Marcellus Senior High School

Program of Studies

2021-2022

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MARCELLUS SENIOR HIGH SCHOOL

OFFICE OF THE HIGH SCHOOL PRINCIPAL

Winter 2021

Dear Parents and Students,

Students have many choices as they pursue their interests, expand their experiences, and prepare for college and career. Students, the parents, and the counselor will work together to plan the four years of high school and to make appropriate decisions/revisions along the way. The student's long-range goals and interests, as well as the very important requirements for graduation, should guide the decision making. The 2021-2022 Program of Studies supports that process. All students meet annually with their counselors to discuss course and college/career plans. Teacher recommendations, standardized test scores, past performance, interests and future plans are considered in the course selection process.

The "Program of Studies" will familiarize you with some school policies and the general nature of 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 issues. Your school counselor will be able to provide you with more information.

The faculty of Marcellus High School is dedicated to assisting students in developing their full potential. Please contact me if you need assistance or direction of any kind.

Sincerely,

John R. Durkee
Principal

SENIOR 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 NY State Board of Regents.

Students must take a minimum of 5 academic subjects and physical education per 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	Participation in Government / Economics
Math	Math	Math	Math
Science	Science	Science	Science
World Language	World Language	World Language	World Language
Fine Arts Requirement	Human Ecology / Elective	Electives	Electives
P.E.	P.E.	P.E.	P.E.

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 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 record.

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.

CHANGES TO ANY OF THE INFORMATION ABOVE IS AT PRINCIPAL DISCRETION.

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. Honor Roll

Honor roll is computed and published each of the four marking periods. Students taking honors/college level courses will have the "weight" recorded in their quarterly overall average, not quarterly course average.

Honor Roll Eligibility

High Honor Roll:	The average for all subjects taken is 92% or above *(See Note)
Honor Roll:	The average for all subjects taken is at least 88%. *(See Note)

***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.*

VI. Advanced Placement/College Level/Honors:

Please refer to the Guidelines on Pages 6 and 7

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 are approved for enrollment by the building principal or his/her designee.

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.

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.

College Level Courses Available 2021-2022

Course	HS Credits	College Credits	College	Cost **
Foundations of Business (AGBS 110)	.5	3	SUNY Morrisville	$135 / 3 credits
Sustainability Science (AGBU 160)	1	3	SUNY Cobleskill	$150 / 3 credits
Horticulture (Hort 100)	1	3	SUNY Morrisville	$135 / 3 credits
Human Nutrition (CAHT 210 and CAHT 210X CIHS)	1	3	SUNY Cobleskill	$150 / 3 credits
Global Environment (EFB 120)	.5	3	SUNY ESF	$200 / 3 credits
Global Environment Research Opportunity (EFB 296)	.5	1	SUNY ESF	$25 / credit
Global Environment Research Problems (EFB 498)	.5	up to 3 college credits	SUNY ESF	$25 / credit
SUPA Economics (ECN 203)	.5	3	Syracuse University	$345 / 3 credits
SUPA Personal Finance (ECN 305)	.5	3	Syracuse University	$345 / 3 Credits
Freshman Composition and Literature I (Eng 103)	.5	3	SUNY (OCC)	Free
Freshman Composition and Literature II (Eng 104)	.5	3	SUNY (OCC)	Free
AutoCAD (MET 261)	1	3	SUNY (OCC)	Free
Pre-Calculus (MAT 143)	1	4	SUNY (OCC)	Free
Essential Statistics (MAT 118)	1	3	SUNY (OCC)	Free
College Algebra & Trig (MAT 104)	1	3	SUNY (CCC)	Free
Statistics (MAT 214)	1	3	SUNY (CCC)	Free
Spanish IV (SPA 201)	1	3	SUNY (Oswego)	$175 / 3 credits
Spanish V (SPA 202)	1	3	SUNY (Oswego)	$175 / 3 credits
French IV (FRE 201)	1	3	SUNY (Oswego)	$175 / 3 credits
French V (FRE 202)	1	3	SUNY (Oswego)	$175 / 3 credits

****Prices are subject to change. Cost provided at this time is based on 2019-2020 pricing.**

AP, College Level & Honors Courses Available 2021-2022

Selection for Advanced and Honors Courses at Marcellus High School is based on grades received in pre-requisite course work, Lexile level, and high evaluative scores in the areas of analytical reading, analytical writing, work ethic, attendance, and ability to work independently (with the exception of AP Art)

Course	Grade	Pre-requisites
AP English Language	10	English 9 Students must be able to read and comprehend college-level texts (The College Board, 2014).
AP English Literature	11	English 9 & 10
AP U.S. History	11	Global History 9 & 10
AP U.S. Government & Politics	12	Global History 9 & 10, U.S. History
AP Studio Art	12	Studio Art 1 and Studio Art II (for 2D Design Portfolio) or Studio Art 1, Photo 1 and Photo II (for Photography Portfolio)
AP Calculus AB	12	Successful completion of Pre-Calculus.
AP Physics 1	11, 12	Completion of Algebra & Geometry & completed or enrolled in Algebra 2.
AP Physics 2	12	Successful completion of Earth Science, Living Environment, and Regents Chemistry, AP Physics 1, Algebra, Algebra 2, and must be enrolled in either Pre-Calculus or AP Calculus for their senior year.
AP Biology	11, 12	Successful completion of Earth Science, Living Environment, and Regents Chemistry and Mastery (85) on each of the Regents exams or permission of the Science Department.
Honors Chemistry	11	Successful completion of E.Science, Liv. Env., Algebra and Geometry. Completion of Algebra 2 (recommended co-requisite if not already completed).

**Fee of $95/AP Exam is based on 2020-2021 pricing.

Appropriate Number of AP/College Level/Honors Courses

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 AP/College Level/Honors courses per year. Any request for more than two advanced-level courses in one year is at the discretion of the high school principal.

Diploma Type Chart-Click on the hyperlink for information about graduation diploma types.

CAREER AND TECHNICAL EDUCATION AT MARCELLUS*

Agriculture

Sustainability Science -- SUNY Cobleskill: AGBU 160 (?) **1 Unit of Credit**
Prerequisite of Biology

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.

Horticulture -- SUNY Morrisville: Hort 100 (0555 and 0557) **½ - 1 Unit of Credit**

This course is designed to introduce students to careers and opportunities in the green industry/plant sciences. An overview of the industry will be studied. Students will learn about the growth and care of plants for outdoor gardens and indoor settings. Students will be given the opportunity to learn about the wide diversity of horticultural species including house plants, flowers, vegetables, turfgrass, weeds, shrubs, and trees. Skills in sexual and asexual plant propagation, growing plants, and plant maintenance will be studied. This is a basic course specifically designed for students who have little or no previous experience in horticulture and wish to develop skills and knowledge with plants.

Foundations of Business -- SUNY Morrisville: AGBS 110 (0560) **1 Unit of Credit**
Prerequisite Career and Financial Management
The objective of this course is to provide an overview of agriculture businesses, their financial status, the management and marketing of; and the careers associated within the agriculture industry.
This is a course to acquaint selected high school students with the basic principles of the agriculture business. Students will have the opportunity to gain valuable career planning skills through job shadowing experiences, resume writing, and interviews. Students will learn about forms of business organizations, agriculture marketing, sales and consolidated and diversified agriculture business opportunities. Students will also be exposed to the financial management and decision making process of owning and operating an agriculture business.

Basic Cooking **½ - 1 Unit of Credit**

Basic Cooking is an introductory course intended to expose students to the fundamentals of cooking. Basic Cooking is the first of multiple courses provided in a sequence of food processing and nutrition at Marcellus. 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 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. As a basic introductory course, Basic Cooking is a prerequisite course that precedes Human Nutrition and Food Science.

