><b>INQUIRY AND PROBLEM-BASED MATH</b></p> <ul style="list-style-type: none"> <li>Absolute value and systems of inequalities</li> <li>Linear equations and inequalities</li> <li>Linear motion and related word problems</li> <li>Exponents and radicals</li> <li>Solving equations with one and two variables</li> <li>Scientific notation</li> <li>Factorization</li> <li>Quadratic equations and parabola</li> <li>Imaginary numbers</li> <li>Rational algebraic expressions</li> <li>Data &amp; statistical reasoning</li> </ul> <p><b>ELECTIVE (7 AND 8)</b></p> <ul style="list-style-type: none"> <li>Math Enrichment</li> </ul>	<p><b>INQUIRY AND PROBLEM-BASED MATH</b></p> <ul style="list-style-type: none"> <li>Absolute value and systems of inequalities</li> <li>Linear equations and inequalities</li> <li>Linear motion and related word problems</li> <li>Exponents and radicals</li> <li>Solving equations with one and two variables</li> <li>Scientific notation</li> <li>Factorization</li> <li>Quadratic equations and parabola</li> <li>Imaginary numbers</li> <li>Rational algebraic expressions</li> <li>Data &amp; statistical reasoning</li> </ul> <p><b>ELECTIVE (7 AND 8)</b></p> <ul style="list-style-type: none"> <li>Math Enrichment</li> </ul>	<ul style="list-style-type: none"> <li>Changes in motion: position and energy</li> <li>Newton's laws</li> <li>Natural selection and ecosystems</li> <li>Investigation of life and matter</li> <li>Diversity of cells, functions and processes</li> <li>Material and chemical properties and reactions</li> <li>Atomic structure</li> </ul> <p><b>ELECTIVES: SCIENCE AND ENGINEERING (7 AND 8)</b></p> <ul style="list-style-type: none"> <li>Robotics: FIRST Tech Challenge</li> <li>Gardening and Sustainability</li> <li>Creative Computation</li> </ul>	<p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Spanish: Hispanic Culture and Community</li> <li>Chinese: Modern Times</li> </ul> <p><b>ELECTIVES: SCIENCE AND ENGINEERING (7 AND 8)</b></p> <ul style="list-style-type: none"> <li>Robotics: FIRST Tech Challenge</li> <li>Gardening and Sustainability</li> <li>Creative Computation</li> </ul>	<p><b>ELECTIVES: ART AND DESIGN</b></p> <ul style="list-style-type: none"> <li>Art History &amp; Art Making</li> <li>Architecture</li> <li>Creative Construction</li> <li>Fiber Arts</li> <li>Graphic Design</li> </ul> <p><b>ELECTIVES: DRAMA</b></p> <ul style="list-style-type: none"> <li>Playmaking</li> <li>Elements of great storytelling: wants, conflict, change</li> </ul>	<p><b>ADDITIONAL ELECTIVES</b></p> <p><b>MASTERY</b></p> <ul style="list-style-type: none"> <li>Mastery: Play! (7)</li> <li>Mastery Seminar: Introduction to Mastery (8)</li> </ul> <p><b>SOCIAL IMPACT</b></p> <ul style="list-style-type: none"> <li>Design 4 Impact (7 AND 8)</li> </ul>

GRADE	HUMANITIES AND WORLD COURSE	MATH	SCIENCE	WORLD LANGUAGES	HIGH INTENSITY PRACTICE	ART AND DESIGN	WELLNESS AND MOVEMENT	MASTERY
9	<p><b>GLOBAL HUMANITIES: FOUNDATIONS</b></p> <ul style="list-style-type: none"> <li>Interconnectedness of civilizations</li> <li>World culture</li> <li>Exchange of ideas</li> <li>Literary analysis and interpretation</li> <li>Foundational research techniques</li> <li>Advanced humanities</li> </ul> <p><b>WORLD COURSE 9</b></p> <ul style="list-style-type: none"> <li>Revolutions</li> <li>Information age</li> <li>Technology and human development</li> <li>Geography and resources</li> <li>Civilizations and its discontents</li> <li>Globalization</li> <li>Critical map reading</li> <li>Comparing perspectives through case study</li> </ul>	<p><b>INTEGRATED MATH 1</b></p> <ul style="list-style-type: none"> <li>Word problems</li> <li>Real, rational and irrational</li> <li>Linear equations and inequalities</li> <li>Absolute value</li> <li>Equations and inequalities</li> <li>Systems of equations</li> <li>Exponents and radicals</li> <li>Quadratic functions</li> <li>Pythagorean theorem</li> <li>Parametric equations and vectors</li> </ul>	<p><b>INTEGRATED SCIENCE 1</b></p> <ul style="list-style-type: none"> <li>Structure and organization of matter</li> <li>Atomic structure and function</li> <li>Forces and motion</li> <li>Electricity and electrostatics</li> <li>Waves and communication systems</li> <li>Digital information systems</li> </ul>	<p><b>SPANISH AND