

2025-2026

Schalmont High School Curriculum & Planning Guide





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Regents Examination Requirements

Students must pass all five of the applicable Regents examinations below with a grade of 65 or higher in order to receive a high school diploma.

Five Exams Required for Regents Diploma

- 1 English Regents
- 1 Math Regents
- 1 Science Regents
- 1 Social Studies Regents
- It is expected that any additional Math, Science or Social Studies Regents offered by the State will count for the fifth required examination or the CDOS certification.

Exams Required for Advanced Regents Diploma

- Algebra I, Geometry and Algebra II
- 2 Science Regents (One of which must be Biology)
- Global Studies
- U.S. History and Government
- English
- Spanish – Locally designed exam

Grade Level Promotion Requirements

To provide enough units for graduation, each student is required to take five subjects plus physical education each year. In addition, the following requirements for promotion to the next grade level have been established.

Grade Level/Class	Units of Credit Required for Promotion
Grade 9/Freshman	Promotion from 8th grade
Grade 10/Sophomore	5.0 units, 1 of which must be English or Social Studies
Grade 11/Junior	11 units, 3 of which must be in English or Social Studies
Grade 12/Senior	17 units, 5 of which must be English or Social Studies

Graduation Requirements

Regents or Advanced Regents Diplomas – a student must earn 22 credits. All students must carry at least five courses per semester, one of which must be Physical Education.

Regents Diploma with Honors – a student must have an average score of 90 on all required Regents exams, including English Language Arts (ELA), Mathematics, Science, U.S. History and Government, and Global History and Geography.

Regents Diploma with Advanced Designation with Honors – a student needs to have an average score of 90 on all required Regents exams, including: English Language Arts (ELA), two (or three) Mathematics, two Sciences (one each in Physical Science and Life Science), U.S. History and Government, Global History and Geography, and Languages Other Than English (LOTE).

Local Diplomas will be available to some students with an IEP or 504. Additionally, some regular education students might be eligible. Counselors will guide each student individually through this process.

Subject	Credits Required for Regents Diploma	Credits Required for Advanced Regents Diploma
English	4.0	4.0
Social Studies	4.0	4.0
Mathematics	3.0	3.0
Science	3.0	3.0
Arts	1.0	1.0
Health	0.5	0.5
Physical Education	2.0	2.0
Second Language	1.0	3.0
Electives	3.0	1.0
Career & Financial Management	0.5	0.5
Total	22.0	22.0

General Information

Course Selection

Counselors meet with students to review their high school plan to help develop the coming school year's course of study. Counselors will take into consideration teacher course recommendations, students and family requests as well as students' post-secondary goals to help the student create an appropriate schedule for students.

An alternate course will need to be selected if a class does not run or a conflict arises in a student's schedule. In most cases, the student will be notified before the end of the school year of the classes that will be on their schedule for the fall. Students have until the end of their current school year to adjust those classes before their course selections are finalized. In cases where students request changes, parents will again be asked to sign off on those changes in a request sheet.

Accelerated Graduation

Students who wish to complete their graduation requirements in less than four years must plan their program accordingly. The request to accelerate graduation should be made in writing, early in the high school program to the student's school counselor, and will need approval from the principal.

Student Support Services

School counselors provide an organized program of counseling, instruction and consultation to all students, including an annual review of each student's progress, college and career guidance and planning, advisement and counseling services, and opportunities for parental involvement. Social workers and school psychologists are also available to assist students and parents with issues that may interfere with a student's education.

Dropping/Adding Courses

Schedules will not be altered to accommodate teacher requests, early dismissal or late arrival. The official add/drop period is five weeks after the beginning of a full-year course and 2.5 weeks after the beginning of a half-year course. Students dropping courses after these deadlines will receive a Drop/Failed (DF) grade on their report card. This will carry the numerical equivalent of 50.

All requests for dropping courses must be accompanied by a special schedule change form and contact from parent/guardian by either email or phone call. Students may not drop a course that is a requirement for graduation. In all cases, students must retain five courses plus Physical Education as a minimum course load.

A schedule change due to academic difficulty may be considered prior to the drop period deadlines provided:

- a request from a parent or guardian is made.
- a student is carrying the required number of courses.
- a student has made a sincere effort to succeed.
- the student, parent, teacher and school counselor are in agreement regarding the change.
- class balance is not disrupted by the change.

Such students may then have to add a course in its place during the 2nd semester.

Special Education Services

Students with disabilities work toward attaining a Regents diploma, a local diploma, or, in some cases a Skills and Achievement Commencement Credential (SACC) credential. Schalmont's continuum of services enables them to be educated with their peers to the maximum extent appropriate. This continuum comprises the provisions of specially designed instruction and supplementary services in a variety of settings as determined appropriate by the Committee on Special Education. For more information, visit our Special Education webpage at www.schalmont.org.

Determination of Class Rank

Class rank will be calculated at the end of the third marking period of grade 12. The student with the highest cumulative average through three years and three quarters of high school will be named valedictorian of the graduating class, and the student with the second highest cumulative average will be designated as salutatorian. The courses will be weighted when determining class rank. All Honors courses will be weighted by a multiplier of 1.025 All Advanced

Placement (AP) and college level courses taken at Schalmont High School will be weighted by a multiplier of 1.05. The weighted and unweighted averages will appear on a student's transcript. All grades/courses count towards a student's average, with the exception of college courses taken at a college or university. If a course is failed and later passed, the higher grade is given for passing the course with the higher average.

The unofficial class rank will appear on the unofficial transcript at the beginning of senior year and at the end of the first semester, for college application purposes. The determination of the Top 10% will utilize the class rank at the end of the 3rd quarter of the senior year.

Transcripts

Transcripts are an official record of a student's academic record as a high school student. See your school counselor with questions regarding transcripts.

