

# Course Offering Handbook



**2024-2025**

**Byron-Bergen Sr. High School**

**Bergen, New York**

<b>Ashley Williams</b> – school counselor	<a href="mailto:ahill@bbschools.org">ahill@bbschools.org</a>	494-1220 x 2504
<b>Kristie Holler</b> – school counselor	<a href="mailto:kholler@bbschools.org">kholler@bbschools.org</a>	494-1220 x 2604
<b>Robert Kaercher</b> – college and career counselor	<a href="mailto:rkaercher@bbschools.org">rkaercher@bbschools.org</a>	494-1220 x 2069

# TABLE OF CONTENTS

(clickable links)

<b>DEFINITIONS</b>	<b>5</b>
<b>NEW YORK STATE LEARNING STANDARDS</b>	<b>6</b>
<b>DIPLOMA REQUIREMENTS</b>	<b>7</b>
<a href="#">COURSE REQUIREMENTS</a>	7
<a href="#">SR. HIGH SCHOOL CREDIT FOR JR. HIGH SCHOOL COURSEWORK</a>	7
<a href="#">COURSE DROP/ADD PROCEDURE</a>	7
<a href="#">REGENTS EXAM REQUIREMENTS</a>	8
<a href="#">ALTERNATIVES TO CERTAIN REGENTS REQUIREMENTS</a>	8
<a href="#">GRADUATION PLAN</a>	9
<b>COURSE DESCRIPTIONS</b>	<b>10</b>
<b>ENGLISH LANGUAGE ARTS</b>	<b>10</b>
<a href="#">English 9</a>	10
<a href="#">English 10</a>	10
<a href="#">English 10 Honors</a>	10
<a href="#">English 11</a>	11
<a href="#">Advanced Placement (AP) Language and Composition</a>	11
<a href="#">English 12</a>	11
<a href="#">Advanced Placement (AP) Literature and Composition</a>	11
<a href="#">Eclectic English</a>	12
<a href="#">Literature and Psychology</a>	12
<b>HEALTH/PHYSICAL EDUCATION/WELLNESS</b>	<b>13</b>
<a href="#">Health</a>	13
<a href="#">HED 204 – Introduction to Healthful Living</a>	13
<a href="#">HED 205 – Responding to Emergencies</a>	13
<a href="#">Physical Education</a>	14
<b>MATHEMATICS</b>	<b>15</b>
<a href="#">Algebra I</a>	15
• <a href="#">Pre-Algebra</a>	15
• <a href="#">Accelerated Algebra I</a>	15
<a href="#">Foundations of Geometry</a>	15
<a href="#">Geometry</a>	16
<a href="#">Math III</a>	16
<a href="#">Algebra II</a>	16
<a href="#">College Algebra III</a>	16
<a href="#">Pre-Calculus &amp; Statistics I</a>	17
<a href="#">Pre-Calculus</a>	17
<a href="#">Advanced Placement (AP) Calculus</a>	17
<b>MUSIC</b>	<b>18</b>
<a href="#">Senior High School Band</a>	18
<a href="#">Senior High Chorale</a>	18
<a href="#">Singing Silhouettes</a>	19

Music Theory & Composition	19
Musical Theater	19
Exploration of Music	19
Technical Theater	19
<b>SCIENCE</b>	<b>20</b>
Living Environment	20
● Accelerated Living Environment	20
Physical Setting: Earth Science	20
Physical Setting: Chemistry	20
Physical Setting: Physics	21
New York State Plants and Animals from Environmental Science	21
Introduction to Agri-Science 1 and 2	21
Advanced Placement (AP) Biology	22
Advanced Placement (AP) Chemistry	22
Advanced Placement (AP) Environmental Science	23
Principles of Animal Science 1 and 2	23
Plant Science	24
Agricultural Power and Technology I and II	24
Food Science and Safety	24
Small Engines	24
Agricultural Business Foundations	24
<b>SOCIAL STUDIES</b>	<b>25</b>
Global History and Geography 1	25
Global History and Geography 1 Honors	25
Global History and Geography 2	26
Advance Placement (AP) World History	26
United States History and Government	26
Advance Placement (AP) United States History	27
Economics	27
Introduction to Government and Civics	27
Advanced Placement (AP) Government	27
Psychology	27
Sociology	28
Current Events	28
Personal Finance	28
Global History through Film	28
US History through Film	28
<b>TECHNOLOGY</b>	<b>30</b>
Drawing and Design for Production (DDP)	31
Computer Aided Design (CAD)	31
Advanced Computer Aided Design (Advanced CAD)	31
Architectural Drawing	31
Multimedia Production	32
Construction Systems	32

Manufacturing Systems 1	32
Manufacturing Systems 2	32
Transportation Systems	32
Advanced Product Design and Innovation	33
Home Maintenance & Repair	33
Electronics and Programming	33
Engineering and Robotics	33
Digital Photography	33
<b>VISUAL ARTS</b>	<b>34</b>
Studio in Art	34
Drawing and Painting 1	35
Drawing and Painting 2	35
Senior Portfolio Capstone	35
Pottery	35
GCC Art 110	35
3-D Design & Sculpture	36
Eclectic Art	36
Digital Photography	36
<b>WORLD LANGUAGES</b>	<b>37</b>
Spanish 1	37
Spanish 2	37
Spanish 3	37
Spanish 4	37
<b>BOCES: OCCUPATIONAL EDUCATION PROGRAMS</b>	<b>38</b>

## DEFINITIONS

<b>CREDIT</b>	A credit is earned by meeting all requirements for a subject taken for a full year.
<b>½ CREDIT</b>	A half-credit is earned by meeting all requirements for a subject taken for one-half year or one-half time basis for a full year. Physical education is an example of a half-credit subject.
<b>PROGRAM</b>	A student's academic program consists of all the subjects required of every student, including his/her chosen field. This includes all courses -- constants, majors and electives -- as planned toward each student's graduation.
<b>CORE SUBJECT</b>	The core subjects are subjects required of every student, regardless of major.
<b>ELECTIVES</b>	An elective is a course other than a core chosen by the student to complete the high school program.
<b>OCCUPATIONAL EDUCATION</b>	Refers to courses and/or major sequences in Technology or Occupational/Vocational Education.
<b>QUARTERLY AVERAGE</b>	Quarterly averages are used to determine honor roll status.
<b>GPA</b>	Grade Point Average – The average of all the grades in every class the student has taken in grades 9-12. Each class has a weight of 1.0.
<b>WEIGHTED GPA</b>	Weighted GPA – the above equation taking into account the heavier weight of an Advanced Placement (AP) course. The AP class will be weighted at 1.08.
<b>GCC College Courses</b>	Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately. Dictated in red.

# NEW YORK STATE LEARNING STANDARDS

All courses at Byron-Bergen Sr. High School are part of the K-12 curriculum designed to attain the New York State Learning Standards. Students will demonstrate the knowledge and skills necessary in:

## THE ARTS

1. Creating, Performing, and Participating in the Arts
2. Knowing and Using Arts Materials and Resources
3. Responding to and Analyzing Works of Art
4. Understanding the Cultural Dimensions and Contributions of the Arts

## ENGLISH LANGUAGE ARTS

1. Listening, Speaking, Reading, and Writing for Information and Understanding
2. Listening, Speaking, Reading, and Writing for Literary Response and Expression
3. Listening, Speaking, Reading, and Writing for Critical Analysis and Evaluation
4. Listening, Speaking, Reading, and Writing for Social Interaction

## WORLD LANGUAGES

1. Communicating in a Language Other Than English
2. Developing Cross-Cultural Skills and Understanding

## HEALTH EDUCATION, PHYSICAL EDUCATION AND FAMILY & CONSUMER SCIENCES

1. Maintaining Personal Health and Fitness
2. Maintaining a Safe and Healthy Environment
3. Managing Personal and Community Resources

## SOCIAL STUDIES

1. Understanding the History of the United States and New York
2. Understanding World History

3. Understanding Geography
4. Understanding Economic Systems
5. Civics, Citizenship, and Government Understanding

## MATHEMATICS, SCIENCE, AND TECHNOLOGY

1. Engaging in Analysis, Inquiry and Design
2. Managing Information Systems
3. Understanding Mathematics

### Content Strands

- a. Number Sense and Operations
- b. Algebra
- c. Geometry
- d. Measurement
- e. Statistics and Probability

### Process Strands

- a. Problem Solving
  - b. Reasoning and Proof
  - c. Communication
  - d. Connections
  - e. Representation
4. Understanding Scientific Concepts and Principles
  5. Applying Technological Knowledge
  6. Understanding Common Themes Across Math, Science, and Technology
  7. Applying Problem Solving Skills to Address Real-Life Problems

## CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

1. Exploring Career Options
2. Applying Academic Learning in Real World Situations
3. Developing Universal Foundation Skills
4. Pursuing Career Major

# DIPLOMA REQUIREMENTS

## COURSE REQUIREMENTS

Students need to earn twenty-two (22) units of credit, including two credits in physical education, to receive a Regents Diploma. Such units of credit shall incorporate the commencement level of the New York State Learning Standards in: English Language Arts, social studies, mathematics, science, technology, the arts (music, theater, dance or art), LOTE (Languages Other than English), health, physical education, family and consumer science, and career development and occupational studies. Such units shall include:

