

# **Program of Studies**

## **2025-2026**

**Marcellus Senior High School**

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**MARCELLUS SENIOR HIGH SCHOOL**  
OFFICE OF THE HIGH SCHOOL PRINCIPAL

Winter 2025

Dear Mustang Students and Families,

Here at Marcellus Senior High School, we strive to provide our students with educational opportunities that not only expose them to first class learning experiences, but also furnish them with the skills and exposure to authentic learning experiences that will help prepare them for their future. Students have many choices to pursue their interests, expand their experiences, and prepare for their next chapter beyond high school.

Students, families, and our school counselors will work together to plan the four years of high school and make appropriate decisions/revisions along the way. All students meet annually with their counselors to discuss course planning. The process of course selection considers the requirements to fulfill for NYS graduation, while also giving consideration to a combination of teacher recommendations, standardized test scores, past academic performance, personal passions, and future plans beyond high school.

This Program of Studies document will familiarize you with some school policies and the general nature of our course offerings. This document is also available on the district website. Please note that all courses may not be offered every year due to enrollment and staffing. Your school counselor will be able to provide you with more information upon request.

The faculty here at Marcellus Senior High School is dedicated to assisting students in developing their full potential. Please contact either myself or your child's counselor if you have questions, or are in need of assistance or direction of any kind.

Cheers,



Brian Sevey  
Principal  
Marcellus Senior High School

## HIGH SCHOOL GRADUATION INFORMATION

To graduate, a student must have a minimum of **22 credits** for a Regents diploma and meet credit and sequence requirements as defined by the New York State Board of Regents.

Students must take a minimum of 5 academic classes plus physical education each semester. Any variation/modification is at the discretion of the building principal.

A typical schedule for students in each grade level is provided to use as a general guide for successfully fulfilling the grade placement criteria and meeting graduation requirements.

Freshman	Sophomore	Junior	Senior
English 9	English 10	English 11	English 12
Global History I	Global History II	US History	Economics / Participation in Government
Math	Math	Math	Math
Science	Science	Science	Science
World Language	World Language	World Language	World Language
Fine Arts Requirement	Human Ecology / Elective	Elective(s)	Elective(s)
P.E.	P.E.	P.E.	P.E.

### **Definition of terms**

The following are definitions of terms frequently used in discussing educational planning:

1. **Unit of Study**: At least 180 minutes of instruction per week throughout the school year, or the equivalent.
2. **Unit of Credit**: Credit given to a student for passing a subject studied for a specified time, usually a full academic year.
3. **Elective**: A subject taken by choice and not required.
4. **Regents Credit**: Credit given for a subject in which a New York State Regents Examination or its equivalent is passed.
5. **Required Subject**: Subjects which all students need in order to meet graduation requirements.

**[Diploma Type Chart](#)**-Click on the hyperlink for information about graduation diploma types.

## GRADUATION SEALS AND ENDORSEMENTS

In the state of New York, graduation seals and endorsements are awarded to high school students to recognize their achievements and skills in specific areas. Three notable seals and endorsements offered here at Marcellus Senior High School are the Seal of Biliteracy, the Seal of Civic Readiness, and the Career & Technical Education (CTE) Technical Endorsement.

These graduation seals and endorsements provide students with additional recognition for their accomplishments and skills beyond the traditional high school diploma. They serve as a testament to the students' dedication, hard work, and proficiency in specific areas, opening doors to future opportunities and enhancing their college and career prospects.

### SEAL OF BILITERACY

The Seal of Biliteracy is awarded to students who have attained a high level of proficiency in both English and another language. This seal acknowledges students who are bilingual and biliterate, highlighting their ability to communicate effectively in multiple languages and their cultural understanding.

Students in upper level language courses can be recognized for their skills and become part of an elite group of students in New York State by pursuing the Seal of Biliteracy. Our students have the opportunity to distinguish themselves from other high school graduates and new college entrants by earning this commendation, which attests to their high proficiency level in English and one or more world languages. If all of the requirements are met, and the student successfully presents their culminating project, their high school diploma will bear a special Seal of Biliteracy and they will receive a medallion to wear at graduation.

The chart below outlines the basic requirements. In order to qualify for the Seal, a student must earn at least 3 points in both English and a World Language accordingly.

**Seal of Biliteracy Requirements**

English 3 Points Total Required	World Language All Points Below are Required
Score of 80+ on ELA Regents Common Core 1 point	Complete a Checkpoint C World Language course (Level IV or V) with a grade of 85+. 1 point
Complete all 11th and 12th grade ELA courses with an 85+ average 1 point	Score at a proficient level on the Checkpoint C assessment. 1 point
Score a 3 or higher on an AP English Language or AP English Literature exam 1 point	Present a culminating project (demonstrating speaking, listening, reading, and writing skills) to a panel of reviewers. 2 points
Present a culminating project (demonstrating speaking, listening, reading, and writing skills) to a panel of reviewers. 2 points	

## SEAL OF CIVIC READINESS

The Seal of Civic Readiness is awarded to students who demonstrate a strong understanding of civic engagement and readiness for active participation in their communities. Civic-ready students use civic knowledge, skills, and mindsets to make decisions and take actions for themselves, their communities, and the public good as members of a culturally diverse, democratic society. This seal recognizes students who have shown their commitment to community service, leadership, and a deep understanding of democratic principles and processes. In order to earn the Seal of Civic Readiness, by May of senior year, students must provide evidence in Civic Knowledge and Civic Participation by completing components in the chart below.

<b>Seal of Civic Readiness</b>		
Students must earn at least 6 points in total, and at least 2 points from each section		
* = may be earned more than once		
Criteria for Demonstrating Proficiency in Civic Knowledge		
(must earn at least two points in this section)		
<b>Four Social Studies Courses Required for Graduation</b>	Points Possible:	1
Global I, Global II, US History, Econ/Gov	Points Earned:	
<b>Social Studies Regents Exams - Mastery (85+)</b>	Points Possible:	1.5*
Global II, US History	Points Earned:	
1.5 for each 85+ on a S.S. Regents		
<b>OR -Social Studies Regents Exams - Proficiency (65+)</b>	Points Possible:	1*
Global II, US History	Points Earned:	
1 for each 65+ on a S.S. Regents		
<b>Successful Completion of Advanced Social Studies Courses</b>	Points Possible:	0.5*
AP US History, AP US Gov't & Politics, SUPA Econ., SUPA Personal Finance	Points Earned:	
.5 for each AP course successfully completed		
<b>Research Project</b>	Points Possible:	1
Can be completed in any course as long as it is a civic related topic	Points Earned:	
Criteria for Demonstrating Civic Participation		
(must earn at least two points in this section)		
<b>Complete a High School Civic Project</b>	Points Possible:	1.5*
Global Environment Project, Senior Project (if civics related), Passion Project (if civics related), Independent Study (if civics related)	Points Earned:	
1.5 for each Civic Project		
<b>Complete a Service Learning Project</b>	Points Possible:	1*
25 hours of community service with a reflection	Points Earned:	
<b>Elective Courses Promoting Civic Engagement</b>	Points Possible:	0.5*
Human Rights, Forensics, Independent Living, Sustainability Science, Intro to Sociology, Intro to Psychology, SUPA Personal Finance (only if earned SUPA Eco)	Points Earned:	
.5 for each Elective Course Completed		
<b>Civic Experience in Extra-Curriculars or Work-Based Learning</b>	Points Possible:	0.5*
CTE BOCES program, Class officer, Student Government Officer, FFA, Model UN, Mock Trial, or DECA (half-point each), 6th Grade Show, 4H, Scouts, Mustang Times Officer, Membership in Rho Kappa, Rho Kappa Officer, National Honor Society Officer	Points Earned:	
.5 for each Civic Experience Completed		
<b>Middle School Capstone Project</b>	Points Possible:	1
Earth Day Project OR Mars Project	Points Earned:	
<b>High School Capstone Project</b>	Points Possible:	4
Global Environment Project, Passion Project (English 12 & if civics related), Independent Study (if civics related), Eagle Scout, Gold Award	Points Earned:	

## CTE TECHNICAL ENDORSEMENT

The CTE Technical Endorsement is awarded to students who have completed a Career and Technical Education (CTE) program and demonstrated mastery of technical skills in a specific field. This endorsement recognizes students who have acquired specialized knowledge and skills that prepare them for success in their chosen career paths. In order to earn the Marcellus Senior High School CTE Technical Endorsement, students must successfully complete a total of 3.5 credits in the following course sequences, as well as pass each of the three parts of a technical assessment (written, demonstration, project components).

Courses	Credits
*Careers and Financial Management	0.5
*Sustainability Science	1
Welding & Metal Fabrication	0.5
Small Engines	0.5
Carpentry & Fine Woodworking	0.5
Building Trades	0.5
Project Management	1.0

\* = Required course to earn the CTE Technical Endorsement

## ACADEMIC POLICIES AND PROCEDURES

### I. Minimum Course Load

Students at Marcellus Central are required to carry five (5) courses (reflecting 5 units of credit) plus physical education. Exceptions will be considered by the Senior High School Principal for students with serious extenuating circumstances (e.g., health condition, personal, or family welfare, etc.).

**Credit for courses enrolled outside the district need to be pre-approved** by the principal. Requests for credit approval should be submitted in writing to the school counseling office prior to enrollment in the course.

### II. Course Scheduling

All students are seen by a school counselor in the spring to discuss current and future plans. A part of this meeting is devoted to subject selection for the next year(s) as is appropriate for the plans. Schedule changes are made throughout the spring and into the summer as the circumstance necessitates.