Human Nutrition -- SUNY Cobleskill: CAHT 210 & CAHT 210X CIHS (0562 and 0563)
½ - 1 Unit of Credit

This is a full year course that will be provided for college credit as part of a relationship with SUNY Cobleskill. As a result of taking this class, students will have an applied understanding of the food industry, day to day food preparation, nutrition science and the potential for future employment in a food-related industry. In this course, students will relate the concepts of human nutrition, diet and exercise to human performance and overall well being. Students will be responsible for applying scientific concepts and principles to the food industry and the human body. A practical and hands on approach to learning will be performed as students prepare a variety of foods and develop a scientific understanding of food. Students will analyze the conditions which affect the availability and quality of food on a local as well as global scale. Hands-on experiences will enforce the relationship between basic and applied science and their balance with moral and ethical issues.

Career and Financial Management (0500) **½ Unit of Credit**
Required by all students pursuing sequences in Business or Technology.

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. In "**The Working Citizen**," students will assess their abilities, interests, and aptitudes and will research career paths of interests. Students will also learn the best processes to follow in completing job applications, writing resumes and cover letters and interviewing for jobs. "**Personal Resource Management**" will teach students to manage resources such as time, skills, energy, and money. 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.

Career Internship (0572) **½ - 1 Unit of Credit**
Prerequisite: Career and Financial Management.
Career Internship is a collaborative school and business partnership designed to provide a work experience that enables students of various academic abilities to:

- Learn about the world and explore career opportunities
- Develop broad-based transferable skills to be applied in school and the workplace
- Earn money to potentially save for post secondary education
- Earn up to two units of elective credit towards graduation

Students must fulfill the related classroom instruction requirement. A minimum of at least one class period per week of related in-school instruction must be provided to each participating student. This course would be taken in conjunction with Career & Financial Management. Credit earned for this course is dependent upon a number of internship hours completed and successful completion of Career & Financial Management.

Technology Education

A Technology Education sequence can give students a broad base of skills that will help prepare students for a variety of careers. Employers today want employees who can think critically and independently. They want people who know how to solve problems and can keep up with the pace of a fast-changing, technological society. *Technology Education* courses help students develop these abilities.

Design and Drawing For Production (0653) **1 Unit of Credit**

**This course can be used to fulfill the ART/MUSIC requirement for graduation.*

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.

Auto CAD I (0670) **1 Unit of Credit**

Prerequisite – Design and Drawing for Production.

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.

CREDIT OPTIONS: 3 COLLEGE CREDIT HOURS from Onondaga Community College will be awarded to the student, upon completion under OCC Title MET 261. Currently these credit hours are tuition free to students.

Foundation of Technology (Engineering by Design) (0660) **1 Unit of Credit**

Foundation of Technology prepares students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. Technology content, resource, and laboratory/classroom activities apply student applications of science, mathematics, and other school subjects in an authentic situation.

Materials Processing (0654) **½ Unit of Credit**

Prerequisite – Design and Drawing Production

An investigation of how basic production materials (wood, metal, and plastics) are altered by manufacturing and construction techniques. This course is organized in a system format; the resources, processes, and effects are the organizing themes. The resulting framework provides a rather complete view of the variety of materials processing. Students will be involved in laboratory activities that will demonstrate specific concepts in the content outline. Specific and independent type activities will be the main type of hands-on experience.

Production Systems (0650) **½ Unit of Credit**

This course presents systems of manufacturing and construction, including their resources, processes, products and quality assurance, and their impact on society, the economy, the environment and manufacturing.

Project Management **1 Unit of Credit**

Prerequisite – A complete three course series of CTE studies or permission of instructor.

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.

Robotics **½ or 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.

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 (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

1st year p.m.
Henry Campus CTE 2nd 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

1st year p.m.
Henry Campus CTE or Driver's Village 2nd 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 1st year p.m.
2 year program 2nd 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 — 1st year p.m.
2 year program — 2nd 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 — 1st year p.m.
2 year program — 2nd 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

1st year p.m.
Henry Campus CTE — 2nd 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 1st year p.m.
Henry Campus CTE 2nd 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 1st year p.m.
Henry Campus CTE 2nd 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 1st year p.m.
Tracey Equipment in Syracuse 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 1st year p.m.
Henry Campus CTE 2nd 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 1st year p.m.
WCNY Studios CTE 2nd 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 1st year p.m.
Upstate Medical University 2nd 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 1st year p.m.
Henry Campus CTE 2nd 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.

The following programs are offered through Cayuga Onondaga BOCES and may be available to Marcellus students (if enrollment allows).

APPLIED ELECTRICAL TECHNOLOGY 1st year a.m.
Auburn campus CTE 2nd year p.m.

The Applied Electrical Technology Program students will be involved in "live" work on off-campus construction and restoration sites. Students will master the fundamentals of residential wiring and, as a second-year student, learn electrical codes and their interpretations, the proper installation of metallic and PVC conduit.

CRIMINAL JUSTICE 1st year a.m.
Auburn campus CTE 2nd year p.m.

Want a career in Law Enforcement? Law? Our students enjoy a wealth of opportunities to explore their interest in the world of Criminal Justice, a classroom with real world learning systems.

Criminal Justice is a two-year program that prepares students for careers in security, law enforcement, and the legal field. The curriculum includes extensive preparation in all aspects of law enforcement, including corrections, social services, probation, police investigative work, pre-law studies, and a whole lot more! In addition to academics, students will do hands-on learning such as fingerprinting, handcuffing, criminal takedown tactical training, self-defense, crime scene investigation, crowd control and traffic control.

EMERGING CAREERS IN COMMERCE 1st year a.m.
Auburn campus CTE 2nd year p.m.

Want a career in Fashion? Music? Gaming? Or Entertainment? Our students enjoy a wealth of opportunities to explore their interest in the world of commerce through four fields: Fashion, Music, Gaming, and Entertainment. Emerging Careers in Commerce...a real world classroom with real world learning systems. Develop skills that allow you to prepare for careers in the Fashion, Music, Gaming, and Entertainment industries while sharing your interests and ideas in a connected multimedia environment. Take charge of your future now by developing skills that you will need for the next step in your career.

GRAPHIC DESIGN AND NEW MEDIA

1st year a.m.
Auburn campus CTE 2nd year p.m.

The Graphic Design & New Media Program offers high school juniors and seniors broad-based instruction and hands-on experience in the visual communications fields. Graduates of this program will be prepared to enter college or begin entry-level employment in their chosen field. Students gain experiential knowledge and skills with emerging media technologies that apply to graphic design, illustration, digital photography, marketing, computer animation, web design, and video production. Students are encouraged to pursue continued education and will graduate from our program with a portfolio that demonstrates artistic and technical competency. This portfolio will have a web and/or video component that displays each student's skills.

HEAVY EQUIPMENT REPAIR AND OPERATION

1st year a.m.
Auburn campus CTE 2nd year p.m.

In the Heavy Equipment Repair & Operation Program, students will learn entry-level skills needed in today's construction industry. Instruction and experience are provided in shop management, equipment repair and operation, and Class A & B truck driving. Learn to operate and repair loaders, dozers, graders, and backhoes.

Additional information about transit work, road & foundation layouts, and measurements are included. Students who demonstrate good mechanical aptitude and like working outside in all types of weather will be successful in this program. A solid background in reading and math work is strongly recommended.

MACHINING AND WELDING

1st year a.m.
Auburn campus CTE 2nd year p.m.