<input type="checkbox"/> English	4 Credits
<input type="checkbox"/> Social Studies <input type="checkbox"/> Global History <input type="checkbox"/> American History <input type="checkbox"/> Economics <input type="checkbox"/> Participation in Government	2 Credits 1 Credit 0.5 Credit 0.5 Credit
<input type="checkbox"/> Science <input type="checkbox"/> Living Environment (or other life science) <input type="checkbox"/> Addition Sciences (1 must be a physical science)	1 Credit 2 Credits
<input type="checkbox"/> Mathematics	3 Units
<input type="checkbox"/> Fine Arts	1 Credit
<input type="checkbox"/> Health Education	0.5 Credit
<input type="checkbox"/> LOTE	1 Credit
<input type="checkbox"/> Physical Education	2 Credits
<input type="checkbox"/> Electives	3.5 Credits

### SR. HIGH SCHOOL CREDIT FOR JR. HIGH SCHOOL COURSEWORK

Several opportunities exist for 8<sup>th</sup> graders to earn Sr. High School credits toward graduation at the end of their middle school careers:

- Passing Jr. High School LOTE courses and Regional exam (1 credit)
- Successful completion of Math 8 – Algebra (1 credit)
- Successful completion of Science 8 Advanced, also called Living Environment (1 credit)

### COURSE DROP/ADD PROCEDURE

Students have the opportunity to drop and/or add courses during the first week of the first and second semester. If a student wants to drop and/or add a course beyond that time frame they will need to contact their counselor to do so. This will require the Schedule Change/Drop Request Form to be completed by student, teacher, parent, counselor, and admin. Students can request these forms from their counselor, they are also available on the Counseling Office website, or [click here](#).

## REGENTS EXAM REQUIREMENTS

The following is information regarding which Regents exams New York State requires students to take in order to graduate from high school. School districts may establish diploma requirements in addition to the State requirements.

To receive a Regents Diploma, students must pass five Regents exams with a score of 65% or above.

- English
- Algebra 1 OR Geometry OR Algebra 2
- Global History & Geography
- United States History & Government
- Science (Living Environment, Chemistry, Earth Science or Physics)

To receive a **Regents Diploma with Advanced Designation**, students must pass nine Regents exams with a score of 65% or above.

- English
- Algebra AND Geometry AND Algebra 2
- Global History & Geography
- United States History & Government
- Science (Two of the following exams - Living Environment, Chemistry, Earth Science, or Physics  
**AND**
- A Language Other Than English  
**OR**
- 5-unit sequence in:
  - Music
  - Art
  - Technology
  - Vocational Education (BOCES) and Career Skills/Financial Management
  - Fine Art (Combination of Art and Music)

The words “with honors” may be added to the diploma if a student has earned a cumulative average of at least 90 percent in all Regents examinations required for the diploma. Cumulative averages below 90.00 will not be rounded upward to 90 percent.

## ALTERNATIVES TO CERTAIN REGENTS REQUIREMENTS

A student may earn a maximum of 6 ½ units of credit for a diploma without completing units of study for such units of credit through a process called Course Credit by Examination if:

- Based on the student's past academic performance, the superintendent of a school district or the chief administrative officer of a non-public school, or his or her designee, determines that the student will benefit academically by exercising this alternative;
- The student achieves a score of at least 85%, or its equivalent as determined by the commissioner, on a State-developed or State approved examination;
- The student passes an oral examination or successfully completes a special project to demonstrate proficiency, as determined by the principal, in the subject matter area;

**\*\*\*\*\*This process must have prior approval of the Jr./Sr. High School Principal.\*\*\*\*\***



<b>GRADUATION PLAN</b>						
<b>8th Grade</b>	<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>	<b>TOTAL CREDITS</b>	
	English 9	English 10	English 11	English 12		<b>4</b>
	Global 9	Global 10	US History	GOV/ECON		<b>4</b>
Math	Math	Math	Math	Math		<b>3</b>
Science	Science	Science	Science	Science		<b>3</b>
	PE	PE	PE	PE		<b>2</b>
LOTE						<b>1</b>
	Art Music Tech					<b>1</b>
		Health				<b>.5</b>
	Electives	Electives	Electives	Electives		<b>3.5</b>
Credits:	Credits:	Credits:	Credits:	Credits:		<b>22</b>
Notes:	Notes:	Notes:	Notes:	Notes:	Notes:	
<b>Regents</b>						
<b>Exam</b>		<b>Score</b>				
Math						
Science						
Social Studies						
ELA						

# COURSE DESCRIPTIONS

## ENGLISH LANGUAGE ARTS

*Students will access, generate, process, and transfer information using appropriate technologies.*

Four credits of English and Senior Exit Project are required for graduation. As outlined in the New York State Learning Standards, the English Language Arts Program will develop the skills and strategies that students need to read, write, speak and listen for the following purposes: for information and understanding, for literary response and expression, for critical analysis, and for social interaction. In addition to the required courses, English electives may be taken. Elective offerings are developed and offered based upon student interest and enrollment.

### English 9

Prerequisite: Freshman Standing

Grade: 9

Unit: 1 credit

In ninth grade ELA students will read, discuss, and analyze contemporary and classic texts. There will be a strong emphasis on reading closely and responding to text-dependent questions, annotating, and developing academic vocabulary.

They will also engage with literary and nonfiction texts to produce evidence-based claims to analyze the development of central ideas and text structure. Students will develop and strengthen their writing by revising and editing, and refine their speaking and listening skills through discussion-based assessments as well as formal and informal public speaking opportunities.

The year concludes with a research paper after reading *Animals in Translation* and then argumentative writing.

### English 10

Prerequisite: English 9

Grade: 10

Unit: 1 credit

ELA 10 is structured around a four-term outline: First Semester: *How Do Authors Develop Complex Characters and Ideas?*, Second Semester: *How Do Authors use Rhetoric and Word Choice to Develop Ideas or Claims about Human Rights?*, Third Semester: *Researching Multiple Perspectives to Develop a Position*, and Fourth Semester: *How do Authors Use Craft and Structure to Develop Characters and Ideas?* During the course of the year, we will answer these questions with a variety of skill sets while investigating selected literature and non-fiction (informational) texts from a variety of sources. Selections may include Art Speigelman's *Maus I & II*, John Steinbeck's *Of Mice and Men*, George Orwell's *Animal Farm*, and William Shakespeare's *Macbeth*.

### English 10 Honors

Prerequisite: English 9

Grade: 10

Unit: 1 credit

While following a relatively similar outline as the traditional ELA 10 instruction, ELA 10 Honors will be developed with the future coursework of both *AP Language and Composition* (11th grade) and *AP Literature and Composition* (12th grade) in mind. *AP Language and Composition* is focused on the argumentation, rhetorical analysis, and synthesis of information from primarily nonfiction texts, while *AP Literature and Composition* is focused on the literary analysis of poetry and prose (fiction). With this in mind,

we will select texts that allow us to focus on each of the two outlined domains. While taking this course does not serve as a prerequisite for the two AP courses, it will afford us the ability to discuss these topics in greater depth and get a head start on some of the basic levels of complexity that will be required in the future.

## English 11

Prerequisite: English 10

Grade: 11

Unit: 1 credit

English 11 is a course focused on discussion, argumentative and analytical writing, and reading and analyzing literature and non-fiction. A brief unit on media literacy is also part of the course. Additionally, students will engage in scholarly research and write a research paper in which they defend a position. Typically, we read *The Great Gatsby*, *Hamlet*, *One Flew Over the Cuckoo's Nest*, and *The Things They Carried*. At the end of the year, students will take the Regents Exam in English, an exam required for graduation. Throughout the year, preparation and practice for this exam will help students hone specific skills on which they will be tested.

## Advanced Placement (AP) Language and Composition

Prerequisite: English 10

Grade: 11

Summer Work Required

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text—from a range of disciplines and historical periods. The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum. There are no prerequisite courses for AP English Language and Composition. Students should be able to read and comprehend college-level texts and write grammatically correct, complete sentences. **To achieve AP credit, students will be required to take the AP Language and Composition test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## English 12

Prerequisite: English 11

Grade: 12

Unit: 1 credit

English 12 is aligned to the New York State Next Generation Learning Standards. English 12 is a reading and writing intensive course designed to meet the needs of students who are preparing for the rigors of college-level reading and writing yet at the same time meet the needs of students who are fulfilling the local requirements toward a high school diploma. All students will explore and expand their strengths in reading, writing, speaking, and listening, with grammar and vocabulary supplementing their class work. These skills will be addressed with the use of poetry, the short story, non-fiction texts, and the novel.

## Advanced Placement (AP) Literature and Composition

Prerequisite: English 11

Grade: 12

Summer Work Required

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in 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, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. The AP English Literature and Composition course aligns to an introductory college-level literature and writing curriculum. There are no prerequisite courses for AP English Literature and Composition. Students should be able to read and comprehend college-level texts and write grammatically correct, complete sentences. **To achieve AP credit, students will be required to take the AP Language and Composition test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## **Eclectic English**

Prerequisite: English 9

Grade: 10-12

Unit: ½ credit

May be retaken for credit.

This series of seven-week mini-courses is – as its title suggests – an eclectic package of English-related experiences. The purpose of this multifaceted course is to intellectually engage students with high-interest ELA-related material without burdening them with traditional “English” pedagogy and homework. Students will be asked to periodically engage in creative writing exercises in each of the subsequent units of study and students will produce a personal portfolio. The mini-courses could include elements of the follows: creative writing, music as poetry, the modern novel, Greek mythology, short stories, speeches, and classic movies.