### III. Drop Policy/Dropping a Course

A student may drop a course with parental approval. The following conditions will apply:

1. If a student drops a course during the first 10 weeks of a full year course, or during the first 5 weeks of a ½ year course, no record of having taken the course will appear on the student's transcript.
2. If a student drops a course beyond the above time limit, but before the last 10 weeks of a full year course, or before the last 5 weeks of a ½ year course, a "Withdraw/Pass" or "Withdraw/Fail" will appear on the student's transcript.
3. If a student drops a course during the last 10 weeks of a full year course, or during the last 5 weeks of a ½ year course, the student will receive a final grade which will appear on the final record and will be used for averaging purposes.
4. Students must remain in the class until the official drop has been processed. The school counselor will make the student aware when the drop is official.

### IV. Changing Levels of a Course

Changing from one academic level of the course to another academic level of that course of study will be made only in the situation where it is determined that the content and objectives of the course are too difficult for the student based on the student's aptitude and ability. If the reasons for a student's poor academic standing in the course include poor attendance, unwillingness to do the homework, and other indications of lack of effort, then such student would not be changed to a lower academic level course.



**V. Honors, College, and Advanced Placement Level Courses (weighted classes):**

In order to account for the increased rigor and expectations of honors, college, and Advanced Placement level courses, the following grade-weighting metrics will be used:

Honors Courses = weighted at 105%

College and AP Courses = weighted at 110%

Note:

Weighted averages will be calculated in the student's overall quarterly average, and will not be displayed in their quarterly course average.

See the following pages for more information on honors, college, and AP course offerings.

**VI. Honor Roll**

Honor roll is computed for each of the four marking periods. Honor Roll eligibility will be calculated as follows:

High Honor Roll      The average for all subjects taken is 92.00% or above

Honor Roll:              The average for all subjects taken is at least 88.00%

**\*NOTE:**      *Students with an incomplete will not be eligible for the honor roll or high honor roll that marking period until the incomplete is resolved.*

**VII. Summer School**

Summer school is offered annually to those students who fail a course (but are not in violation of the attendance policy) and/or the Regents exam, if applicable. Summer school is offered through BOCES at a site to be announced. Students should inquire at the counseling office for additional/specific summer school details.

**SPECIAL NOTE:**

*Not all courses listed in this Program of Studies may be offered each year. Some course listings have been included that are still being reviewed by the staff and administration at the time of printing this booklet. Some courses may be dropped because of insufficient enrollment; other courses may be offered on a rotating basis.*

*Changes, adjustments, or exceptions to the Marcellus Senior High School Academic Policies and Procedures is at the discretion of the building principal.*

## HONORS, COLLEGE, AND AP LEVEL COURSES

Marcellus Senior High School offers students the opportunity to explore interests (academic and extracurricular) and connect learning to future goals. We believe it is important to choose appropriately challenging courses while not adversely impacting student mental health. To that end, we recommend that students take a maximum of 2 Honors/College/AP level courses per year. The process of course selection and enrollment into honors, college, and AP level courses considers the requirements to fulfill for NYS graduation, while also gives consideration to a combination of teacher recommendations, standardized test scores, past academic performance, personal passions, and future plans beyond high school. Any request for more than two such courses in a year is at the discretion of the high school principal.

### College Courses

Course	HS Credits	College Credits	College	Cost **
<b>Sustainability Science</b> (AGBU 160)	1	3	SUNY Cobleskill	\$150 / 3 credits
<b>SUPA Economics</b> (ECN 203)	.5	3	Syracuse University	\$345 / 3 credits
<b>SUPA Personal Finance</b> (ECN 305)	.5	3	Syracuse University	\$345 / 3 credits
<b>College Composition and Literature I</b> (ENG 103)	.5	3	SUNY (OCC)	Free
<b>College Composition and Literature II</b> (ENG 104)	.5	3	SUNY (OCC)	Free
<b>AutoCAD</b> (MET 261)	1	3	SUNY (OCC)	Free
<b>Technical Drawing Interpretation</b> (ELM 101)	.5	1	SUNY (OCC)	Free
<b>Creative Writing</b> (CRW 103)	.5	3	SUNY (OCC)	Free
<b>Pre-Calculus</b> (MAT 143)	1	4	SUNY (OCC)	Free
<b>Calculus</b> (MAT 161)	1	4	SUNY (OCC)	Free
<b>Statistics</b> (MAT 214)	1	3	SUNY (CCC)	Free
<b>Physics I</b> (PHY 103)	1	4	SUNY (OCC)	Free
<b>Physics II</b> (PHY 103)	1	4	SUNY (OCC)	Free
<b>Spanish IV</b> (SPA 201)	1	3	SUNY (Oswego)	\$175 / 3 credits
<b>Spanish V</b> (SPA 202)	1	3	SUNY (Oswego)	\$175 / 3 credits
<b>French IV</b> (FRE 201)	1	3	SUNY (Oswego)	\$175 / 3 credits
<b>French V</b> (FRE 202)	1	3	SUNY (Oswego)	\$175 / 3 credits

\*\*Prices are subject to change. Cost provided at this time is based on 2023-2024 pricing.

## **AP Courses**

**AP English Language & Composition**

**AP English Literature & Composition**

**AP United States History**

**AP US Government & Politics**

**AP Biology**

**AP Portfolio (Drawing, 2D Design, 3D Design)**

\*\*Fee of \$99/AP Exam is based on 2024-2025 pricing.

## **COURSE CATALOG**

### **CAREER AND TECHNICAL EDUCATION AT MARCELLUS**

#### ***Agriculture Course Offerings***

##### **Sustainability Science**

*1 Unit of Credit*

Sustainability Science is an introductory exploratory course that reviews a variety of courses offered within the CTE Department at Marcellus. Students participating in the Sustainability Science course experience hands-on activities, projects, and problems. Student experiences involve the study of communication, the science of food production, plants, animals, natural resources, and mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Sustainability is an applied course that requires students to develop scientific concepts and apply their understanding of STEM to real-world problems.

*Note - this course earns 3 college credits through SUNY Cobleskill*

##### **Basic Cooking**

*½ - 1 Unit of Credit*

Basic Cooking is an introductory course intended to expose students to the fundamentals of cooking. In this course, students learn basic kitchen safety and processes. Throughout the year, students apply an understanding of cooking techniques to produce food from around the country as well as the world. After completing this course, students will feel comfortable following a recipe as well as venturing out to produce their own dishes without a recipe. This is a laboratory course, and students will be expected to participate in weekly cooking assignments.

*Note - this course may be taken as a half or full year course*

### **Career and Financial Management**

*½ Unit of Credit*

This course is essential for students who plan on living and succeeding in today's competitive society. Students will learn about the realities of the working world while learning more about themselves. They will have the opportunity to develop transferable skills essential to all occupations. Students will assess their abilities, interests, and aptitudes and will research career paths of interest. Students will also learn the best processes to follow in completing job applications, writing resumes and cover letters, and interviewing for jobs. Students will learn about buying a car and a house, using and balancing a checking account, investing and saving, preparing tax returns, and purchasing insurance. They will prepare a realistic financial budget for an individual living independently. They will learn the difference between cash and credit, and how, when, and why to use both.

*Note - this course is required for the CTE Technical Endorsement*

### **Welding & Metal Fabrication**

*½ Unit of Credit*

This is an introductory course intended to help students understand the fundamentals of welding and metalworking. This is a project-based course that is grounded in theory. Projects will allow students to develop a fundamental understanding of the nature of work conducted in the welding and fabricating industries. Students will use a mixture of traditional metalworking techniques and computer-automated practices in the school's metal shop. This is a class that is not only for those interested in pursuing a career in metalworking but also for those who would like to be independent homeowners or explore the trades.

### **Small Engines**

*½ Unit of Credit*

This is an introductory course intended to help students understand the fundamentals of two-stroke engines, four-stroke engines, and equipment operation. This is a laboratory-based course that is grounded in theory. Learning modules will allow students to break down small engines to develop a complete understanding of the parts and how each functions. Students will use their understanding of small engines to troubleshoot and diagnose problems with small engines.

*Note - This course will be offered in the 2025-2026 school year*

### **Carpentry & Fine Woodworking**

*½ Unit of Credit*

This is an introductory course intended to help students understand the fundamentals of woodworking. Students will learn how wood products are designed and created to serve humankind. This is a project-based course that allows students to use the school's woodshop. Students develop a fundamental understanding of lumber and the tools, both traditional and computer-automated, to create wood products. This course depends on successful work in both group and individual learning activities.

*Note - This course will be offered in the 2026-2027 school year*

### **Building Trades**

*½ Unit of Credit*

This is an introductory course intended to help students understand the unique disciplines of the construction industry. This is a laboratory course that is grounded in theory and will help students develop the skills necessary to be successful in any chosen field of construction. Laboratory exercises will allow students to develop a fundamental understanding of the different construction disciplines including the concepts that drive them, the tools that are commonly used in them, and common relevant work practices. Students will obtain exposure to framing, wiring, plumbing, trimming, and painting. Students will have the skills to pursue any entry-level job in construction after completing this course.

*Note - This course will be offered in the 2025-2026 school year*

### **Project Management**

*½-1 Unit of Credit*

Project Management is an independent senior-level capstone course. This course is intended to follow a comprehensive sequence of CTE courses throughout the student's high school career. In this course, students work directly with the instructor to apply his or her understanding of a chosen field within CTE. Students have the freedom to pursue an area of management they are specifically interested in. This course is designed and intended for a student who is interested in pursuing a field of CTE. As an independent study, students are expected to be self-motivated learners who have a significant interest in further developing their understanding of a chosen construction or manufacturing process.