Our competency-based Machining and Welding Program is a unique blend of two professions. The goal of this program is to help students develop job readiness skills relative to the welding and machining occupations. Good work ethics and employable skills are taught through classroom theory and shop activities. The course curriculum will be presented by classroom instruction, shop activities, and industrial tours.

Students will visit local industry and see how the computer and CNC equipment has dominated today's manufacturing. Within the first year, students learn the basic theory and skills of both welding and machining through required classroom and shop activities. Measurement, blueprint reading, layout, machine setup, and operation of various types of welders and machines are all studied and applied. Required activities and projects act as a curriculum core in order for students to learn the fundamentals of these occupations. Once core requirements are completed, individual projects are encouraged to expand on these skills.

Second-year students have the opportunity to specialize in either the machining or welding portion of the program. Students will continue to develop their knowledge and ability through advanced trade applications in the occupation of their choice. In welding, students will focus on different types of welding procedures, as well as basic design and fabrication skills using pipe benders, rollers, brakes, and shears. In machining, students will expand on their current machine operations and setup skills, along with CNC programming and operation using "Mastercam" software, Haas CNC lathes, and vertical machining centers.

OUTDOOR POWERSPORTS EQUIPMENT AND TECHNOLOGY 1st year a.m.
Auburn campus CTE 2nd year p.m.

The Outdoor Power Equipment program focuses on all aspects of system operations and component breakdown related to the small gasoline engine industry. Students get to learn the general theories of systems and apply repair/troubleshooting techniques to small gas engines while utilizing the same tools and equipment found in repair shops all over the country. Students will get the opportunity to practice on customer and school owned equipment. Safe operation practices are implemented into every aspect of student training.

The Powersports technology program focuses on all aspects of the system of operations and the component breakdown related to the Powersports industry. Students get to learn general theories of systems and apply repair/troubleshooting techniques to Powersports vehicles while utilizing the same tools and equipment found in dealerships all over the country. Students will get the opportunity to practice on customer and school owned equipment. Safe operation practices are implemented into every aspect of student training.

PLANT, ANIMAL, AND LIFE SCIENCES 1st year a.m.
Auburn campus CTE 2nd year p.m.

The Plant, Animal, and Life Sciences Program is a stimulating and challenging option for employment-bound or college-bound high school students. Not sure what you want to do...just know you like working with plants and animals and being outside...we'll help you figure it out at the Cayuga-Onondaga BOCES.

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.**

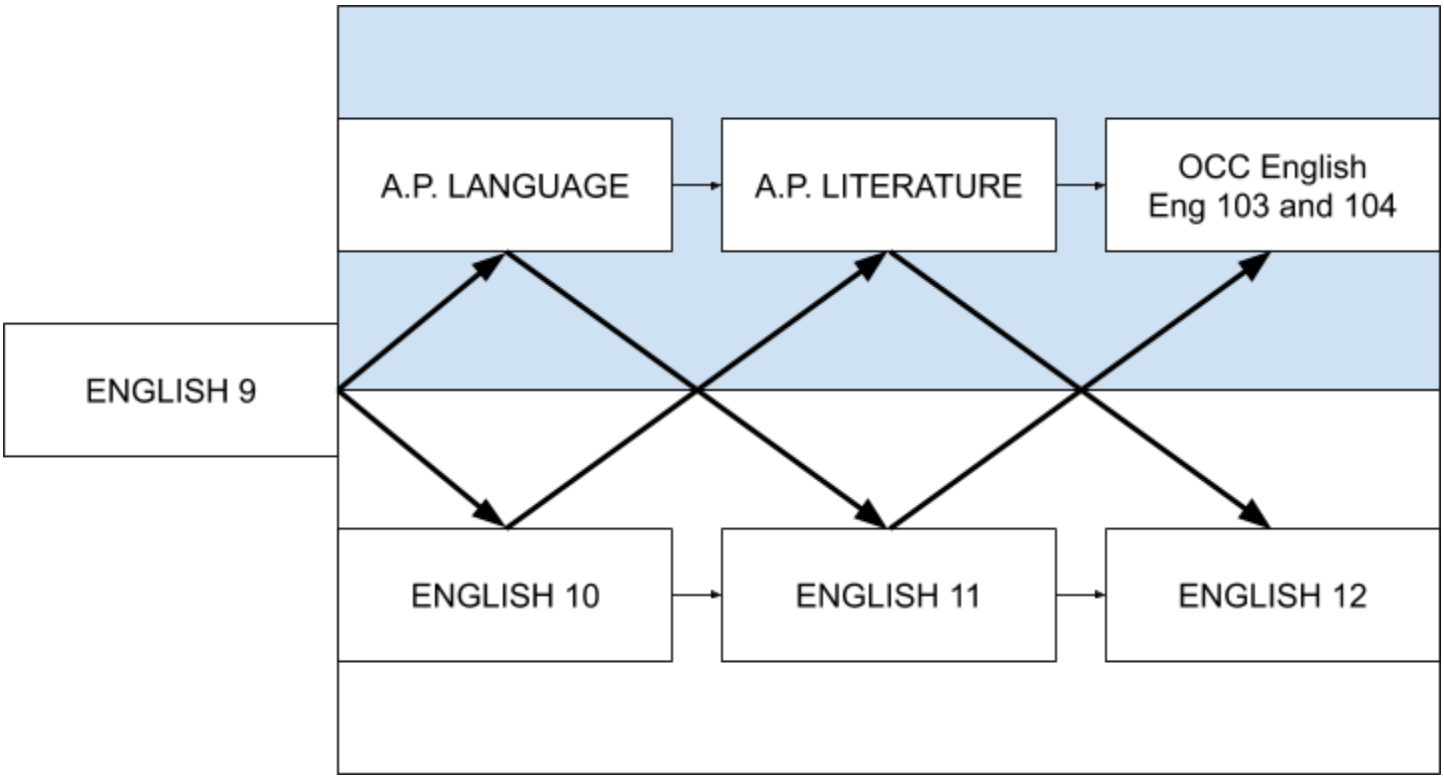
New Visions Engineering Professions is a one-year program designed for highly motivated seniors. As an engineering immersion program, students will explore numerous career pathways as they engage in real-world learning within an industry setting. Successful students will have the opportunity to learn 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 **l year**
Crouse Hospital **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.

ENGLISH



NOTE: *Students are required to take four years of English to graduate from high school*.

With the adoption of the Common Core Learning Standards, English/Language Arts engages students in critical thinking through four overlapping strands that serve as the cornerstones for instruction: Reading, Writing, Language, and Speaking/Listening. These strands allow students to build skills in fluency, comprehension, analysis and communication, as are necessary for college-and-career readiness.

Each year builds on the previous year's experiences and learning. Students habitually engage in close, critical reading of texts that increase in complexity. By the end of their senior year, students should be able to read and comprehend a variety of complex texts independently and proficiently. Writing instruction has students explore writing as both a process and an on-demand task. Three main text structures are used in instruction – writing arguments to support claims, writing informative/explanatory texts to examine and convey ideas, and writing narratives to develop real or imagined experiences. Students will also engage in research tasks/projects that ask them to synthesize information from several sources.

As students engage in a variety of critical reading and writing experiences, they develop a command of the conventions of standard English grammar and usage, and they are able to apply knowledge of language to understand how it functions in different contexts to convey meaning. Students will routinely participate in class discussions (whole group/small group/pairs) and be expected to deliver presentations to develop skills in speaking and listening.

