




# Berlin Middle High School

CURRICULUM GUIDE 2023-2024



Counseling Office  
BERLIN CENTRAL SCHOOL DISTRICT  
17400 ROUTE 22  
CHERRY PLAIN, NY 12040

# **BERLIN MIDDLE HIGH SCHOOL 2022-2023 CURRICULUM GUIDE**

<b>Berlin Middle/High School Department Contacts</b>	5
<b>Graduation Requirements &amp; Diploma Types</b>	6
<b>Earning Credit</b>	9
<b>Student Programming</b>	10
<b>Visual Arts</b>	14
<i>Studio in Art</i>	14
<i>Introduction to Drawing</i>	14
<i>Introduction to Painting</i>	15
<i>Introduction to Graphic Design</i>	15
<i>Introduction to Photography</i>	15
<i>Introduction to Sculpture</i>	15
<i>Introduction to Ceramics</i>	15
<i>Yearbook Design</i>	15
<i>Printmaking</i>	16
<i>Intermediate Studio Art</i>	17
<i>HVCC Survey of Art History I/II</i>	17
<b>Career and Technical Education in Engineering and Technology</b>	17
<i>Design and Drawing for Production</i>	17
<i>Materials Processing</i>	17
<i>HVCC CADD 100 Topics in 2D Auto CAD</i>	18
<i>HVCC Digital Electronics</i>	18
<i>CISI 110: Intro to Computer Science with Python &amp; Multimedia</i>	18
<b>English</b>	19
<i>English 9</i>	19
<i>English 9 Honors</i>	19
<i>English 10</i>	19
<i>English 10 Honors</i>	20
<i>English 11</i>	20
<i>AP English Literature and Composition</i>	21
<i>The Individual in Society</i>	21
<i>Creative Writing</i>	22
<i>Media Matters</i>	22
<b>Foreign Language</b>	23
<i>Spanish Culture</i>	23
<i>Spanish IA</i>	23
<i>Spanish IB</i>	23
<i>Spanish II</i>	23
<i>Spanish III</i>	24
<i>HVCC Spanish 200 – Language and Culture IV</i>	24
<i>HVCC Spanish 201 – Language and Culture V</i>	24
<b>Mathematics</b>	25

<i>Algebra I Common Core</i>	25
<i>Algebra Year 1 Common Core</i>	25
<i>Algebra Year 2 Common Core</i>	25
<i>Algebra II Common Core</i>	25
<i>Geometry - Regents</i>	26
<i>General Geometry (Non-regents)</i>	26
<i>Applied Mathematics</i>	26
<i>Consumer Math</i>	27
<i>Pre-Calculus</i>	27
<i>HVCC Math 170 - PreCalculus</i>	27
<i>HVCC Math 180 - Calculus I</i>	28
<b>Music</b>	29
<i>High School Band</i>	29
<i>Music Appreciation</i>	29
<i>High School Chorus</i>	29
<i>High School Chamber Choir</i>	29
<i>Advanced Musical Theatre</i>	30
<i>Jazz Band</i>	30
<b>Physical Education</b>	31
<i>PE 9/10</i>	32
<i>PE 11/12</i>	32
<b>High School Health</b>	33
<i>Health</i>	33
<i>Responding to Emergencies</i>	34
<b>Science</b>	35
<i>Earth Science</i>	35
<i>General Earth Science</i>	35
<i>Living Environment</i>	36
<i>Chemistry</i>	36
<i>Physics</i>	36
<i>General Physical Science</i>	37
<i>Marine Biology</i>	37
<i>AP Chemistry</i>	38
<b>Social Studies</b>	39
<i>Global History I</i>	39
<i>Global History II</i>	39
<i>U.S. History &amp; Government</i>	39
<i>Participation in Government</i>	40
<i>Economics</i>	40
<i>World War II</i>	40
<i>Cold War</i>	41
<i>Introduction to Politics</i>	42
<i>NYS &amp; the 20th Century</i>	43
<i>United States History: Rebellion and Terrorism</i>	43
<i>AP Psychology</i>	44

<b>Distance Learning</b>	45
<i>Sign Language I - Fall</i>	45
<i>Sign Language II - Spring</i>	45
<i>Psychology</i>	45
<i>Math &amp; Financial Applications</i>	45
<i>Introduction to American Politics</i>	45/46
<b>Middle School</b>	46
<b>Sixth Grade</b>	46
<i>6th Grade ELA</i>	46
<i>6th Grade Math</i>	46/47
<i>6<sup>th</sup> Grade Social Studies</i>	47
<i>6th Grade Science</i>	48
<i>6<sup>th</sup> Grade Technology</i>	48
<i>6<sup>th</sup> Grade Library Skills</i>	48
<i>6<sup>th</sup> Grade Middle School Essential: Work Habits &amp; Organizational Skills</i>	49
<i>6<sup>th</sup> Grade Health</i>	49
<b>Seventh Grade</b>	49
<i>7<sup>th</sup> Grade English</i>	49
<i>7<sup>th</sup> Grade Math</i>	50
<i>7th Grade Compression Math</i>	50
<i>7<sup>th</sup> Grade Social Studies</i>	50/51
<i>7<sup>th</sup> Grade Science</i>	51
<i>7<sup>th</sup> Grade Spanish IA</i>	51
<i>7<sup>th</sup> Grade Technology</i>	51
<b>Eighth Grade</b>	52
<i>8<sup>th</sup> Grade English</i>	52
<i>8<sup>th</sup> Grade Math</i>	52/53
<i>8th Grade Accelerated Math</i>	53
<i>8<sup>th</sup> Grade Social Studies</i>	53
<i>8<sup>th</sup> Grade Science</i>	53
<i>8<sup>th</sup> Grade Spanish - Spanish IB</i>	53
<i>8<sup>th</sup> Grade Family and Consumer Sciences</i>	53
<i>8<sup>th</sup> Grade Health</i>	54
<b>Middle School Art and Music</b>	55
<i>Middle School Visual Art</i>	55
<i>6th Grade Art</i>	55
<i>7th Grade Art</i>	55
<i>8th Grade Art</i>	55
<i>Middle School Music</i>	56
<i>6th Grade General Music</i>	56
<i>6th Grade Chorus</i>	56
<i>6th Grade Band</i>	56
<i>7<sup>th</sup> Grade General Music</i>	56
<i>7/8 Band</i>	56/57
<i>7/8 Grade Chorus</i>	57



## ***Berlin Middle/High School Department and Curriculum Contacts***

Berlin Middle/High School  
Counseling Office

(518) 658-1500  
(518) 658-1500 (ext. 1070)

### **Counselors Grades 6-12**

Mrs. Rachel Harrison MS/HS School Counselor (last names A-I)	Email: rharrison@berlincentral.org Phone: (518) 658-1500 (ext. 1072)
Ms. Caroline Testa MS/HS School Counselor (last names J-Z)	Email: ctesta@berlincentral.org Phone: (518) 658-1500 (ext. 1073)

### **Program Directors & Coordinators**

Ms. Angela Pastizzo Director of Pupil Personnel Services	Email: apastizzo@berlincentral.org
Ms. Amy Donohue Response to Intervention (RTI) Coordinator	Email: adonohue@berlincentral.org

### **Department Chairs**

Mrs. Ariel Gilbert Department Co-Chair - English	Email: agilbert@berlincentral.org
Mrs. Cristi Lamontagne Department Co-Chair - English	Email: clamontagne@berlincentral.org
Mr. Nate Ellis Department Chair - Math	Email: nellis@berlincentral.org
Mr. Robert Gould Department Chair - Social Studies	Email: rgould@berlincentral.org
Mr. Matthew Christian Department Chair - Science	Email: mchristian@berlincentral.org
Mr. Steven Mellor Department Chair - Science	Email: smellor@berlincentral.org

## *NYS Graduation Requirements*

### REQUIREMENTS FOR GRADUATION FOR STUDENTS GRADUATING IN 2023

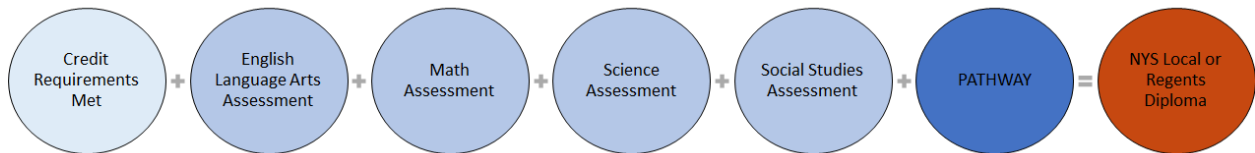
<b>Regents Diploma</b>		<b>Advanced Regents Diploma</b>	
<b>Required Course</b>	<b>Required Credits</b>	<b>Required Course</b>	<b>Required Credits</b>
<b>English</b>	<b>4</b>	<b>English</b>	<b>4</b>
<b>Social Studies</b>	<b>4</b>	<b>Social Studies</b>	<b>4</b>
<b>Math</b>	<b>3</b>	<b>Math</b>	<b>3</b>
<b>Science</b>	<b>3</b>	<b>Science</b>	<b>3</b>
<b>Language other than English (LOTE)</b>	<b>1</b>	<b>Language other than English (LOTE)</b>	<b>3</b>
<b>Fine Arts (art, music, technology)</b>	<b>1</b>	<b>Fine Arts (art, music, technology)</b>	<b>1</b>
<b>Health</b>	<b>.5</b>	<b>Health</b>	<b>.5</b>
<b>Physical Education (PE)</b>	<b>2</b>	<b>Physical Education (PE)</b>	<b>2</b>
<b>Electives</b>	<b>3.5</b>	<b>Electives</b>	<b>1.5</b>
<b>TOTAL</b>	<b>22</b>	<b>TOTAL</b>	<b>22</b>

\*Students must earn a minimum of 22 credits to graduate.

\*Students must earn the course credits (listed above) in order to earn a Regents/Advanced Regents Diploma.

## MULTIPLE PATHWAYS TO GRADUATION

Multiple pathways recognize the importance of engaging students in rigorous and relevant academic programs. The regulations approved in 2015 and 2016 recognize students' interests in the Arts, Biliteracy (LOTE), Career and Technical Education (CTE), Career Development and Occupational Studies (CDOS), Humanities, and Science, Technology, Engineering and Mathematics (STEM) by allowing an approved pathway to meet the students' graduation requirements.



Under the 4+1 Pathway Assessment option, NYS public school students must take and pass **four** Regents Exams or Department Approved Alternative Assessments. The four Regents exam subject areas include: *English language arts, mathematics, science, and social studies*.