Honor Roll

The High Honor Roll and Honor Roll students are identified quarterly. When quarter grades are finalized, quarter averages are used to identify honor roll students. Students achieving an overall quarter average from 92-100% earn High Honor Roll distinction. Students achieving an overall quarter average from 88-91.9 earn Honor Roll distinction.

NCAA Eligibility

The NCAA has strict academic eligibility requirements for prospective student athletes to participate in Division I and II intercollegiate athletics. Students and parents should visit www.eligibilitycenter.org to review these requirements.

Graduation Ceremony Participation

Students who have met all of their graduation requirements by June, and are eligible for a high school diploma may participate in the June commencement exercises. Students who have not met their graduation requirements by June will be considered an August graduate and will receive their diploma in August.

Advanced Placement (AP) Courses

AP courses prepare students to take the College Board AP exams in May. Colleges may give credit and/or advanced course placement to students who take and score well on their AP exams.

Honors (H) Courses

These courses are enriched beyond the curriculum subscribed by the NYS Regents syllabus. Students are recommended for the honors level by criteria developed by each department. Criteria used will include student performance on standardized tests and locally prepared exams.

College Courses and Registration Fees

Our academic program offers several courses for local school credit along with college credit. Students taking a college level course in high school will be responsible for registering for the course and providing payment to the college or university. For more information, please contact your school counselor.

College in the High School (CHS)

The College in the High School program through SUNY Schenectady County Community College (SUNY SCCC) is set up to allow students to earn credits toward their college education while still in high school. Courses and teachers must be approved by the college. The courses at the high school are matched with the courses at the college to be sure that the same curriculum is taught. What the college covers in one semester, the high school will cover in two semesters. In order to earn credits for the course at SUNY SCCC, participants must receive a grade of at least a "C," while a transfer to a four-year college may require at least a "B." By taking these courses in high school through the CHS Program, students:

- Will pay about one-third of the cost of taking the same course at the college, and books are provided at no charge.
- Can reduce their college load by taking fewer credits during one or more of their college semesters.
- Show college admissions officials that they are serious students.

Course offerings:

- Human Biology (4 Credits)
- Pre-Calculus (4 Credits)
- Pre-Calculus Honors (4 Credits)
- Statistics (3 Credits)
- Sociology (3 Credits)
- Spanish Level IV (3 Credits)
- Spanish Level V (3 Credits)
- Music Theory (3 credits)

As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

Syracuse University Project Advance (SUPA)

Syracuse University Project Advance (SUPA) is a cooperative program between Syracuse University and participating school districts that allows high school seniors to take college courses in their own schools at low cost. The program enables students to rise to the challenge of college work through enrollment in freshman-level courses prior to full-time college study.

SUPA also serves other important purposes: it provides in-service training for high school instructors and a continuing forum for communication between educators from the high school and university. As an agency of the University's Center for Instructional Development, Project Advance conducts extensive ongoing research and evaluation as part of its efforts to improve instruction.

The courses are regular offerings in the schools and Syracuse University, and are taught by high school faculty who are trained by SU faculty members. Grades for courses through Project Advance are earned in one or two semesters of course work. As a result of their experience, these students earn a Syracuse University transcript for college credits successfully completed. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply.

Project Lead the Way - RIT

PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators

and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply.

Honors & AP Courses

Those courses designated as honors or advanced placement (AP) are:

- Algebra I Honors
- Algebra II Honors
- Biology Honors
- Chemistry Honors
- English 10 Honors
- Geometry Honors
- Pre-Calculus Honors
- AP Calculus AB
- AP English Literature & Composition
- AP Physics 1
- AP U.S. History
- AP World History

Departments & Courses List

On the following pages are a list of courses available at Schalmont High School. Some courses may have prerequisites, so be sure to read course descriptions carefully. The symbols below signify special courses:

- **AP** – Advanced Placement Course
- **H** – Honors Course
- **SUPA** – Syracuse University Project Advance Course
- **CHS** – College in the High School Course - SUNY Schenectady credit
- **UHS** – University in the High School Course – University of Albany credit
- **PLTW** - Project Lead the Way – Rochester Institute of Technology credit

ART

Art courses are available for students with an interest in continuing in the visual arts and those who desire to take one or two introductory courses in the field.

Studio in Art

Prerequisite: None

Credits: 1/Full Year

Studio in Art is a comprehensive, full-year course that includes art production (making art in various forms), art history, and art criticism. Students will explore techniques used in various forms of drawing, painting, sculpture and design. This course may be used to satisfy the art/music requirement for graduating high school. This course must be completed before taking any other art elective.

Studio in Crafts

Prerequisite: None

Credits: 1/Full Year

Studio in Crafts is an integrated arts course composed of special education and general education students. This course introduces students to two and three-dimensional art and functional art forms. Students will explore a variety of techniques and materials used in crafting, including ceramics, fiber arts, drawing, painting, and mixed media. This course satisfies the New York State arts requirement and can also be taken as an elective. Through hands-on projects, students will develop both technical and collaborative skills, as well creative problem-solving abilities while producing unique works of art.

Drawing and Painting I

Prerequisite: Studio in Art

Credits: 1/Full Year

Drawing and Painting I is a comprehensive, in-depth study of two-dimensional art forms. Students will explore a variety of techniques in both drawing and painting media. Various artists and art movements will be discussed in relation to students' projects.

Drawing and Painting II/III

Prerequisite: Studio in Art and Drawing and Painting

Credits: 1/Full Year

Students in Drawing and Painting II/III will explore more advanced techniques and materials related to both drawing and painting media. Various artists and art movements will be discussed in relation to students' projects.

Sculpture I

Prerequisite: Studio in Art

Credits: 1/Full Year

Students will explore three-dimensional art forms and work with a variety of media: clay, plaster, wood, metal, and stone. Students will learn to construct, mold, model and manipulate various materials into a completed artwork. Artists of the past and present will be discussed as they relate to various projects.