CHINESE</b></p> <ul style="list-style-type: none"> <li>Authentic language use from and within contexts</li> <li>Utilizing language to accomplish real-world tasks</li> <li>Advancing proficient communication</li> <li>Interpretive listening and reading, presentational speaking and writing, interpersonal communication</li> </ul>	<p><b>HIP THINKING</b></p> <ul style="list-style-type: none"> <li>Fluid intelligence</li> <li>Problem solving</li> <li>Composition of thought</li> <li>Empathy</li> <li>Creativity</li> <li>Critical thinking</li> </ul>	<p><b>INTRODUCTION TO THE CREATIVE PROCESS</b></p> <ul style="list-style-type: none"> <li>Discover, create, evolve</li> <li>Artistic literacy</li> <li>Societal influence on art</li> <li>Studio practice</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Music Theory and Practice Workshop</li> <li>Vocal Workshop</li> <li>Advanced Music</li> <li>Introduction to the Creative Process</li> <li>Programming studies</li> <li>Musical theater</li> <li>Vocal workshop</li> <li>Advanced music</li> </ul>	<p><b>INTERSCHOLASTIC ATHLETICS</b></p> <ul style="list-style-type: none"> <li>Practice 4x a week and some Saturdays</li> </ul> <p><b>WELLNESS</b></p> <ul style="list-style-type: none"> <li>Character strengths</li> <li>PERMA</li> <li>Mindful decision making</li> <li>Exercise science</li> <li>Sex and relationships</li> <li>Drugs/decision making</li> <li>Altruism</li> <li>Mindfulness techniques</li> <li>Mindful eating</li> </ul> <p><b>MOVEMENT</b></p> <ul style="list-style-type: none"> <li>Various rotations at Avenues, Chelsea Piers and local fitness boutiques (kickboxing, Row House, Soulcycle, etc.)</li> <li>FMCs (functional movement capacities)</li> <li>SAQs (speed, agility, quickness)</li> <li>Functional movements</li> </ul>	<ul style="list-style-type: none"> <li>Mastery Seminar: Introduction to Mastery</li> <li>Mastery Workshop</li> </ul>
10	<p><b>GLOBAL HUMANITIES: MODERNIZATION AND GLOBALIZATION</b></p> <ul style="list-style-type: none"> <li>Diversity</li> <li>Culture appreciation</li> <li>Genre study: historical narrative, critical lenses, satire, editorial</li> <li>Exchange of ideas</li> <li>Literary analysis and interpretation</li> <li>Complex narrative structure</li> <li>Advanced humanities</li> </ul> <p><b>WORLD COURSE 10</b></p> <ul style="list-style-type: none"> <li>Globalization</li> <li>Modern age</li> <li>Urbanization</li> <li>Movement and immigration</li> <li>Technological era</li> <li>Society, culture, politics</li> </ul> <p><b>ELECTIVE</b></p> <ul style="list-style-type: none"> <li>Advanced Humanities</li> </ul>	<p><b>INTEGRATED MATH 2</b></p> <ul style="list-style-type: none"> <li>Geometric transformations</li> <li>Angles and structure of geometric proofs</li> <li>Congruence theorems</li> <li>Quadrilaterals, medians, angle bisectors</li> <li>Triangles and their properties</li> <li>Polygonal regions and their areas</li> <li>Parallel lines</li> <li>Volume and surface</li> <li>Area of solids</li> <li>Triangle trigonometry</li> <li>Similarity</li> </ul>	<p><b>INTEGRATED SCIENCE 2</b></p> <ul style="list-style-type: none"> <li>Energy, power and conservation of energy theorem</li> <li>Modes of energy transformation and modern energy sources</li> <li>Chemical reactions and combustion</li> <li>Carbon footprint and other costs of energy use</li> <li>Global climate system</li> <li>Interrelationship between humans and their ecosystems</li> <li>Designing solutions to environmental issues</li> </ul>			<p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Design and Engineering Workshop</li> <li>Visual and digital arts workshop</li> <li>Music theory and Practice workshop</li> <li>Vocal workshop</li> <li>Advanced music</li> <li>Orchestra and band</li> </ul>		<ul style="list-style-type: none"> <li>Mastery Workshop (reserved for Mastery students; see application process)</li> </ul>

# Upper Division Curriculum: Grades 11-12

2019-20

GRADE	HUMANITIES	WORLD COURSE	MATH	SCIENCE	WORLD LANGUAGES	ART AND DESIGN	WELLNESS AND MOVEMENT	MASTERY