Additional information about the Common Core Learning Standards can be found at the New York State Education Department website at www.engageNY.org

English 9 (0001) and **English 10 (0002)** **1 Unit of Credit/Year**

Students will read literary and informational texts. Text selections will be both teacher-assigned and student-selected. Skill development in comprehension, interpretation, and analysis will be monitored and assessed through the use of literature logs, quizzes, writing tasks, and class discussions. Reading instruction will not only focus on the written word; students will evaluate content presented in diverse formats and media, with an emphasis on words and language, and how structure and style are used to create/convey meaning. Through the exploration of key ideas and details, evaluation of craft and structure, and integration of knowledge and ideas, students will be able to read and comprehend complex texts appropriate for 9th and 10th grade.

Students will write for a variety of purposes, developing skills that will allow them to write clear, concise first drafts under strict deadlines as well as drafts that are taken through the writing process. Students will focus on understanding how task, purpose, and audience are related, and they will work on developing style and structure appropriate for varied assignments. Research strategies will be emphasized to support the assertion of claims that are defended with relevant and sufficient evidence gathered from multiple sources. Overall, students will write routinely over extended time frames and shorter time frames for a range of tasks, purposes, and audiences.

Students will be assessed routinely over the course of the year. In addition to quarterly assessments, students will be required to complete a portfolio. The portfolio grade becomes part of the fourth quarter grades, and the final grade for the course is the average of the four marking periods.

The tasks required of the students will build the foundational skills necessary for the successful completion of the NYS Common Core English Regents exam at the end of the students' junior year.

English 11 (0003) **1 Unit of Credit/Year**

Instruction in reading, writing, language, and listening/speaking will continue with the texts and materials in the 11th and 12th 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 works of non-fiction, while also having a choice in some reading selections. Speaking and listening will continue to be an important part of the curriculum. Students will complete a variety of listening and speaking tasks and will observe the presentation of senior projects. Juniors are present at the senior projects for two purposes: learning what will be expected of them in their senior year, as well as learning from the variety of information being presented.

Students in English 11 are required to take the Common Core English Regents exam as a graduation requirement. This test assesses a student's ability to read and evaluate complex texts, establish claims that are supported by evidence while refuting an opposing viewpoint, and analyze the structure and style used by an author to convey his/her ideas. Any student who fails to successfully complete the Regents exam will be required to retake it.

The portfolio is the final project, which is averaged with the fourth quarter grades. The final course grade is the average of the four marking period grades.

English 12 (0005) **1 Unit of Credit/Year**

Instruction will continue to move the students forward in their abilities to read and write critically and analytically. A major component of Senior English is the Senior Project. The project is comprised of a comprehensive research task that will culminate in a formal oral presentation and written documentation of the research involved. The senior project is 50% of the final exam grade.

Senior year places an emphasis on college and 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.

The final exam grade for English 12 is the average of the senior project and the student portfolio, which is combined with the fourth quarter grades. The final course grade is the average of four marking periods.

ADVANCED ENGLISH

Students may select to be considered for enrollment in Advanced Placement English courses starting their sophomore year. A student's accomplishments are taken into account when he or she would like to be considered for the course. The selection criteria for the advanced placement courses follows the course descriptions.

Advanced Placement (AP) Language and Composition (0011) **1 Unit of Credit**

Prerequisite: "Students must be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing" (The College Board 2014).

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods *(College Board, 2016).*

Advanced Placement (AP) Literature and Composition (0004) **1 Unit of Credit**

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. *(College Board, 2016)*

Students will also be required to take the NYS Common Core Regents exam in June.

OCC English- English 103 and 104 (0007 and 0008) **1 Unit of Credit**
Prerequisite: Completion of English 11, unweighted overall GPA of 85 or higher, and/or passing score on the English Accuplacer.

ENG 103 Freshman Composition and Literature I (3 credits)

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. Prerequisite: Onondaga Community College placement test and/or satisfactory completion of ENG 099 or ESL 116.

ENG 104 Freshman Composition and Literature II (3 credits)
Prerequisite: Successful completion of ENG 103

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.

Creative Writing (0100) **½ Unit of Credit**

This course is centered around the art of short story writing, while also exploring units in poetry, dramatic playwriting (theatre), and screenwriting (tv or film). Further, students will investigate career tasks for creative writers (advertising, journalistic voice, etc.). To achieve these ends, students will read texts by influential writers in various genres, both fiction and autobiographical. Students will write in various methods using the workshop participation model. The course also spends some time on publication and students will be encouraged to submit their best writing to the Marcellus literary magazine and/or professional publications and contests.

FINE ARTS: PERFORMING ARTS

Music courses offered at the senior high school level offer students the opportunity to broaden their general music knowledge as well as providing a platform for those who wish to major in music. A career major includes two units of a performing organization and the completion of Theory I. The New York State requirement of one year of high school music or art may be met by taking 1 unit of the courses listed below.

Applied Instrumental Music/Concert Band (0749) **1 Unit of Credit**

Prerequisite for this course is successful completion of the middle school band program or teacher approval. Students grades 9-11 are eligible to enroll in Concert Band.

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.

Applied Instrumental Music/Symphonic Band (0750) **1 Unit of Credit**

Prerequisite for this course is performance ability at a NYSSMA Level 5 equivalent. ***Students in grades 9-11 may audition for Symphonic Band.*** *Teacher recommendation, based on performance level will also be considered. Balance of instrumentation may be a factor in determining Symphonic Band placement.*

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.

Senior High Concert Choir (0751) **½ Unit of Credit**

The Senior High Concert Choir, grades 9–12, is comprised 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.

Senior High Select Choir *True Sound* (0752) **½ Unit of Credit**

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.

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.

Senior High Women's Chorus (0745) **½ Unit of Credit**

Prerequisite for this course is successful completion of the middle school general music curriculum.

The Senior High School Women's Chorus is comprised of students who are new to the Marcellus High School Vocal Music program and/or are performing at the intermediate ability level. The focus of this ensemble is on basic elements of music, vocal production, music reading (rhythmic and melodic), and ensemble performance skills. Chorus members will expand their listening experiences and perform a wide repertoire of various musical genres, styles, and cultures. Group voice lessons are required for all Women's chorus participants on a rotating basis once a week.

Theory I (0753) **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. Students who plan to major or minor in music in college are encouraged to take Theory I their freshman year. *Teacher approval required.*

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.

Theory II (0754) **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. *Teacher approval required (Grades 10 - 12).*

FINE ARTS: VISUAL ARTS

To obtain a sequence in Visual Art, students must successfully complete a five-unit sequence.

Regents Advanced Designation Credit
Students must inform their visual art instructor(s) that they are seeking Regents credit for their visual art sequence by the end of the first marking period of the junior year. Students must successfully complete all the following sequence requirements:

1. Studio Art I - 1 credit.
2. Plus any combination of Studio Art II, Ceramics, Photography, or Photography II to equal a total of either 3 or 5 units.
3. A portfolio containing eight pieces of the student's best work that will be exhibited at the Annual Visual Art Show.
4. A Senior project.

*Regents sequence portfolios must be of superior quality, that is, comparable to a portfolio that might be sent to Scholastic Art Awards Scholarship Competition. The senior project should also be of superior quality.

Studio Art I (0701) **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. This is a required course for visual art majors or anyone planning to elect any other visual art course. A final examination is required by New York State at the end of this course.

Studio Art II/ Advanced Studio in Art (0704) **1 Unit of Credit**
Prerequisite: Studio Art I. *1/2 with permission of instructor

This is an intermediate to advanced level visual art course in which students will work on observational drawing skills and develop projects in painting, drawing, ceramics, sculpture, printmaking, computer art, and portfolio development. This elective can be taken more than once. Upon successful completion of Studio Art II, subsequent elections of this course will be noted on student records as Advanced Studio in Art.

Specialization in Art-Ceramics (0715) **½ Unit of Credit**
Prerequisite: Studio Art I.