Sculpture II/III

Prerequisite: Studio in Art, Sculpture I

Credits: 1/Full Year

Students in Sculpture II/III will explore more advanced techniques and materials related to three-dimensional art forms.

Digital Photography

Prerequisite: Studio in Art

Credits: .5/Half Year

Students will learn the features of the digital camera, how to compose and shoot interesting photographs, and how to manipulate and edit photos. The course introduces design layout and production. Students will gain experience using a variety of digital media applications to create original works of artwork.

Graphic Design

Prerequisite: Studio in Art

Credits: .5/Half Year

This 2-D digital media course helps students develop familiarity with introductory digital art software. The focus of this course will engage students in learning how to create professional quality graphic designs for various projects, which may include logo design, poster design, advertisements, brochures, and image editing. Through hands-on experience, students will enhance their skills and creativity in the realm of digital art.

CAREER & TECHNICAL EDUCATION

The Schalmont High School Career and Technical Education program encompasses a course of study in Business Education, Computer Science, Engineering and Family and Consumer Sciences (FACS). Students have a variety of courses to choose from to meet their interests and to be prepared for post-secondary programs of their choosing.

Business Education

The Business Education course of study offers a sequence for which students can earn an Advanced Regents Diploma in Business. To complete the sequence, a student must take and pass Accounting, Business Law, Sports Marketing, Personal Finance, and Career and Financial Management.

Accounting I

Prerequisite: None

Credits: 1/Full Year

Accounting is the language of business. Students planning to major in business or a related field in college will need to learn to "speak the language." This course will provide students with entry-level job skills (bank teller, bookkeeper, accounting clerk, etc.) as well as personal use skills such as maintaining and balancing a personal checkbook and debit card, understanding payroll procedures, and preparing income tax returns. Students will learn accounting concepts and procedures by working through a complete accounting cycle for a sole proprietorship service business.

Business Law

Prerequisite: None

Credits: 1/Full Year

Business Law will teach students about the criminal justice system and how it all began. Emphasis is on law as individuals may encounter it in business, occupational or personal life. By studying true situations and cases, students will learn how business and personal law impacts the personal lives of young people and adults. Modules include ethics in law, tort or civil law, criminal law, the court system, personal injury law, insurance, contracts, real property, laws of minors and family law.

Career and Financial Management

Prerequisite: None

Credits: .5/Half Year

The Career and Financial Management course will enable students to explore a variety of careers and learn critical skills to be career- and college-ready after high school. Students will explore different career options and identify the training, skills and post-secondary education that will be required to be successful in that field. Additionally, students will explore independent financial management to learn to efficiently handle personal finance and consumption expenditures.

Personal Finance

Prerequisite: None

Credits: 1/Full Year

The Personal Finance course will provide students with the background and attitudes essential for making good financial decisions both now and in the future. The course begins with a unit on financial planning, including budgeting and career planning. Information on banking, credit cards, checking accounts, investing, income taxes, insurance and understanding paycheck deductions will be covered. A project will be done on purchasing an automobile, funding college and renting an apartment. The class will participate in the “stock market game,” competing with students from schools across the country.

Sports Marketing

Prerequisite: None

Credits: 1/Full Year

This course introduces students to the important role that marketing plays in our economic system. Content revolves around the basic marketing functions. Selling, promotion, pricing, purchasing, product, service, idea planning and distribution are covered. Projects are developed to give students hands-on experience using these functions through the lens of sports. Students will experience numerous guest speakers throughout the year to expose them to various employment opportunities in sports.

* Students interested in an internship experience should speak to their school counselor.

Computer Science

Students will have the opportunity to learn computer science and programming through rigorous college-level course work and instruction in the computer science education sequence of instruction.

Computer Science Discovery

Prerequisite: None

Credits: 1/Full Year

This is an introductory course for students with minimal prior experience in computer science. The course presents an overview of the history, principles, and transformative applications of computer science, as well as a comprehensive introduction to programming. Students will start by programming in Netsblox, a friendly graphical language that will allow them to express themselves by creating interactive games, animations, and stories, while learning the fundamentals of computer programming. Students will continue to develop their programming and problem solving skills using the text-based

language Python. Finally, students will learn how to design their own website using HTML, CSS and JavaScript.

This course is a good introduction to Siena’s dual enrollment course, CS 110 - Computer Science.

Computer Science

Siena College - CS 110

Prerequisite: 80%+ average in Algebra 1

Credits: 1/Full Year (3 College Credits)

This course is a broad introduction to a variety of fundamental topics in computer science through the use of multimedia. Students will use the Python program language to complete coding assignments. The course covers topics in data representation, truth tables, circuits, computer organization, operating systems, artificial intelligence and the historical/societal impact of computing. This class is currently being offered by Siena College (CS 110). College credits are earned through the successful completion of the course, applicable registration fees as set by the college do apply.

Engineering

The Engineering course of study introduces students to the Project Lead the Way curriculum to help them understand the field of engineering and engineering technology. Students will explore various engineering systems while gaining an understanding of how engineers address the social and political consequences of technological change. Through hands-on projects and relevant instruction, students will gain a good understanding of what a career in Engineering is truly like. Credits are earned with an 85 percent or higher final average in the course and a passing grade on the PLTW exam. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply upon earning course credit.

Project Lead the Way I: Introduction to Engineering Design

Prerequisite: None

Credits: 1/Full Year

Introduction to Engineering Design (IED) is a high school level course designed for students interested in engineering and design. This course will focus on exposing students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity, project and problem-based learning. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. Students will also learn how to document their work and communicate their solutions to their peers.