Outlined below are the 4+1 Graduation Pathway Requirements:

### NYS PATHWAY REQUIREMENTS

Pathway	Students eligible for this pathway must successfully complete:
<b>Arts Pathway</b>	<ul style="list-style-type: none"> <li>• An additional Arts course (or sequence) culminating in a Department-approved pathway assessment; and</li> <li>• The culminating Department-Approved Pathway Assessment in the Arts.</li> </ul>
<b>Biliteracy (LOTE) Pathway</b>	<ul style="list-style-type: none"> <li>• Adequate LOTE coursework (based on student proficiency); and</li> <li>• The culminating Department-Approved Pathway Assessment in Languages other than English.</li> </ul>
<b>Career and Technical Education (CTE) Pathway</b>	<ul style="list-style-type: none"> <li>• A Department-Approved CTE Program; and</li> <li>• The culminating 3-part technical assessment.</li> </ul>
<b>Career Development and Occupational Studies (CDOS) Pathway</b>	<ul style="list-style-type: none"> <li>• The CDOS Commencement Credential Requirements (Option 1 or Option 2).</li> </ul>



<b>Humanities Pathway</b>	<ul style="list-style-type: none"> <li>• An additional Social Studies or English Language Arts course culminating in a Regents or Department-approved alternative assessment; and</li> <li>• The culminating Regents Exam or Department-Approved Alternative.</li> </ul>
<b>STEM Pathway</b>	<ul style="list-style-type: none"> <li>• An additional Science or Mathematics course culminating in a Regents or Department-approved alternative assessment; and</li> <li>• The culminating Regents Exam or Department-Approved Alternative.</li> </ul>



### DIPLOMA TYPES

<b>Regents Diploma (Traditional Pathway)</b>	<b>Advanced Regents Diploma</b>
--	---------------------------------

<b>English Language Arts</b>	<b>English Language Arts</b>
<b>Algebra I</b>	<b>Algebra I, Geometry, Algebra II</b>
<b>Global Studies</b>	<b>Global Studies</b>
<b>U.S. History</b>	<b>U.S. History</b>
<b>One Science Regents (Living/Physical Science)</b>	<b>Two Science Regents (1 Living/1 Physical)</b>
	<b>Language other than English (LOTE) Exam</b>

## *Earning Credit*

Once students transition into High School they begin to accumulate credits. Upon completing and demonstrating comprehension of the course content (overall passing grade of 65 or higher) students will earn credit for their classes.

NYS Department of Education requires students to meet a certain number of credits in specific content areas to graduate from high school. Students will progress to the next grade depending on the number of credits they accrued in their previous years.

### Minimum Credits for Grade Level Promotion

Grade 9 = Less than 5 ½ credits  
 Grade 10 = 5 ½ credits  
 Grade 11 = 11 credits  
 Grade 12 = 16 ½ credits  
 GRADUATION = 22

Grade 9	Grade 10	Grade 11	Grade 12
Physical Education ½	Physical Education ½	Physical Education ½	Physical Education ½
English 9 <b>1</b>	English 10 <b>1</b>	English 11 <b>1</b>	English 12 <b>1</b>
Global Hist. 1 <b>1</b>	Global Hist 2. <b>1</b>	U.S. Hist. <b>1</b>	PIG               ½ Econ               ½
Algebra 1 <b>1</b>	Geometry <b>1</b>	Algebra 2 <b>1</b>	<i>Math Elective</i> <b>1</b>
Living Env. <b>1</b>	Earth Science <b>1</b>	Chemistry <b>1</b>	<i>Science Elective</i> <b>1</b>
Art/Music <b>1</b>	1 Elective <b>1</b>	1-2 Electives <b>1</b>	1-2 Electives <b>1</b>
<i>Spanish 2</i> <b>1</b>	Health           ½		
8th Grade Credit Spanish 1A/1B <b>1</b>			
<b>TOTAL</b> <b>7 ½</b>	<b>TOTAL</b> <b>6</b> (13 ½)	<b>TOTAL</b> <b>5 ½</b> (18 ½)	<b>TOTAL</b> <b>5 ½</b> (24)

\*Sample 4-Year Student Plan - Regents Diploma Track

\***Bolded** numbers indicate number of credits earned upon completion of course

\**Italicized* courses are optional, but highly recommended

\*School counselors ensure that students stay on track for graduation by scheduling them for a minimum of 5.5 credits each year.

# ***STUDENT PROGRAMMING***

## **ACADEMIC OPPORTUNITIES**

### **Questar III/Career and Technical Education (CTE)**

11th and 12th grade students are eligible to apply to one of several Questar III's Career and Technical Education (CTE) programs. These hands-on programs provide students with the academic and technical skills necessary to succeed in future careers and to become lifelong learners.

During their 10th grade year, prospective students will have an opportunity to visit their facility at the Rensselaer Educational Center in Troy. After the visit, school counselors will check in with interested students and provide them with their application materials.

Upon acceptance students will earn credits through their program of study. Credits are counted toward diploma requirements at Berlin High School.

CTE courses are scheduled for one-half of the school day (2 ½ hours), Monday through Friday. Students will spend half of the day at the Rensselaer Ed Center and half of the day at the high school.

To be eligible to attend the Rensselaer Ed Center, the student must have successfully completed the following:

<b>English</b>	<b>2 credits</b>
<b>Social Studies</b>	<b>2 credits</b>
<b>Science</b>	<b>2 credits</b>
<b>Mathematics</b>	<b>2 credits</b>
<b>Art/Music</b>	<b>1 credits</b>
<b>Phys Ed</b>	<b>1 credit</b>

CTE courses include: Academy for Information Technology I & II (AIT), Automotive Technology I & II, Aviation Technology I & II, Construction I & II, Cosmetology, Criminal Justice, Culinary Arts I, HVAC, CNA-Nursing (senior year only).

Career Studies: Auto Services I & II, Intro to Food Services

For more information regarding Questar III/CTE and the programs offered please see your school counselor or visit their website:

<https://www.questar.org/education/career-and-technical-education/>

## New Visions

New Visions programs are offered through Questar to highly motivated, academically capable and mature high school seniors who are serious about learning more about careers in a specific field. Students will spend their entire day at the New Visions Program.

**STEM – Science, Technology, Engineering and Mathematics at RPI.**

**Visual & Performing Arts – Arts Center of the Capital Region, Troy**

**Medical - Samaritan Hospital, Troy**

**Science Research & World Health – University at Albany’s Health Sciences Campus, Rensselaer**

**Detailed descriptions of all Career and Technical Education Courses and the New Visions Program are available in the Questar III Course Catalog**

<http://www.questar.org/education/career-tech-ed>

## HVCC College in the HS Courses

Berlin HS is proud to be a part of Hudson Valley Community College’s College in the HS program. Through this program, more than 90 college-level courses are offered at high schools across the Capital Region during the regular school day. These courses give students an opportunity to experience a college-level course while still in high school. *College credit can be applied to most four-year colleges and universities. Depending on the school, students may be able to transfer up to 15 credits or more.*

The cost for college in the high school courses is \$65 per credit hour. Students who qualify for the free and reduced lunch program may also apply to receive the HVCC scholarship to cover the cost of their course. Eleventh and twelfth graders may also be eligible to apply for the Carelli-Gardner Memorial Scholarship.

College in the HS courses that will be offered for the 2022-23 school year at Berlin HS are:

**Digital Electronics (Full Year) - ELET 210, 4 credits**  
**Survey of Art History I (Fall) - ARTS 100 3 credits**  
**Survey of Art History II (Spring) - ARTS 101 3 credits**  
**Precalculus (Fall) - Math 170, 4 credits**  
**Calculus I (Spring) - Math 180, 4 credits**  
**Spanish Language & Culture IV (Fall) - SPAN 200, 3 credits**  
**Spanish Language & Culture V (Spring) - SPAN 201, 3 credits**

## **Honors Criteria**

The honors courses for social studies 9-12 will provide students who demonstrate a desire to excel academically a more in-depth inquiry of various social studies themes. These themes will include areas in geography, world history, U.S. History, and U.S. Government and Economics

Parents will receive letters notifying them that their child has been selected to participate in the enrichment program. Please see the attached sheets for the criteria that will determine eligibility for these students.

Berlin High School's Social Studies Department will meet with middle school Social Studies teachers and school counselors to evaluate candidates for the enrichment program.

## **ACADEMIC SUPPORTS**

### **Academic Intervention Services (AIS)**

Academic Intervention Services (AIS) are additional instruction and/or support services that supplement the instruction provided in the general curriculum and assist students in meeting the State Learning Standards. Academic Intervention Services are intended to assist students who are at risk of not achieving the State Learning Standards in English Language Arts, mathematics, social studies and/or science or who are at risk of not gaining the knowledge and skills needed to meet or exceed designated performance levels on State Assessments.

Academic Intervention Services shall be made available to students with disabilities on the same basis as non-disabled students, provided, however, that such services shall be provided to the extent consistent with the student's Individualized Education Program.

### **Response to Intervention (RTI)**

Response to Intervention (RTI) is a multi-tier approach to the early identification and support of students with learning and behavior needs. The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning.

These services may be provided by a variety of personnel, including general education teachers, special educators, and specialists. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student response to instruction.

## ***COURSE SELECTION PROCESS***

Berlin Middle High School's goal is for parents/guardians to be informed and more involved in the scheduling process. As students enter and continue on through their high school career, they begin to have more choices in the courses they take. Throughout the scheduling process, we encourage parents and students to review the current year's Course Curriculum Guide to get an understanding of the course description and requirements.

Once your child meets with their school counselor to choose their courses, we encourage parents to look over the course selections your child has requested to take next year, discuss these selections, and reach out to your child's school counselor with any questions or concerns.

## **TRANSITIONING MIDDLE SCHOOL TO HIGH SCHOOL**

All eighth grade students will meet individually with their assigned school counselor to discuss their courses for ninth grade. During this meeting, students and their counselor will explore their 4-year high school plan as well as post-secondary goals and interests they have for themselves. Counselors will explain graduation requirements including the required number of credits, courses, and multiple pathways for graduation.

## *Visual Arts*

Satisfactory completion of one credit in Studio in Art may be used to meet the one credit of art or music required of ALL students to meet graduation requirements as prescribed by the New York State Education Department.

We believe the most common misconception students have about taking art classes is that you have to already be talented in the arts in order to take them. This is simply not true! Our philosophy is that...EFFORT, PARTICIPATION, ATTENDANCE and a GOOD ATTITUDE are more important than being a skilled artist at this age. That's what we are here for: To teach our students the skills and techniques they need to express themselves creatively within their individual abilities. We develop projects/courses that can cater to the more advanced students, as well as the children that need more guidance and practice.

College preparation is our biggest concern for those students interested in pursuing the arts as a career. Gaining basic knowledge, skills and appreciation for the arts is the goal for our students less interested in making the arts their career.

### **FOUNDATIONAL COURSE:**

#### **Studio in Art**

Grades 9 & 10

(Full Year 1 credit)

Prerequisite: None

#### **Course Description**

Studio in Art is the foundation for all other high school art courses. Students are taught the skills and techniques of how to use and investigate many art media, such as drawing, painting, printmaking, sculpture and photography.

*\*You need to take this before taking any other art electives.\**

### **INTRODUCTION ELECTIVE COURSES**

#### **Introduction to Drawing**

Grades 10 – 12

(Half Year .5 credits)

Prerequisite: Studio in Art or concurrent enrollment with.

#### **Course Description**

Always wanted to learn to draw? In this course, you are taught the techniques of drawing in depth including different techniques in Graphite, Charcoal, Marker, Colored Pencil, Oil Pastel, Collage and more!

#### **Introduction to Painting**

Grades 10 – 12

(Half Year .5 credits)

Prerequisite: Studio in Art or concurrent enrollment with.

#### **Course Description**

In this course, you are taught how to progress in your painting skills, including techniques in Watercolor, Inks, Acrylic and Oil Paint. You don't have to already be a great painter to take this course!

### **Introduction to Sculpture**

Grades 10 – 12

(Half Year .5 credits)

Prerequisite: Studio in Art or concurrent enrollment with.

#### **Course Description**

Do you love working with your hands and building with different types of materials? This course explores three-dimensional (3D) art through different mixed media (non-clay). We learn about space and form through exploration of wire, paper, cardboard, polymer, plaster and wire sculptures, among others!