## **Literature and Psychology**

Prerequisite: English 9, English 10

Grade: 11-12

Unit: ½ credit

The course begins with the study of grief theories and literature's exploration of this concept. As part of this unit, students will read *The Lovely Bones*, by Alice Sebold. The course continues with an introduction to Sigmund Freud's theories about the human psyche (id, ego and superego) and a study of defense mechanisms. In this unit, students will develop the skills necessary to analyze literature through the lens of psychoanalytic criticism. This involves analysis of both authors and literary characters. Students will then study Carl Jung's theory of the Collective Unconscious—the theory that stories from all over the world and across time have a similar basic construct and universal character types. Students will analyze several films to better understand these universal archetypes and the Hero's Journey. The fourth unit will be a study of the literary genre of true crime. We will explore the popularity of the genre and apply what we learn here to *The Lovely Bones*. A brief poetry unit will follow, specifically from the genre of Confessional Poetry. The course is driven by discussion, so students must be prepared and willing to participate in discussion every day. Assessments: brief quizzes, journal writing, literary response writing, presentations, and a final project.

# HEALTH/PHYSICAL EDUCATION/WELLNESS

***Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.***

## Health

Prerequisite: 10th grade status

Grade: 10

Unit: ½ credit

The Health Education course is based on skills based/standards based curriculum. Units taught in this course are Life Skills, Mental Health, Alcohol, Tobacco and other Drug Prevention units, Infectious Diseases, including HIV/AIDS, Human Growth and Development, Family Life Education and Parenting. This course enhances student decision making skills and is an asset when dealing with day to day challenges. Health Education is a required course for half of a credit. It is recommended that students take health in the 10<sup>th</sup> grade.

## HED 204 – Introduction to Healthful Living

Prerequisite: Health

Grade: 11-12

Unit: ½ credit

**3 college credits possible\***

This course is designed for Juniors and Seniors who have successfully completed High School Health. This is a college level health class that emphasizes reasons and strategies for assuming responsibility for maintaining a healthy lifestyle. The course focuses on lifestyle factors and their relationships to well-being, behaviors, and disease. The course also includes health and wellness, stress, drug, alcohol and tobacco use and abuse, nutrition and weight control, cardiovascular health, physical fitness, healthy relationships, sexuality, birth control, sexually transmitted diseases, safety education, communication skills for productive relationships, identifying and reporting suspected child abuse and maltreatment. Three college credit hours are available to students through Genesee Community College. **\*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$195/ 3 credit hours.**

## HED 205 – Responding to Emergencies

Prerequisite: Health

Grade: 11-12

Unit: ½ credit

**3 college credits possible\***

This course is designed for Juniors and Seniors who have successfully completed High School Health. This is a college level health course that presents emergency techniques used to maintain health, alleviate suffering and sustain human life under conditions during which professional care and/or normal health services are unavailable. Studies safety and prevention as they relate to home, school, industry, and the highway.

Provides Red Cross certification in Responding to Emergencies and CPR/AED for the Professional Rescuer upon successful completion of requirements and payment of Red Cross fees. Three college credit hours are available to students through Genesee Community College. **\*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**

## Physical Education

Prerequisite: None

Unit: ½ credit/year

It is the goal of High School Physical Education for students to gain the necessary knowledge to make healthy choices for a lifetime of fitness, personal health and enjoyment. All students must take a Physical Education course while in high school. Two units of physical education are required for graduation. The following are units presented at varying times throughout a student's high school career:

<i><b>Dance &amp; Aesthetic Activities</b></i>	<i><b>Team Sports</b></i>	<i><b>Net and Wall Sports</b></i>	<i><b>Outdoor Activities</b></i>	<i><b>Personal Performance</b></i>	<i><b>Target Activities</b></i>	<i><b>Striking &amp; Fielding Sports</b></i>
Aerobics	Flag Football	Tennis	Kayaking	Strength Training	Archery	Softball
Step-Aerobics	Omnikin Ball	Badminton	Orienteering	Fitnessgram	Golf	Wiffle Ball
Tae Bo	Soccer	Pickleball	X-Country Skiing	Adventure Activities	Bocce	
Self Defense	Lacrosse	Paddle Ball	Snowshoeing	Insanity Workout	Horseshoes	
Line Dancing	Ultimate Frisbee	Volleyball	Challenge Course		Croquet	
Ballroom Dance	Basketball	Table Tennis	Recreational Games		Frisbee Golf	
Pilates	Floor Hockey					
Yoga	Speedball					
Zumba	Team Handball					

### P.E. Comparable Credit Program

The goal of the Byron-Bergen Junior-Senior High School Physical Education staff is to engage students in a variety of activities that promote team and lifelong fitness options. To support this mission and to promote and reinforce physical fitness that occurs outside of the classroom, Byron-Bergen offers students an opportunity to earn physical education credit for comparable athletic participation for up to TWO semesters total in 11th and/or 12th grade.

#### Students are eligible for this program if they:

- A. participate in a comparable amount of time each semester in extra-class athletic activities
- B. demonstrate acceptable levels of physical fitness, physical skills, and knowledge of physical education activities

#### Criteria for Consideration:

- Currently enrolled in their 3rd (11th grade) or 4th (12th grade) year of high school
- Currently participating in a Byron-Bergen junior varsity or varsity athletic team
- Possess a 95% attendance rate
- Achieve top 25% in all five fitness categories as assessed through the Fitness-Gram
- Earns an score of 85% or higher on a departmental local examination of physical education knowledge
- In good academic standing, receiving passing grades in all courses
- Enrolled in 6.0 credits

#### Guidelines for Participation:

1. Students will be scheduled for a physical education class and assigned to a teacher
2. Students will complete a WEEKLY physical education journal that must be submitted and approved WEEKLY by their assigned physical education teacher
3. Students must maintain a 95% attendance rate
4. Students must remain in good academic standing and earn passing grades in all other coursework

# MATHEMATICS

*Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically.*

## Course Pathway Options

The following pathways were created and are recommended by the teachers in the mathematics department. Students, teachers, parents and counselors should discuss each option carefully during course selection each year to select the most appropriate choice for each student. It is possible to change pathways throughout high school with consideration of student growth and long-term goals.

### Traditional Regents Pathway

7th Grade Math→8th Grade Math→Algebra I→Geometry→Algebra II or Math 3→Pre-Calculus or College Algebra

### Accelerated Regents Pathway

Pre-Algebra→Accelerated Algebra I→Geometry→Algebra II→ Pre-Calculus/Statistics→AP Calculus

### Supportive Pathway

7th Grade Math→8th Grade Math→Algebra 1→Foundations of Geometry→Math 3→Algebra II or College Algebra

## Algebra I

Prerequisite: None

Grade: 9-10

Unit: 1 credit

Students study the first year of a three-year sequence aligned with the New York State learning standards. The intent of these standards is to provide a variety of ways for students to acquire and demonstrate mathematical reasoning ability with solving problems. The major concepts of this course focus on linear, exponential, and quadratic functions with algebraic and graphing components. Use of a graphing calculator is necessary as it is infused into the daily instruction as a problem solving, calculation, and investigation tool. The culmination of this course includes completion of the New York State Common Core Algebra Regents exam.

- **Pre-Algebra**

Prerequisite: Teacher recommendation and Student Application Required

Grade: 7

Unit: no High School Credit Given

Eligible students can take Pre-Algebra in 7th grade. The acceleration process starts in the spring of 6<sup>th</sup> grade and is based on Teacher Recommendation and an application process.

- **Accelerated Algebra I**

Prerequisite: Teacher recommendation and Student Application Required

Grade: 8

Unit: 1 credit

Eligible students can take Algebra I in 8<sup>th</sup> grade. The acceleration process starts in the spring of 7<sup>th</sup> grade and is based on Teacher Recommendation and an application process.

## Foundations of Geometry

Prerequisite: Pass Algebra I course and exam

Grade 9-11

Unit: 1 credit

Students study a second year of Mathematics which includes geometric and trigonometric relationships, informal proof, coordinate geometry, transformational geometry, circle geometry, and constructions. Further exploration of concepts supported by the use of the graphing calculator is integrated into the course. Students

who pass this course fulfill their second credit in mathematics that is needed in order to obtain a Regents diploma.

## Geometry

Prerequisite: Pass Algebra I course and exam

Grade 9-10

Unit: 1 credit

Students study the second year of a three-year sequence aligned with the New York State Common Core Curriculum and the Learning Standards. The intent of these standards is to provide a variety of ways for students to acquire and demonstrate mathematical reasoning ability when problem solving. Topics of study include geometric and trigonometric relationships, informal and formal proof, coordinate geometry, transformational geometry, circle geometry, and construction. Further exploration of concepts supported by the use of the graphing calculator is integrated into this course. This course ends with students taking the Geometry Regents exam in June.