Project Lead the Way II: Principles of Engineering

Prerequisite: Project Lead the Way I

Credits: 1/Full Year

This is a survey course of engineering, exposing students to some of the major concepts they will encounter in a post-secondary engineering course of study. Students will be provided with the opportunity to develop their skills and understanding of

course concepts through activity, project and problem-based learning. Topics include mechanisms, energy sources, energy applications, machine control, fluid power, statics, material properties, material testing, statistics and kinematics.

Project Lead the Way III: Digital Electronics

Prerequisite: Project Lead the Way II

Credits: 1/Full Year

This is a course in applied logic that encompasses the application of electronic circuits and devices. Students study topics such as combinational and sequential logic. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

Project Lead the Way IV: Civil Engineering and Architecture

Prerequisite: Project Lead the Way III

Credits: 1/Full Year

This course studies the design and construction of residential and commercial building projects. It provides students with an introduction to many of the factors involved in building design and construction, including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

Family and Consumer Science

The mission of the Family and Consumer Sciences program is to help students become self-supporting, capable, caring, confident individuals in all areas of life to meet their present and future responsibilities.

Child Development/Psychology

Prerequisite: None

Credits: 1/Full Year

This course focuses on the physical, intellectual, and emotional development of preschool to school-aged children (ages 3-12). Psychological theories and current issues related to each stage of development will also be explored. Students will have the opportunity to observe young children during this course. This course would be especially beneficial for all students who are pursuing a future career in areas such as healthcare, childcare, education, psychology, social work, and medicine or have a desire to learn more about the stages of childhood development.

Entrepreneurship

Prerequisite: None

Credits: .5/Half Year

This course provides an opportunity for you to analyze your skills in relation to owning a business. Students will develop a business plan and utilize an in-school business that includes applying business principles, creating and maintaining a budget, and developing a marketing strategy for the in-school business.

Fashion Industry

Prerequisite: None

Credits: .5/Half Year

This course will take an in-depth look at the development of fashion. There will be an emphasis on different textiles, illustration, and fashion design. A Computer Aided Design

(CAD) program will be used during the duration of this course. A final project will include a virtual clothing line using the CAD program.

Food Preparation

Prerequisite: None

Credits: .5/Half Year

This course focuses on hands-on preparation of nutritious and common, popular foods and dishes. Students will learn new and more advanced skills as they prepare appetizers, entrees, and desserts using more complex skills. Safety and sanitation, recipe comprehension, kitchen measurements, equivalents, kitchen equipment and appliances will be covered.

Global Culinary Arts

Prerequisite: Food Preparation

Credits: .5/Half Year

This course introduces the ways in which the culture and traditions of regions and countries influence food choices with hands-on cooking experience. Identifying and preparing foods from various regions and countries to compare foods, ingredients, and preferred cooking methods will be emphasized. The issues and conditions, which affect the availability and quality of food in the global market, as well as the current issues related to global nutrition from production through consumption, will be explored.

Housing & Interior Design

Prerequisite: None

Credits: 1/Full Year

Prerequisite: None

This course is designed to make students aware of the influence of history, culture, and environment in housing decisions. Current environmental issues, such as energy and conservation, are increasingly important in the field of housing and will be emphasized. Changing global demographics have created housing issues that must be satisfied for individuals and families across the lifespan through innovative design solutions. This course will also focus on aspects of interior design for residential and commercial buildings. Students will use a Computer Aided Design (CAD) program to complete this course. Final project will be designing and creating your own home.

Technology

Residential Tech: Home Improvement & Maintenance

Prerequisite: None

Credits: .5/Half Year

The Home Improvement and Maintenance class provides students with a foundational understanding of house construction and the care of a home's mechanical systems, including basic architectural drawing and design. This course helps students develop strong work habits and a solid work ethic, preparing them for real-world challenges. Through hands-on experience, students will learn to use hand tools and portable power tools to complete various home repair tasks. They will engage in practical activities in areas such as concrete work, framing, plumbing, electrical systems, drywall installation and finishing, painting and architectural coatings, flooring and finish carpentry.

ENGLISH

Students must take four years of English (English 9, 10, 11 and 12) as a requirement for graduation. The English Department plans each course to help meet the objectives of a positive language arts curriculum that stresses the four elements of reading, writing, listening and speaking.

English 9

Prerequisite: None

Credits: 1/Full Year

English 9 establishes the departmental focus on both shared and independent reading by prioritizing reading in classroom routines. Students will develop skills and build resilience as readers of complex texts as they read and respond to informational and literary texts. They will analyze authors' choices and attend to the range of ways authors use writing to engage and impact readers using mentor texts. Students will receive direct instruction in crafting and building arguments, informational texts, and narratives as they study the role of language, audience, and purpose. Students in this course will set goals and regularly reflect on their growth as readers, writers, and thinkers.

English 10

Prerequisite: English 9

Credits: 1/Full Year

English 10 continues the departmental focus on independent reading and shared texts by prioritizing daily reading in classroom routines. Students continue to engage in independent reading, working to build stamina and resilience as readers of complex texts. Students will engage in self-exploration and goal setting as they learn about themselves as readers and writers and transfer their reading comprehension knowledge to their own writing. Students will study authors' craft in a variety of genres and use mentor texts as models for their own writing. Writing lessons that are scaffolded, as well as on-going modeling and sharing of student and teacher work, establish a Writing Workshop approach that serves to guide students as they work to complete literary analysis, argument, informational, and narrative pieces. Students will work closely, write collaboratively, and revise their written work in various genres and of various themes. Students create a writing portfolio with both newly polished and revised pieces from the year. They reflect upon themselves as readers and writers in a final reflective essay included in their portfolio that establishes their growth from September to June. Students will use Writer's Notebooks to practice and develop their writing craft.