### **Introduction to Ceramics**

Grades 10 – 12

Prerequisite: Studio in Art or concurrent enrollment with.

(Half Year .5 credits)

Prerequisite: Studio in Art or concurrent enrollment with.

Love getting messy with clay? In this course, we will investigate many techniques within ceramics including handbuilding and work on the potter's wheel. Students will learn different forms of construction, as well as surface treatments and glazing.

### **Media Arts**

Grades 10 – 12

Prerequisite: Studio in Art or concurrent enrollment with.

(Full Year 1 credit)

#### **Course Description**

The field of "Media Arts" includes Digital Photography, Adobe Photoshop and Printmaking - the triad of tools for Graphic Designers. Graphic Design is the career that designs advertisements, logos, t-shirts, websites and the other media around us. Along with learning the Adobe Suite, including skills in Illustration, Film and Animation, you will learn how to take and edit proper photographs for a well-rounded skill set.

## **INTERMEDIATE ART ELECTIVE COURSES:**

### **Intermediate Studio**

Grades 10 – 12

(Full Year 1 credit, option for Half Year .5 credit)

Prerequisite: Studio in Art (*It is recommended that some Beginner Electives are taken before this course, but could be taken ahead of time with Teacher Recommendation*)

#### **Course Description**

Intermediate Studio is the middle level art course to allow students to explore their own fine art-making and get to know the Artistic Process in a deeper, more meaningful way. Students may choose their own path in many media areas including, but not limited to: Drawing, Painting, Collage, Printmaking, Graphic Design, Photography OR Sculpture or Ceramics (or a mixture!).



This course can also be used for pre-portfolio development for students wishing to take AP Studio Art: 2D Design the following year. This course can be taken as a full year or every other day course. It can also be taken multiple school years.

### **ADVANCED ART ELECTIVE COURSES:**

#### **HVCC Credit Survey of Art History I & II**

(Distance Learning - Full Year Course)

#### **Prerequisite: None, *Any Student Grades 10-12 with Teacher Recommendation***

Most college programs require at least one Art or Art History Course to get your degree. Why not earn those credits while still in High School? We will be exploring the Art and culture from the ancient civilizations to the mid-gothic period in Survey I, and the late gothic period to modern art in Survey II, both through projects, reading, writing, analyzing and, most importantly, discussion! You will leave this course with 6 humanities credits from HVCC. Taking this course is highly recommended for a student wishing to pursue the Visual Arts/Design post-graduation.

#### **AP Studio Art: 2-D Design (Advanced Placement Studio Art in Two-Dimensional Design)**

(Full Year 1 credit)

Prerequisite: Intermediate Studio and/or Teacher Recommendation

**Course Description** This college-level course develops a well-rounded AP portfolio demonstrating understanding of 2D Design through drawing, printmaking, photography, graphics and the Art Elements & Principles of Design. Successful completion of this course can be used for the Alternate Pathway to Graduation.

### ***Career and Technical Education in Engineering and Technology***

#### **Design and Drawing for Production “DDP” (Fulfills H.S. Art/Music Elective)**

Grades 9-12

(Full year 1 credit)

#### **Course Description**

DDP provides students with opportunities to be creative and to apply your decision-making and problem-solving skills to various design problems. Each student will use powerful computer hardware and software (Inventor) to develop 3-D models of objects. Using this computer aided design system you will learn the design process by creating, analyzing, drawing, and producing a model.

#### **Materials Processing**

Grades 10-12

(Half Year .5 credit)

Prerequisite: None

#### **Course Description**

The Material Processing course is designed to give the learner a wide overview of materials and processes used to transform them. This course focuses on the classifying, properties, and processes of materials and the selection of those materials to be used in applications. Topics

explored in processes and materials used in metals, woods, plastics, ceramics, and composites. This course demonstrates unchanging processes used on different materials, as well as specific processes used on certain materials. This course also offers a selection of the use of materials in different applications. Special attention is given to safety in the workshop environment. Major activities include reports, analysis of materials, hands on projects, minor hands on projects, and safe techniques used to process materials.

### **Webpage Design**

Grades 11-12

(Half Year .5 credit)

*\*Cap of 20 students*

#### **Course Description**

Web Design is an introductory course where students will learn the fundamentals of designing web pages that are functional, accessible, extensible, and aesthetically pleasing.

Students will:

- Build web pages using **HTML5** with links, images, tables, and forms.
- Use style sheets (**CSS3**) to add colors, backgrounds, text format, page layout, and basic animations.
- Design web sites that display properly on **mobile** and touch screen devices.
- Learn about and build sites that meet **accessibility** requirements.

### **ADVANCED CTE/TECHNOLOGY ELECTIVE COURSES:**

#### **HVCC CADD 100 Topics in 2D Auto CAD**

Grades: 11-12

(Full Year 1 credit)

Prerequisite: None

#### **Course Description**

Utilizing current computer aided drafting (CAD) software students will apply standard drafting theory to a diverse set of two-dimensional computer aided drafting applications. Topics included in this comprehensive, introductory level course are: preliminary CAD software techniques, basic computer skills, creation and editing of geometry, plotting, single and multiple views of drawings, coordinate systems, dimensioning and basic block use.

#### **HVCC Digital Electronics: Eligible for 4 HVCC College Credits, School of Engineering**

Grades 11-12

(Full Year 1 credit)

#### **Course Description**

An introductory course in digital systems. The topics covered include: number systems, Boolean algebra, logic gates, logic simplification, implementation and analysis of digital systems, flip-flops, and counters. Students will explore topics through lectures reinforced by hands-on circuitry labs.

## **CSIS 110: Introduction to Computer Science with Python and Multimedia**

Grades 11-12

(Full Year 1 credit)

### **Course Description**

This course is a broad introduction to a variety of fundamental topics in computer science through the theme of multimedia. Using the Python programming language, students will express themselves creatively and solve problems involving images, sounds, and animations. Students are also introduced to important computer science topics including data representation, Boolean logic, gates, and circuits, computer organization, machine/assembly language, operating systems, artificial intelligence, and history and societal impact of computing.

## *English*

**All students must pass four credits of English and the New York State Comprehensive English Regents Examination to meet requirements for graduation.**

### **English 9**

Grade 9

(Full Year 1 credit)

#### **Course Description**

This is the first of the 3 years' preparation for the English Regents Examination, administered at the end of the third year of high school English. Emphasis is upon the reading and interpretation of various types of texts, including classical literature, short stories, poetry, investigative journalism, visual texts, and more. Writing skills in a variety of rhetorical contexts are developed and strengthened, in particular in the genre of argument. Students will engage in a variety of conversations and debates in high-interest topics for which they must study a variety of positions and perspectives, determine their own position, and use the "moves" of argument writing. Other genres of writing students will study include expository, letter-writing, and free writing. Vocabulary, spelling, and grammar conventions are studied. Students are expected to work collaboratively, consistently, and conscientiously.

### **English 9 Honors**

Grade 9

(Full Year 1 credit)

#### **Course Description**

This course takes the English 9 requirements and some of the texts and adds additional rigor and enrichment to the classroom experiences. Students will use more complex texts, delve deeper into topics and discussions, and be expected to read and write at higher levels while exhibiting greater stamina.

### **English 10**

Grade 10

(Full Year 1 credit)

#### **Course Description**

The primary goal of English 10 is to integrate learning with engaging activities that promote fun ways to strengthen student's depth of knowledge regarding worldly themes. Many interesting units serve as supplements to personal exploration and interaction with literature—both classic and modern. From the shortest stories to the longest novels, with plenty of pit stops in between; we have a full load of reading and analyzing ahead of us. Lectures and notes will be taken regularly, but they are not the best way for everyone to learn. Students can be ready to get up and move around as they weave their own ideas and their own learning strategies into the dynamic curriculum. Writing is a central focus in this course and students will be encouraged to explore creative writing outlets as well as practice more formal and analytical styles of writing. Through analysis of songs, poems, short stories, novels, videos, movies, and TED Talks, students will exit English 10 with a broader mindset that is ready to engage with the modern world. Important themes discussed throughout the year are Personal Narrative, Self-Discovery, The American Dream, and Perception vs. Reality, Morality, Ambition, Corruption, Young Adult Life, School

Society, Acceptance, Violence, and Bullying. Key novels we will focus on are: *Jellicoe Road* by Melina Marchetta, *Monster* by Walter Dean Myers, *Of Mice and Men* by John Steinbeck, *Macbeth* by William Shakespeare, and *Speak* by Laurie Halse Anderson.

## **English 10 Honors**

Grade 10

(Full Year 1 credit)

### **Course Description**

The grade 10 honors course will be designed to challenge those students coming from ninth grade who demonstrate a desire for a superior skill level in reading and writing.

Objectives: There will be less time reviewing basic skills and more time on analytical and critical discussions of literature. There will be a broader range of literary works covered, which will enable the students to make comparisons between different writers' perspectives on common themes. Because of this broader range of literary examples studied, the student will be able to "see" how these relate to other fields of study such as global studies, science, etc. There will be four major writing assignments. These will relate to the themes covered in each quarter. The major literary forms covered will include: biographies, fiction, critical essays, non-fiction works, and drama.

## **English 11**

Grade 11

(Full Year 1 credit)

### **Course Description**

"The New York State grade 11 curriculum...continue[s] to develop students' skills in analyzing complex literary and informational texts as students delve deeply into works by acclaimed authors and historical figures.... Through the study of a variety of text types and media, students build knowledge, analyze ideas, delineate arguments, and develop writing, collaboration, and communication skills.... Students read, discuss, and analyze literary and nonfiction texts focusing on how authors relate textual elements, such as plot, character, and central ideas, within a text.... Key protocols and routines for reading, writing, and discussion will continue throughout the year.... Students read, discuss, and analyze literary and informational texts, focusing on how authors use word choice and rhetoric to develop ideas and advance their points of view and purposes.... Students engage in an inquiry-based, iterative process for research. Building on [earlier] work with evidence-based analysis..., students explore topics that lend themselves to multiple positions and perspectives. Students gather and analyze research based on vetted sources to establish a position of their own.... Students read, discuss, and analyze literary texts, focusing on authors' choices in developing and relating textual elements such as character development, point of view, and central ideas, while also considering how a text's structure conveys meaning and creates aesthetic impact. Additionally, students learn and practice narrative writing techniques as they examine the techniques of the authors whose stories students analyze."

Students self-select independent books based on interests and reading levels; they are expected to read independent texts several times a week. Vocabulary and grammar are also studied. Regents practice is incorporated, and the Common Core ELA Regents examination is administered.

### **AP English Literature and Composition**

Grade 12

(Full Year 1 credit)

#### **Course Description**

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

Students enrolled in this course will be expected to take the AP Literature and Composition exam in May (cost of exam for the 2018-19 school year was \$85/\$53 for students qualifying for F&R lunch).

### **ENGLISH DEPARTMENT ELECTIVES**

#### **The Individual in Society**

Grade 10-12

(Half Year .5 credit)

#### **Course Description**

The Individual in Society is an elective English course that prompts students along a journey of introspection and self-discovery through the modern lens of society. With roots and philosophy stemming from both sociology and literature, the course promotes societal thinking while students ask themselves just what kind of influencer they want to be. Primarily taught through discussion and small projects, The Individual in Society engages with the concept of change, who one wants to be, how one wants to act, and how the world is influenced by individual choice and reason. In this class students will be encouraged to push boundaries and explore beyond traditional conventions of the classroom. Thinking of modern issues, seniors will have the opportunity to interact with their learning and tailor certain elements to their own personal interests. Using English and literary conventions as background tools, seniors will construct a unique learning experience that prepares them for the next step in their young adult lives.