## Math III

Prerequisite: Two years of High School Math

Grade 11-12

Unit: 1 credit

Students study a third year of Mathematics, which includes regression analysis, quadratic equations, imaginary and complex numbers, and statistics with an emphasis on “real-life” application. This course incorporates the use of graphing calculators as an instructional tool. Students who pass this course fulfill their third credit in mathematics that is needed in order to obtain a Regents Diploma. *Students who complete this course and pass the Algebra I and Geometry Common Core exams may enroll in Algebra II to pursue a Regents Diploma with Advanced Designation or College Algebra to earn college credits.*

## Algebra II

Prerequisite: Algebra I and Geometry courses (75% or better on both Regents exams)

Grade: 11-12

Unit: 1 credit

Students study the third year of a three-year sequence that is aligned with the New York State Core Curriculum and the Learning Standards. The intent of these standards is to provide a variety of ways for students to acquire and demonstrate mathematical reasoning ability when problem solving. Topics of study include imaginary and complex numbers, quadratic, exponential, and logarithmic functions, trigonometry, regression analysis, and normal distribution. The graphing calculator is a mandatory tool that students must master in order to be successful in this course. This course ends with students taking the Algebra II Regents exam in June. Successful completion of this exam along with the Algebra I and Geometry Regents will satisfy the math requirements for a Regents Diploma with Advanced Designation.

## College Algebra III

Prerequisite: Three years of high school math with teacher recommendation

Grade: 11-12

Unit: 1 credit

**3 college credits possible\***

Students study advanced topics of algebra and the basics of trigonometry. Topics include absolute value equations and inequalities, linear and quadratic systems, rational exponents, radical expressions and complex numbers, quadratic, exponential and logarithmic functions and applications, graphs of functions and their inverses, conic sections, trig functions, and the unit circle. **\*Students are able to earn college credit if they register for this course with Genesee Community College (MAT136) at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**



## Pre-Calculus & Statistics I

Prerequisite: Pass Algebra 2 and Trigonometry with 85% or more And at least 75% on Algebra II Regents exam  
Grade 11-12  
Unit: 1 credit

7 college credits possible\*

This course is required for accelerated math students. However, other students may take Pre-Calculus & Statistics (provided they have at least an 85% final average in previous math courses and at least an 85% on all Regents exams in these courses). The Honors courses in Mathematics are aligned with the New York State Core Curriculum and Learning Standards. Curriculum and Learning Standards will be covered with an in- depth and enriched approach. Honors courses will require students to be self-motivated and willing to assume responsibility for their learning and are intended to challenge math students who have been successful in previous math courses. This is a one-year course and students will not be allowed to withdraw from the course mid-year. **\*Students are able to earn college credit if they register for this course with Genesee Community College (MAT 140 and MAT 129) at an approximate cost of \$420/ 7 credit hours.**

## Pre-Calculus

Prerequisite: Algebra 2 and Trigonometry  
Grade 11-12  
Unit: 1 credit

4 college credits possible\*

Students study a variety of introductory college math topics such as: linear, quadratic, exponential and logarithmic functions, analytic and coordinate geometry, complex fractions, and rational integral functions of the nth degree. Solutions to equations of higher degree and relationships between roots and coefficients are treated in detail with practice in synthetic division and the remainder and factor theorems. More advanced work in logarithms and exponents are studied, including base “e” and the natural logarithmic function. In the spring students enrolled in this course will spend considerable time studying the basic concepts of calculus, preparing students to study high school or college calculus. **\*Students are able to earn college credit if they register for this course with Genesee Community College at an approximate cost of \$260/ 4 credit hours.**

## Advanced Placement (AP) Calculus

Prerequisite: Pre-Calculus, Accelerated Math for 4 years overall average and exams, 85% Teacher Recommendation  
Grade 12  
Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

4 college credits possible\*

This course is ONLY available for those students who were accelerated in mathematics for four years and have successfully completed all of the preparatory courses with an overall math average above an 85% and/or teacher recommendation. This course is a rigorous college level math course taught in a high school setting. Students will develop the understanding of the concepts of calculus, together with its methods of applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. **To achieve AP credit, students will be required to take the AP Calculus test in May at a cost of \$98. College credits can be earned pending a successful outcome of the AP exam. \*Students can either earn AP course credit OR GCC credit if they register for this course with Genesee Community College (MAT 141) at an approximate cost of \$260 / 4 credit hours. Students must verify which credit they will pursue with their teacher by December 1st.**

# MUSIC

*Students will engage in processes that constitute creation and performance in the arts and participate in various roles.*

## Music Electives Anticipated Schedule

**NOTE:** Some music courses will be offered in a three-year cycle – All other courses are offered every year

Offered every year:	
<ul style="list-style-type: none"> <li>• Senior High School Band</li> <li>• Senior High Chorale</li> </ul>	<ul style="list-style-type: none"> <li>• Singing Silhouettes</li> <li>• Music Theory and Composition</li> </ul>

Cycle A	Cycle B	Cycle C
<ul style="list-style-type: none"> <li>• Technical Theater</li> </ul>	<ul style="list-style-type: none"> <li>• Musical Theater</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration of Music</li> </ul>

2024-2025 (A)	2025-2026 (B)	2026-2027 (C)	2028-2028 (A)
<ul style="list-style-type: none"> <li>• Technical Theater</li> </ul>	<ul style="list-style-type: none"> <li>• Musical Theater</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration of Music</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Theater</li> </ul>

### Senior High School Band

Prerequisite: Play an instrument

Grade: 9-12

Unit: 1 credit/year

Sr. High School Band is open to all students in grades 9 – 12. It offers them the opportunity to experience various styles of music and encourages lifetime appreciation of music. Students participate in marching band, which teaches field show choreography as well as street marching. This unit usually occurs in the 1<sup>st</sup> and 4<sup>th</sup> quarter. Students participate in a Concert Band and Jazz Band format during the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarter. Extracurricular opportunities are offered to interested students who may elect to participate in the pit band for the musical during the 3<sup>rd</sup> quarter. Students may select to perform solos that earn them the ability to participate in county and state ensembles.

### Senior High Chorale

Prerequisite: None

Grade: 9-12

Unit: 1 Credit

The Senior High Chorale is an performing vocal ensemble that welcomes students including those without prior choral experience, or music reading skills. Senior Chorale members focus on developing vocal technique tailored to the ensemble's evolving needs, and with a diverse repertoire including popular music, songs in other languages, and various musical styles. Songs are typically performed with piano accompaniment, however choir members will have the opportunity to learn a capella (unaccompanied) singing as well. If you love to sing, then this is the course for you... all are welcome!

## **Singing Silhouettes**

Prerequisite: Audition with Teacher

Grade: 9-12

Unit 1 Credit/year

The Singing Silhouettes are the vocal music ambassadors of Byron - Bergen. Comprising students from grades 9 - 12, this ensemble performs a diverse and challenging repertoire for a variety of genres, and includes both accompanied and a capella singing. Beyond performances in the winter and spring concerts, the ensemble actively engages with the community. Students interested in Singing Silhouettes will have the opportunity to audition for the following year's Silhouettes in January.

## **Music Theory & Composition**

Grade: 9-12

Unit: 1 credit

Required for Music Sequence for Regents Diploma with Advanced Designation. This course provides knowledge of the mechanics of music and composition, and provides students with the skills to obtain greater ability at reading, writing, and listening to music. Tailored for students at all levels with no prior requirements, it enhances proficiency and understanding melody, rhythm, harmony, form, and artistic choices and how these characteristics influence the music that they encounter and write. With an emphasis on music literacy, this course is valuable for any aspiring musician and is particularly crucial for those pursuing a future career in music.

## **Musical Theater**

Grade: 9-12

Unit: 1 Credit

If you love Musical Theater, this is the class for you! Dive into many of the elements required in making a musical, as well as explore ways that musicals have developed through history. Explore strategies and techniques in order to improve your storytelling through singing and acting, and how this weaves into all of the pieces of a production. Students will be engaged with active learning and "hands on" experiences as much as possible. No experience in Musical Theater is required for this course!

## **Exploration of Music**

Grade: 9-12

Unit: 1 Credit

This class explores what music is, and all of the elements that contribute to music. Discover the changing relationship between society and music, and explore their ongoing influence on each other. Learn how music has evolved throughout time, and throughout the world. Students will engage in making music in hands-on ways as much as possible. Students will be immersed in lots of active listening activities and discussions.

## **Technical Theater**

Grade: 9-12

Unit: 1 Credit

Do you like designing? Do you like solving problems? Do you like finding creative ways to tell stories through making things? If you answered yes to any of these questions, Technical Theater is the course for you! In this course, you will explore the elements needed to create a story that are done before the curtain opens. We will explore set design, construction, and painting techniques, prop construction, lighting design, costume design, and effective techniques to communicate and collaborate as part of a production team. This course is very hands-on, and projects are often directly related to the Byron - Bergen Musical.

# SCIENCE

*Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.*

## Living Environment

Prerequisite: None

Grade: 8-10

Unit: 1 credit

This course should be the first science course in the science Regents sequence. Based on the New York State Standards, students use scientific inquiry and design to generate data, and apply scientific concepts, principles and theories that are common to Math, Science and Technology. Students study the nature of living things.

Students learn to apply knowledge and thinking skills in class to address real life problems and make informed decisions. Topics include reproduction and development, evolution, ecology, genetics, and physiology. Students must successfully complete the required 1200 minutes of laboratory experience with satisfactory reports on file for Regent's credit. Students are required to take the Living Environment Regents examination at the completion of this course. This course meets a Living Environment science graduation requirement and a minimum grade of an 85% is preferred for A.P. Biology.

- **Accelerated Living Environment**

Prerequisite: Teacher recommendation Student Application Required

Grade: 8

Unit: 1 credit

Eligible students can take Living Environment in 8<sup>th</sup> grade. The acceleration process starts in the spring of 7<sup>th</sup> grade and is based on Teacher Recommendation and an application process.