English 10 Honors

Prerequisite: ELA 8 scores; completion of English 9; English 9 average; Teacher recommendation

Credits: 1/Full Year

This course requires rigorous reading, both over the summer and during the school year. It begins at the conclusion of freshman year. Students will read, analyze, and interpret significant literature from a number of time periods and genres. The emphasis is on critical reading and writing, and students are expected to accept considerable responsibility for the main reading, writing, and research projects. Students continue to engage in independent reading, working to build stamina and resilience as readers of complex texts. Students will engage in

self-exploration and goal setting as they learn about themselves as readers and writers and transfer their reading comprehension knowledge to their own writing. Students will study authors' craft in a variety of genres and use mentor texts as models for their own writing. Scaffolded writing lessons and ongoing modeling and sharing of student and teacher work establish a Writing Workshop approach that serves to guide students as they work to complete literary analysis, argument, informational, and narrative pieces. Students will work closely, write collaboratively, and revise their written work of various genres and themes. Students create a writing portfolio with both newly polished and revised pieces from the year. They reflect upon themselves as readers and writers in a final reflective essay included in their portfolio that establishes their growth from September to June. Students will use Writer's Notebooks to practice and develop their writing craft. Students who earn a final course average of an 88 or higher and who receive the teacher's recommendation will be enrolled in English 11 AP.

English 11

Prerequisite: English 10

Credits: 1/Full Year

English 11 focuses on students' development as critical readers, writers, and thinkers through their study of literature, informational texts, complex arguments, and narratives. Throughout this course, students will continue to strengthen their reading strategies as they study a range of genres. Through shared texts, students will analyze authors' craft and use of literary techniques, which will serve as models for their own writing. Students will build complex arguments that rely on ideas garnered from multiple texts as they support their claims and counterclaims and evaluate key components of effective arguments. Through self-generated questions, students will embark on an inquiry into college and career exploration as they refine their research skills and take the first steps in exploring a post-secondary plan. Students will think, research, write, revise, and edit as they engage in the writing process throughout the course. This course will prepare students to meet the challenges of the NYS Regents exam in English Language Arts in January of the junior year.

AP English Literature & Composition (English 11)

Prerequisite: 88+ average in English 10 (H), teacher recommendation, and completion of summer reading assignment

Credits: 1/Full Year

Qualified students can elect to take Advanced Placement English Literature and Composition in their junior year, which gives them the opportunity to complete college-level work while in high school. The course requires rigorous reading during the school year, which begins at the end of the sophomore year when the summer reading assignment is given. Students will read, analyze, and interpret significant literature from a number of time periods and genres with an emphasis on continued critical reading, thinking, and writing. Students are expected to accept considerable responsibility for completion of many reading and writing tasks. Course participants are required to sit for the AP exam in Literature and Composition (fee required) in May of their junior year and the NYS Common Core English Regents in January. Those who complete the English (AP) course are given first preference for enrollment in Syracuse University Project Advance (SUPA) courses for their senior year.

English 12

Prerequisite: English 9-11 or English 9/ English Honors/ AP English

Credits: .5 Credit (Seminar I)/.5 Credit (Seminar II)

In the fall semester, students will take *Senior Seminar I: Reading and Writing for the Real World*. During the spring semester, students will choose either *Senior Seminar II: Murder and Mystery* **OR** *Senior Seminar II: Exploring Contemporary Issues Through Pop Culture*. Successful completion of Seminar I and Seminar II with a passing grade of 65% are required for graduation, earning a combined total of 1 credit for Seminar I and Seminar II.

English 12: Senior Seminar I (Fall Semester) Reading and Writing for the Real World

Prerequisite: English 9-11 or English 9/ English Honors/ AP English

Credits: .5/Fall Semester

In the fall semester, all seniors are required to take Reading and Writing for the Real World, which focuses on writing across disciplines in preparation for the world beyond high school, whether college or career. Students will have opportunities to create resumes, cover letters, and personal statements to be used in the college application process and/or the job market. Students will engage in both independent reading and shared literature. They will read for author's craft and notice important decisions authors make. During this course, students will engage in various literary texts as they continue to build their independent reading habits. Students will identify and analyze problems, generate questions and implement well-reasoned solutions, incorporate multiple perspectives, constructively responding to feedback from various stakeholders, and continue to engage in self-reflection as they become college and career-ready. Students will engage in metacognition as they reflect on their writing and assess their writing strengths and weaknesses, understand patterns in their own writing, and work towards understanding the process of writing. Students must attain a course grade of 65 or higher to get credit for the course. Students need this course credit to advance to Senior Seminar II in the Spring Semester and to graduate.

English 12: Senior Seminar II (Spring Semester) Mystery and Murder OR Exploring Contemporary Issues Through Pop Culture

Prerequisite: English 9-11 or English 9/ English Honors/ AP English; completion of *English 12: Reading and Writing for the Real World*

Credits: .5/Spring Semester

English 12: Mystery and Murder

Are you a super sleuth in the making? Are you fascinated by true crime documentaries and podcasts? Mystery novels? Classic and contemporary detective stories? Explore crime and punishment through the lens of contemporary movies, literature, podcasts, and psychology in this exploration of the dark side of human nature. This course aligns with the NYS ELA standards for grade 12. Students must attain a course grade of 65 or higher to get credit for the course.

English 12: Exploring Contemporary Issues Through Pop Culture

How are important societal issues reflected in the entertainment that we consume? We will explore topics from the gaming we engage in, the movies and theater we watch, the music we listen to, the books we read (including science fiction and fantasy), and the news and social media we scroll through. This course will examine how the entertainment we consume is shaped by and reflective of the world around us. This course aligns with the NYS ELA standards for grade 12. Students must attain a course grade of 65 or higher to get credit for the course.