#### **Creative Writing**

Grade 10-12

Half Year .5 credit

#### **Course Description**

This is a half-year course to be offered to seniors as half of an English 12 credit. The course requires students to explore and complete writing in a variety of genres, including poetry,

creative nonfiction, short fiction, and drama. The writing process involves peer response. Reading from a variety of contemporary literature is also required. At the end of the course, the class may publish a compilation of student work.

### **Media Matters**

Grades 10-12

(Distance Learning - Half Year .5 credit)

#### **Course Description**

Media Matters is an inquiry into the role of the news media in our country. Using a wide-range of texts, including news articles, interviews, and film, students will study the ten central tenets of journalism and how they are demonstrated or distorted by a wide range of press. Students will learn how to guard against echo chambers, assess a site's credibility, and search for shards of truth in the abundance of information that inundates us by the minute. Students will learn how they can use the foundations of journalism to be more aware, informed, and empowered citizens.

## *Foreign Language*

### **Spanish Culture**

Grades 9-10

(Full Year 1 credit)

#### **Course Description**

Students will learn about the culture and geography of Spanish speaking countries through the use of readings, movies, and documentaries. They will do weekly current events about a Spanish speaking country. This course is only offered to students that did not successfully complete Spanish 1A and 1B or have never taken a second language.

### **Spanish IA**

Grade 7

#### **Course Description**

This course is an introduction to the basics of the Spanish language and cultures. The four primary language skills of hearing, speaking, reading and writing will be covered. Students will learn grammar and vocabulary through reading short stories. They will develop speaking skills through conversation and working with partners and in groups. Students will explore Hispanic cultures.

### **Spanish IB**

Grades 8

#### **Course Description**

This course is a continuation of Spanish 1A. The completion of both 1A and 1B give students their first HS credit of Spanish. The four primary language skills of hearing, speaking, reading and writing will be covered. Students are expected to learn vocabulary. They are also expected to speak conversationally with partners and in groups. Students will explore Hispanic geography and cultures. **The completion of Spanish 1A and 1B results in 1 high school credit of a foreign language.**

### **Spanish II**

Grades 9-12

(Full Year 1 credit)

Prerequisite: Spanish I

#### **Course Description**

Spanish II focuses on the development of communication and comprehension skills. Learning activities are similar to Spanish I. Knowledge of vocabulary and commonly used idioms is expanded. Emphasis is placed on grammar. Conversational proficiency is developed through the use of dialogues. Students will increase their language skills through reading chapter books in Spanish.



### **Spanish III**

Grades 10-12

(Full Year 1 credit)

Prerequisite: Spanish II

#### **Course Description**

In Spanish III all four skills (understanding, speaking, reading and writing) are integrated. Students will read and use authentic sources from the target language. They will learn about the geography, history, and culture of Spanish speaking countries. Students will focus on speaking skills through oral readings, conversation and presentations.

### **ADVANCED FOREIGN LANGUAGE ELECTIVES**

#### **HVCC Spanish 200 – Language and Culture IV**

Grades 11-12

Prerequisite: Spanish III

#### **Course Description**

This class offers a review and extension of grammar and concentrates on improving the student's vocabulary, conversational fluency and reading skills through the discussion of selected readings in Spanish. Classroom discussions, conducted primarily in Spanish, are supplemented with exercises from the textbook. As part of the HVCC College in the High School program students wanting to receive college credit for the course will be required to complete the HVCC application and pay for the credits.

#### **HVCC Spanish 201 – Language and Culture V**

Grades 12

Prerequisite: Spanish IV

#### **Course Description**

A continuation of Spanish IV/HVCC Span200, this course completes the review of Spanish grammar and provides more reading of Spanish works. Classroom discussions, conducted primarily in Spanish, concern classroom readings and Spanish customs and culture. This course is primarily designed for students who have completed Spanish III or no more than three or four years in high school. As part of the HVCC College in the High School program students wanting to receive college credit for the course will be required to complete the HVCC application and pay for the credits.

## *Mathematics*

*All students must earn three credits in mathematics to meet requirements for graduation with a Regents diploma. All students who wish to receive an Advanced Regents diploma must successfully complete Algebra, Geometry and Advanced Algebra and Trigonometry and pass the state regents exams.*

### **MATH REGENTS PREPARATION PROGRAM**

*The college bound students should recognize that a regents program in mathematics might not fulfill the requirements for admission into scientific and technical programs at many local colleges.*

#### **Algebra I Common Core**

Grades 9-12

(Full Year 1 credit)

##### **Course Description**

This course covers the following topics: the language and properties of algebra; basic operations with real numbers; solving and graphing linear equations and inequalities; basic operations with polynomials; factoring polynomials; solving and graphing quadratic equations; basic operations with radical expressions; basic probability and statistics. This course is offered over one or two years. In order to receive a high school diploma, a student must pass both the course and the required Regents exam.

#### **Algebra Year 1 Common Core**

Grades 9-12

(Full Year 1 credit)

##### **Course Description**

This course covers the first half of the topics covered in Common Core Algebra I. This is the first year of a two-year course that ends with a Regents exam in the second year.

#### **Algebra Year 2 Common Core**

Grades 9-12

(Full Year 1 credit)

##### **Course Description**

This course covers the second half of the topics covered in Common Core Algebra I. This is the second year of a two-year course that ends with a Regents exam in June.

#### **Algebra II Common Core**

Grades 9-12

(Full Year 1 credit)

##### **Course Description**

This course covers the following topics: Review of Algebraic Essentials; Functions as the cornerstones of Algebra II; Linear Functions, equations, and their Algebra; Exponential and logarithmic functions; Sequences and Series; Quadratic functions and their algebra; Radicals and

the quadratic formula; Complex numbers; Polynomial and rational functions; Circular Functions; Probability and Statistics. This is a one-year course that ends with a Regents exam.

### **Geometry - Regents**

Grades 9-12

(Full Year 1 credit)

Prerequisites: Successful completion of Algebra Regents

#### **Course Description**

This course covers the following topics: Points, lines, planes, and angles; inductive and deductive reasoning and proofs; parallel and perpendicular lines; Congruent Triangles; triangle parts and relationships; similar triangles and polygons; right triangle trigonometry; properties of quadrilaterals; transformations; circle parts and relationships; area of polygons and circles; surface area and volume of three dimensional figures. This course is a one-year course with a Regents exam at the end.

### **General Geometry - Non-regents**

Grades 9 – 12

(Full Year 1 credit)

#### **Course Description**

This course covers all of the topics covered in Regents Geometry except for two column proofs. This is a one year course that ends with a final exam in June.

### **Applied Mathematics**

Grades 10 - 12

(Distance Learning - Full Year 1 credit)

Prerequisite: Currently taking, or having completed, Algebra 2 Common Core

#### **Course Description**

This course focuses on applied and theoretical mathematical topics. Topics can include (but are not limited to):

Non-Euclidean Geometries

Alice in Wonderland

Real life applications of mathematics

College life skills (budgeting)

SAT Prep

College Math Prep

Nspire calculator skills

Fractals/Chaos theory

Statistics and Probability

Paradoxes

Math in the Movies

Infinity

Coding

Students should be willing to work in groups, have in depth conversations in class and online, problem solve and apply theory to real world situations, use dynamic math software including the Ti-Nspire, Geogebra, and Desmos, and complete projects as part of their grade. There will also be an emphasis on reading and writing about mathematical concepts incorporated into the class.

The format and majority of the topics of this course will be chosen by the students both at the beginning of the year, and throughout the year, with a focus on Non-Euclidean Geometries and an analysis of Alice's Adventures in Wonderland as a culminating project. There will be flexibility in due dates and types of assignments throughout the course, as we look to build connections between Mathematics and student's individual interests.

### **Consumer Math**

Grade 10-12

(Full Year 1 credit)

#### **Course Description**

This full year, one credit Math course allows students to gain knowledge and application of basic financial principles in order to make sound financial life choices. The *Consumer Math* curriculum will help students to learn life skills through technology, discussions, writing, and real working examples to create a more interactive curriculum that will be beneficial to students.

### **Pre-Calculus**

Grade 11-12

(Full Year 1 credit)

Prerequisites: Successful completion of Algebra II

#### **Course Description**

Precalculus is a course designed for the math/science oriented college-bound student. Topics of study include but are not limited to trigonometry, probability, matrices and determinants, polynomial functions, and conic sections. This course would be followed by HVCC Precalculus and Calculus.

## **ADVANCED MATH ELECTIVES**

### **HVCC Math 170 - PreCalculus**

Grade 11-12

(May be taken without college credit)

#### **Course Descriptions**

Math 170 - PreCalculus

This course explores the study of algebraic and transcendental functions and their graphs, complex numbers, DeMoivre's Theorem, and applications of these concepts.

*NOTE: A graphing calculator may be required and will be discussed at the first class.*

## **HVCC Math 180 - Calculus I**

Grade 11 and 12

Prerequisite: *MATH 170*, Precalculus or the equivalent.

Topics covered include but are not limited to: limits, continuity, differentiation and integration of elementary functions (including transcendentals), with applications to curve sketching, optimization problems, related rates, area under a curve problems, and solutions to elementary differential equations.

***NOTE:** A graphing calculator may be required and will be discussed at the first class.*

## **Finite Math (Siena College)**

**Grade 11-12**

(Full Year 1 credit)

*You also receive 3 college math credits from Siena College for the course.*

**Prerequisite:** Regents Geometry

### **Description:**

In this class we will work on how to build our confidence with public speaking and develop our skills in creating well thought out presentations. We'll learn about the different types of math that we won't see in a typical classroom and have in-depth decisions about mathematical problems/challenges. Students will work together in groups and communicate to apply theory and reasoning to hands-on, real life, interesting (even fun at some points), and applicable math. The course is more project based, teamwork based, work with freedom to learn what you want.

*This course focuses on applied and theoretical mathematical topics. Topics from the textbook can include (but are not limited to):*

**Ch.1 Getting Started (Patterns and relationships)**

**Ch.2 Algorithms, Functions and Equations**

**Ch.3 Dimensional Analysis**

**Ch.4 Money Matters**

**Ch.5 The Science of secrecy**

**Ch.6 Calculus: The Smallest Pebble on the Beach**

**Ch.7 Mathematical Models**

**Ch.8 Arithmetic**

**Ch.9 Powers, logarithms and Exponential Change**

**Ch.10 Alternative Geometries**

*Additional topics that we study are:*

**Math related to your hobbies and interests**

**Puzzles**

**Coding**

**Real life applications of mathematics**

**Statistics and Probability**

**Paradoxes**

**Math in the Movies**

**Non-Euclidean Geometries**

**Alice in Wonderland**

**Requirements: 3 College Approved Exams from Siena College**

**Math nights:** For math nights we create math related games for students, and for the public to learn and have fun, these games will show them that math can be fun and interesting. The math nights are a way to show the public what we've been learning. The course requires us to complete at least one per year.

**Movie/book assignments for the quarter:** In this class you will research a movie and a book then you will make a presentation on how math was related to the book or movie. In the presentation you should implement an activity that gets the class involved and interested.

## ***Music***

***Satisfactory completion of Music Theory, Music in Our Lives, or one credit of Band, Chorus or Guitar meets the one credit of art or music required of all students to meet graduation requirements as prescribed by the NYS Education Department.***

### **High School Band**

Grades 9-12

(Half Year .5 credit)

#### **Course Description**

- Study and perform music of diverse time eras, cultures, religions, and styles.
- Expand on music literacy, knowledge of music history, and theory.
- Demonstrate proper playing technique and instrument care including breath support, good tone, and maintenance.
- Develop habits that encourage success and professionalism within and outside the music classroom.