Students will learn "wheel throwing" and hand building skills in clay. Students will design and build projects using these methods and learn about glazes and glazing techniques.

Photography I (0705) **1 Unit of Credit**
Prerequisite: Studio Art I.

This course will cover basic knowledge of the 35mm camera, black and white film and print development. Experimentation with, and creative use of the photographic image will be encouraged. Ownership of a 35mm camera is suggested. Students provide their own film and paper that may be purchased in the main office.

Photography II /Advanced Studio in Photography (0709) **1 Unit of Credit**
Prerequisite: Photography I.

This course option is designed for students who have successfully completed Photography I and wish to continue to develop their skills and artistic vision. Work in this course is developed in traditional photographic techniques as well as in digital and computer-enhanced photography using "Adobe Photoshop". Students may also choose to work on original video productions using "I Movie" and "After Effects". Portfolios are developed in this class and completed by seniors in Photography II or AP Studio Art. Upon successful completion of Photography II, subsequent elections of this course will be noted on student records as Advanced Studio in Photography.

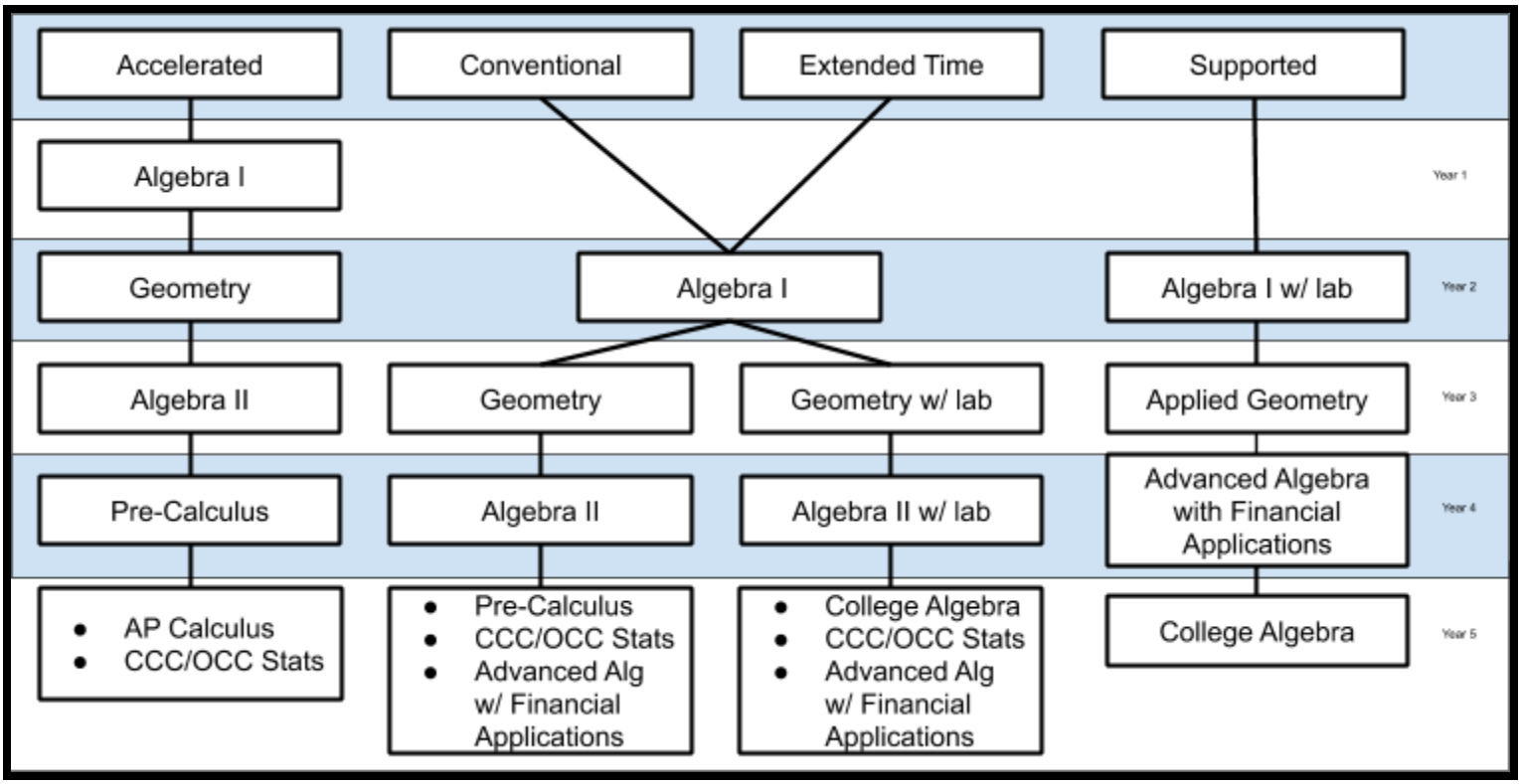
AP Studio Art (0717) **1 Unit of Credit**
Prerequisites: Studio Art 1 and Studio Art II (for 2D Design Portfolio) or Studio Art I, Photo I and Photo II (for Photography Portfolio).

This course is designed for students who are seriously interested in the practical experience of visual art. AP Studio Art is not based on a written exam. Instead, students submit portfolios for evaluation at the end of the school year. Portfolios may be submitted in 2D Design (including Photography), 3D Design or Drawing. Students are expected to spend significant time outside of class working on their portfolios and related work. The cost of portfolio submission is the same as any AP exam, currently $94.00. The course will address the following: a sense of quality in a student's work, the student's concentration on a particular visual interest or problem, and the student's need for breadth of experience in the formal technical and expressive means of the artist. AP Studio Art is open to sophomores, juniors and seniors who have completed the prerequisite courses. Sophomores and juniors will be considered pre-AP and will work to develop portfolio elements. Seniors must complete the AP portfolio in order to successfully complete the course. Sending the completed portfolio to AP for evaluation is optional. If the portfolio is not sent to AP, school credit only will be awarded for the course; the student's transcript will read AP Studio Art. Students who wish to apply for college credit for the course must have their portfolio evaluated by the College Board (AP). Course grades are separate from the AP score.

NOTE: There is no formal independent study option. The visual arts teacher grants students independent study status on an individual basis. Students should not assume they automatically qualify after 2 or 3 years of visual art study. Visual Art teachers do not have to grant an independent study option.

MATHEMATICS

Math Flow Chart



The mathematics program is designed to give the largest number of students as much mathematics as will be meaningful and useful to them. Our goals are to teach students an understanding and appreciation of mathematics, how to analyze new situations, to apply previous knowledge, and to develop effective and efficient use of the latest calculator and computer technology.

New York State is in the process of phasing in a plan for raising the Standards for all students. As this transition has taken place, course titles and descriptions have been modified. Compliance with New York State mandates requires that the following policies be applied:

1. Each student must earn at least three units in mathematics.
2. The second unit must be earned by successful completion of a course, which shall deepen the understanding or broaden the application of concepts studied in the first course. In other words, the two courses must be sequential in nature.
3. Each student must pass the Common Core Algebra Regents Exam.

Algebra I (0203) **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 1 is essential for the solution of many problems in science. In June, all students will take the Algebra Regents Exam. *A graphing calculator is required.*

Algebra I with Lab (0203*) **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. Additional support is given to the students every other day for 40 minutes. Students must be enrolled in both the course and the lab period. In June, all students will take the Algebra Regents Exam.
A graphing calculator is required.

Applied Geometry (0204) **1 Unit of Credit**
Prerequisite: Successful completion of Algebra I Regents exam.