## ***Technology Education Course Offerings***

### **Design and Drawing For Production (DDP)**

*1 Unit of Credit*

This course is a mixture of Design, Technical Drawing and Pre-Engineering. This course will deal with: sketching, orthographic projection, modeling and prototyping, computer-aided drawing, pictorial drawing, problem solving, and many other skills used by designers, technical illustrators, and engineers. The course promotes creative thinking, teamwork, research and analysis, problem solving, and engineering standards. The course runs one full year for one credit. It is a prerequisite for several technology courses.

*Note - This course can be used to fulfill the FINE ARTS requirement for graduation*

### **Auto CAD**

*1 Unit of Credit*

This is an introductory course in CAD (Computer Aided Drafting) using AutoCAD software. Topics include the manipulation of the basic drawing commands to construct computer detailed multi-viewed drawings.

*Note - This course earns 3 college credits through OCC*

### **Technical Drawing Interpretation (ELM 101)**

*½ Unit of Credit*

This course introduces students to common technical drawings including electrical schematics, mechanical drawings, and fluid power circuits. Students will gain an understanding of typical technical drawing content including title blocks, revisions, and parts lists, and how to correlate the schematic and parts list to physical components. Students will learn to interpret multi-view drawings utilizing orthographic projection and be able to interpret dimensions, tolerances, symbols, and notes on engineering drawings.

*Note - This course earns 1 college credit through OCC*

### **Robotics**

*½ - 1 Unit of Credit*

Robotics introduces and allows high school students to further their knowledge in a wide range of Science Technology Engineer and Math skills. Topics will include designing, programming, and problem solving strategies. This course will involve students in the development, building and fabrication of robotics chassis'. Students will work hands-on in teams to design, build, program and document their progress. Topics will include motor control, gear ratios, torque, friction, sensors, decision-making, propulsion systems and locomotive systems. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots and illustrations of current state of the art research and applications.

*Note - This course may be taken as a half or full year course*

## **ENGLISH**

*Students are required to take four years of English to graduate from high school in addition to passing the New York State English Regents Exam (typically taken during Junior year).*

### ***English Course Offerings***

#### **English 9**

*1 Unit of Credit*

English 9, aligned with the New York State Next Generation Standards, offers a comprehensive language arts curriculum. Students engage in literary analysis across genres, including fiction and poetry, and nonfiction reading for informational literacy. Writing skills are honed through expository, narrative, and argumentative essays, emphasizing clarity, creativity, and persuasion. The course prioritizes listening and speaking skills, fostering active listening and effective oral communication through discussions and presentations. Research skills are developed, and students learn to present information cohesively, integrating multimedia tools. Continuous assessment measures growth, ensuring students acquire a strong foundation in language arts, setting them on a path for success in subsequent academic pursuits.

#### **English 10**

*1 Unit of Credit*

The English 10 curriculum, designed in accordance with the New York State Next Generation Standards, focuses on developing advanced language skills. Students analyze complex elements such as themes and rhetorical strategies by reading literary and nonfiction texts. The writing process is emphasized as a recursive approach, fostering the creation of narrative, expository, and argument-based essays with attention to clarity and audience awareness. Research skills are honed, guiding students in formulating questions, evaluating sources, and presenting findings ethically. Oral communication is refined through presentations and discussions, promoting active listening and effective expression. Attention to language conventions ensures clarity and style. Continuous assessments track student progress, aiming to equip them with the language proficiency necessary for college and career readiness.

#### **AP English Language and Composition**

*1 Unit of Credit*

The AP English Literature 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 course aligns to an introductory college-level rhetoric and writing curriculum.

*Note - Students will take the AP exam in May*

## **English 11**

*1 Unit of Credit*

Instruction in reading, writing, language, and listening/speaking will continue with the texts and materials in the 11<sup>th</sup> and 12<sup>th</sup> grade text complexity band, and a more extensive understanding of literary works is emphasized. Students will continue to study a combination of assigned readings of novels, plays, short stories, poetry, essays, and other nonfiction works while having a choice in some reading selections. The writing process is central, guiding students through planning, drafting, revising, and editing. They refine narrative, expository, and argumentative writing using credible evidence. Research skills focus on inquiry, synthesis, and ethical use of information. Speaking and listening will continue to be an important part of the curriculum, and students will complete various listening and speaking tasks.

*Note - Students will take the NYS English Regents exam in January*

## **AP English Literature and Composition**

*1 Unit of Credit*

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 course aligns to an introductory college-level literature and writing curriculum.

*Note - Students will take the AP exam in May*

## **English 12**

*1 Unit of Credit*

Instruction will continue to move the students forward in their abilities to read and write critically and analytically. The Senior Project (Passion Project) is a significant component of Senior English. The project is a comprehensive research task culminating in a formal oral presentation and written documentation of the research involved. Senior year emphasizes career readiness. Assigned writing tasks, investigations, and research-based writing assignments will engage students in the types of analytical thinking they need to be successful in the world beyond high school.

## **OCC English 12 (ENG 103)**

*½ Unit of Credit*

Emphasizing the recursive nature of writing and the process of revision, this course teaches students the skills and processes necessary for writing and revising college-level academic prose. Various aspects of writing, including invention/pre-writing, composing, revision, and editing/proofreading will be taught. Critical readings of various non-fiction texts may be used to develop an understanding of rhetorical conventions and genres. Composing in and for electronic environments, as well as their conventions, will also be taught.

*Note - This course earns 3 college credits through OCC*

## **OCC English 12 (ENG 104)**

*½ Unit of Credit*

Teaches students to comprehend, respond to and use the ideas of others in their own writing. Skills such as analytic and critical reading and writing, summarizing, and paraphrasing are developed through the study of literature. Term paper form will also be taught.

*Prerequisite: ENG 103*

*Note - This course earns 3 college credits through OCC*

### **Creative Writing**

*½ Unit of Credit*

This is an introductory course focused on preparing students for the practice of writing fiction, poetry, creative nonfiction, and/or scriptwriting. Students learn to read as writers, develop an individual voice, recognize the craft of writing, and produce and critique their own and others' pieces. Student Learning Outcomes: Upon satisfactory completion of this course, the successful student will be able to:

- Identify samples of written pieces (& use in writing), the elements of given creative genres, such as narrative structure, image, metaphor, symbol, character, conflict, dialogue, the poetic line, and setting/stage directions.
- Assess and evaluate choices made by writers in creating written works in each genre.
- Revise the content and structure of their own work using a variety of revision strategies.

*Note - This course earns 3 college credits through OCC*

### **ELA Labs**

*0 Unit of Credit*

ELA Labs are a remedial service designed to provide targeted intervention and individualized instruction to help students achieve greater success in their current ELA course. Additional support is given to the students every other day for 40 minutes.

## **FINE ARTS**

*Students are required to take at least 1 unit of credit in the fine arts in order to graduate from high school. This credit may be either a performing arts credit (music) or a visual arts credit (art).*

### ***Music Course Offerings***

#### **Concert Band**

*1 Unit of Credit*

This course presents a logical sequence from the middle school band program and the high school musician performing at the intermediate (Level 3-4) ability level. More advanced rhythms, techniques and styles are presented to provide a platform for developing instrumentalists. Representative music of classical and contemporary composers is studied and performed at public concerts. Small ensembles, such as wind quintet, jazz ensemble, percussion ensemble, etc. will be offered to interested students. Home practice, lesson attendance, progress and rehearsal techniques are stressed in this course. Citizenship and maturity are nurtured in the high school band program through the regular practice of cooperation, self-discipline, responsibility, fulfillment of obligations and loyalty. No audition is required for enrollment in Concert Band.



### **Symphonic Band**

*1 Unit of Credit*

This course presents a platform for the high school musician performing at the advanced (Level 6) or advanced intermediate (Level 5) ability level. More difficult music and styles will be studied, rehearsed and performed at public concerts. Small ensembles, such as wind quintet, jazz ensemble, percussion ensemble, etc. will be offered to interested students. Home practice, lesson attendance, progress and rehearsal techniques are stressed in the course. Citizenship and maturity are nurtured in the high school band program through the regular practice of cooperation, self-discipline, responsibility, fulfillment of obligations and loyalty.

*Note - Students may audition for Symphonic Band, and membership selections are made by the director based on ability and the instrumentation needs of the organization.*

### **Senior High Concert Choir**

*½ Unit of Credit*

The Senior High Concert Choir, grades 9–12, is composed of students with varying degrees of experience in singing. Emphasis is placed on the learning of proper vocal techniques, music reading skills, stage presence, and performance etiquette and practices. A wide variety of music styles and periods of choral literature is studied and performed. Group voice lessons are required for all Concert Choir members on a rotating basis once a week. Lessons focus on various aspects of vocal proficiency, sight singing, and music for choir concerts. Students learn to work together to attain a high standard of choral performance, and to experience and discover singing as a form of communication and expression.

### **Select Choir**

*½ Unit of Credit*

The Senior High Select Choir provides opportunities for the music students with advanced reading and vocal skills to achieve a higher level of performance through the study of more challenging choral literature. Students are exposed to a variety of time periods and genres with the emphasis on mastering the advanced vocal and music reading skills, correct stylistic interpretations, and self-discipline needed to perform in the ensemble setting.

*Note - This is an auditioned choir from members of the Senior High Concert Choir, and membership selections are made by the director based on ability and the voicing needs of the organization.*

### **Practical Musicianship Through Keyboarding**

*½ Unit of Credit*

This is an introductory course in musicianship through keyboarding. Students will develop skills in critical listening, elements of music theory. Practical Musicianship will offer students the opportunity to explore and enhance their music abilities through learning the basics of keyboarding and acquire lifelong skills to participate in and appreciate music.