### **Music Appreciation**

(Full Year 1 credit)

#### **Course Description**

- Listen and respond to a wide variety of music genres.
- Improve music literacy through performance on keyboard or guitar.
- Understanding music history.
- Understanding music theory.
- Encourage creativity through improvisation and compositions.

### **High School Chorus**

Grades 9-12

(Half Year .5 credit)

#### **Course Description**

- Study and perform music of diverse time eras, cultures, religions, and styles.
- Expand on music literacy, knowledge of music history, theory and aural skills.
- Demonstrate proper singing technique and vocal care including breath support, good tone and diction, and proper voice placement.
- Develop habits that encourage success and professionalism within and outside the choral classroom.

### **High School Chamber Choir**

Grades 9-12

(Half Year .5 credit)

#### **Course Description**

- Study a variety of genres of choral music.
- Fostering tonal independence with mostly a cappella performance.
- Understanding of music literacy when relating to a variety of genres.
- Provide additional performance opportunities.

## **Jazz Band**

Grades 9-12

(Half Year .5 credit)

Prerequisites: Minimum of two years experience playing their instrument

### **Course Description**

Program Goals:

- Study a variety of genres of music (including but not limited to: Jazz, Blues, Swing, Rock, Pop, etc)
- Fostering solo performance and improvisational skills on their primary/secondary instruments
- Understanding of music literacy when relating to a variety of genres (including but not limited to: Jazz, Blues, Swing, Rock, Pop)
- Provide additional performance opportunities

## **Advanced Musical Theatre**

Grades 10-12

(Half Year .5 credit)

Prerequisites: Successful completion of Intro to Musical Theatre

### **Course Description**

Program Goals:

- Use knowledge learned in Intro to Theatre to produce a well-conceived musical production.
- Develop time management skills through creating a rehearsal calendar & coordinating performance dates
- Develop budgetary skills through ordering materials, supplies and creating a budget
- Develop production staff skills through successful completion of production job title



## ***Physical Education***

***The physical education program focuses on the study, practice and application of the art and science of human movement. The goal of this course is to engage, challenge, and motivate the student in a variety of sports, recreational skills, and fitness activities in a safe environment that encourages character building and lifelong fitness.***

### **NYS Learning Standards**

**Standard 1:** Personal Health and Fitness; Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.

**Standard 2:** A Safe and Healthy Environment; Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

**Standard 3:** Resource Management; Students will understand and be able to manage their personal and community resources.

### **Character Education**

Through our physical education program, the students will be given the opportunity to demonstrate various character education traits. These traits will be displayed through various activities such as skill development, knowledge of rules, and team play. These character education traits are identified as the following: *Trustworthiness, Respect, Responsibility, Fairness, Caring, Citizenship, Honesty, Courage, Diligence, and Integrity.*

### **Objectives:**

- Possess a lifelong desire to maintain a healthy level of physical fitness and wellness.
- Practice safety and risk reduction.
- Demonstrate good character in all activities.
- Develop respect, compassion, and tolerance for other students.
- Take responsibility for his/her own actions.
- Appreciate teamwork and the group process.

### **Mission Statement**

The mission of the physical education program at BCSD is to prepare students for a lifetime of health and well-being through active participation in a wide variety of team and individual sports, recreational, lifetime and fitness activities. Active participation will provide an opportunity for students to become competent in many and proficient in a few of these activities. The ability to confidently and knowledgeable engage in physical activity encourages a positive attitude that results in lifelong fitness and movement.

### **Required Materials**

- Shorts and tee shirt
- Sweatpants/yoga pants
- Sweatshirt or Hoodie
- Sneakers
- Hand Sanitizer
- Deodorant
- Hair Ties (if applicable)
- Notebook

### **Expectations**

- To have fun
- To challenge one's physical ability while maintaining self control and the safety of others
- Participation in each and every class
- Preparedness in each and every class
- Fair play
- To put forth effort
- Growth and achievement
- **Athletes who do not participate in physical education class will not be allowed to participate in practices/athletic events that day.**

### **Physical Education 9/10**

Grades 9-10

(Half Year .5 credit)

#### **Course Description:**

The focus of physical education I is to provide students the opportunity to demonstrate the knowledge and skills to achieve a health enhancing level of physical activity and fitness. We will be focusing on ensuring students recognize the value of physical activity for overall wellness, enjoyment, challenge, and/or self-expression. Evaluation will be based on students demonstrating competency in a variety of motor skills, dance and movement patterns (sport skills, dance movement patterns, fitness and lifetime activities), as well as, exhibiting social and personal behavior that respects self and others.

### **Physical Education 11/12**

Grades 11-12

(Half Year .5 credit)

#### **Course Description:**

The focus of physical education II is for students to apply principles, concepts and tactics in a variety of sports, dance and movement activities ( locomotor, non locomotor, communicative, and manipulative skills). Students will recognize the value of physical activity for overall wellness, enjoyment, challenge, and/or self-expression, while exhibiting social and personal behavior that respects self and others. Students will leave this class with the knowledge and

understanding to recognize career opportunities and manage personal and community resources related to physical activity and fitness to achieve and maintain overall wellness.

## ***High School Health***

### **Health**

Grade 10 & 11  
(Half Year .5 credit)

#### **Course Description**

- The purpose of this course is to provide students with information to make healthy choices, understand the benefits of a healthy lifestyle, identify risky behavior, and manage personal physical, mental and social health.
- Offer the necessary skill to access valid safe and reliable resources to obtain accurate health products and services.
- Understand the connection of one's physical, emotional and social health in regard to one's overall well- being and quality of life

#### **Required Material**

Folder with pockets and tabs  
Journal  
Access to the school's computer via computer use form  
USB

#### **Grading Policy**

Project and Assessment-20%  
Daily Participation-50%  
Current Events-10%  
Notebook & Journal-20%

#### **Class Requirements**

Preparedness  
Participation  
Reflection  
Self-evaluation  
Class discussion  
Demonstration of understanding of the material

#### **Functional Knowledge**

Physical activity and nutrition  
HIV/AIDS  
Sexual risk  
Tobacco, alcohol and other drugs  
Family life/relationships/ sexual health  
Unintentional injury  
Violence prevention

Stress, anger, depression and suicide

### **Responding to Emergencies**

Requirement: Students must be 16 years of age

20 weeks (Half Year .5 credit)

First Aid/CPR/AED Certification Course

#### **Course Description**

The purpose of this course is to help participants recognize and respond appropriately to cardiac, breathing and first aid emergencies until advanced medical personnel arrive using American Red Cross Approved curricula written lessons, practicum, scenario re-enactment and video clips

#### **Course Requirements:**

- **Students must be at least 16 years of age**
- Students must be in attendance for a minimum of 85% of the classes (**See attached contract**)
- To actively participate in each and every class
- To know the three steps of a cardiac, breathing or first aid emergency
- To make a commitment to learn, understand and administer the appropriate care until advanced medical personnel arrives
- **Three Hours of community service TBD.** clean and maintain first aid equipment, inventory and replenish coaches' first aid kits, assist coaches as a first aid manager, promote safety and violence prevention, mandatory one hour of service at a community firehouse
- To score an 80 or higher on the ARC responding to emergencies examination

## **Science**

*Pursuant to Section 207 of the NYS Education Law, Section 8.2(c) of the rules of the Board of Regents states, “only those persons who have satisfactorily met the laboratory requirements as stated in the State Syllabus for a science shall be admitted to the Regents examination in such science.”*

*Successful completion of the State mandated laboratory requirement will be satisfied when the student has completed 1200 minutes of hands-on laboratory experience.*

*All students must earn three units of credit in science to meet requirements for graduation with a Regents diploma. Of the three units, one must be from the Living Environment curriculum and one from the Physical Setting.*

*Students who desire an Advanced Regents diploma must earn three units of credit in any of the four Regents Science courses including the passing of two New York State Regents examinations in respective Science courses (One Physical Setting and Living Environment).*

### **Earth Science**

Grades 10-12

(Full Year 1 credit)

(1 Physical Setting Credit)

#### **Course Description**

This course provides students with a better understanding of the constant changes occurring on their home planet and studies the relationship between Earth and other objects in our solar system and universe. This course follows the New York Curriculum. There is a heavy emphasis on laboratory work and reports. A Regents examination is required and there is a mandatory lab requirement in order to qualify for the Regents exam in Earth Science. Areas of study include: Physical geology, historical geology, astronomy, climatology, meteorology, and oceanography. Success in this course requires that the student write extensively and do homework regularly. Final examination: NYS Regents Examination

### **General Earth Science (Non-regents)**

Grade 10

Prerequisites: Regents Living Environment

#### **Course Description**

This course provides students with a better understanding of the constant changes occurring on their home planet. Students will study the natural phenomenon that are experienced by the Earth and the relationship between Earth and other objects in our solar system and universe. Coursework will include laboratory work, hands on investigations and projects.

Final examination will consist of a final project.

### **Living Environment**

Grades 9-12

(Full Year 1 credit)

(1 Living Environment credit)

### **Course Description**

This is a laboratory course, which also includes lectures and class discussions. Topics covered include: cells, biochemistry, plants, and animals, reproduction, genetics, evolution, and ecology. The final examination is the New York State Regents Examination in Living Environment. The student is also required to complete a specific number of laboratory experiments. A Regents examination is required.

Great emphasis is placed on language usage, reading comprehension, and writing. Regular outside – of – class preparation is essential.

Final examination: NYS Regents Examination

### **Chemistry**

Grades 10-12

(Full Year 1 credit)

(1 Physical Science credit)

Prerequisite: *Satisfactory completion of the Regents exam in Earth Science, Algebra and Geometry, Living Environment*

*Recommendation: Successful completion of algebra and geometry, including a passing grade on the algebra regent's exam and an average of 70 or better in a regent's science class. Students wishing to take chemistry concurrently with geometry should have achieved a final average of 85 or better in a regent's science course. A student who has achieved less than 85 in Algebra may expect considerable difficulty.*

### **Course Description**

The chemistry curriculum focuses on matter, its composition, properties and changes, and the energy relationships in chemical change. This is a comprehensive chemistry course dealing with the substances of the physical world and their interactions at the particle level.

Topics include: atomic structure, chemical bonding, periodic properties, acid-base chemistry, electrochemistry, and organic chemistry. Chemistry classes are scheduled to meet the state laboratory requirements. A Regents examination is required. Considerable outside-of-class preparation is required.

**Final examination: NYS Regents Examination**

### **Physics**

Grades 11-12

(Full Year 1 credit)

(1 Physical Science credit)

Prerequisite: Algebra 2/Trigonometry, Chemistry or 2 credits in science and teacher recommendation.

Recommendation: Algebra including a passing grade on Geometry regents examination OR have passed Algebra2/Trigonometry. All physics students must be enrolled in a math course.

### **Course Description**

Physics represents a comprehensive curriculum including the principles of mechanics, sound, light, electricity, magnetism, and atomic physics. Students planning to take this course should be well grounded in the mathematical skills of Algebra and the Trigonometry of right triangles. The content and methods of this course are indispensable components of all four year college programs in engineering and the physical sciences and many two-year technical programs.

Physics classes are scheduled to meet the laboratory requirements. A Regents examination is required.