This course teaches the basics of Geometry and applies the concepts to strengthen 21st Century skills. Students who complete this course will learn to apply basic geometry concepts such as congruent triangles, logic, geometric relationships and informal mathematical arguments. The final test is a local exam. This course does not prepare a student for Common Core Geometry.
A graphing calculator is required.

Geometry (0205) **1 Unit of Credit**
Prerequisite: Successful completion of Algebra 1 or Algebra 1 Regents exam.

Geometry is the second course in a traditional 3-year sequence of math courses. 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.
In June, all students will take the Geometry Regents Exam. *A graphing calculator is required.*

Geometry with Lab (0205*) **1 Unit of Credit**
Prerequisite: Successful completion of Algebra 1 or Algebra 1 Regents exam.

Geometry is the second course in a traditional 3-year sequence of math courses. 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. Additional support is given to the students every other day for 40 minutes. Students must be enrolled in both the course and the lab period. In June, all students will take the Geometry Regents Exam. *A graphing calculator is required.*

Algebra II (0217) **1 Unit of Credit**

Prerequisite: Successful completion of both Algebra I or Algebra Regents exam and/or Geometry or Geometry Regents exam.

Algebra II is the third course in a traditional 3-year sequence of math courses. 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. In June, all students will take the Algebra II Regents Exam.
A graphing calculator is required.

Algebra II with Lab (0217*) **1 Unit of Credit**

Prerequisite: Successful completion of both Algebra 1 or Algebra Regents exam and Geometry or Geometry Regents exam.

Algebra 2 is the third course in a traditional 3-year sequence of math courses. 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. Additional support is given to the students every other day for 40 minutes. Students must be enrolled in both the course and the lab period. In June, all students will take the Algebra II Regents Exam. *A graphing calculator is required.*

Advanced Algebra with Financial Applications (0213) **1 Unit of Credit**

Prerequisite: Algebra I.

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. The course is for students who have successfully completed Algebra I and who have passed the Algebra I regents. *A calculator is required.*

Pre-Calculus (0211) (MAT 143) **1 Unit of Credit**

*Prerequisite: Successful completion of Algebra II Regents exam **and** pass Algebra II. Students may earn 4 college credits through O.C.C. (SUNY) by completing this course.*

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.
A graphing calculator is required.

AP Calculus (0212) **1 Unit of Credit**

Prerequisite: Successful completion of Pre-Calculus.

This course is open only to students who have completed four years of mathematics, including Pre-Calculus. The course will be comparable to a college freshman Calculus course including theory, proofs, and applications of differential and integral calculus.
A graphing calculator is required.

Statistics (MAT 214) **1 Unit of Credit**

Prerequisite: 80% or higher in Algebra II. Students may earn 3 college credits through C.C.C. (SUNY) by completing this course.

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.

Essential Statistics (MAT 118)

Prerequisite: > 66% in Common Core Algebra I course and 2 additional math courses (beyond CC Algebra 1) including a 2nd Common Core course. Students may earn 3 college credits through O.C.C (SUNY) by completing this course.

This is an introductory statistics course for non-STEM majors. Topics include: random sampling, graphical displays of data, measures of central tendency and dispersion, normal distribution, standard scores, confidence intervals, hypothesis testing, Student t distribution, two-way tables, probability, correlation and regression.

College Algebra and Trigonometry (MAT 104)

Prerequisite: Successful completion of Algebra II. Students may earn 3 college credits through C.C.C (SUNY) by completing this course.

A Continuation of the study of Intermediate Algebra, the fundamentals of Trigonometry. The concept of function is then introduced and applied to algebraic, rational, exponential and logarithmic functions. Applications of the right triangle are emphasized. A non-graphic scientific calculator is required.

PHYSICAL EDUCATION

The Physical Education curriculum of Marcellus Central Schools was established to meet the New York State Standards. Our units and lesson plans will incorporate the following New York State Standards:
Standard 1. Demonstrates competency in a variety of motor skills and movement patterns.
Standard 2. Applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.
Standard 3. Demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.
Standard 4. Exhibits responsible personal and social behavior that respects self and others.
Standard 5. Recognizes the value of physical activity for overall wellness, enjoyment, challenge, and/or self-expression
Standard 6. Recognizes career opportunities and manages personal and community resources related to physical activity and fitness to achieve and maintain overall wellness.
Physical Education Learning Standards express what a student should know and be able to do in physical education.
[NYS ED]

Ninth and Tenth Grades (0801 & 0802) **½ Unit of Credit**

Ninth & Tenth Grade (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. [NYS ED]

Eleventh and Twelfth Grades (0803) **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. [NYS ED]

Human Ecology (0315) **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. This course is required for graduation and is usually taken in the 10th grade.

Electives - Eleventh and Twelfth Grades **¼ Unit of Credit Each Semester**

PE Excel

*11 and 12 graders only ***WITH*** a recommendation from a PE teacher

Half year class with Fall & Spring semester offerings that meets every other day in addition to students regular PE class. This class is in addition to your regular physical education class. Class will use the Sport Education Model - students will plan and create activities. This class will include lesson on how to referee/umpire.

STRENGTH AND CONDITIONING CLASS

Half year class with Fall & Spring semester offerings that meets every other day in addition to students regular PE class. Class will include a regular structured workout program with a focus on specific exercise theory and will explore fitness trends and styles. All manners of exercise will be covered including strength training, cardio, and flexibility. Each semester offering will be limited to 25 students.

UNIFIED PHYSICAL EDUCATION

11 and 12 graders only

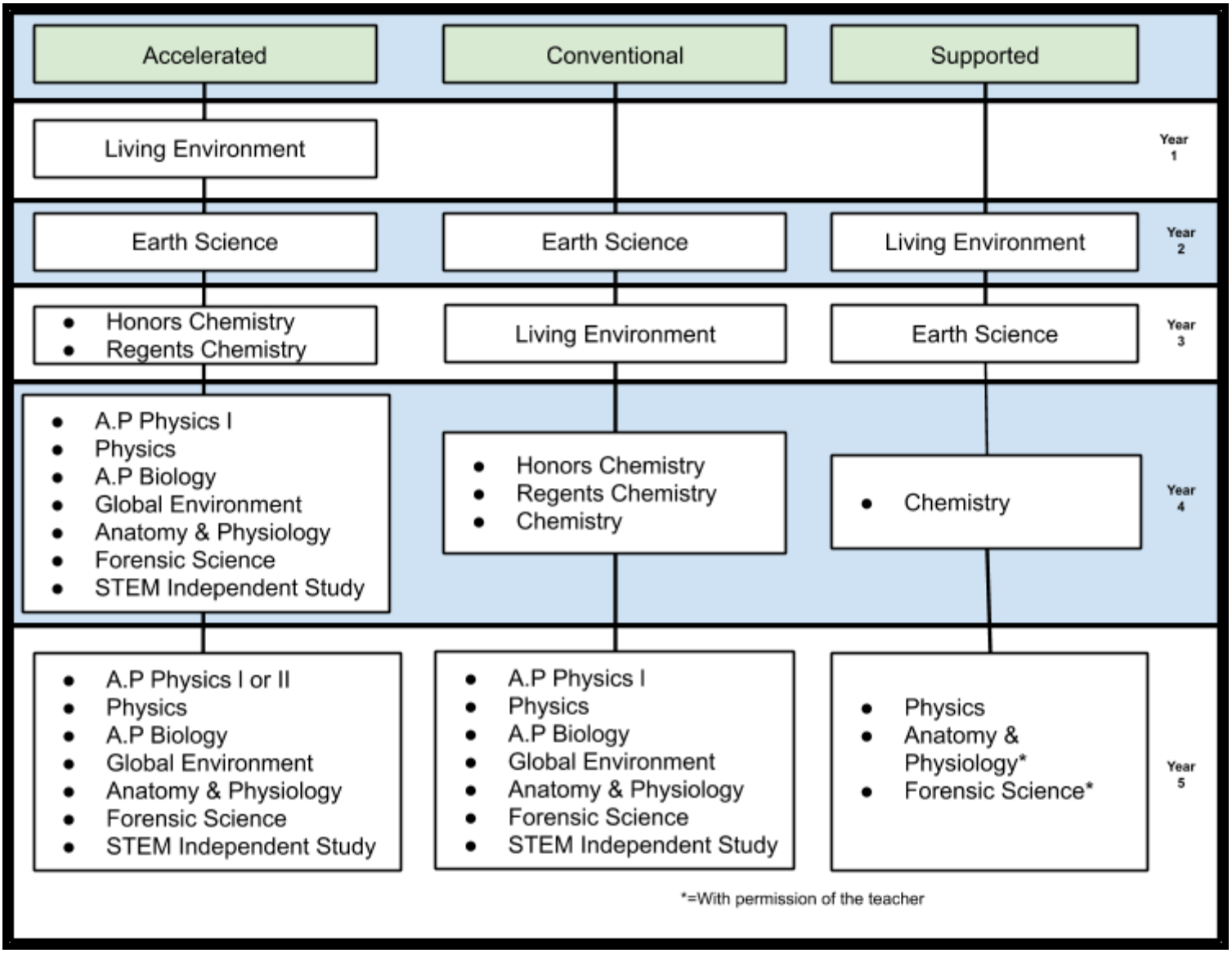
This course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sport. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students.