*Note - This course is designed for students who do not participate in performing ensembles*

### **Practical Musicianship Through Guitar**

*½ Unit of Credit*

This is an introductory course in musicianship through guitar. Students will develop skills in critical listening, elements of music theory. Practical Musicianship will offer students the opportunity to explore and enhance their music abilities through learning the basics of guitar and acquire lifelong skills to participate in and appreciate music.

*Note - This course is designed for students who do not participate in performing ensembles*

### **Music Theory I**

*1 Unit of Credit*

Music Theory I is designed for the traditional and non-traditional music student who is planning to pursue music as a career, hobby, or leisure activity. The emphasis of study in this course is to introduce, review and reinforce the basic rules and principles involved in using and understanding the language of music. Students will develop skills in sight-singing, rhythm-reading, dictation, playing the piano, conducting, and composition.

#### **Theory I Requirements:**

- Students must be active in a performing ensemble: (choir/band, community, or peer ensemble)
- Students must have access to a piano/keyboard.
- Students must participate in a school based concert/program such as Talent Show, Choir or Band Concerts, Coffee House etc.

### **Music Theory II**

*1 Unit of Credit*

Theory II is a continuation of the skills and concepts studied in Theory I. The emphasis of study is to further develop aural, reading, and writing skills and to acquire a broad perspective of music literature through in-depth study of form and analysis, and orchestration. This course is recommended for students who intend to pursue music as a career.

*Prerequisite: Theory I*

## ***Art Course Offerings***

### **Studio Art I**

*1 Unit of Credit*

This is a basic visual art course that offers experiences in many media. Students develop original project ideas in painting, drawing, printmaking, and sculpture, while covering fundamental artistic concepts such as the Elements of Art and Principles of Design. This is a required course for visual art majors or anyone planning to elect any other visual art course.

### **Studio Art II**

*½ - 1 Unit of Credit*

This is an intermediate level visual art course in which students will work on observational drawing skills and develop projects in painting, drawing, ceramics, sculpture, printmaking, and portfolio development.

*Prerequisite: Studio Art I*

*Note - This course may be taken as a half or full year course*

### **Advanced Art**

*½ - 1 Unit of Credit*

This course is designed for advanced art students who have successfully completed Studio II and want to continue developing their observational drawing, design, and project planning skills as well as explore their personal artistic “voice.” Students will take an active role in developing their own projects and visually exploring topics, materials and processes of their choice.

*Prerequisite: Studio Art II*

*Note - This course may be taken as a half or full year course*

### **Ceramics**

*½ Unit of Credit*

This course offers students an opportunity to work with clay in a student led environment that centers around their personal interests/lives. Ceramics I introduces students to the three handbuilding techniques (pinch, slab, and coil). Interested students will also be able to get an introduction to the pottery wheel. As the course progresses, experimentation with basic techniques will lead to more freedom and individual creativity. The course will include an examination of clay, glazing, decoration methods, and the firing process.

*Note - This course may be taken for multiple semesters*

### **Photography I**

*1 Unit of Credit*

This course will cover basic knowledge of the 35mm camera, manual functions, black and white film and print development, digital photography, and Adobe Photoshop. Experimentation with and creative use of the photographic image will be encouraged. Ownership of a 35mm camera and/or a DSLR is recommended but not required. Students provide their own film and paper that may be purchased in the main office.

### **Advanced Photography**

*½ Unit of Credit*

This course is designed for students who have successfully completed Photo II and wish to build upon their photography skills as well as to develop their personal “voice” as a photographer. Students will take an active role in developing their own projects and visually exploring topics and photographic media and processes of their choice, culminating in a portfolio. Students can use this class in lieu of Pre AP if they wish to complete an AP portfolio in Photography their Senior year.

*Prerequisite: Photography I*

*Note - This course may be taken for multiple semesters*

### **Digital Art**

*½ Unit of Credit*

This is a beginner level elective art course in which students will work on digital art skills (drawing, digital painting, simple animation/loops, augmented reality etc). Students will develop skills through the use of the Procreate Application and Adobe Suite computer programs. This elective can be taken upon successful completion of Studio Art I. This course can be taken more than once.

### **Digital Video Production**

*½ Unit of Credit*

This is an introductory course to video production and broadcasting. Students will build skills using equipment such as cameras, iMacs, lighting, microphones, and tripods. Videography skills that will be the primary focus include planning, developing stories, interviewing, use of angles, and taping/editing footage. Students will participate behind the camera in the production of the morning announcements.

### **Pre-AP Studio Art**

*1 Unit of Credit*

This course is designed for students who are interested in pursuing Art as a career or in challenging themselves with college level work. Students will continue to hone their technical and design skills, while developing their voice and artistic style. Students will work towards producing a portfolio that will meet the requirements of most college programs, including work that demonstrates their understanding of observational drawing in addition to self directed and imaginative work. The AP portfolio and criteria will also be introduced and students will work towards developing ideas and skills necessary for creating an AP portfolio their Senior year. It is recommended to take this course during the Junior year, in order to be prepared for college portfolio submissions and the AP Portfolio class in the Fall of their Senior year.

### **AP Portfolio (Drawing, 2D Design, or 3D Design)**

*1 Unit of Credit*

This is a college level course designed for students who are serious about developing their artistic skills and/or are interested in pursuing Art as a career. AP Art is a Portfolio based exam. Students are expected to spend significant time outside of class working on their portfolios and related work. Students choose to complete either the Drawing, 2D Design (including Photography), or 3D Design portfolio. The portfolio consists of two sections: the Sustained Investigation (SI), in which students visually investigate a self generated topic or problem, and the Selected Works (SW), which focuses on quality of technical skill, use of materials, design and concept. The course will address artistic processes such as ideation, practice, experimentation, revision, self reflection, group critique and development of student voice and style. Students must demonstrate their process in creating their body work through imagery and written comments and submit a total of 20 images: 15 images, including approximately 8-10 finished works in the SI, and a total of 5 finished works in the SW. All work is submitted electronically at the beginning of May.

## **MATHEMATICS**

*Students are required to take at least three years of Math to graduate from high school in addition to passing the Algebra I Regents Exam.*

### ***Math Course Offerings***

#### **Algebra I**

*1 Unit of Credit*

Algebra I is the first course in a traditional 3-year sequence of math courses. Topics covered include number theory, operations, polynomials, factoring, algebraic fractions, equations and inequalities, and patterns, functions and relationships. This course will also include the study of coordinate geometry, probability and statistics, and some trigonometry. Algebra I introduces language and notation used in subsequent courses. A working knowledge and understanding of the topics of Algebra I is essential for the solution of many problems in science.

*Note - A graphing calculator is required*

*Note - Students will take the Regents exam in June*

## **Algebra II**

*1 Unit of Credit*

This course will expand on skills obtained in Algebra and apply them to trigonometry. Topics covered include relations and functions, logarithms, complex numbers, transformational geometry, statistics, vectors, trigonometric proofs, sequences and series. At this level, students will be expected to demonstrate understanding of mathematical theory and reasoning ability when solving problems in addition to performing mathematical operations.

*Prerequisite: Algebra I*

*Note - A graphing calculator is required*

*Note - Students will take the Regents exam in June*

## **Honors Algebra II**

*1 Unit of Credit*

This course parallels Algebra II with greater depth emphasized.

*Prerequisite: Honors Algebra I (DMS)*

*Note - A graphing calculator is required*

*Note - Students will take the Regents exam in June*

## **Geometry**

*1 Unit of Credit*

The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving toward forming mathematical arguments and proofs.

*Note - A graphing calculator is required*

*Note - Students will take the Regents exam in June*

## **Applied Algebra II**

*1 Unit of Credit*

This course teaches the basics of Algebra II and applies the concepts to strengthen 21<sup>st</sup> Century skills. This course is designed for students who lack the mathematical foundation required for Algebra II. This course does not explicitly prepare for the Algebra II Regents exam and ends with a local exam.

*Note - A graphing calculator is required*

## **Advanced Algebra with Financial Applications**

*1 Unit of Credit*

The purpose of this course is to enhance and continue the study of financial applications as well as provide additional tools to ready students for college success. This course encourages students to be actively involved in applying mathematical ideas to their everyday lives. This course includes, but is not limited to: banking services, consumer credit, employment basics, preparing a budget and income taxes.

*Prerequisite: Algebra I*

*Note - A graphing calculator is required*

### **Pre-Calculus**

*1 Unit of Credit*

This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value and quadratic inequalities, functions and their equations, exponential and logarithmic functions and their applications, right triangle trigonometry, law of sines and law of cosines, trigonometric functions (circular) and their inverses, trigonometric identities and equations, additions and multiple angle formulas, and binomial theorem.

*Prerequisite: Algebra I, Algebra II, Geometry*

*Note - This course earns 4 college credits through OCC*

*Note - A graphing calculator is required*

### **Calculus**

*1 Unit of Credit*

This is a first course in calculus for students in mathematics, science, computer science and engineering. Topics include basic analytic geometry, functions, limits and continuity, derivatives of algebraic and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, applications of derivatives and integrals.

*Prerequisite: Pre-Calculus*

*Note - This course earns 4 college credits through OCC*

*Note - A graphing calculator is required*

### **Statistics**

*1 Unit of Credit*

Topics range from data collection, descriptive statistics and linear regression models to inferential statistics. Includes probability, counting principles, and binomial probability distribution. Normal probability distribution and student's t-distribution are discussed in single and two-populations applications. Statistical inference (confidence intervals and hypothesis testing) in sociology, psychology, and business/industry are stressed. Additional topics may include Chi-square goodness of fit test, tests for independence, and testing the significance of the linear regression model.