SUPA English 12

Syracuse University -WPT 105 and ENG 181

Prerequisite: English 9-11 or English 9 and English Honors/ AP, 85 or higher on English Regents, recommendation of teacher

Credits: 1/Full Year (6 College Credits)

Instead of enrolling in English 12, qualified students can elect to take college-level English through the Syracuse University Project Advance (SUPA) courses. Two one-semester courses make up the English offering for Project Advance. Minimum requirements: students should have passed the English Regents exam with at least an 85 and have a "B" average or higher in English and have the recommendation of their teacher. In addition, students who have completed the English 10 Honors/ AP English two-year sequence will be given first preference for enrollment. The Project Advance courses require a tuition payment set by Syracuse University, which awards course credit for those students earning a minimum of a "C" grade for the course. Students who complete the course satisfactorily are often exempted from college English requirements and earn 6 college credits; more than 600 colleges and universities accept Project Advance credits.

SUPA English 12: Writing Studio 1 (WPT 105)

Writing Studio 1 (WRT 105) is the first of two English courses offered through the Writing Program at Syracuse University. Studio 1 pays particular attention to writing formal academic analytic persuasive papers. Students confer with the teacher on an individual basis, revise frequently, and read from a variety of texts. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply.

SUPA English 12: English and Textual Studies Class & Literary Texts (ENG 181)

The English and Textual Studies: Class & Literary Text (ENG 181) course presents students with many different forms of reading and makes students aware that their understanding and appreciation of what they read may vary from culture to culture, from time period to time period, and depend upon issues connected to socioeconomic class. The focus of the course is on literary theory set in an historical framework. Concepts such as social stratification, inequality, and the relationship among wealth, privilege, and power provide critical lenses through which to interpret texts and foster a richer understanding of students' own implications within these systems of power and even perhaps to act as a springboard for advocacy and direct social action. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply.

English Academic Intervention Services (AIS)

Students are recommended to take this class based on previous scores on the 8th grade ELA exam, teacher recommendations, and course grades in high school ELA. This class will provide students with the literacy support needed in all content classrooms as well as the skills needed to successfully complete the English Regents Exam.

Film and Literature

Prerequisite: English 9 and 10

Credits: 1/Full Year

This course explores the intersection of film and literature, including the ways in which movies can be analyzed as works of literature unto themselves and the ways in which literature is taken from the page to the screen. We will examine the decisions writers, directors, and actors make to bring characters, conflicts, symbols, and themes to life in film. Open to junior and seniors, this course would be taken in addition to English 11 or 12.

Creative Writing: Mocha Musings & Multimedia

Prerequisite: English 9 and 10

Credits: 1/Full Year

Calling all creative writers or those who would like to become one. This course invites students to enter a relaxed, guided, and hands-on coffee house-style classroom setting where work is completed together with the goal of publication in various forums with writing contests, the school newspaper, and the literary magazine. Daily creative prompts for story creation are given. Students work on diverse genres of writing based on interest, including short fiction, horror, science-fiction, fantasy, non-fiction, journalism, poetry, journaling, blogs, reviews, editorials, opinion, informational, memoir, narrative, argument, and children's literature. Integration of multimedia components for story production will also be explored via podcasting, video shorts and reels, video narratives, digital storyboards, photo essays, graphic design, and digital photography. Open to juniors and seniors, this course would be taken in addition to English 11 or 12.

HEALTH EDUCATION

The Health Education course of study helps our students understand behaviors that promote wellness, while developing and implementing strategies to improve the overall health and lifelong wellness of the student.

Health

Prerequisite: None

Credits: .5/Half Year

This required course is designed to cover the critical areas of health. The topics covered include, but are not limited to: nutrition, alcohol, tobacco and other drugs, relationships, non-communicable and communicable diseases, human sexuality, injury prevention, stress management, and mental health. The course focuses on the consequences of harmful behaviors that relate to young adults.

Human Sexuality

Prerequisite: Health

Credits: .5/Half Year

Typically taken in 12th grade, this course will focus on the following topics: character in relationships, dating and

abstinence, violent relationships, reproductive health, STDs and HIV/AIDS, marriage and parenthood, pregnancy and childbirth, and birth control methods. The course emphasizes the use of refusal skills, making responsible decisions, and practicing abstinence as ways to reduce teen pregnancies and exposure to STDs.

Nutrition – Weight Management

Prerequisite: Health

Credits: .5/Half Year

Typically taken in 12th grade, this course will focus on the following topics: physical activity for life, nutrition and your health, and managing weight and body composition. It also focuses on the importance of maintaining a healthy weight in order to reduce the probability of developing heart disease, cancer and adult-onset diabetes.

MATHEMATICS

The Mathematics Department offers a wide variety of course work designed to meet all of our students' needs, while challenging students with rigorous instruction. The course design enables students to apply mathematical ways of thinking while preparing them to think and reason mathematically. The math instruction allows for college-and career-readiness, by helping students develop a depth of understanding and ability to apply mathematics situations as college students and employees regularly do. Graphing calculators are required on the New York State Math Regents examinations. It is recommended that students purchase their own calculators. The TI-84 Plus, TI-84 Plus Silver Edition or the TI-84 Plus CE calculator is recommended for student use and will be used for classroom demonstrations.

Program	Grade 9	Grade 10	Grade 11	Grade 12
Regents Mathematics	Algebra 1 with Lab	Topics in Geometry	Topics in Algebra 2	Algebra 2 with Lab
	Algebra 1 with Lab	Geometry with Lab	Algebra 2 with Lab	Pre Calc.
	Algebra 1 with Lab	Geometry	Algebra 2 with Lab	Pre Calc.
	Algebra 1 with Lab	Geometry with Lab	Topics in Algebra 2	Algebra 2 with Lab
	Algebra 1	Geometry	Algebra 2 with Lab	Pre Calc.
	Algebra 1	Geometry	Algebra 2	Pre Calc.
	Algebra 1 Honors	Geometry Honors	Algebra 2 Honors	Pre Calc.
	Accelerated Mathematics	Geometry	Algebra II	Pre Calc.
Accelerated Honors Mathematics	Geometry Honors	Algebra II Honors	Pre-Calc. Honors	AP Calc. Or Statistics

Algebra 1 with Lab

Prerequisite: Math 8; teacher recommendation

Credits: 1/Full Year

This course will be based on the Algebra 1 learning standards adopted by New York State. The class will follow the same curriculum and course of study as the Algebra 1 course. Students will be scheduled an additional period every other day with their math teacher for additional math work. The extra time provides the ability to develop the fundamental skills and understanding to be successful in Algebra I. A Regents exam will be taken in June.