## Physical Setting: Earth Science

Prerequisite: None

Grade: 9-12

Unit: 1 credit

This course should be the second science course in the science Regents sequence. Earth Science involves the investigation of processes related to the solar system, weather systems, climates, geological formations and geologic history based on observation and measurements. Students must successfully complete 1200 minutes of laboratory experience with satisfactory reports on file for Regent's credit. Technology, such as computers, is used in the study of topographic maps, meteorology, coordinate systems and measurements. Students are required to take the Earth Science Regents examination. This course meets a Physical Setting science graduation requirement.

## Physical Setting: Chemistry

Prerequisite: Living Environment and Geometry

Grade: 10-12

Unit: 1 credit

Physical Setting: This course should be the third science course in the science Regents sequence. Chemistry is a laboratory-based Regents course that studies matter and its interactions with energy. Students must successfully complete 1200 minutes of laboratory experience with satisfactory reports on file for Regents credit. It is highly recommended that students have successfully completed Geometry. Units covered in this course include atomic concepts, the periodic table, moles/stoichiometry, chemical bonding, and physical behavior of matter, kinetics/equilibrium, organic chemistry, oxidation-reduction, nuclear chemistry, and acid-base chemistry. Students are required to take the Chemistry Regents examination at the conclusion of this course. This course meets a Physical Setting science graduation requirement and is a prerequisite for AP Chemistry, AP Biology, and the Health Academy.

## **Physical Setting: Physics**

Prerequisite: Living Environment and Geometry

Grade: 11-12

Unit: 1 credit

This course should be the fourth science course in the science Regents sequence. This course is a study of motion, forces, work, forms of energy, mechanics, waves (sound and light), atomic structure, particle-wave duality, conservation laws, electricity, magnetism, and modern physics with an emphasis during the course on problem solving. Laboratory experiences support classroom study and include collecting, organizing, and analyzing data. Students must successfully complete 1200 minutes of laboratory experience with satisfactory reports on file for Regent's credit. Students are required to take the Physics Regents examination at the end of this course. It is highly recommended that students have completed or are concurrently enrolled in Trigonometry. Strong math skills and knowledge of Algebra are necessary for success in this course. This course meets a Physical Setting science graduation requirement.

## **New York State Plants and Animals from Environmental Science**

Prerequisite: The Living Environment

Grade: 11-12

Unit: 1 credit

The first semester of this course will cover the Envirothon topics of forestry (tree species identification, measurement and value of timber, forest structure and Silviculture), soils (order, profile, texture, erosion, and sedimentation), and current environmental issues. The second semester of this course will cover the Envirothon topics of wildlife species identification by skulls and tracks, habitats, invasive species, endangered species, food webs, invertebrates, vertebrates, ecosystems, aquatics (watersheds, wetlands, and water quality), energy sources and current environmental issues. This course meets a General science graduation requirement.

## **Introduction to Agri-Science 1 and 2**

Prerequisite: Can be taken concurrently with Living Environment

Grade: 9-12

Unit: ½ credit per semester

Agriculture careers require a wide array of skills from food tasting to construction. In this course, you will develop basic skills to lead you to possible careers in agricultural science. In class, you will have hands-on experiences in researching the quality of water in your school and community. Planning, designing and constructing a habitat for local wildlife. Determining how to safely store and preserve food. Determining composition of local soils. Students will also have opportunities in leadership development by joining the Byron-Bergen FFA chapter.

## Science Advanced Placement Anticipated Cycle

**NOTE:** Some Advanced Placement science courses will be offered in a two-year cycle – A / B

<b>Offered every year:</b>
AP Chemistry

<b>Cycle A</b>	<b>Cycle B</b>
• AP Biology	• AP Environmental

<b>2024-2025 (A)</b>	<b>2025-2026 (B)</b>	<b>2026-2027 (A)</b>	<b>2027-2028 (B)</b>
• AP Biology	• AP Environmental	• AP Biology	• AP Environmental

### Advanced Placement (AP) Biology

Prerequisite: Living Environment and Regents Chemistry, Recommended: Earth Science

Grade: 11-12

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

Summer Work Required

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interactions. This course requires that 25% of the instructional time will be spent in hands-on laboratory activities. Lab reports are required for each laboratory with a discussion on outcomes as a class. This course is taught at a college-level and is recommended for students with a strong interest in science, particularly in the life science beyond high school. It is expected that students invest a significant amount of time beyond the classroom. **To achieve AP credit, students will be required to take the AP Biology test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

### Advanced Placement (AP) Chemistry

Prerequisite: Physical Setting Chemistry

Grade: 11-12

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

Summer Work Required

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. **To achieve AP credit, students will be required to take the AP Chemistry test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## Advanced Placement (AP) Environmental Science

Prerequisite: Living Environment, Earth Science and Algebra

Grade: 10-12

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

Summer Work Required

Explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. You'll take part in laboratory investigations and field work. In this course you will apply the following skills: analyzing data, visual representations, and writings, applying quantitative methods in solving problems, proposing a solution for an environmental problem and supporting your idea with evidence and analyzing a research study to identify a hypothesis. AP Environmental Science is equivalent to one semester of an introductory course in environmental science. Students are expected to take the AP exam in Environmental Science. **To achieve AP credit, students will be required to take the AP Chemistry test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## Science Electives Anticipated Schedule

2024-2025	2025-2026	2026-2027
<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Food Science</li> <li>• Agricultural Business ½</li> <li>• Small engines ½</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Agricultural Power and Technology</li> <li>• Animal Science</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Agricultural Power and Technology</li> <li>• Plant Science</li> </ul>
2027-2028	2028-2029	2029-2030
<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Food Science</li> <li>• Agricultural Business ½</li> <li>• Small engines ½</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Agricultural Power and Technology</li> <li>• Animal Science</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Agri-Science 1 &amp; 2</li> <li>• Agricultural Power and Technology</li> <li>• Plant Science</li> </ul>

## Principles of Animal Science 1 and 2

Prerequisite: Introduction to Agri-Science 1 and 2

Grades 10-12

Unit: ½ credit per semester

The major focus of the *Principles of Animal Science* course is to expose students to agriculture, animal science, and related career options. Students participating in the course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. Students will also have opportunities in leadership development by joining the Byron-Bergen FFA chapter.

## **Plant Science**

Prerequisite: Introduction to Agri-Science 1 and 2  
Grades 10-12  
Unit: 1 credit

Plant Science provides a foundation of plant science knowledge and skills. Students will experience various plant science concepts through exciting “hands-on” activities, projects, and problems. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agronomic, forestry, and horticultural industries. Students will discover the value of plant production and its impact on the individual, the local, and the global economy.

## **Agricultural Power and Technology I and II**

Prerequisite: Introduction to Agri-Science 1 and 2  
Grades 10-12  
Unit: ½ credit per semester

Agricultural Power and Technology exposes students to mechanics, power, technology, and career options in the world of agriculture. Students participating in the APT course will have experiences in various mechanical and engineering concepts with exciting hands-on activities, projects, and problems. Student’s experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components. Students will acquire the basic skills to operate, repair, engineer, and design agricultural tools and equipment. Throughout the course, students will apply the engineering principles to the construction of machines and structures.

## **Food Science and Safety**

Prerequisite: Introduction to Agriscience 1 and 2  
Grades 10-12  
Unit: 1 credit

Explore the process of producing new foods while meeting safety and nutrition standards. Study food chemistry, safety, processing, marketing, and product development through hands-on activities and projects. You will earn your ServSafe ® Food Handler certificate for base employment in the food industry during this course. Conclude the course by developing, test marketing, and field-testing your innovative food product. Students will also have opportunities in leadership development by joining the Byron-Bergen FFA chapter.

## **Small Engines**

Prerequisite: Introduction to Agriscience 1 and 2  
Grades 10-12  
Unit: ½ credit

Small gas engines provides technical applications to mechanical systems, using small gas engines as the instructional tool. Students practice technical skills, including measurements, troubleshooting, documenting an engine teardown and assembly, completing work/repair orders, and reading a service manual. Students will also have opportunities in leadership development by joining the Byron-Bergen FFA chapter.

## **Agricultural Business Foundations**

Prerequisite: Introduction to Agri-Science 1 and 2  
Grades 10-12  
Unit: ½ credit

Agricultural Business Foundations (ABF) introduces students to business management in agriculture. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community.



## SOCIAL STUDIES

***Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.***

Four credits of Social Studies and Senior Exit Project are required for graduation. Students are required to take Global History and Geography in 9<sup>th</sup> and 10<sup>th</sup> grades, which cumulatively accounts for two units of credit, U.S. History and Government (one unit of credit) in 11<sup>th</sup> grade, and Economics and Introduction to Government (one unit of credit) in 12<sup>th</sup> grade. All students will take Regents examinations at the end of 10<sup>th</sup> grade in Global History and Geography and at the end of 11<sup>th</sup> grade in U.S. History & Government.