*Prerequisite: Algebra II*

*Note - This course earns 3 college credits through CCC*

*Note - A graphing calculator is required*

### **Math 12**

*1 Unit of Credit*

Students enrolled in this course will review and strengthen algebra and geometry skills in anticipation for enrolling in a college math course. The course also includes a general study of graphing techniques involving properties of functions, conic sections, and trigonometry. Math 12 should be viewed as a course primarily for the student who: a) has done reasonably well in previous math courses; b) has expectations of taking a college mathematics course (as required by many colleges) but who plans to pursue studies not mathematically or scientifically oriented; or c) wishes to maintain present skill in mathematics.

*Note - A graphing calculator is required*

### **Math Labs**

*0 Units of Credit*

Math Labs are a remedial service designed to provide targeted intervention and individualized instruction to help students achieve greater success in their current math course. Additional support is given to the students every other day for 40 minutes. Math Labs will be designed in the specific areas of Algebra, Algebra II, and Geometry. A separate non-specific math lab may be scheduled in the event that the course specific lab does not fit in a student's schedule.

## **PHYSICAL EDUCATION**

*Students are required to complete 2 credits of Physical Education in addition to Human Ecology to graduate from high school. PE is a required course and is to be taken each year of high school at ½ credit per year.*

### ***PE Course Offerings***

#### **PE 9/10**

*½ Unit of Credit*

Ninth & Tenth (Level I) physical education focuses on the benefits of leading a healthy lifestyle. The grade level outcomes include components of personal wellness and the social-emotional factors that contribute to leading an enjoyable life, extending beyond graduation. An exploration into the different domains of resources and career options are explored. Competency of various motor skills and movement patterns is demonstrated.

#### **PE 11/12**

*½ Unit of Credit*

Eleventh & Twelfth Grade (Level II) physical education prepares students as they transition to post-secondary life. Students design and implement personal wellness plans that promote lifelong physical activity and fitness. Health-enhancing behaviors, such as nutrition and social-emotional factors, are included in the plan. Students apply effective habits of personal and social behaviors, as well as an exploration into the different domains of resources, other than school, to continue the practices of physical activities. Proficiency of various motor skills and movement patterns is demonstrated.

#### **Human Ecology**

*½ Unit of Credit*

The Human Ecology program involves the development of an awareness of the need for physical, mental, emotional, social, and psychological well being within one's own environment. Emphasis is placed on the human life cycle (birth, childhood, adolescence, young adult, adult, old age, and death) and problems that are encountered throughout this cycle.

*Note - This course is typically taken during sophomore year*

## **SCIENCE**

*Students are required to take at least three years of Science to graduate from high school in addition to passing at least one Regents exam.*

### ***Science Course Offerings***

#### **Earth and Space Science**

*1 Unit of Credit*

This is a Regents course with emphasis placed on the application of basic scientific principles to the special field of earth science. Areas of concentration include: astronomy, geology, and meteorology. The course stresses scientific literacy, critical thinking, and problem solving through inferential reasoning, as well as inductive and deductive reasoning.

*Note - Students must complete 1200 minutes of laboratory exercise in a satisfactory manner to be eligible to take the Regents exam. Included in the 1200 lab minutes are the three NYS mandatory Lab Investigations.*

*Note - Students will take the Regents exam in June*

#### **Life Science: Biology**

*1 Unit of Credit*

Biology focuses on the interactions of living organisms with their environment and the processes therein. The major themes of the course are as follows: from Unicellular to Multicellular, Biochemistry of Life, Evolution, Genetics, Population Dynamics, Reproduction and Development, and Ecology. The overlying themes of how an organism maintains homeostasis and interacts with its environment are addressed throughout the course.

*Note - Students must complete 1200 minutes of laboratory exercise in a satisfactory manner to be eligible to take the Regents exam. Included in the 1200 lab minutes are the three NYS mandatory Lab Investigations.*

*Note - Students will take the Regents exam in June*

#### **Regents Chemistry**

*1 Unit of Credit*

Chemistry involves the study of elements and compounds, their structure, chemical and physical properties, and their relationships with each other and man. Chemical calculations are also stressed. Laboratory technique and experiments are developed through regular experiences one to two times per week.

*Note - Students must complete 1200 minutes of laboratory exercise in a satisfactory manner to be eligible to take the Regents exam*

*Note - Students will take the Regents exam in June*



### Honors Chemistry

*1 Unit of Credit*

All of the above description of Regents Chemistry applies to this course, however there will be more in-depth study of those same topics and a greater emphasis on problem solving. This course is designed to challenge talented science students and is geared toward preparing students for the rigors of college chemistry and will require more independent work than Regents chemistry. In addition, topics will be added to prepare students who wish to take the SAT II subject test in chemistry. Students will be required to complete a summer assignment covering introductory and review topics from previous science courses. This will allow more time to cover other topics in greater depth. Many topics are explored beyond the scope of the Regent's chemistry classes; especially stoichiometry, atomic structure, acid-base chemistry and equilibrium concepts. Exams in this course are more challenging than those in Regents chemistry and there will be an in class final examination in addition to the Regents examination.

*Note - Students must complete 1200 minutes of laboratory exercise in a satisfactory manner to be eligible to take the Regents exam*

*Note - Students will take the Regents exam in June*

### Chemistry

*1 Unit of Credit*

This course will teach the fundamental chemical principles needed to understand chemically related societal and environmental issues. A focus on problem-solving and decision making will be used to help students develop skills that will help them to be active and informed citizens. There will be a strong laboratory component incorporated into the topics being covered. These activities will reinforce concepts, provide practice in laboratory safety procedures, and teach students how to analyze data using graphs and other types of comparisons. This course meets the requirement of a Physical Science Course toward completion of a Regents diploma, but students will not take the Regents exam in Chemistry.

### College Physics I - Full year

*1 Unit of Credit*

College Physics I is a **first-year** introduction to Physics. It is a basic, non-calculus General Physics course emphasizing fundamental concepts and principles with a problem-solving approach. Topics covered include Kinematics and Dynamics, Newton's Laws, Work and Energy, Momentum, Rotational Motion, Heat and Thermodynamics. Upon completion of this course, the successful student will be able to;

1. Demonstrate a basic understanding of concepts and principles by correctly stating basic terms, definitions, physical laws and principles.
2. Demonstrate the ability to apply each principle and/or law and use basic computational skills in solving simple one-concept problems.
3. Demonstrate the ability to analyze complex physical problems involving one or more physical principles and several computational steps, and correctly solve for one or more unknown quantities.
4. Demonstrate the ability to apply principles taught in the classroom to a laboratory situation. This includes making accurate measurements, performing accurate analytic and graphical analysis and explanation of results and combining these in a written report.

*Prerequisite: Algebra I, Algebra II*

*Note - This course earns 4 college credits through OCC*

### **College Physics I-Fall**

*1/2 Unit of Credit*

This course is the same curriculum as the full-year version of the course, however it is condensed into a single (fall) semester. This semester long version of the course enables students to enroll in College Physics II for the spring semester

*Prerequisite: Algebra I, Algebra II, Geometry*

*Note - This course earns 4 college credits through OCC*

### **College Physics II-Spring**

*1/2 Unit of Credit*

College Physics II is a **second-semester** spring course in Physics and is a continuation of PHY 103. Students explore principles of electricity, magnetism, DC and AC motors, vibrations and waves, optics, and topics in modern physics.

1. Demonstrate a basic understanding of concepts and principles by correctly stating basic terms, definitions, physical laws and principles.
2. Demonstrate the ability to apply each principle and/or law and use basic computational skills in solving simple one-concept problems.
3. Demonstrate the ability to analyze complex physical problems involving one or more physical principles and several computational steps, and correctly solve for one or more unknown quantities.
4. Demonstrate the ability to apply principles taught in the classroom to a laboratory situation. This includes making accurate measurements, performing accurate analytic and graphical analysis and explanation of results and combining these in a written report.

*Prerequisite: College Physics I*

*Note - This course earns 4 college credits through OCC*

### **Physics**

*1 Unit of Credit*

Physics is designed for students who have fulfilled their science requirement and are interested in a fourth science credit, but do not wish to take physics at the college level. Students must be proficient in Algebra, since much of the problem solving in the course involves algebraic equations.

### **AP Biology**

*1 Unit of Credit*

AP Biology is an introductory college-level biology course where the teacher serves as the facilitator while the students develop as independent thinkers and learners, especially through laboratory investigations. Many concepts that are considered prerequisite knowledge for the course can be reviewed as home study through the use of rich resources such as assigned websites, videos, and the summer assignment. In class, students are given opportunities to learn and apply their knowledge through the process of inquiry rather than learning from lectures and/or prescribed lab protocols. A sense of wonder and use of original thought are fostered as students are encouraged to extend their learning via scaffolded conceptual understandings and open inquiry. A summer assignment will be given out in late May/early June.

*Prerequisite: Life Science: Biology*

*Note - Students will take the AP exam in May*

### **Anatomy and Physiology**

*½ - 1 Unit of Credit*

Anatomy and Physiology is a laboratory intensive course that investigates the structure and function of the human body. Topics covered will include the basic organization of the body; biochemical composition; and major body systems along with the impact of diseases on certain systems. Students will engage in many topics and competencies related to truly understanding the structure and function of the human body. Working from the topics of basic anatomical terminology to the biochemical composition of the human body, all the way into great detail of each of the major systems of the body, students will learn through collaborative discussions, hands-on labs, virtual simulations, case studies and current science advancements. Students will be responsible for proper use of lab equipment, lab reports, and projects assigned throughout each unit. One of the goals of this course is to prepare students with the skills necessary to be successful in future science classes in college, management of their personal health, and a health related profession.