Algebra 1

Prerequisite: 75%+ average in Math 8, Passed Math 6 and 7, teacher recommendation

Credits: 1/Full Year

Based on learning standards adopted by New York State, the Algebra I course focuses on the relationships between quantities and reasoning with equations, descriptive statistics, linear and exponential relationships, expressions and equations, quadratic functions and expressions. Regents exam will be taken in June.

Algebra 1 Honors

Prerequisite: 93%+ average in 8th Grade Math with teacher recommendation

Credits: 1/Full Year

This course is an enriched study of the Algebra 1 learning standards adopted by New York State. The course focuses on the relationships between quantities and reasoning with equations, descriptive statistics, linear and exponential relationships, expressions and equations, quadratic functions and expressions. A Regents exam will be taken in June.

Topics in Geometry

Prerequisite: Algebra 1, passing grade on Algebra 1 Regents Exam, teacher recommendation

Credits: 1/Full Year

This course will be based on the Geometry Common Core learning standards adopted by New York State. It is designed for students who need more instructional time to meet these standards. The course will focus on the congruence, similarity, construction, transformation and proof of figures, trigonometric ratios, three-dimensional figures, connecting algebra and geometry through coordinates, and circles with and without coordinates. A final exam will be taken in June.

Geometry with Lab

Prerequisite: 65%+ average in Algebra I. Passing grade on Algebra 1 Regents Exam, teacher recommendation

Credits: 1/Full Year

This course will focus on the fundamental concepts of the Geometry learning standards as adopted by New York State. The class will follow the same curriculum and course of study as the Geometry course. Students will be scheduled for an additional period every other day with their math teacher for additional math instruction. The lab period will provide students with the opportunity to acquire the course content, develop an understanding of the learning standards, and acquire the math skills necessary for success on the Geometry Regents Exam taken in June.

Geometry

Prerequisite: 75% + average in Algebra I or Algebra 1 Honors, passing grade on Algebra 1 Regents, teacher recommendation

Credits: 1/Full Year

This course will focus on the fundamental concepts of the Geometry learning standards adopted by New York State. The course will focus on the congruence, similarity, construction, transformation and proof of figures, trigonometric ratios, three-dimensional figures, connecting algebra and geometry through coordinates, and circles with and without coordinates. A Regents exam will be taken in June.

Geometry Honors

Prerequisite: Requires 93%+ average in Algebra I Honors or 97%+ average in Algebra 1 and 80%+ on Algebra I Regents Exam, teacher recommendation

Credits: 1/Full Year

This course is an enriched study of the Geometry learning standards adopted by New York State. The course will explore the congruence, similarity, construction, transformation and proof of figures, trigonometric ratios, three-dimensional figures, connecting algebra and geometry through coordinates, and circles with and without coordinates. A Regents exam will be taken in June.

Topics in Algebra 2

Prerequisite: Algebra 1, Geometry or Topics in Geometry

Credits: 1/Full Year

This course will be based on the Algebra 2 learning standards adopted by New York State. It is designed for students who need more instructional time to meet these standards. The course will focus on polynomial, rational, and radical relationships, introduction to relations and functions, quadratics, and complex numbers. A final exam will be taken in June.

Algebra 2 with Lab

Prerequisite: 65%+ average in Algebra 1 and Geometry, teacher recommendation

Credits: 1/Full Year

This course will be based on the Algebra 2 learning standards adopted by New York State. The class will follow the same curriculum and course of study as the Algebra 2 course. The course will focus on polynomial, rational, and radical relationships, trigonometry, exponential and logarithmic functions, probability, and statistics. Students will be scheduled an additional period every other day with their math teacher for additional math work. The extra time provides the ability to develop the fundamental skills and understanding to be successful in Algebra 2. A Regents exam will be taken in June.

Algebra 2

Prerequisite: 75%+ average in Algebra 1 and Geometry, teacher recommendation

Credits: 1/Full Year

This is the third course in the three-year Regents sequence based on the Algebra 2 learning standards adopted by New York State. The course will focus on polynomial, rational, and radical relationships, trigonometry, exponential and logarithmic functions, probability, and statistics. A Regents exam will be taken in June.

Algebra 2 Honors

Prerequisite: 93%+ average in Geometry Honors, 75% + on Geometry Regents and 80%+ on Algebra Regents, teacher recommendation

Credits: 1/Full Year

This course is an enriched study of the Algebra 2 learning standards adopted by New York State. The course will focus on polynomial, rational, and radical relationships, trigonometry, exponential and logarithmic functions, probability & statistics. A Regents exam will be taken in June.