A student must complete 2 credits of Physical Education to graduate. PE is a required course and is to be taken each year of high school at ½ credit per year.

SCIENCE

Three units of credit in science will be required for graduation. One credit must be the Living Environment course. A second credit must include either Earth Science, Chemistry, or Physics. The third credit may include a Regents course or other elective. For graduation, a student must pass 3 science credits, 2 Regents courses (one must be Living Environment), and 1 Regents exam.

Learning is conducted in classroom-laboratory situations that provide opportunities for individual and group instruction, investigation, and experimentation. Students participate in field activities that provide opportunities to apply methods and principles of science to the investigation of problems of living.



Physical Setting/Earth Science (0301) **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. The completion of 1200 minutes of laboratory exercise in a satisfactory manner is a prerequisite for admission to the final exam. The Regents will be the final exam.

Regents Living Environment (Biology) (0302) **1 Unit of Credit**

The Living Environment 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 Multi-cellular, 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. This course is required for graduation by NYS. Any student not passing the class will need to repeat the course until they are successful. The completion of 1200 minutes of laboratory exercise in a satisfactory manner is required by NYS to pass the course.

Regents Chemistry (0303) **1 Unit of Credit**

Prerequisites: Students enrolling in the Regents course in Chemistry must have successfully passed the Algebra exam. They also should have passed and successfully completed Geometry. While very little of the content of Geometry is used directly in chemistry, the experience in setting up and solving problems, and the analytical thinking developed in this course are essential in Chemistry.

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. The completion of 1200 minutes of laboratory exercise in a satisfactory manner is required by the State to take the Regents exam in Chemistry. The Regents Exam in Chemistry will be the final exam.

Chemistry (0308) **1 Unit of Credit**

Prerequisites:Successful completion of Algebra, Regents Living Environment and a Regents Earth Science, as well as having passed each of the Regents examinations.

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. We use the American Chemical society textbook and accompanying curriculum: *Chemistry in the Community.*

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.

Honors Chemistry (0313) **1 Unit of Credit**

Prerequisites: Prior completion of Algebra is required and Algebra II is recommended. Algebra II must be taken as a co-requisite if not previously completed. Students must have achieved a 90% or better as a final average in Algebra, Earth Science and Living Environment courses. Students must be recommended by the Science Department for work ethic and potential for success.

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. 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.

Many topics are explored beyond the scope of the Regent's chemistry classes; especially stoichiometry, atomic structure, acid-base chemistry and equilibrium concepts. The completion of 1200 minutes of laboratory exercise in a satisfactory manner is required by NYS to pass the course The final exam will be the Chemistry Regents.

AP Physics 1 (0304) **1 Unit of Credit**

Prerequisites:Students enrolling in this class must have successfully completed Algebra. They should have completed, or, at least, be currently enrolled in Geometry or Algebra II.

AP Physics 1 students will explore principles of Newtonian mechanics (including rotational motion); work energy and power; mechanical waves and sounds; and introductory, simple circuits. The course is based on six Big Ideas that encompass core scientific principles, theories and processes that cut across the traditional boundaries and provide a broad way of thinking about the physical world. This course is equivalent to a first semester college physics course. This course requires that 25% of the instructional time will be spent in hands-on laboratory work, with the emphasis in inquiry-based investigations that provide students with opportunities to apply the science practices.

Physics (0309) **1 Unit of Credit**

Prerequisites: Successful completion of Algebra. Additional courses in math and science are recommended.

The General Physics course is designed for students who have fulfilled their science requirement and are interested in a fourth science credit, but do not wish to take Advanced Placement. Students must be proficient in Algebra, since much of the problem solving in the course involves algebraic equations. Each unit will be presented through a combination of: teacher lecture, worksheets, and laboratory exercises. Each unit will have a unit test. Students may bring and use their own reference materials on tests. There will also be one group project during each marking period. This course will have a final assessment.

AP Physics 2 (0322) **1 Unit of Credit**

Prerequisites: Students must have successfully completed AP Physics 1. Successful completion of Algebra I, Algebra II, and Geometry and must be enrolled in either Pre-Calculus or Calculus for their senior year.

AP Physics 2 students explore principles of fluids, thermodynamic, electricity, magnetism, optics, and topics in modern physics. The course is based on seven Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. This course is **equivalent** to a **second semester** college physics course. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with the emphasis in inquiry-based investigations that provide students with opportunities to apply the science practices.

Anatomy and Physiology (0306 and 0307) **½ - 1 Unit of Credit**

Co-Requisite: Chemistry

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.

Forensic Science (0314 and 0315) **½ - 1 Unit of Credit**

Co-Requiste: Chemistry

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.

Global Environment (0312) (Additional Research Credit Available) **½ Unit of Credit**
Prerequisites: Successful completion of Regents Earth Science, Regents Living Environment, and Regents Chemistry.

Global Environment (EFB 120) provides students with an overview of global environmental problems, current rates of global change, and potential impacts on human populations and the quality of life. While there is a global nature to the subject matter, opportunities abound including course topics based on local and regional interests and problems. Students will need to understand the broad, global context of environmental change and develop an appreciation for the linkages among human social systems and biophysical systems. Global Environment is a course offered in conjunction with SUNY ESF and offers the student the opportunity to earn three college credits as well as ½ unit of high school credit. This course is a college level course and will give the students a rigorous preparation for future college experiences.

Research Credits through SUNY ESF: - Upon completion of Global Environment there are two opportunities to earn additional credits through SUNY ESF.

1. **Research Problems**: Earn an additional one half high school credit while simultaneously earning an additional 1 college credit through SUNY ESF (EFB 498) while performing 45 hours of field research and work. This semester focuses less on classroom content, and more on students leading field research projects. It is student driven and meant to provide them the opportunity to participate in a college symposium at the conclusion of the semester. This course is offered in conjunction with SUNY ESF and allows for use of ESF resources and partnerships. There is a $25 fee for the 1 SUNY ESF credit.