*Prerequisite: Life Science: Biology*

*Note - This course may be taken as a half or full year course*

### **Forensic Science**

*½ - 1 Unit of Credit*

Forensic Science is the application of science to criminal and civil laws that are enforced by police agencies in a criminal justice system. In this course students will experience rich exploration and hands-on lab investigation while incorporating previously learned scientific principles rooted in math, chemistry, biology, physics, psychology, earth science and other aspects of Science. Students will be “hired” at M.C.S.I.(Marcellus Crime Scene Investigation) and be trained in topics including processing a crime scene, collecting and preserving evidence, fingerprinting, forgery and document analysis, footprints, hair, fibers, serology, DNA, firearms and ballistics, glass, and forensic chemistry. The main focus of this course will be to emphasize the evidential value of crime scenes and related evidence and the services of what has become known as the crime laboratory. Case studies and current events will be explored.

*Prerequisite: Chemistry (may be taken concurrently)*

*Note - This course may be taken as a half or full year course*

### **Robotics**

*½ Unit of Credit*

Robotics introduces and allows high school students to further their knowledge in a wide range of Science Technology Engineer and Math skills. Topics will include designing, programming, and problem solving strategies. This course will involve students in the development, building and fabrication of robotics chassis'. Students will work hands-on in teams to design, build, program and document their progress. Topics will include motor control, gear ratios, torque, friction, sensors, decision-making, propulsion systems and locomotive systems. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots and illustrations of current state of the art research and applications.

### **Robotics Independent Study**

*½ Unit of Credit*

Students will have the opportunity to explore and/or expand upon their knowledge of robotics. A personalized learning plan/project will be completed by the student and the teacher to outline the work for the semester.

*Note - This course may be taken with or without having taken Robotics as a prerequisite.*

### **Sustainability Science**

*1 Unit of Credit*

Sustainability Science is an introductory exploratory course that reviews a variety of courses offered within the CTE Department at Marcellus. Students participating in the Sustainability Science course experience hands-on activities, projects, and problems. Student experiences involve the study of communication, the science of food production, plants, animals, natural resources, and mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Sustainability is an applied course that requires students to develop scientific concepts and apply their understanding of STEM to real-world problems.

*Note - this course earns 3 college credits through SUNY Cobleskill*

### **Independent Study**

*½ - 1 Unit of Credit*

Students will have the opportunity to explore a career field with real world experience under the supervision of an expert in the field and a science faculty member. A minimum of 55 hours of collective work hours and a tangible summative project is what translates to successful course completion. A personalized learning plan will be completed by the student and the teacher to outline the work for the semester. A focus on professional skills and problem solving is a critical focus of this experience.

*Note - This course may be taken as a half or full year course*

## **SOCIAL STUDIES**

*Students are required to take at least four years of Social Studies which is to include Global History & Geography I and II, US History & Government, and Economics & Participation in Government. Additionally, students must also pass at least one Regents exam in Social Studies.*

### ***Social Studies Course Offerings***

#### **Global History & Geography I**

*1 Unit of Credit*

This first year of a two-year course in Global History will chronologically study the history of the world beginning with Ancient Civilizations (around 4000 B.C.) up through the 17th Century. Regions to be covered are Europe, the Middle East, Africa, East Asia, Southeast Asia, Latin America, and South Asia.

#### **Global History & Geography II**

*1 Unit of Credit*

This second year of a two-year course in Global History will be a study of the history of the world from the 17<sup>th</sup> Century to today. Interactions and linkages among nations and peoples will be explored within specific time periods to ascertain how the past influences the present. The

perspectives of history and the social sciences will be treated in each area studied.

*Note - Students will take the Regents exam in June*

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

*1 Unit of Credit*

This course will include a chronological survey of United States history in general; constitutional and legal issues will be explored in depth, as will the problems of a dynamic and industrial society in an increasingly complex and technology-oriented world.

*Note - Students will take the Regents exam in June*

### **AP United States History**

*1 Unit of Credit*

This course is comparable to a freshman college course in American History. This course will include a chronological survey of United States history in general; constitutional and legal issues will be explored in depth, as will the problems of a dynamic and industrial society in an increasingly complex and technology-oriented world.

*Note - Students will take the AP exam in May*

*Note - Students will take the Regents exam in June*

### **Participation in Government**

*½ Unit of Credit*

Participation in Government is one of the two required Social Studies courses for seniors. It is designed to be a culminating course of study that focuses on Social Studies Learning Standard 5-Civics, Citizenship, and Government. Units of study may include government theory, comparative politics, state government, local government, the federal government, American politics, the judiciary, foreign policy, domestic policy, the media, and others. Students will apply this content to the study of contemporary and/or historic public issues and will increase awareness of their rights and responsibilities as citizens. Additional components include court and government meeting observations.

### **AP U.S. Government & Politics**

*1 Unit of Credit*

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

*Note - Students will take the AP exam in May*

### **Economics, The Enterprise System & Finance**

*½ Unit of Credit*

This course is one of the two components of Social Studies for seniors. This course includes the study of major macro- and micro-economic concepts, the economic system of the U.S. and how it operates, the roles that various components of the American economic system play, economic global interdependence, and financial literacy.

### **SUPA Economics**

*½ Unit of Credit*

This is an introduction to mainstream economic thought designed for students with a liberal arts interest. The course begins with a presentation of the scientific method, which is then used to analyze the question: *How do individuals and societies make choices when they are faced with scarcity?* The course takes students from the micro economic to the macroeconomic level, emphasizing the connection between these two perspectives. Students examine the benefits, as well as the problems, inherent in a market-oriented economy. The course prepares students to analyze and understand the on-going economic policy debate between interventionists and non-interventionists. This class is designed to help students understand “how the world works.” This course is designed to be taken in place of Economics as a senior level course.

*Note - This course earns 3 college credits through Syracuse University*

### **SUPA Personal Finance**

*½ Unit of Credit*

This class covers essential aspects of consumer personal finance, including record keeping, budgeting, banking, borrowing, investing, insurance, taxes, and retirement planning. Students will learn important institutional facts about different types of bank deposits; mutual funds; bonds, including US Savings Bonds; stock; loans and credit, including credit cards and fixed and adjustable rate mortgages; retirement accounts, such as Individual Retirement Accounts and 401 (k) plans; taxes, including tax deductions and credits; and aspects of health, life, and property insurance. Coverage of this institutional personal finance material will be framed within basic fundamentals of economic and financial analysis. This conceptual basis gives students a deeper understanding of the important issues of personal finance and characteristics of the institutional material as well as a framework for evaluating and applying to their own decisions new innovations or changes in financial products over time. Overall, the course provides a foundation for students to make informed and reasoned choices with regard to financial decisions over their professional and personal lives. This course is designed to be taken in place of Economics as a senior level course.

*Note - This course earns 3 college credits through Syracuse University*

### **Human Rights**

*½ Unit of Credit*

This course is a comprehensive study of the Holocaust, genocides around the world and other violations of human rights. We will focus on events prior to, during, and following these global tragedies in order to have a better understanding of the causes and effects these violations and atrocities have on world history.

### **Psychology**

*½ Unit of Credit*

This course is designed to introduce the student to the many facets of human behavior. Emphasis will be placed on the history of psychology, methodology, physiological involvement, development, conditioning, learning, memory, intelligence, personality, and abnormal psychology. The course will provide a basic understanding of these areas.

### **Sociology**

*½ Unit of Credit*

Sociology is the study of how people, groups, and societies differ from and interact with one another. Like the natural sciences, the goal of sociology is to find order out of seeming chaos - to look for patterns in behaviors of social groups that on the surface may look like random variations. It is the intent of this course to deal with both how to study human behavior in social settings and the study of selected patterns of behavior.

## WORLD LANGUAGES

*Students are required to take at least one year of a World Language course. Students often complete a minimum of a 3 credit pathway in addition to the Checkpoint B exam to obtain their Pathway required for graduation.*

### ***World Language Course Offerings***

#### **French 1**

*1 Unit of Credit*

First-year French introduces students to the four basic communication skills: speaking, reading, and writing in French and general comprehension. The goal for all students is to become familiar with French vocabulary and structures. Students also learn about the various cultures of the French-speaking world through the study of geography, history, and daily living in France and other Francophone countries. Students will engage with the language and culture via short stories, a Quebecois television show, films, and music.

#### **French 2**

*1 Unit of Credit*

Second-year French provides more extensive development of the four skills introduced in French I. Students will write more intensively by exploring language structures with more depth. Cultural development will also be enhanced as students become aware of living conditions, famous landmarks, and daily habits of Parisians and other people in the francophone world. Students will expand their vocabulary and reading comprehension skills using authentic French websites and beginning literature selections.

#### **French 3**

*1 Unit of Credit*

French 3 provides added vocabulary and finer distinction in structural patterns. Students will learn the essentials of grammar including syntax and verb tense. The course will emphasize all elements of a language: speaking, listening, reading, and writing. Students will be able to carry on discussions in French by the end of the course; they will also be able to write a small composition or story. There will be regular listening and speaking activities in the course, including web-based activities. Culturally, students will explore the Francophone world, including Quebec, Africa, the Caribbean, and Western Europe.