All Byron-Bergen students have the opportunity to earn a special distinction called “The Seal of Civic Readiness”. Byron-Bergen CSD is committed to civic education that empowers all students to make informed decisions for the public good as members of a culturally diverse, democratic society in an interdependent world. Civic education facilitates the development of civic competencies, which are needed for a democratic society to flourish. Through civic education, students learn how to identify and address problems in their community or school community. Students also learn how to demonstrate respect for the rights of others, respectfully disagree with other viewpoints, and provide evidence for a counterargument. Civic education can strengthen the relationships of schools and students with parents, families, civic leaders, and organizations and community partners. <https://sites.google.com/bbschools.org/bbsealofcivicreadiness/home?pli=1>

### **Global History and Geography 1**

Prerequisite: Freshman Standing

Grade: 9

Unit: 1 credit

Global History and Geography is a two-year course that students take during 9<sup>th</sup> and 10<sup>th</sup> grade, which culminates in a Regents examination at the end of the 10<sup>th</sup> grade. Students will focus on the five social studies standards (geography, world history, US History, economics, and government), common themes that reoccur across time and place (e.g., change, diversity, and nationalism), and eight historical eras. The course is taught chronologically and focuses on exploring historical and cultural differences and similarities between different regions of the world during the same time period. During 9<sup>th</sup> grade, students will gain an understanding of world history and geography from ancient times until the late 18<sup>th</sup> century.

### **Global History and Geography 1 Honors**

Prerequisite: Freshman Standing, Social Studies 8 with an 85% average, English 8 with an 85% average

Grade: 9

Unit: 1 credit

Global History and Geography is a two-year course that students take during 9<sup>th</sup> and 10<sup>th</sup> grade, which culminates in a Regents examination at the end of the 10<sup>th</sup> grade. The course is taught chronologically and focuses on exploring historical and cultural differences and similarities between different regions of the world during the same time period. During 9<sup>th</sup> grade, students will gain an understanding of world history and geography from ancient times until the late 18<sup>th</sup> century. Upon completion, students may register for either the Advanced Placement World History or the 10<sup>th</sup> grade Global History and Geography courses. Advanced Placement students will have the opportunity to earn college credit by achieving a satisfactory score on the AP World History assessment administered in May of their sophomore year. Honors students are also expected to achieve mastery on the Global History and Geography Regents Examination in June of their sophomore year. It is important to note that a strong work ethic, effective time management and organizational skills are essential for success at the honors level. Honors assessments will consist of Advanced Placement World History and modified Advanced Placement World History level essay topics and multiple-choice questions. Exams are designed to enhance comprehension of course material. This honors course will challenge you; it will require your maximum effort; it will push you to reach your maximum potential. There is required work over the summer.

## **Global History and Geography 2**

Prerequisite: Global History and Geography 1

Grade: 10

Unit: 1 credit

Global History and Geography is the second course in a two-year study begun in 9<sup>th</sup> grade. In 10<sup>th</sup> grade students will develop an understanding of world history from the late 18<sup>th</sup> century until modern times, including an emphasis on contemporary issues. Students will focus on the social studies framework including the ten key ideas that continue across time and place. Students are required to take the Global History and Geography Regents exam at the completion of this course as a requirement for graduation.

## **Advance Placement (AP) World History**

Prerequisites: Global 9 Honors with at least 85% average preferred, English 9 with 85 % average preferred

Grade: 10

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

Summer Reading Assignment

AP World History is an elective course for sophomores combining the Regents Global History and Geography requirements with college level assignments. This course is taught as a college-level course and recommended for students with a strong interest in history and those willing to invest a significant amount of time and effort beyond the classroom. AP World History is designed to be the equivalent of a two-semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 1200 C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course provides nine units that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. **To achieve AP credit, students will be required to take the AP World History test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## **United States History and Government**

Prerequisite: Global History and Geography 2

Grade: 11

Unit: 1 credit

United States History and Government is a one-year course that students take in the 11<sup>th</sup> grade. Students will focus on the five social studies standards integrated throughout the study of our nation's history. Students will develop an understanding of American geography, the Constitutional foundations for our government and legal system, and the history of the United States from its beginning to the present day. Students will develop essential social science skills that include finding, using, and presenting information, problem solving, and effective communication orally, visually, and in writing. Students are required to take the US History and Government Regents exam at the completion of this course.

## **Advance Placement (AP) United States History**

Prerequisites: Global History 9 and 10 with 85% average English 9 & 10 with 85 % average

Grade: 11

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

Summer Reading Assignment (Read three books and write three writing assignments).

AP United States History is an elective course for Juniors combining the Regents U.S. History and Government requirements with college level assignments. It is a survey course in U.S. History from the arrival of the first Native Americans to the continent to the present. The course requires summer reading and writing projects in preparation for the school year. This course is taught as a college-level course and recommended for students with a strong interest in history and those willing to invest a significant amount of time and effort beyond the classroom. **To achieve AP credit, students will be required to take the AP United States History test in May at a cost of \$98. The culminating act is the AP exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## **Economics**

Prerequisite: Senior Standing

Grade: 12

Unit: ½ credit

This course is designed as a general overview of Economics. This course will include a focus on personal finance and a broad overview of microeconomics, macroeconomics, money, labor, business organizations and the government's role in the economy.

## **Introduction to Government and Civics**

Prerequisite: Senior Standing

Grade: 12

Unit: ½ credit

This course provides an overview of the American system of government. The two major focuses of the course are the U.S. Constitution especially rights guaranteed in the Bill of Rights and an individual's role and participation in government. Other topics include political beliefs, government institutions, public policy and civil liberties.

## **Advanced Placement (AP) Government**

Prerequisite: United States History and Government

Grade: 12

Unit: 1 credit

Weight: Advanced Placement courses are weighted 1.08 letter grade

AP United States Government and Politics is a college level course that gives students an analytical study of government and politics. This course includes a general study of the Constitutional Underpinnings of American Government, Political Beliefs, Interest Groups, Media, Government Institutions, Public Policy, and Civil Liberties and Rights. Additionally a study of economic forces will be integrated into the course. **To achieve AP credit, students will be required to take the AP United States Government test in May at a cost of \$98. The culminating act is the AP Exam. Students who enroll in AP are expected to participate in this exam, and college credits can be earned pending a successful outcome of the AP exam.**

## **Psychology**

Prerequisite: 10th grade status

Grade: 11-12

Unit: ½ credit

**3 college credits possible\***

General psychology introduces the scientific study of human and animal behavior. Topics include basic methodology, neuroscience, behavior, motivation, emotion, learning, memory, human development, personality, psychological disorders and therapy.

This course is designed to give students an overview of what psychological science has discovered about human behavior and mental processes over the past century. An evolutionary, functional perspective will be applied across the many fields of psychology. Students will gain an understanding of the psychological phenomena that occur in daily life as well as the practical applications of psychological knowledge.

**\*Students are able to earn college credit if they register for this course with Genesee Community College (PSY101) at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**

## **Sociology**

Prerequisite: 10th grade status

Grade: 10-12

Unit: ½ credit

Sociology is an elective class focused on the behavior of people in groups. Topics included in the curriculum are socialization, institutions, social interactions, social change, collective behavior and competition in society. Activities include but are not limited to research, readings, presentations, analysis of society, group activities and simulations as well as standard testing.

## **Current Events**

Prerequisite: None

Grade: 9-12

Unit: ½ credit

This course is an exploration and analysis of local, state, national and international events. Students are exposed to a variety of media, expected to read periodicals, and watch current news programs. Active and regular participation in class discussion and debates are some of the core requirements for successfully completing this class.

## **Personal Finance**

Prerequisite: 10th Grade Status

Grade 10-12

Unit: ½ credit

Effective money management is a disciplined behavior. Students will start on a path toward being in control of their financial futures by developing skills and strategies that promote financial responsibility. This course will teach students to identify and prioritize their personal money management goals, develop personal spending and savings plans, comprehend how to invest more money, identify banking services offered, understand the cost of using credit, and how to protect their assets.

## **Global History through Film**

Prerequisite: Global History and Geography 1

Grade: 10-12

Unit: ½ credit

This is a half year course which covers multiple issues from Global History, including but not limited to, the Crusades, World War I, World War II, The Holocaust, The Iranian Revolution, and Apartheid in South Africa. As they view films on these topics, students will learn about the historical circumstances as well as the effects of these historical turning points. Throughout the semester, students will also do research to discover the historical accuracy of the films being viewed. Students must get a permission slip signed by their parents or legal guardians for the entire film list.

## **US History through Film**

Prerequisite: Global History and Geography 1

Grade: 10-12

Unit: ½ credit

This is a half year course which covers multiple issues from United States History, including but not limited to the French and Indian War, The American Revolution, Slavery, The Great Depression, World War II, and the

Cold War. As they view films on these topics, students will learn about the historical circumstances as well as the effects of these historical turning points. Throughout the semester, students will also do research to discover the historical accuracy of the films being viewed. Students must get a permission slip signed by their parents or legal guardians for the entire film list.