11	<p><b>AMERICAN STUDIES: ENGLISH</b></p> <ul style="list-style-type: none"> <li>Colonial America</li> <li>Revolution</li> <li>Sectionalism</li> <li>Civil War and Reconstruction</li> <li>The Gilded Age</li> <li>Reform movements</li> <li>Imperialism and WWI</li> <li>Boom and bust</li> <li>WWII and the Cold War</li> <li>Post-WWII America and civil unrest</li> </ul> <p><b>ELECTIVES (11 and 12)</b></p> <ul style="list-style-type: none"> <li>Creative Writing</li> <li>Journalism Theory and Practice</li> <li>Worlds Collide, Worlds Connect: China and the U.S. Across Time</li> </ul>	<p><b>AMERICAN STUDIES: WORLD COURSE</b></p> <p><b>ELECTIVES (11 and 12)</b></p> <ul style="list-style-type: none"> <li>Eastern Philosophy</li> <li>Build Your Own Business</li> <li>Design 4 Impact</li> </ul>	<p><b>INTEGRATED MATH 3</b></p> <ul style="list-style-type: none"> <li>Functions</li> <li>Matrix operations and transformations</li> <li>Trigonometric functions</li> <li>Trigonometric identities</li> <li>Inverse trigonometric functions</li> <li>Polynomials</li> <li>Exponential and logarithmic functions</li> <li>Conic sections</li> <li>Sequences and series</li> <li>Permutation, combination and probability</li> </ul> <p><b>ELECTIVE</b></p> <ul style="list-style-type: none"> <li>Statistics</li> </ul>	<p><b>BIOCHEMISTRY</b></p> <ul style="list-style-type: none"> <li>Conditions for life on earth</li> <li>The chemistry of life</li> <li>Cellular structure and sustaining life</li> <li>Gene expression and genetics</li> <li>Growth and health of multicellular organisms</li> <li>Genetic engineering</li> <li>Evolution and diversity of life</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Advanced Biology</li> <li>Advanced Chemistry</li> <li>Cosmology</li> <li>Psychology</li> <li>Sociology</li> </ul>	<p><b>SPANISH AND CHINESE</b></p> <ul style="list-style-type: none"> <li>Authentic language use from and within contexts</li> <li>Utilizing language to accomplish real-world tasks</li> <li>Focus on written and spoken communication</li> <li>Interpretive listening and reading, presentational speaking and writing, interpersonal communication</li> </ul>	<p><b>VISUAL ART</b></p> <ul style="list-style-type: none"> <li>Mixed media arts</li> <li>Film arts</li> <li>Senior studio art (grade 12)</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Film Arts</li> <li>Music theory and practice</li> <li>Studio art practice</li> <li>Photography</li> <li>Design and engineering studio</li> <li>Musical theater</li> <li>Mixed media studio</li> </ul>	<p><b>INTERSCHOLASTIC ATHLETICS</b></p> <ul style="list-style-type: none"> <li>Practice 4x a week and some Saturdays</li> </ul> <p><b>WELLNESS</b></p> <ul style="list-style-type: none"> <li>Character strengths</li> <li>Exercise science</li> <li>Sex and relationships</li> <li>Drugs/decision making</li> <li>Altruism</li> <li>Mindfulness</li> <li>Mindful eating</li> </ul> <p><b>MOVEMENT</b></p> <ul style="list-style-type: none"> <li>Various rotations at Avenues, Chelsea Piers and local fitness boutiques (kickboxing, Row House, Soulcycle, etc.)</li> <li>FMCs (functional movement capacities)</li> <li>SAQs (speed, agility, quickness)</li> <li>Functional movements</li> </ul>	<ul style="list-style-type: none"> <li>Mastery Workshop (reserved for Mastery students; see application process)</li> </ul>
12	<p><b>WORLD LITERATURE: ENGLISH</b></p> <ul style="list-style-type: none"> <li>Interdisciplinary exploration</li> <li>Engagement with issues of race, class, gender and sexuality</li> <li>Exchange of ideas</li> <li>Global perspectives and traditions</li> <li>Analytical writing</li> <li>Creative nonfiction writing</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>See above</li> </ul>	<p><b>SENIOR SEMINAR</b></p> <ul style="list-style-type: none"> <li>Community Design Incubator</li> <li>Visual Narratives</li> <li>Dinner's Ready</li> <li>Consciousness, Ethics and the Search for Meaning</li> </ul> <p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>See above</li> </ul>	<p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Calculus</li> <li>Intro to Calculus</li> <li>Statistics</li> <li>Advanced Math Research</li> </ul>	<p><b>ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Physics C</li> <li>Advanced Biology</li> <li>Advanced Chemistry</li> <li>Cosmology</li> <li>Psychology</li> <li>Sociology</li> </ul>				<ul style="list-style-type: none"> <li>Mastery Seminar: Creativity (reserved for Mastery students; see application process)</li> </ul>