**Final examination: NYS Regents Examination.**

### **General Physical Science**

Grades 11-12

(Full Year - 1 credit)

Prerequisites: 1 year life science and 1 year physical science

#### **Course Description:**

Emphasizes application and science skills needed to understand the physical worlds we live in. Students will utilize technology, laboratory activities, problem-solving and critical-thinking skills to enhance understanding and application of scientific reasoning. Students will apply engineering practices to design and refine devices that employ scientific principles such as energy and momentum. This course includes concepts from physics and chemistry. Students will learn the basic concepts of Newton's laws, energy, light, structure of matter, chemical equations, etc.

**Final exam will be project-based.**

### **Marine Biology**

Grades 10-12

(Half Year .5 credit) (1/2 Living Environment credit)

Prerequisite: Two science credits, one must be Regents Biology/Living Environment and a passing grade on a Regents science examination OR successful completion of BOTH the Living Environment and Earth Science or General Science.

#### **Course Description**

The theme of this course will be meeting the challenges presented to organisms by the marine environment. The course will provide an overview of the physical marine environment including geography, physics, and chemistry of the ocean. Students will be introduced to the taxonomy and anatomy of the organisms with an emphasis on those that appear in the marine environment. Students will conduct lab activities, study and maintain a marine habitat, and learn about careers in this field of science whose subject covers over 70% of our planet. This course is designed to fulfill the .5 credit of the 3 credit science requirements.

Final examination: Portfolio of student work and observations of marine environment, in addition to a written exam.

### **AP Chemistry**

Grade 12

(Full Year 1 credit)

Prerequisite: Successful completion of Regents Chemistry with 80% or better, final student average, teacher recommendation, and successful completion of Geometry.

### **Course Description**

AP Chemistry is a college level course designed as a second chemistry course for high school students. Many topics in the course will be extensions of those studied in Regents chemistry. Such topics as stoichiometry, chemical kinetics and chemical thermodynamics will be studied in depth with a strong emphasis on mathematical models and problem solving. Students must take the AP exam as part of this course (approximate test fee \$86.) Financial help is available to students with special needs. A strong math background is necessary for success in this course.

### **Science Department Independent Studies**

#### **Freshwater Studies**

Grades: 11-12

(Full Year .5 credit)

*Prerequisites:* Successful completion of Regents Living Environment and Earth Science (regents or non-regents)

#### **Course Description**

This is an independent study course that is pass/fail. This course is designed for students that are interested in environmental science and want to learn about our local freshwater ecosystems. Coursework will include setting up and maintaining freshwater ecosystems and monitoring the health of all organisms in the ecosystems.

#### **Independent Study in Science**

Grades: 11-12

(Full Year .5 credit)

*Prerequisites:* Successful completion of three credits in science or two credits in science with a corequisite of a third.

#### **Course Description**

Intended as an enrichment course for students seeking a chance to explore a specific topic in detail. This is an opportunity for upperclassmen to explore a long term project in science with a focus on a specific process with a desired outcome. This may include simple aquaculture or husbandry projects as well as genuine scientific research. The course is good for half pass/fail credit in science and is not intended to replace a core science requirement. Entry into the course will require a proposal of project by the student due to the teacher of record before the conclusion of the previous school year. The proposal will include a goal for the project, a description of work to be done throughout the course and a plan for reaching that goal. The course will require record keeping of work performed throughout the project as well as a final, formal, presentation of results. Work for this class is conducted outside the student's regular school day.



## ***Social Studies***

***All students must earn four credits by passing Global History I, II, U.S. History and Government, Economics and Participation in Government. In addition, all students must pass a New York State Regents examination in U.S. History and Government in grade 11 and a New York State Regents examination in Global History at the end of grade 10.***

Global History I and Global History II are a requirement for all high school students. The New York State Regents examination is administered at the completion of Global History II.

### **Global History I**

Grades 9

(Full Year 1 credit)

#### **Course Description**

The Global History curriculum is covered in two grade levels: 9 and 10. Global History I will provide 9<sup>th</sup> grade students an understanding of social studies standards according to history, geography, economics and civics. Global History I topics include introduction and examination of ancient world civilizations and belief systems; expansion, exchange and encounters among world civilizations; global interactions and the first Global Age.

### **Global History II**

Grade 10

(Full Year 1 credit)

Prerequisite: Global History I

#### **Course Description**

In the second year of the curriculum, students enrolled in Global History II study the following topics: An Age of Revolutions, A Half-Century of Crisis and Achievement, The 20<sup>th</sup> Century since 1945 and Global Connections and Interaction.

### **U.S. History & Government**

Grade 11

(Full Year 1 credit)

Prerequisite: Global Studies II

#### **Course Description**

This course is designed to provide a solid background in American History in order to prepare the student for citizenship in the 21<sup>st</sup> Century. The focus is on the thirteen enduring constitutional issues: National Power, Federalism, Judicial Power and Policy, The Constitution, Civil Liberties, Equality, Presidential Power, Separation of Powers, Property Rights, Rights of Women, and Constitutional change. Research projects and term papers are assigned for greater in-depth study in American History. A student must pass the Regents Examination in U. S. History and Government in order to receive a *high* school diploma. A review book will be offered for purchase in the fall.

## **Participation in Government**

Grade 12

(Half Year .5 credit)

Prerequisite: U. S. History – Government

### **Course Description**

This course is required for all high school students getting a regents diploma. The student will respond to local, state, national, and international issues and participate in representative public policy issues from a decision-making perspective. As a culmination of the social studies program, the goals for this course include the development of individuals who have the characteristics that define a citizen: civic-mindedness, civic intelligence, and civic literacy.

## **Economics**

Grade 12

(Half Year .5 credit)

Prerequisite: U. S. History—Government

### **Course Description**

This course will provide students with an understanding of the fundamental concepts and principles of economics that are a basic part of the American economic system. Students will gain the knowledge and skills necessary to function as informed and economically literate citizens in our society and in the world.

These essential questions are the core of the course, as well as immediate short and long term causes.

## **World War II**

Grade 12

(Distance Learning - Half Year .5 credit)

### **Course Description**

Course Scope: World War II shaped the world as we know it today. It was the largest war in history fought by the “Greatest Generation” and the closest thing to total war that the world has ever seen.

Although technology has had an increasingly larger impact on warfare throughout the course of history, World War II is history's first "high-tech" war. Virtually every technological aspect of warfare as we know it today--including attack from space--was present in some rudimentary form in World War II.

This course deals with the entire scope of World War II, the struggle as it played out around the globe -- in essence, the war against the Axis partners. The course focuses primarily on the land and naval campaigns in the Pacific and Asia, the German conquest of Western Europe, the struggle between Germany and the Soviet Union in the east, and the final liberation of Europe made possible by the Allied landings at Normandy and the Soviet advance. You will examine the strategy, organization, equipment, and leadership of the German, Japanese, Soviet, and Western

Allied Armies. You will also study the operations and the major battles of the war from 1939 to 1945.

You will answer the following questions throughout this course:

- Explain the origins of World War II in Europe and Asia as they grew out of the imperfect peace that followed the first World War and describe the revolution in military operations that took place between 1919 and 1939.
- Define the concept of Blitzkrieg; define the German operational strategy for Operation Barbarosa and explain the flaws that ultimately led to its failure; also describe the magnitude of the war in the east, and explain why and how the Soviets played the major role in the defeat of Nazi Germany.
- Evaluate the North African, Sicilian, and Italian campaigns and explain the strategic objectives and shortcomings of both sides.
- Appraise the influence of the Battle of the Atlantic on the ground campaign, and explain how the Allies managed to win a campaign they could have lost.
- Analyze American amphibious warfare doctrine and operations including the crucial roles of air and sea power while comparing and contrasting United States and Japanese naval strategy in the Pacific.
- Examine the Allied operational issues overcome to land in Normandy and the subsequent campaign across Europe and the German operational strategy for the Ardennes Offensive, and explain its ultimate failure.
- Describe the United States strategy in Japan.
- Characterize the war's effect on the people of the world and the immediate aftermath of the war.

You will need: a notebook, a pen, access to google and a positive attitude.

**Let's crush some facts.**

## **Cold War**

Grade 11-12

(Distance Learning - Half Year .5 credit)

### **Course Description**

The Cold War was more than simply a military confrontation between the United States and the Soviet Union; it was the frame within which the entire world developed (for better or worse) for nearly five decades.

This course will examine the Cold War as a global phenomenon, covering not only the military and diplomatic history of the period, but also examining the social and cultural impact of the superpower confrontation. We will cover the origins of the conflict, the interplay between

periods of tension and detente, the relative significance of disagreements within the opposing blocs, and the relationship between the "center" of the conflict in the North Atlantic/European area and the global "periphery".

- The Cold War as History: Why is the Cold War such a hot topic!
- Describe the Origins of the conflict beyond wikipedia.
- Analyze the impact of WWII on the relationship between the USA and USSR.
- Describe the wars fought by proxy; Korea and Vietnam (decolonization)
- Summarize the Space Race and the impact on each country's economy.
- Cold War at home- Analyze how the Cold War became institutionalized in the American psyche.
- JFK to our world today- assassination to Reaganomics.
- Post Cold War society- What our world looks like today because of the Cold War?

You will need: a notebook, a pen, access to google and a positive attitude.

**Let's crush some facts.**

## **Introduction to U.S. Politics**

Grade 11-12

(Distance Learning - Half Year .5 credit)

### **Course Description**

Introduction to the study of politics, focusing on American national government, state government, and local government. Students will explore how government functions and how interconnected all levels of government operate. A study of the historical shaping of American politics. Encompassing institutions, public policies, political culture, and political economy, American Political Development uncovers patterns of political stability and change. It explores critical episodes in American political history in a theoretically-informed fashion.

*This course will be focused on Project Based Learning.*

Students will explore:

- US Politics from the early constitutional era.
  - 1790-1820
- Hamilton vs Jefferson and the political shift in ideology.
- Pre-Civil War political changes
- Post-Civil War politics
- Politics in the Gilded Age
  - Monopolies and big business
- World Wars and politics
- Civil Rights Era
- Cold War Era Politics (1950-1990)
- Globalism and Politics (1980-2010)

*Materials Needed*

- 3 Ring Binder
- 1 subject notebook
- Pens/pencils

## **NYS and the 20th Century**

Grade 11-12

(Distance Learning - Full Year 1 credit)

### **Course Description**

This class examines the demographic, commercial, political and productive transformations that occurred in New York from the late 19th century of the state into the late twentieth century.

Students will analyze the ways in which New York functioned as the nation's center for global finance, industrialization, social diversity, cultural innovation, and social movements. Students will explore the impact of progressive era reform on the emergence of the modern interventionist state while analyzing the effects of immigration, race relations, and patronage politics.

*This course will be focused on Project Based Learning.*

*Materials Needed*

- 3 Ring Binder
- 1 Subject Notebook
- Pens/Pencils

## **United States History: Exploring Conflict in History**

Grades 11, 12

(Half Year - .5 credit)

### **Course Description:**

The definitions of rebellion and terrorism have changed over time as societies have adapted to new realities. What this course looks to accomplish is to be able to break down how rebellion and terrorism have been viewed in the United States since the founding.

Purpose: This class will analyze the history of terrorism and the United States. The course will break it into 3 distinct chunks;

- Terrorism from inside of the United States pre-20th century
- Terrorism inside of the United States during the 20th/21st centuries
- Terrorism from external groups. It will then look to the future of terrorism and its complex relationship with the US.