# TECHNOLOGY

***Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs.***

## Technology Electives Anticipated Schedule

**NOTE:** Some technology courses will be offered in a two-year cycle – A / B All other courses are offered every year

<b>Offered every year:</b>	
<b>All Year</b>	
Drawing and Design for Production	
<b>Fall</b>	<b>Spring</b>
<ul style="list-style-type: none"> <li>● CAD</li> <li>● Manufacturing Systems 1</li> <li>● Multimedia Production</li> <li>● Electronics and Programming</li> </ul>	<ul style="list-style-type: none"> <li>● Advanced CAD/Architectural Drawing</li> <li>● Manufacturing Systems 2</li> <li>● Digital Photography</li> <li>● Engineering and Robotics</li> </ul>

<b>Cycle A</b>	<b>Cycle B</b>
<ul style="list-style-type: none"> <li>● Advanced Product Design (Fall)</li> <li>● Transportation Systems (Spring)</li> </ul>	<ul style="list-style-type: none"> <li>● Construction (Fall)</li> <li>● Home Repair and Maintenance (Spring)</li> </ul>

<b>2024-2025 (A)</b>	<b>2025-2026 (B)</b>	<b>2026-2027 (A)</b>	<b>2027-2028 (B)</b>
<ul style="list-style-type: none"> <li>● Advanced Product Design (Fall)</li> <li>● Transportation Systems (Spring)</li> </ul>	<ul style="list-style-type: none"> <li>● Construction (Fall)</li> <li>● Home Repair and Maintenance (Spring)</li> </ul>	<ul style="list-style-type: none"> <li>● Advanced Product Design (Fall)</li> <li>● Transportation Systems (Spring)</li> </ul>	<ul style="list-style-type: none"> <li>● Construction (Fall)</li> <li>● Home Repair and Maintenance (Spring)</li> </ul>

## Offerings by Grade Level

<b>Grades 9-12</b>	<b>Grades 10 -12</b>	<b>Grades 11-12</b>
DDP Electronics and Programming Engineering and Robotics Construction Systems Home Repair and Maintenance	Digital Photography Multimedia Production CAD Advanced CAD Architectural Drawing Manufacturing 1 and 2 Transportation Systems	Advanced Product Design

## Drawing and Design for Production (DDP)

Prerequisite: Freshman standing

Grade: 9-12

Unit: 1 credit

This course emphasizes creative problem-solving, designing, and technical drawing (3D CAD). The course reflects the approach used in business and industry to develop new products. Students develop solutions to various design problems. The proposed solutions are researched, sketched, refined, and drawn 3D CAD design software and 3D printed. Students will work in teams to design and improve products, document their solutions, and communicate them to others.

DDP can be used to fulfill a student's Fine Art graduation requirement.

## Computer Aided Design (CAD)

Prerequisite: DDP, 10th grade status

Grade: 10-12

Unit: ½ credit

3 college credits possible\*

Students create 2-D engineering drawings using basic CAD concepts and industrial level software (AutoCAD). Focuses on the principles and practices common to all CAD systems used in drafting. Develops skills with operating systems, computer terminology, and functions of hardware and peripheral components within a workstation environment and using proper drafting standards. Requires drawings using different techniques, drawing constructions and dimensioning. \*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.

## Advanced Computer Aided Design (Advanced CAD)

Prerequisite: CAD

Grade: 10-12

Unit: ½ credit

3 college credits possible\*

The purpose of this course is to expose students to the fundamentals of computerized manufacturing technology. Topics of study include: shop math, 2D and 3D CAD, G & M code programming, computer numerical control (CNC) equipment, computer aided manufacturing (CAM) software, automation control, and 3D printing. This course reinforces technical drawing standards and CAD modeling skills developed in DDP, and CAD. \*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.

## Architectural Drawing

Prerequisite: DDP and CAD

Grade: 10-12

Unit: ½ credit

Students will gain a comprehensive introduction to the world of architecture, encompassing the exploration of various architectural styles and the practical application of design principles. The primary focus of the course is hands-on learning through the utilization of Autodesk Revit, a powerful Building Information Modeling (BIM) software. Students will develop essential skills in creating architectural plans, elevations, and 3D models, enabling them to visualize and communicate their design concepts effectively. Throughout the course, students will delve into the rich history of architecture, studying different styles, periods, and influential architects to gain a deeper understanding of the built environment.

## Multimedia Production

Prerequisite: 10th grade status

Grade: 10-12

Unit: ½ credit

This dynamic high school course explores the exciting realm of multimedia production, focusing on the integration of visual, audio, and video communication. Students will engage in hands-on projects that encompass podcasting, sound editing, movie production using Adobe Premiere, and computer graphics utilizing Adobe Illustrator. The course is designed to empower students with the skills needed to effectively communicate ideas through a variety of multimedia platforms.

## Construction Systems

Prerequisite: None

Grade: 9-12

Unit: ½ credit

Students learn about residential, commercial and public construction processes. The students spend much of their time doing actual construction activities. Activities include foundation work, structural framing (floor, wall and roof), interior and exterior finishing, and basic electrical and plumbing of residential structures.

## Manufacturing Systems 1

Prerequisite: None

Grade: 9-12

Unit: ½ credit

**3 college credits possible\***

Students learn selection, cutting, bending, joining, and finishing of wood, metal, ceramic and plastic materials used to create manufactured products. Students gain a basic understanding of the operation of a manufacturing facility by imitating the manufacture of a product from beginning to end. Additional information is taught about related careers. **\*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**

## Manufacturing Systems 2

Prerequisite: Manufacturing Systems 1

Grade: 9-12

Unit: ½ credit

This is an applied technology course. Students will be exposed to advanced techniques used in the industrial worlds while basing the course around actual industry practices. The outcome will be a variety of projects that students will manufacture in class combining the basic skills obtained in Manufacturing Systems I and the advanced skills learned throughout this course.

## Transportation Systems

Prerequisite: 10th grade status

Grade 10-12

Unit: ½ credit

This is an applied technology course. Students are exposed to the methods used to move people and goods by land, sea, and air transportation. The learning outcome will be the application of knowledge to engage in a variety of hands-on projects and career exploration pertaining to the transportation industry.



## **Advanced Product Design and Innovation**

Prerequisite: DDP, Required Manufacturing Systems 1 & 2, 11th grade status

Grade 11-12

Unit: ½ credit

This advanced product design course serves as the capstone experience for our technology program, providing students with an immersive and hands-on exploration of applied technology. As the pinnacle of their technological education, students will leverage their acquired knowledge and skills from other courses to conceptualize, design, test, and fabricate innovative solutions to real-life problems.

## **Home Maintenance & Repair**

Prerequisite: none

Grade: 9-12

Unit: ½ credit

This hands-on class is designed to give students a working knowledge of how to make household repairs through the introduction of hand and power tools and techniques needed for basic home maintenance and repair. The fundamentals of interior and exterior home maintenance including electricity, plumbing, carpentry, masonry and appliance trouble-shooting and repairs will be explored. Also, students will review fundamental methods in installing and repairing common household items such as flooring, furniture, cabinets, and basic wall framing. The understanding of blueprints and its importance relating to trouble-shooting problems buried within a wall structure will also be covered.

## **Electronics and Programming**

Prerequisite: None

Grade: 10-12

Unit: ½ credit

This comprehensive electronics course provides students with a solid foundation in basic electronic circuits, progressing to the study of essential digital logic elements, and culminating in hands-on programming using Python for Arduino microcontrollers. Designed to bridge the gap between theory and practical application, this course equips students with the skills necessary to understand, design, and program electronic systems, laying the groundwork for further exploration in computer hardware and real world problem solving applications.

## **Engineering and Robotics**

Prerequisite: Electronics and Programming

Grade: 10-12

Unit: ½ credit

Engineering and Robotics is an immersive course designed to introduce students to the foundational concepts of engineering through the exploration of robotics, mechatronics, and the fundamental principles of simple machines using the VEX platform. Through a series of hands-on projects and challenges, students will delve into the core principles of mechanics, pneumatics, hydraulics, and simple machines, fostering a comprehensive understanding of engineering disciplines and cultivating problem-solving skills.

## **Digital Photography**

Prerequisite: Multimedia Production or Studio in Art

Grade: 10-12

Unit: ½ credit

This comprehensive course is designed to equip students with the essential skills for producing high-quality photographs. Through a combination of theoretical concepts and hands-on practical exercises, students will explore the fundamentals of photography, master proper exposure techniques, understand composition guidelines, and learn to digitally enhance and edit images using Adobe Photoshop.

# VISUAL ARTS

***Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.***

“Every child is an artist; the problem is how to remain an artist when he grows up.”

Pablo Picasso

The Visual Arts program presents opportunities for students to broaden their interests in the arts as they acquire knowledge, understanding, and appreciation of the artistic, cultural, and intellectual accomplishments of civilization, and develop skills to express personal artistic talents. Students who show a strong interest or ability in the visual arts should begin preparing a portfolio and pursue an art major sequence.

**NOTE:** Some art courses will be offered in a two-year cycle – A / B All other courses are offered every year

<b>Offered every year:</b>	
<ul style="list-style-type: none"> <li>● Studio in Art</li> <li>● Drawing and Painting 1</li> <li>● Drawing and Painting 2</li> <li>● Senior Portfolio Capstone</li> </ul>	<ul style="list-style-type: none"> <li>● Pottery</li> <li>● GCC Art 110</li> <li>● Digital Photography</li> </ul>

<b>Cycle A</b>	<b>Cycle B</b>
<ul style="list-style-type: none"> <li>● Eclectic Art</li> </ul>	<ul style="list-style-type: none"> <li>● 3-D Design &amp; Sculpture</li> </ul>

<b>2022-2005 (A)</b>	<b>2025-2026 (B)</b>	<b>2026-2027 (A)</b>	<b>2027-2028 (B)</b>
<ul style="list-style-type: none"> <li>● Eclectic Art</li> </ul>	<ul style="list-style-type: none"> <li>● 3-D Design &amp; Sculpture</li> </ul>	<ul style="list-style-type: none"> <li>● Eclectic Art</li> </ul>	<ul style="list-style-type: none"> <li>● 3-D Design &amp; Sculpture</li> </ul>

## Offerings by Grade Level

<b>Grades 9-12</b>	<b>Grades 10-12</b>	<b>Grades 11-12</b>	<b>Grade 12</b>
<ul style="list-style-type: none"> <li>● Studio in Art</li> </ul>	<ul style="list-style-type: none"> <li>● Drawing and Painting 1</li> <li>● Pottery</li> <li>● 3-D Design &amp; Sculpture</li> <li>● Photography</li> </ul>	<ul style="list-style-type: none"> <li>● Drawing and Painting 2</li> <li>● GCC Art 110</li> <li>● Eclectic Art</li> </ul>	<ul style="list-style-type: none"> <li>● Senior Portfolio Capstone</li> </ul>

### Studio in Art

Prerequisite: None

Grade: 9-12

Unit: 1 credit

Studio In Art is a foundation course for students who are planning to be art majors or are taking an art course for a fine art graduation credit. *Throughout the course, the focus will be on WHY humans have created art throughout time with a major focus on art history and diverse cultures.* This course is also centered on the

exploration of a variety of media and introduces students to hands-on art techniques in order to develop successful works of art. A sketchbook is required.