2. **Research Opportunity:** EFB 296: Research Experience The SUNY ESF is offering a research opportunity for curious and motivated high school students. You can enroll in a free research course, and work with undergraduate and graduate students in the Multiple Element Limitation in Northern Hardwood Ecosystems (MELNHE) project. Activities include processing leaf litter, analyzing soil texture, sorting roots from soil, sorting seeds from litter, identifying fungal spores by microscopy, and entering and managing data. Sessions are held at ESF on weekends during the school year and including weekdays during the summer, with optional field trips to the research site in New Hampshire. You are welcome to participate for any number of sessions. For each 45 hours of work, you can earn a one college credit (up to 3 credits).

Advanced Placement Biology (0320) **1 Unit of Credit**
Prerequisites: Successful completion of Regents Earth Science, Regents Living Environment, and Regents Chemistry and Mastery (85) on each of the Regents exams or permission of the Science Department.

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.

STEM Independent Study - **½ Credit per semester**

Prerequisites: Successful completion of Regents Earth Science, Regents Living Environment, and Regents Chemistry.

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.

Sustainability Science **1 Unit of Credit**

Sustainability is a study and review of the interactions, and extent of influence, that exist between humans and their surrounding environment. Sustainability Science introduces students to a variety of facets of sustainable living and is meant to be an introductory course for the Sustainability Strand of Study at Marcellus High School. Units that will be explored through project based instruction include the basics of growing food, environmental conservation, animal husbandry, mechanics, food science, construction, financial management and communication. As students experience the basics of sustainability, they will learn to solve problems, conduct research, analyze data, work in teams, and become independent, self-driven learners. The Sustainability Science course does not have any prerequisites and counts as a third science course for high school graduates.

SOCIAL STUDIES

The social studies program is a four-year sequence. New York State Regents Tests are administered at the end of the Global History & Geography course in grade 10 and after completion of the U.S. History & Government course in grade 11.

Global History & Geography I (0101) **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. *Passage of this course is required for graduation.*

Global History & Geography II (0102) **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 17th 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. Students will be required to take and pass the **Regents Exam in Global History & Geography II (Grade 10)** at the end of the course which is required for graduation. *Passage of this course is required for graduation.*

U.S. History & Government (0103) **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. The **Regents examination in U.S. History & Government** will be taken at the end of this course. *Students must pass both the course and the Regents Examination in order to graduate.*

Participation in Government (0104) (1 Semester) **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. A final examination will be administered upon completion of this course. *Passage of this course is required for graduation.*

Economics, The Enterprise System & Finance (0105) (1 Semester) **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. A final exam will be administered upon completion of this course. *Passage of this course is required for graduation.*

Psychology (0109) **½ Unit of Credit**

Prerequisite: Seniors who have achieved at least an 80% average in previous Social Studies courses or principal discretion.

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.

Advanced/College Level Course Offerings in Social Studies

United States History – AP (0108) **1 Unit of Credit**

This course is comparable to a freshman college course in American History. It will prepare highly-motivated juniors and seniors to take the Advanced Placement exam in United States History and earn college credit. Students are required to take the Advanced Placement exam in May. Juniors enrolled will also take the New York State Regents Examination in **U.S. History & Government** as this course also follows the above curriculum for U.S. History & Government.
Students must pass the Regents Examination as well as the course in order to graduate.

U.S. Government & Politics – AP (0107) **1 Unit of Credit**

Prerequisite: US History.

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.
Passage of this course is required for graduation.

SUPA Economics (0112) (1 Semester) **½ Unit of Credit**

Prerequisite: US History, Algebra, Geometry.

Economics 203, ***Economic Ideas and Issues***, 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. Students should understand basic algebra and geometry. More importantly, they should be able to follow carefully reasoned logical development of a theoretical model and to apply that model to their own experiences. **Economics 203** is designed to help students understand "how the world works."

To the extent that students master the material presented in the course they will have a solid foundation in mainstream economic thought that can be applied to everyday experience as well as further study in economics or the social sciences.

This course is designed to be taken in place of Economics as a senior level course. All students will be expected to take this class as an enrolled member of Syracuse University.
Passage of this course is required for graduation if it is taken in place of economics.

SUPA Personal Finance (0113) (1 Semester) ½ Unit of Credit

This three-credit Syracuse University course – offered under the dual enrollment program Syracuse University Project Advance (SUPA) – 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. All students will be expected to take this class as an enrolled member of Syracuse University.
Passage of this course is required for graduation if it is taken in place of economics.

WORLD LANGUAGES

The acquisition of second language skills on an ever-increasing functional level is the major aim of the department. These skills include the ability to understand a second language when spoken, speak the target language in direct communication with people of another culture, read another language with ease and enjoyment, and express one's thoughts and ideas clearly and correctly in writing in a language other than English.

The study of another language also involves a gradual expanding and deepening of the knowledge of a foreign country - the culture and literature. As a consequence, students attain a better perspective of American culture and a greater awareness of cultural similarities and differences.

French 1 (0411) **1 Unit of Credit**

First-year French introduces students to basic language tools. Emphasis is placed on speaking and oral comprehension skills that are developed into reading and writing skills. From the mastery of basic conversational skills, the students learn to express themselves in the present and past tense of regular and irregular verbs. Included in this course are studies of geography, history, and daily living in France and other Francophone countries.

French 2 (0412) **1 Unit of Credit**

Prerequisite – Students qualifying for this course have successfully completed French 1.

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 (0413) **1 Unit of Credit**

Prerequisite – Students qualifying for this course have successfully completed French II.

French 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 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 (0414) **1 Unit of Credit**

Students qualifying for this course have successfully completed French III and have a teacher recommendation.

Fourth-year French offers 3 college credits through SUNY Oswego, and thus is a demanding 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 some of the major French contributions to literature. They read a short novel, poetry, and short stories. In addition, students also explore contemporary French culture through music and media.

French 5 (0415)
Students qualifying for this course have successfully completed the French IV course, the final exam and have teacher recommendation.

French 5, also offers the students the opportunity to earn 3 college credits from SUNY Oswego. 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, and French Fairy Tales. 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 also participate in a pedagogical unit where they will teach younger students at KCH. Finally for interested students, there will be the option of taking the AP examination in the spring.

Spanish 1 (0401) **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 (0402) **1 Unit of Credit**
Prerequisite – students must have successfully completed Spanish 1.

Spanish 2 provides an intensive and extensive development of the four skills introduced in Spanish I. 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 (0403) **1 Unit of Credit**
Prerequisite – students must have successfully completed Spanish 2.

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 (0404) **1 Unit of Credit**
Students qualifying for this course have successfully completed the Spanish 3 course and have teacher recommendation.

Fourth-year Spanish offers the opportunity for 3 college credits through SUNY Oswego, and thus is a more demanding course that is taught primarily in Spanish. Students will continue to develop language skills from previous years; students will study Spanish language structures and the class offers frequent oral practice of the language. Culturally, students will explore various topics through use of literature, CDs and DVDs.

Spanish 5 (0405) **1 Unit of Credit**

Prerequisite: Successful completion of Spanish 4, the final exam and have teacher recommendation.

Spanish 5 also offers the students the opportunity to earn 3 college credits through SUNY Oswego. This is an advanced level course which intends to refine, enhance, and perfect previously learned language skills as well as to broaden the students' understanding of Hispanic culture and foster interest in continuing the study of Spanish in college. Students will continue their study of complex grammar and syntax. By the end of this course, students will be able to write college level compositions in Spanish and carry on sophisticated discussions in the language. Finally, for interested students, there will be the option of taking the AP examination in the spring.

Non-Departmental Elective

Yearbook (0580) **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.