Pre 20th Century Terrorism in the US: This section will take a look at the history of different groups within the US and their different actions. This will include:

- Whiskey Rebellion, Bloody Kansas, The Anti-Rent Wars, White Supremacy Action, The Civil War, The Johnson and Grant Administrations, and the Anarchist/Socialist hysteria of the late 1800s.

- This will serve to establish a difference between terrorism and rebellion and will seek to have students judge their own biases about what is a just and righteous cause and what is a terrorist act.

Terrorism in the 20th/21st centuries from within the US: This will focus on the change in terrorism within the US as groups became less common and individual actors began to become the main agent of violence within the US.

- Socialist/Anarchist Actions, Lone Wolf Actions, Columbine, Pulse Nightclub, Ruby Ridge, Waco Texas, UnaBomber, and the Boston Marathon Bombing.
- We establish what terrorism that comes from within the US look like in the modern era and why it is so prevalent.

Terrorism in the 20th/21st centuries from outside the US: We will answer the question “How has international terrorism affected the US?”

- The Rise of Al Qaeda, ISIS, and State Sponsors.
- We will use this unit to establish how foreign policies of different nations may have fueled an increase in violence.
- We will also take a look to the future on plans for militaries to combat this new generation of warfare by using drones, information snooping, and biometrics.

Materials: First Platoon: A STORY OF MODERN WAR IN THE AGE OF IDENTITY DOMINANCE By ANNIE JACOBSEN

## **AP Psychology**

Grade 12

(Full Year 1 credit)

Prerequisite:

### **Course Description**

The purpose of this AP Psychology course is to introduce students to the study of the behavior and mental processes of the human brain. Explore the ideas, theories, and methods of the scientific study of behavior and mental processes. You’ll examine the concepts of psychology through reading and discussion and you’ll analyze data from psychological research studies. This course is a one-semester, introductory college course in Psychology.

*This class will prepare students for the AP Psychology Exam in May.*

## *Distance Learning*

More information on this to come in February 2022!

## *Middle School*

## *Sixth Grade*

### **6th Grade ELA**

#### **Course Description**

Sixth Grade ELA is unit/theme based and aligns with the NYS Standards. The four themes students are introduced to: Overcoming Adversity with the book, *Number the Stars*, Choices with *Tuck Everlasting*, Heroes and mythology with *The Lightning Thief*, and Author's Craft, a research project on an author of the student's choice. In addition to the classroom books, each quarter students will be expected to choose a book to read throughout that quarter that connects to the theme we are working on. Students will be completing several different types of writing pieces and one project throughout each quarter. Through the reading and writing pieces, students will challenge themselves as readers and writers. They will expand their knowledge by answering questions that connect to the themes such as, "How do people overcome obstacles and challenges?" "Does living mean always changing?" "How do the choices we make affect others?" and "Why is it important for an author to know the audience they are writing for?" The goal of ELA 6 is for students to gain many reading, writing, listening, and speaking skills along with becoming life-long learners.

### **6th Grade Math**

#### **Course Description**

Math 6 is a stepping stone on the road to high school, college, and career readiness. The concepts and skills learned at each grade level in middle school are expanded upon in each high school math course. Strong mathematical understanding is necessary for independence and success in our ever changing technological world.

Students in Math 6 will continue to develop their mathematical understanding by increasing their ability to justify why a particular mathematical statement is true or where a mathematical rule comes from. Students will progress by explaining mathematical rules and improving procedural skills. Students will develop problem solving skills by moving from using concrete objects, pictures, and diagrams to solve problems; to using abstract reasoning. Students will learn to represent problems symbolically. Students will explain the meaning of the problem, analyze the meaning, and form inferences about the form and meaning of the solution. Students will plan a route to the solution and persevere in solving the problem. Students will learn to check to make sure their answer makes sense and understand the different approaches that other students utilize to solve the same complex problem. Students will construct practical arguments by analyzing situations and justifying conclusions by distinguishing correct logic from that which is flawed. Students will apply mathematics to solve problems in everyday life: i.e. students may apply proportional reasoning to increase the number of servings a recipe can make.

The Math 6 curriculum will align with the Common Core State Standards in Mathematics. The scope of what is taught will narrow, allowing students to reach strong foundational knowledge and deep conceptual understanding. Students will build new understanding onto foundations built in the elementary years. Students are expected to reach fluency with multi-digit decimal operations and multi-digit division. Students will gain fluency with simple calculations so they are more able to understand more complex concepts. Progress will be made in applying appropriate mathematical concepts to new situations. Students will gain an understanding of



how to apply math concepts to “real world” situations: i.e. how many gallons of paint does it take to paint the walls of a room measured in square feet? A common mathematical vocabulary will be developed to use when speaking and explaining mathematical understanding.

Math 6 students will spend the year focusing on ratios and rates; division of fractions; fluently adding, subtracting, multiplying and dividing multi-digit decimals; understanding, ordering, comparing, and graphing positive and negative rational numbers; writing, interpreting, graphing, and using expressions and equations; developing an understanding of statistical thinking, i.e. summarize and describe distributions. Finally, another focus of Math 6 will be to build student knowledge of shapes, as well as develop reasoning about shapes. Students will determine the area, surface area, and volume of shapes. Students will develop and justify formulas for areas of triangles and parallelograms and by decompose irregular polygons and prisms into regular polygons to find the respective area and surface area.

## **6<sup>th</sup> Grade Social Studies**

### **Course Description**

Grade 6 Social Studies is based on the geography and history of the Eastern Hemisphere. This includes the development of cultures, civilizations, and empires. Students examine interactions between societies and the comparison of trends in governments and economics around the world. It also incorporates some elements of other social sciences, especially in terms of anthropology, archaeology, and geography. The course begins with an examination of the Eastern Hemisphere today, using geographic skills. This provides the foundation for making connections between the past and the present throughout the course. Students cover a tremendous time span from pre-history into the 1300s. Students are provided the opportunity to explore belief systems across time and to examine the foundations of democracy as well. Curriculum follows the NYS Social Studies Framework, created to provide students with the tools to become social scientists.

## **6<sup>th</sup> Grade Science**

### **Course Description**

Middle school science focuses on 15 main areas of study. These areas are divided up among sixth, seventh, and eighth grades.

Currently, the sixth grade in our school focuses on **Earth's Waters** (oceans, lakes, & rivers), **Weather & Climate**, **Astronomy** (sun, moon, stars, planets, galaxies, solar systems), **Inside Earth** (plate tectonics, volcanoes, earthquakes), and **Sound & Light**.

Schools have the option of teaching the fifteen middle school units in any order they choose, so a student transferring from a different district may end up either missing a topic or covering it twice.

Units may be added to or deleted from a grade level at the discretion of the science department.

## **6<sup>th</sup> Grade Technology**

### **Course Description**

The Technology 6 is a one quarter course designed as an introduction into modern day technology. Students start with the basics in circuitry. During this time students actually create both series and parallel circuits using basic circuitry components. Students then learn to read and create diagrams using actual schematic symbols based on the circuits they created. After circuitry, students then learn about coding. We look at what it is and how it helps software design. During this time students are introduced to basic block coding programs. The quarter ends with the students working with Ozobots. Ozobots are mini robots that will perform basic tasks based on different combinations of color codes that it travels over.

## **6<sup>th</sup> Grade Library Skills**

### **Course Description**

The 6th grade library course teaches independent use of the library's print and non-print resources. Students learn to access, evaluate, interpret, and apply information in an accurate and efficient manner. Students learn to identify whether information is true or misleading. They learn about plagiarism, paraphrasing, note taking and citations. They learn about the difference between research databases and the World Wide Web and find efficient ways to search both. Students will also seek books to read for enjoyment and will explore genres and authors whose works they find interesting. Students will have the opportunity to use the maker space where they learn to create, collaborate and follow instructions using various educational kits and games.

## **6<sup>th</sup> Grade Middle School Essential: Work Habits & Organizational Skills**

### **Course Description**

This course is designed to continue to build students' executive functioning skills like note-taking, studying, group-project work, binder organization, and managing homework to name a few!

## **6<sup>th</sup> Grade Health**

### **Course Description**

The New York State Learning Standards on Health Education

Encourages students to understand the seven skills necessary for a healthy lifestyle. These skills include; communication, decision making, self- management, relationship management, stress-management, planning and goal setting and advocacy.

The purpose of this class is to teach students the skills needed to understand the importance of health and well- being as well as reduce the risk of disease, decrease the risk of injury, create and maintain healthy relationships, and manage stress.

Students will learn how to set realistic goals, communicate effectively, make responsible decisions and build good character in an environment that promotes the practice of these skills, inclusion, collaboration and respect. Create healthy solutions to potential problems associated with stress and anger management.

### **Grading policy**

Participation 25%

Notebook/ Journal 25%

### **Topics of discussion**

Communication

Nutrition

Projects/Assessment 25%  
Homework 25%

### Class Requirements

Preparedness  
Respect for self and other  
Demonstrate understanding  
Identify healthy behaviors  
Create healthy solutions to potential problems

Physical Fitness  
Friendship/Relationships  
Bullying  
Refusal Skills  
Peer Pressure  
Disease Prevention and Hygiene  
Puberty and Development  
Emotions  
Stress and Anger Management

## *Seventh Grade*

### **7<sup>th</sup> Grade English**

#### **Course Description**

The 7<sup>th</sup> grade ELA curriculum strives to nourish students to become life-long learners and responsible and productive citizens. Through a variety of relevant and meaningful reading, writing, and speaking experiences in individual, group and class-community settings, students will meet and exceed the Common Core State Standards by grappling with essential questions such as “How can I use my writing to take a stand?” and universal themes such as *cultural clashes* and *personal growth*. They will hone their analytical and evaluative skills with full-length works such as Roll of Thunder, Hear My Cry, The Light in the Forest, The Killer’s Tears, and The Giver, and a variety of other texts, including poems, articles, and film clips. Students will learn to make important rhetorical choices as writers, depending on purpose and audience. Finally students will engage in constant, careful and honest reflection of their learning and growth.

### **7<sup>th</sup> Grade Math**

#### **Course Description**

Seventh Grade Math includes the following units of study: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, and Statistics and Probability. In Ratios and Proportional Relationships, the focus is on computing and comparing unit rates, recognizing and representing proportional relationships, and using proportions to solve multi-step problems involving ratio and percent. In the Number System unit, the focus is on mastering the operations of addition, subtraction, multiplication, and division with rational numbers and solving real-world problems involving rational numbers. Representing real-life situations with algebraic expressions and simplifying these expressions is part of the Expression and Equation unit. Another main focus of this unit is representing real-life situations with equations and inequalities and then using inverse operations to solve them. The Geometry unit consists of solving real-world problems using similar figures, the formulas for area and circumference of circles, and the formulas for area, volume, and surface area of two and three dimensional objects. It also focuses on understanding the relationships of complementary, supplementary, and vertical angles and the angles within a triangle. Finally the Statistics and

Probability unit focuses on using data from a random sample to draw inferences about a population and using measures of central tendency and variability to make comparisons between populations. It also focuses on finding the theoretical and experimental probability of events using lists, tables, tree diagrams, and simulation.

## **Compression Math 7**

### **Course Description**

This course covers the following topics from both 7th and 8th grade math: Integers and Rational numbers, Ratios and Proportional Relationships, Expressions, Equations and Inequalities, Percent and Proportional relationships, Statistics and Probability, Plane and solid geometry, Powers, Roots, and Scientific Notation, Graphing Linear Functions, Solving Systems of Linear Equations, Congruence, Similarity, and Transformations of Geometric Figures, Volume and Surface Area of Three Dimensional Figures. Students who complete CCSS Accelerated Math 7 will be enrolled in CCSS Accelerated Algebra in their 8<sup>th</sup> grade year.