#### **French 4**

*1 Unit of Credit*

This is a college credit bearing course that is taught primarily in French. Students continue to develop language skills from previous years; students study French language structures and the class offers frequent oral practice of the language. Culturally, students study complete units on education in the Francophone world, *Le Petit Prince*, *Les Fables de la Fontaine*, and French artists. They read a short novel, poetry, and short stories. In addition, students also explore contemporary French culture through music and media. Seniors in this course will have the opportunity to pursue the Seal of Biliteracy.

*Note - This course earns 3 college credits through SUNY Oswego*

### **French 5**

*1 Unit of Credit*

In French 5, students continue the intensive study of grammar begun in French 4. The course will be conducted entirely in French and students speak frequently in the language. Students complete a course of study that includes a unit on the German occupation of France, symbolist poets, Haiti, a reading of *Notre-Dame de Paris*, Camus' *La Peste*, French fairy tales, and a poetry in translation unit. Each unit will include a variety of selections from text and film for student's reflection. Students read current events in French, and respond to authentic French sources such as podcasts, the news, and interviews. Students in this course will have the opportunity to pursue the Seal of Biliteracy.

*Note - This course earns 3 college credits through SUNY Oswego*

### **Spanish 1**

*1 Unit of Credit*

This course is an introduction to the basic language tools with emphasis on speaking and comprehension skills that are developed into reading and writing skills. Students learn to express themselves in the present tense. Included in this course are some aspects of Spanish culture and vocabulary related to daily living. At the end of the second semester, more class time is conducted in Spanish.

### **Spanish 2**

*1 Unit of Credit*

Spanish 2 provides an intensive and extensive development of the four skills introduced in Spanish 1. Although listening and speaking are still a major part of the program, emphasis is also placed on the skills of reading and writing. In addition, extemporaneous speaking in Spanish is introduced through the use of individual presentations and group skits. Studies related to the people and culture of Spain and Latin America receive increased attention.

### **Spanish 3**

*1 Unit of Credit*

Spanish 3 provides added vocabulary expansion and finer distinction in structural patterns. Students will learn the essentials of grammar including syntax and verb tense. The course will emphasize all elements of a language: speaking, listening, reading, and writing. Students will be able to carry on discussions in Spanish by the end of the course; they will also be able to write a small composition or story. There will be regular listening and speaking activities in the course, including web-based activities. Culturally, students will be exposed to everyday life in Spain through the video series called "Mi Vida Loca."

### **Spanish 4**

*1 Unit of Credit*

This course is taught primarily in Spanish. Students will converse daily in Spanish and will build on skills they have previously learned through in-depth exploration of cultural aspects of the Spanish-speaking world as well as through the study of more advanced grammar structures seen at the college level. Students will engage with the language and culture via music, literature, a Spanish television show, and short films. Seniors in this course will have the opportunity to pursue the Seal of Biliteracy.

*Note - This course earns 3 college credits through SUNY Oswego*



## **Spanish 5**

*1 Unit of Credit*

This is an advanced course taught entirely in the target language which intends to enhance previously learned language skills as well as to broaden the students' understanding of the diverse cultures of the Spanish-speaking world and foster interest in continuing the study of Spanish after graduation. Students will continue working with complex grammar and syntax and will converse daily in Spanish. Students will engage with the language and culture via music, literature, a Spanish television show, and short films. For interested students, there will be the option of taking the AP Spanish Language and Culture exam in the spring. Seniors in this course will also have the opportunity to pursue the Seal of Biliteracy.

*Note - This course earns 3 college credits through SUNY Oswego*

## **Non-Departmental Elective**

### **Creating Content with Artificial Intelligence**

*½ Unit of Credit*

Embark on a dynamic exploration with this elective course. Focused on AI-driven image and story creation, students will master crafting visuals, narratives, and AI prompts. Uncover secrets behind cutting-edge algorithms, delving into real-world applications and ethical considerations. This course offers an immersive experience, honing skills at the forefront of digital creativity. Prepare to shape the future of storytelling and visual communication in our AI-driven world.

*Note - This course description was written by Chat-GPT*

### **Yearbook**

*1 Unit of Credit*

This is a hands-on, activity-based course which focuses on the development of skills leading to a specific finished product – the school yearbook. This course will engage students in the basics of yearbook production including graphic design, copywriting and editing, photo composition, interviewing techniques, ad sales, budget management, marketing and project management skills. Members of the staff are expected to have a high level of maturity and the ability to work independently. This is a wonderful opportunity for members of the team to exercise their creativity,

while developing new skills. Creating the yearbook is a fun process and the end result of all the effort is a product the students can be proud of.

## **CAREER and TECHNICAL EDUCATION: BOCES**

The Career and Technical Education program (BOCES) provides an important dimension to the educational program available at Marcellus.

Students who enter the BOCES program generally should have completed 10th grade at the home school district. When they are in the BOCES program, they attend half of the school day (morning or afternoon) and are then bused to the vocational centers for the remainder of the day. A student receives 3 units of credit toward graduation for one year in BOCES *and* their third credit of Math or Science. Students who graduate receive a Marcellus diploma and may also receive a Career and Technical endorsement if they meet additional requirements.

The BOCES courses equip these students to enter directly into the field or trade that has been studied but does not preclude higher education. Several of our BOCES students have gone on to college for further education.

The Marcellus Board of Education and administration have supported vocational education as a necessary part of the total school program. Parents or other district residents are invited to telephone the high school (315-673-6300) if they would like further information. A visit to the BOCES center can be arranged for those who wish to see vocational education at its best.

*College credit is available for some BOCES programs through articulation agreements with colleges.*

Below are the courses offered at BOCES and a description of each course. (*Check with your counselors at Marcellus regarding this*). Career and Financial Management\* is required for a major sequence in Occupational Education. It is best if Career and Financial Management\* is taken at the high school. If it can't be taken at the high school, then it can be taken at BOCES.

*\*Refer to CTE Section for course outline.*

### **AUTOMOTIVE COLLISION TECHNOLOGY**

Henry Campus CTE

1<sup>st</sup> year p.m.  
2<sup>nd</sup> year a.m.

Automotive Collision Technology is a two-year program in which students learn the essential skills needed to begin a career in the auto body and collision industry. As specialists in the automotive industry, Automotive Collision Tech students gain real-world and hands-on experience working in an industry-standard collision lab setting. Students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

Students will learn the fundamentals of vehicle refinishing, metalwork, unitized body and frame alignment, painting and finishing, welding, plastics repair, body repair/replacement, cost estimation and customer service skills.

## **AUTOMOTIVE TECHNOLOGY**

Henry Campus CTE or Driver's Village

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

Automotive Technology is designed to provide students with basic mechanical knowledge and skills. As an Automotive Service Excellence (ASE) program certified by the National Automotive Technicians Education Foundation (NATEF). This program, which is state and nationally certified, is the first step in preparing an individual for a career in the technical repair field. Over the course of the program, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ASE NATEF technical assessment.

Students gain knowledge and skills through a combination of theoretical study and hands-on lab work, including the repair of customer vehicles in brake systems, engine performance diagnosis, suspension and steering, electronic control systems, and on-board computerized engine control systems diagnosis on automobiles and light trucks.

## **COMPUTER TECHNOLOGY**

Henry Campus CTE

2 year program

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

The Computer Technology program is designed to prepare students for the ever-changing world of computer and information technology. Through a combination of theory and hands-on lab work, this two-year, Cisco-certified program provides students with the essentials of computer repair and support in the first year, before transitioning to the fundamentals of networking in year two.

As the first step in the computer technology career path, students are afforded the opportunity to earn the industry recognized Cisco Career Certification, which also serves as a gateway to the industry-recognized CCNA Certification. Moreover, the CompTIA A+ Certification is yet another key offering that helps fulfill a comprehensive program for students who are preparing for entry level work or have post-secondary aspirations. Prior to completion, students are also provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma, which they can achieve by successfully passing the industry standard technical assessments.

## **CONSTRUCTION TECHNOLOGY**

Henry Campus CTE

2 year program

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

The two-year Construction Technology program teaches students the essential skills needed to begin a career in the building and construction trades. Through the construction of a new house, students will gain real-world knowledge and hands-on experience in the fundamental components of carpentry, drywall, painting, framing, roofing, floor installation, door and window installation, blueprint reading, siding, electrical wiring, plumbing, proper tool use, and OSHA safety training.

Students will develop and demonstrate integrated academics and employability skills through class activities, projects, live clinic, community service and professional development. Students are also provided with the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

## **COSMETOLOGY**

Henry Campus CTE  
2 year program

1<sup>st</sup> year p.m.  
2<sup>nd</sup> year a.m.

Cosmetology is a two-year program that instructs students in the theory and practical skills necessary to prepare them for a career in the cosmetology field and/or post-secondary education.

Students are provided with hands-on training and experience to pursue employment opportunities in such roles as cosmetologists, nail technicians, estheticians, hair stylists, salon managers and small business owners.

As part of the required 1,000 hours of instruction over a two-year period, students are provided with clinical and internship experiences in addition to the opportunity to apply for their New York State Cosmetology License and earn a Career and Technical Endorsement on their diploma by successfully passing a technical assessment.

## **CULINARY AND PASTRY ARTS**

Henry Campus CTE

1<sup>st</sup> year p.m.  
2<sup>nd</sup> year a.m.

Culinary and Pastry Arts is a hands-on food preparation program that provides students with broad exposure to the science of cooking and the art of pastry design. Through an academic partnership with the National Restaurant Association, students will develop their culinary and pastry skills learning the ProStart curriculum in food production, dining etiquette, customer service, food safety, and sanitation.

As part of the required 1,000 hours of instruction over a two-year period, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ProStart exams and NOCTI performance assessment.

## **EARLY CHILDHOOD EDUCATION**

Henry Campus CTE

1<sup>st</sup> year p.m.  
2<sup>nd</sup> year a.m.