## **Drawing and Painting 1**

Prerequisite: Studio in Art

Grade: 10

Unit: 1 credit

This full year course builds on learning from Studio in Art and is designed to have an *intense focus on materials and advanced technique*. Students will become more skilled in the use of graphite drawing pencils, colored pencils, pastels, pen and ink, watercolors, and acrylic paints. A sketchbook is required.

## **Drawing and Painting 2**

Prerequisite: Studio in Art and Drawing and Painting 1

Grade: 11-12

Unit: 1 credit

Students who successfully completed Drawing & Painting 1 use this course to continue the art sequence. *The main focus of this course is guiding the students to use their prior knowledge of materials to begin to develop their own personal artistic style*. Advanced techniques using drawing and painting supplies are explored and students will continue to learn about themes and artists in the art world. A sketchbook is required.

## **Senior Portfolio Capstone**

Prerequisite: Minimum three previous Art credits

Grade: 12

Unit: 1 credit

This course is designed to be the culminating art experience for senior artists. Students will be guided through identifying a theme of interest and the ultimate course outcome is a unified, coherent body of artwork showcasing each student's style and vision. Students will be encouraged to explore the materials of their choice, either 2-dimensional, 3-dimensional, or both and college portfolio preparation will be emphasized. A sketchbook is required.

## **Pottery**

Prerequisite: Studio in Art

Grade: 10-12

Unit: 1 credit

This course will introduce students to the pottery studio. Vocabulary for clay and knowledge of clay and ceramics in art history will be incorporated. Students will explore three basic forms of hand building: pinch, coil, and slab. Students will also learn about a variety of glazing and firing techniques. Once students have learned basic building techniques, they will explore more advanced forms of hand building such as lidded vessels and sculptural forms. All students will learn how to use the pottery wheel and throw vessels with clay.

## **GCC Art 110**

Prerequisite: Studio in Art, Drawing and Painting 1, and at least 1 other art elective

Grade: 11-12 And teacher approval

Unit: 1 credit

**3 college credits possible\***

GCC Drawing 101 is designed for serious students interested in majoring in fine art in college and earning college credit. This course will focus on various drawing techniques, artistic style and personal choice, analyzing artwork through critique discussion, and the development of a college admissions portfolio. There will also be a strong emphasis on direct observational drawing. Students are required to have a sketchbook, and hardbound portfolio. **\*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**

### **3-D Design & Sculpture**

Prerequisite: Studio in Art

Grade: 10-12 Offered every other year (next offered 2023-2024)

Unit: 1 credit

We will explore the basic principles of art that govern 3 dimensional work and how they can be manipulated to produce aesthetically pleasing and interesting sculptural forms. Offered every other year with Eclectic Art.

### **Eclectic Art**

Prerequisite: Studio in Art and 1 other art elective or teacher permission

Grade: 11-12 Offered every other year (offered 2022-2023)

Unit: 1 credit

This full year course is designed to give students an opportunity to explore a wide variety of arts experiences, media, and concepts not typically available in our other art classes. Students can expect to try non-traditional art forms like paper making, bookbinding, textile arts, up-cycling, multi-cultural arts & anthropology, mixed media arts and much more. A variety of guest artists and field trips exploring local arts experiences may be included in this course.

### **Digital Photography**

Prerequisite: Multimedia Production or Studio in Art

Grade: 10-12

Unit: ½ credit

This comprehensive course is designed to equip students with the essential skills for producing high-quality photographs. Through a combination of theoretical concepts and hands-on practical exercises, students will explore the fundamentals of photography, master proper exposure techniques, understand composition guidelines, and learn to digitally enhance and edit images using Adobe Photoshop..

# WORLD LANGUAGES

*Students will be able to use a language other than English for communication.*

## Spanish 1

Prerequisite: None

Grade: 9-12

Unit: 1 credit

This course is designed to meet the one year language requirement in high school. Students eligible for this course may not have received credit in a middle school language class or would like to learn a new language. This course introduces the student to the Spanish language and to the culture of the Hispanic world. Upon completing this course, students will be able to carry on basic conversation in Spanish. Written, as well as oral comprehension is emphasized.

**\*Students who did not pass the NYS Proficiency requirements in grade 8 must take and pass this course in order to graduate.**

## Spanish 2

Prerequisite: Spanish 1 / Spanish 8

Grade: 9-12

Unit: 1 credit

Students learn and practice the grammatical concepts of the language and other fundamentals such as writing brief descriptions of simple situations and events, participating in short conversations, reading ads and announcements, and using cues and strategies to understand dialogues. Through art, music, and history, students continue their study of the basic geographical and cultural aspects of the countries speaking the language. The structure of grammar as it relates to writing and speaking conventions is also an integral part of this course. Throughout the year, weekly quizzes and tests are given.

## Spanish 3

Prerequisite: Spanish 2

Grade: 10-12

Unit: 1 credit

In this course, more emphasis is placed on oral and written work. This course also involves a great deal of reading and vocabulary expansion. Several short oral presentations are required throughout the year and weekly quizzes and tests are given. It is expected that the students have a command of the language and that they be able to comfortably communicate both orally and in writing. The Comprehensive Spanish Regional examination is given in June. Students must pass the class and the exam in order to receive credit necessary for the Advanced Regent Diploma.

## Spanish 4

Prerequisite: Spanish 3 and successfully passing the Spanish Regional Exam Students must have had an 85% or better in Spanish 3 in order to take this course

Grade: 11-12

Unit: 1 credit

**3 college credits possible\***

This course concentrates on skills of reading, writing, and speaking in Spanish. Conversations and discussions are conducted mostly in the target language. Hispanic culture is researched in depth and discussed in class. Throughout the year, students are required to do research on the culture, write papers, and do oral/visual presentations in Spanish. **\*Students are able to earn college credit if they register for this course with Genesee Community College at current ACE GCC tuition rate of approximately \$225/ 3 credit hours.**

## **BOCES: OCCUPATIONAL EDUCATION PROGRAMS**

The Occupational Education programs established by the Board of Cooperative Educational Services are designed to be an extension of each component school in Genesee County. It is meant to be supplemental to, and an enrichment of, the existing program. The curriculum is planned for both those students intending to enter the labor market immediately as well as preparing for college upon graduation from high school. All students find added enrichment in the skills and practices provided by these programs. The BOCES Vocational program is meant to supplement, not supplant, the course of study at Byron-Bergen Sr. High School.

### **What Vocational Education has to offer:**

- Preparation for initial employment or college education in a variety of vocational and technical fields.
- Work Experience and Work Exploratory programs giving students opportunities to gain experience, confidence and a better understanding of the vocational-technical field they are pursuing.
- A Student Placement program to assist graduating students in securing employment or college placement.
- Articulation and enrichment agreements with Genesee Community College, Monroe Community College, Canton College, and Community College of the Finger Lakes. Qualified graduates may be granted college credits and/or advanced placement.
- Up to four units of high school credit per year.

### **Guidelines:**

1. Successful completion of recommended courses and consistent school attendance will be evaluated when considering a student's occupational eligibility.
2. Before attending a vocational program as an 11<sup>th</sup> grader, students should have successfully completed English 9 and 10, Social Studies 9 and 10, two years of mathematics, two years of science, one year of Fine Arts, Health, and one unit of Physical Education. Completion of Career Skill/Financial Management at BOCES is required for students using a vocational program as a 5-unit sequence for a Regents Diploma with Advanced Designation.
3. Juniors have first consideration in a two-year program.
4. Seniors have first consideration in a one-year program.

### **Courses of Study**

Course are subject to change

Math, Science, and Career & Financial Management courses also available

#### **10th Grade:**

**Career Assessment Program (CAP)**

#### **11th and 12th Grade:**

**Animal Science 3 college credits possible\***

**Auto Trades: Automotive Technology**

**Auto Trades: Collision, Custom & Restoration**

**Building Trades**

**Conservation/Heavy Equipment**

**Cosmetology**

**Criminal Justice**

**Culinary Arts 6 college credits possible\***

**Diesel Mechanics**

**Electro-mechanical Trades 9 college credits possible\***

**Graphic Arts**

**Health Dimensions**

**Metal Trades**

**Programming and Interactive Media (PIM) 18 college credits possible\***

#### **Only available to take Senior Year**

**Health Careers Academy 15 college credits possible\***

**Justice Academy 15 college credits possible\***