## **7<sup>th</sup> Grade Social Studies**

### **Course Description**

#### **Grade 7 Social Studies**

Seventh Grade Social Studies is the first year of a two-year course in United States and New York History. Grade 7 Social Studies is arranged chronologically and incorporates geography as well as economic, social, and political trends. The course content is divided into eight Key Ideas, tracing the human experience in the United States from pre-Columbian times until the Civil War, with a focus on the people, events, and places in New York State.

#### **Key Ideas**

1. Native Americans
2. Colonial Developments
3. American Independence
4. Historical Development of the Constitution
5. The Constitution in Practice
6. Westward Expansion
7. Reform Movements
8. A Nation Divided

## **7<sup>th</sup> Grade Science**

**The Science program for middle school introduces students to a variety of science-related disciplines that will prepare them for the New York State Grade 8 Science Assessment.**

### **Course Description**

The Science 7 program is designed to allow students to apply their science understanding and measurement skills to a variety of life science topics. Areas of study include: classification and taxonomy of living things, cellular biology, plants, environmental science, human body systems, and genetics. Since investigative activities are central to the program, students are placed in situations in which they can manipulate objects, pose questions, and compare results from one activity to another. The students' learning occurs through concrete activities dealing with key

concepts and processes of the life sciences. Students are provided opportunities that develop higher-level thinking skills, as well as science process and inquiry skills.

**Students in grades 7 and 8 are also given the opportunity and support to participate in Future City, where a team research project and model of the future is presented.**

### **7<sup>th</sup> Grade Spanish 1A**

#### **Course Description**

This course is an introduction to the basics of the Spanish language and cultures. The four primary language skills of hearing, speaking, reading and writing will be covered. Students will learn grammar and vocabulary through reading short stories. They will develop speaking skills through conversation and working with partners and in groups. Students will explore Hispanic cultures.

### **7<sup>th</sup> Grade Technology**

Course Length: 20 Weeks

Grading: Numerical

Prerequisite: None

#### **Course Description**

This course meets NYSED Technology 5 Learning Standards.

This course is the first part of a comprehensive broad-based introduction to the study of technology. The course will include studies in the following areas: Resources, Systems, Problem Solving, Technological Processes, Societal/Environmental Impacts, and a perspective on its History and Future. All this will be presented in the engineering study, designing, building, and testing of model bridges. The student will also be introduced to basic Micro-Computer Drafting techniques.

## ***Eighth Grade***

### **8<sup>th</sup> Grade English**

#### **Course Description**

8th grade English follows the NYS standards. A variety of topics are covered including, but not limited to, reading comprehension, writing, listening and speaking skills, story elements, literary devices, dialogue, and argument. Multiple genres are explored, and there are multiple tie-ins with the Social Studies curriculum. Students are challenged to read, think, analyze, synthesize,

question, cite evidence, debate, and write. Forty Acres and Maybe a Mule by Harriette Gillem Robinet and The Boy in the Striped Pajamas by John Boyne are two of the books studied during the year. Students will also need to read independently to build their reading stamina. Students should have a book with them at all times. For writing, some of the pieces they will work on are essays analyzing characters and story elements, argument essays, and research investigations.

One overarching goal is to foster more academic independence and teach real world skills so that students are successful in high school and beyond.

## **8<sup>th</sup> Grade Math**

### **CCSS Math 8**

#### **Course Description**

Eighth Grade Math follows the NYS Math standards for 8<sup>th</sup> grade mathematics. Some of the topics covered are: equations, factors and fractions, ratios, proportions and percents, inequalities, functions and graphs and statistics and probability. Also, the basic math skills such as multiplication tables and opposite operations are reinforced.

### **CCSS Accelerated Algebra (Compression Math)**

#### **Course Description**

This course covers the following topics from both 8th grade math and CCSS

Algebra: Expressions, Equations, Functions, Linear Equations, Linear Functions, Equations of Linear Functions, Linear Inequalities, Systems of Linear Equations and Inequalities, Exponents and Exponential Functions, Quadratic Expressions and Equations, Quadratic Functions and Equations, Radical Functions and Geometry, Rational Functions and Equations, Statistics and Probability. This is a one-year course that ends with a Regents exam. Students who have completed the accelerated program at the middle school level will be enrolled in Geometry CCSS in their 9<sup>th</sup> grade year.

## **8<sup>th</sup> Grade Social Studies**

#### **Course Description**

Grade 8 Social Studies is arranged chronologically, beginning with Reconstruction and ending at the present. Grade 8 Social Studies incorporates geography as well as economic, social and political trends. The course content is focused on the human experience in the United States from Reconstruction to the end of World War II. Students will also examine different themes in United States and New York State history from the post-War period up to the present day, which provides the opportunity to explore more contemporary issues. The curriculum follows the NYS Social Studies Framework, created to provide students with the tools to become successful students of history and social sciences.

## **8<sup>th</sup> Grade Science**

#### **Course Description**

Eighth Grade Science follows the NYS Science standards. There is a NYS standardized Performance test and a written test. Topics studied throughout the year include energy, motion, simple machines, properties of matter, electricity and magnetism.

## **8<sup>th</sup> Grade Spanish - Spanish IB**

### **Course Description**

This course is an introduction to the basics of the Spanish language and cultures. The four primary language skills of hearing, speaking, reading and writing will be covered. Students are expected to learn vocabulary. They are also expected to speak conversationally with partners and in groups. Students will explore Hispanic cultures.

*The completion of Spanish 1A and 1B results in 1 high school credit of a foreign language.*

## **8<sup>th</sup> Grade Family and Consumer Sciences**

8th Grade - Full Year

### **Course Description**

This course meets NYSED Family and Consumer Sciences 3 learning standards.

This course allows the students to develop their life skills in various areas of studies including: College and career exploration and research, Cooking, Home maintenance, Financial management, Consumer knowledge, Entrepreneurial opportunities, Sewing, Clothing maintenance, Safety (in various areas) and Problem solving. The students will demonstrate their skills through various projects throughout the year including a career research project, an entrepreneurial project, cooking labs and sewing project.

## **8<sup>th</sup> Grade Health**

### **Course Description**

The objective of eighth grade health is to provide students with the content and skills necessary to assess, predict, identify, select and enjoy a healthy lifestyle and avoid choices that lead to obesity, addiction, heart disease, stress and toxic relationships in an environment that is safe and respectful.

- **Educational skills:** In accordance with the New York State Learning Standards for Health Education, students will develop the 7 skills of health (self- management, relationship-management, stress management, communication, decision making, Planning and goal setting and advocacy)
- **Functional knowledge:** In accordance with the New York State Learning Standards for Health Education , students will be introduced to intermediate functional knowledge, which includes; physical activity, nutrition, HIV/AIDS awareness, tobacco, alcohol and other drugs, sexual health and risk, family life, injury and violence prevention.

### **Required material**

Loose leaf paper

Folder with pockets and tabs with additional paper placed in the tabs

Small notebook or journal

### **Grading policy**

Participation 50%

Tests/Presentations 30%

Notebook/ Journal 20%

### **Class requirements**

Preparedness

Daily participation  
Respect for other opinion  
Organization  
Demonstration of understanding of the material



## ***Middle School Art and Music***

### **Middle School Visual Art (Art 6, Art 7 and Art 8)**

#### **Course Descriptions**

New York State requires a structured visual arts curriculum that will create a strong foundation of skills and knowledge needed for the (1) unit of art/music credit required for a high school diploma. Students will explore various 2D/3D media (*drawing, painting, collage, printmaking, sculpture, ceramics and media arts*) via Art Production, Art History, Art Criticism and Aesthetics. The 6th, 7th and 8th grade cumulative coursework addresses *National and State Learning Standards for the Visual Arts*, which include:

#### **Creating**

1. Generate and conceptualize artistic ideas and work.
2. Organize and develop artistic ideas and work.
3. Refine and complete artistic ideas and work.

#### **Presenting**

4. Analyze, interpret and select artistic work for presentation.
5. Develop and refine artistic techniques and work for presentation.
6. Convey meaning through the presentation of artistic work.

#### **Responding**

7. Perceive and analyze artistic work.
8. Interpret intent and meaning in artistic work.
9. Apply criteria to evaluate artistic work.

#### **Connecting**

10. Synthesize and relate knowledge and personal experiences to make art.
11. Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

#### **6th Grade Art**

In 6th Grade Art, students explore Modern Art, Color Theory (watercolor), Ceramics (coil pots), printmaking, and continue building their drawing skills (with a focus on pressure control). They will look briefly at the invention of the camera and how it influenced Modern Art.

#### **7th Grade Art**

In 7th Grade Art, students create collages in the style of Surrealism, abstract human figures in clay, and Cubist still life prints. The areas of illustration and the career of architecture is also explored through designing an architectural watercolor piece.

#### **8th Grade Art**

In 8th Grade Art, students are preparing for high school level coursework in art by honing various drawing skills and techniques, including perspective drawing, contour drawing, and value drawing, as well as learning about color theory and proper mixing of pigments through a composition painting.

## **Music**

### **6th Grade General Music**

#### **Course Description**

- Experience music from other cultures and history through reading music, performance, composition, performance evaluation and lessons.
- Develop music literacy and theory.
- Expand on knowledge of recorders by performing and composing music.
- Develop habits that encourage success and professionalism within and outside the music classroom.

### **6th Grade Chorus**

#### **Course Description**

- Study and perform music of diverse time eras, cultures, religions, and styles.
- Develop music literacy, knowledge of music history, theory and aural skills.
- Demonstrate proper singing technique and vocal care including breath support, good tone and diction, independent singing and proper voice placement.
- Develop habits that encourage success and professionalism within and outside the choral classroom.

### **6th Grade Band**

#### **Course Description**

- Study and perform music of diverse time eras, cultures, religions and styles.
- Expand on music literacy, knowledge of music history and theory.
- Demonstrate proper playing technique and instrument care including breath support, good tone, and maintenance.
- Develop habits that encourage success and professionalism within and outside the music classroom.

### **7<sup>th</sup> Grade General Music**

#### **Course Description**

- Gain a general understanding of music history and how our current music relates to those genres of the past.
- Foster music literacy through a variety of hands-on activities.
- Promote open minded, focus listening skills both in and out of the music classroom.

### **7th/8th Grade Band**

#### **Course Description**

- Study and perform music of diverse time eras, cultures, religions, and styles.
- Expand on music literacy, knowledge of music history, and theory.
- Demonstrate proper playing technique and instrument care including breath support, good tone, and maintenance.
- Develop habits that encourage success and professionalism within and outside the instrumental classroom.

## **7th/8th Grade Chorus**

### **Course Description**

- Study and perform music of diverse time eras, cultures, religions, and styles.
- Develop music literacy, knowledge of music history, theory and aural skills.
- Demonstrate proper singing technique and vocal care including breath support, good tone and diction, independent singing and proper voice placement.
- Develop habits that encourage success and professionalism within and outside the choral classroom.

## **8<sup>th</sup> Grade General Music**

### **Course Description**

- Analyze music in American history through research based projects, performance, classroom discussion, performance evaluation.
- Develop music literacy and expand on theoretical knowledge
- Expand knowledge of guitars by reading, notating and performing.
- Develop habits that encourage success and professionalism within and outside the music classroom.