This course is offered to students who want to work with young children. Students learn about the characteristics, needs, and behavior of three - and four – year olds and learn how to care for them in a nursery school setting. After learning basic skills, students operate a nursery school for 20 children four days a week. Each high school student in the course is expected to participate in all phases of running the nursery school. On Fridays, students plan activities for the following week and study child development through lectures, discussions, observations, films, speakers, and occasional field trips.

Graduates may find employment in daycare centers, nursery schools, and parks and recreation departments. Many graduates continue their education in nursery and elementary education at 2- and 4- year colleges.

## **HEALTH OCCUPATIONS TECHNOLOGY**

Henry Campus CTE

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

Health Occupations is a two-year program offering theory and practical experience for students interested in the medical and health care professions. Students are introduced to multiple facets of long-term care, basic nursing procedures, patient rights, ethical practices, medical terminology, and body systems. Students will have the opportunity to earn a NYS license as a Certified Nursing Assistant and CPR & First Aid certification.

This training includes a minimum of 108 hours in a long-term care clinical setting. Students are provided with embedded internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

## **HEAVY EQUIPMENT REPAIR OPERATION & DIESEL TECHNOLOGY**

Tracey Road Equipment in Syracuse

1st year p.m.

2nd year a.m.

Located at Tracey Road Equipment in Syracuse, the two-year heavy equipment operations and diesel repair technology program is designed to offer students essential skills in the operation and repair of heavy equipment and heavy-duty diesel trucks using the latest techniques and computerized diagnostic equipment. Students will gain daily practical experience working with a variety of engines and equipment that will prepare them for employment opportunities or further their education at college and technical schools. Students may be eligible to earn industry certifications in safety training and equipment operation. A Career and Technical Endorsement on their high school diploma will signify that students have met the rigorous industry standard upon successfully passing a technical assessment.

## **LABORATORY TECHNICIAN**

Henry Campus CTE

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

Working in an industrial design medical laboratory environment, students enrolled in the two-year Laboratory Technology program will acquire the knowledge and technical skills that will prepare them for positions as entry-level laboratory assistants or advanced placement in post-secondary education. Students will gain practical learning experience through scientific investigations and experiments, as well as the collection and testing of samples, writing reports and presenting information in a state-of-the-art, high-tech laboratory setting.

As a career link, established partnerships with many local businesses and medical facilities provide students with internships and potential future employment opportunities. In addition, students have the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

## **MEDIA MARKETING COMMUNICATIONS**

WCNY Studios CTE

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

The two-year Media Marketing Communications program offers a rigorous high school and college level of study that pairs hands-on learning in a real-world business setting at WCNY, Central New York's public media organization. WCNY's Broadcast and Education Center serves as a 21st-century classroom for the students under the instructional guidance of OCM BOCES, Onondaga Community College, and WCNY professionals.

In this course, students will work alongside WCNY staff on projects across TV, radio, social media, web, and print platforms, learning firsthand the fundamentals of the world of broadcast media, marketing and communications. Another integral component of the program is the dual credit courses offered through Onondaga Community College, where students begin building their transcript by taking college credit courses on-site with college instructors. Students will also be eligible to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-based technical assessment.

## **PHYSICAL THERAPY PROFESSION**

Upstate Medical University

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

Physical Therapy Professions is a two-year program designed for highly motivated students who are interested in gaining a postsecondary edge in pursuing a career as a physical therapist, a physical therapist assistant or practitioner in a related field. Located at Upstate Medical University, students will study the fundamentals of the physical therapy profession including the elements of movement, evaluation, treatment, anatomy and physiology.

As a postsecondary partner, Onondaga Community College provides onsite dual credit courses allowing students to begin building their college transcript. Another important component of the program is providing students with opportunities to shadow physical therapy professionals in the field. Students are also able to earn a Career and Technical Endorsement on their diploma by successfully passing an industry standard technical assessment.

## **WELDING TECHNOLOGY PROGRAM**

Henry Campus CTE

1<sup>st</sup> year p.m.

2<sup>nd</sup> year a.m.

Skilled welding technicians have multiple employment options and are a vital link in the manufacturing, construction, and facilities maintenance industry. As a two-year program, Welding Technology provides students the skills of arc welding, resistance welding, brazing, and soldering, as well as cutting, heat-treating, and metallurgy. Students gain knowledge of electrical systems, power sources and different welding technologies, welding systems, print interpretation, and measurement, as well as the use and interpretation of visual symbols related to welding.

This course will give the student knowledge and technical skills that will prepare them for positions as an entry-level welder or advanced placement in post-secondary education. Work-based learning sites are developed in the second year to allow the opportunity to intern at many local businesses. Students are provided with internship experiences, the opportunity to earn industry-recognized AWS certifications and a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

## NEW VISIONS PROGRAMS

*New Visions Programs* are selective programs that involve an application and selection process. Students interested in participating in a New Visions program during their senior year need to formally express their intent in writing to the school counseling office no later than February 1 of their junior year.

### Criminal Justice

**1 year**

**8:30 a.m -11:30 a.m**

New Vision Criminal Justice is a one-year program offered to high school seniors. students study the components of law enforcement, the judiciary and corrections system, causes and prevention of crime and current topics of interest including community relations, gun control, drug enforcement, cybercrime and capital punishment.

Class visitations by community and career professionals will occur in addition to internship and job shadowing opportunities. Key components of the trip include visits to the FBI Academy Police Memorial, the Smithsonian Institute, Congress and Capitol Hill, and the Bureau of Engraving. Eligibility requirements: Interested students must be in their senior year of high school, in good academic standing and on target with all graduation requirements. Eligible candidates should exhibit self-motivation, enthusiasm and maturity, and must be willing to work both independently and as a team member in diverse settings.

### Engineering Professions

**1 year**

**Lockheed Martin**

**8:15-11:00 a.m. or 11:30 a.m.-2:30 p.m.**

New Visions Engineering Professions is a one-year program designed for highly motivated seniors. As an engineering immersion program, students will explore numerous career pathways as they engage in real-world learning within an industry setting. Successful students will have the opportunity to learn the fundamentals of engineering as they work alongside Lockheed Martin industry professionals, engaging in a collaborative problem solving environment. Students will also earn college credits in Freshman Composition and Technical Writing through OCC.

### Medical Professions

**1 year**

**Thompson Road**

**8:30 a.m.–11:30 a.m.**

New Visions Medical Professions is a one-year program offered to highly motivated high school seniors. As a healthcare field immersion program, students will explore related career pathways as they participate in scheduled rotations at Crouse Hospital, Syracuse VA Medical Center and SUNY Upstate Medical University.

Students will experience firsthand the medical profession, working with physicians, nurses, and other health professionals. Through a combination of research and hands-on projects, students will learn about medical ethics, patient rights, human anatomy and physiology, governmental regulations, and health careers. Students will also earn CPR First Aid certification and fulfill their English 12, Participation in Government, and Economics requirements toward graduation. Eligibility requirements: Interested students must be in their senior year of high school, in good academic standing and on target with all graduation requirements. Eligible candidates should exhibit self-motivation, enthusiasm and maturity, and must be willing to work both independently and as a team member in diverse settings.



## Department Course Maps

### English Department Course Options

#### Grade 9 English Option

English 9 (1 credit)
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#### Grade 10 English Options

English 10 (1 credit)	AP English Language and Composition (1 credit)
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#### Grade 11 English Options

English 11 (1 credit)	AP English Literature and Composition (1 credit)
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#### Grade 12 English Options

English 12 (1 credit)	OCC English 12 (1 credit)
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#### English Elective (grades 10-12)

Creative Writing (0.5 credit)
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## Math Department Course Options

### Grade 9 Math Option

Algebra I (1 credit)	Honors Algebra 2 (1 credit)
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### Grade 10 Math Options

Applied Algebra 2 (1 credit)	Algebra 2 (1 credit)
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### Grade 11 Math Options

Advanced Algebra w/ Financial Applications (1 credit)	Geometry (1 credit)	Algebra 2 (1 credit)
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### Grade 12 Math Options

Pre-Calc (1 credit)	Math 12 (1 credit)
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### Other 11/12 Math Options

Statistics (1 credit)	Calculus (1 credit)
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## Science Department Course Options

### Grade 9 Science Option

Earth and Space Science (1 credit)
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### Grade 10 Science Option

Life Science: Biology (1 credit)
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### Grade 11 & 12 Science Options

Chemistry (1 credit)	Regents Chemistry (1 credit)	Honors Chemistry (1 credit)
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### Grade 11 & 12 Science Options

Physics (1 credit)	College Physics 1 (1 credit)	College Physics 2 (1 credit)
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### Grade 11 & 12 Science Options

AP Biology (1 credit)	Robotics (0.5 credit)	Sustainability Science (1 credit)
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### Grade 11 & 12 Science Options

Anatomy & Physiology (.5 credit per semester )	Forensics (.5 credit per semester )	STEM Independent Study (.5 credit per semester )
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## Social Studies Department Course Options

### Grade 9 Social Studies Option

Global History & Geography I (1 credit)
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### Grade 10 Social Studies Option

Global History & Geography II (1 credit)
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### Grade 11 Traditional Social Studies Options

US History & Government (1 credit)	AP US History (1 credit)
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### Grade 12 Traditional Social Studies Options

Economics (1 credit)	Participation in Government (1 credit)
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### Social Studies Options/Electives

AP US Government & Politics (1 credit)	SUPA Economics (1 credit)	SUPA Personal Finance (1 credit)	Human Rights (0.5 credit)	Psychology (0.5 credit)
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