Pre-Calculus (CHS)**SUNY Schenectady – MAT 167**

Prerequisite: 85%+ average in Algebra 2, teacher recommendation

Credits: 1/Full Year (4 college credits)

This course prepares students for a basic level calculus course in college. Topics include analytic geometry, advanced algebra and trigonometry, polynomial functions, conic sections, and graphing polar equations. The graphing calculator is used extensively. This class is currently being offered from SCCC (MAT 167). Students take a local final exam in June. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

Pre-Calculus Honors (CHS)**SUNY Schenectady - MAT 167**

Prerequisite: 85%+ average in Algebra 2, 75% + on Algebra 2 Regents, teacher recommendation

Credits: 1/Full Year (4 college credits)

This course is the prerequisite for those students planning on taking AP Calculus in their senior year. Topics include analytic geometry, advanced algebra, matrix algebra, techniques of graphing, transcendental and algebraic functions, advanced trigonometry, limits, and an introduction to calculus. This class is currently being offered from SCCC (MAT 167). Students take a local final exam in June. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

AP Calculus AB

Prerequisite: 93%+ average in Pre-Calculus Honors, teacher recommendation

Credits: 1/Full Year (4 college credits)

This course includes all topics from the AP Calculus course and selected topics from the BC course published by the College Entrance Exam Board. Students take the Advanced Placement exam in May. Many students receive college credit after their chosen school evaluates their scores. Topics include derivatives and integrals of polynomials, algebraic, exponential, logarithmic, and trigonometric functions and limits. Application problems include graphing, velocity, acceleration, related rates, maximum and minimum values, mean value, areas, volumes, growth, and decay and work. After the AP exam, students study topics from advanced integration.

Statistics (CHS)**SUNY Schenectady - MAT 147**

Prerequisite: Algebra 2

Credits: 1/Full Year (3 college credits)

This course focuses on the following topics: descriptive statistics, an introduction to probability, random variables and probability, distributions, the binomial and normal probability distributions, sampling, estimation, hypothesis testing, chi-square distributions, linear correlation and regression. Students take a local final exam in June. This class is currently being offered from SCCC (MAT 147). As college credits are earned through the successful completion of the course, applicable registration fees as set by the college do apply.

MUSIC AND PERFORMING ARTS

The Schalmont High School Music Department offers many opportunities for an exciting and well-rounded music education experience. We strive to support students in becoming better listeners, learners and lovers of music. The music program includes the development of technical music skills, the appreciation of all types of music literature and individual performing experiences through participation in musical ensembles. Performing groups typically attend the NYSSMA Majors festival in the spring and participate in additional performances outside of school. All students enrolled in music performance courses must adhere to the attendance policy as stated in the Student Handbook. Music can meet the 4+1 Advanced Regents Diploma requirements provided the student takes three years of music and our capstone course, Music Theory.

Concert Band

Prerequisite: Previous Band Experience

Credits: 1/Full Year

Concert Band is the next step in your students' instrumental music education. This course, for students in grades 9-12, will involve the continued study, preparation and performance of modern band music. Students are expected and required to spend additional time practicing their instrument at home for this course. All students will be required to take a weekly lesson in school or with an approved private music instructor outside of school. Students are encouraged to prepare for the NYSSMA Solo Festival. Students will be required to adhere to the music policies given to each student at the beginning of the school year. The course meets daily for one period.

Wind Ensemble

Prerequisite: Audition with the Director; Level H, R

Credits: 1/Full Year

Wind Ensemble is the culmination of the instrumental music program at Schalmont for students in grades 9-12. Students perform very challenging and exciting music at the highest levels of the NYSSMA repertoire. This ensemble performs at the NYSSMA Majors festival every spring and enjoys many other outside of school opportunities to bring music to the community. All students will be required to take a weekly lesson in school and are expected and required to practice their instrument at home every day. Students are encouraged to prepare for the NYSSMA Solo Festival. Provided students attend NYSSMA, musicians participating in this group are eligible to be nominated for extracurricular instrumental opportunities in honor ensembles such as All-County Band, Area All-State Band, and Conference All-State Band. Students are

required to adhere to the music policies given to each student at the beginning of the school year. The course meets daily for one period.

Pop Choir

Prerequisite: None

Credits: 1/Full Year

Welcome to the vibrant and energetic world of Pop Choir! This course is open to all high school students grades 9-12 and offers the exciting opportunity to explore and perform popular music in a choral setting. Whether you are a seasoned vocalist or just starting to discover your singing talent, this course is designed to cultivate a love for contemporary music genres while honing essential vocal and performance skills. Students study a diverse repertoire of popular songs spanning various decades and styles. From chart-topping hits to classic favorites, the repertoire highlights the dynamic range of pop music, allowing students to connect with the music they know and love while building a foundation in choral singing. Students will be required to adhere to the music policies given to each student at the beginning of the school year. The course meets daily for one period.

Concert Choir

Prerequisite: Audition with the Director; Level H, R

Credits: 1/Full Year

The Concert Choir represents the pinnacle of the vocal music program at Schalmont. This ensemble is an immersive and enriching musical experience designed for talented and dedicated vocalists seeking to elevate their choral skills to new heights. This advanced-level course is tailored for students who have a strong foundation in choral singing and are eager to explore more challenging repertoire, refine vocal technique and deepen their understanding of musical expression and music theory. This ensemble performs in a variety of events throughout the year; NYSSMA Majors Festival, SCCC Choral Workshop Festival, the SPAC Festival of Young Artist Showcase, as well as other events within the community. In addition to ensemble rehearsals, each student is required to attend a weekly scheduled vocal lesson or opt for private instruction with an approved music instructor. Participants in Concert Choir are eligible to apply for enriching extracurricular choir opportunities, including All County Choir, Melodies of Christmas Choir, Area All-State Choir, and All-State Choir. The course meets daily for one period.

Modern Music and Digital Composition

Prerequisite: None

Credits: 1/Full Year

Modern Music and Digital Composition is an exciting journey into the dynamic world of contemporary music creation! This course is designed for aspiring musicians, composers, and producers eager to explore the intersection of traditional musical elements and cutting-edge digital technologies. Students will embark on a historical and hands-on exploration of modern music genres, including rock and roll, electronic, pop, hip-hop, and experimental styles. The course will cover a range of topics, from music theory and composition techniques to the practical application of digital audio workstations (DAWs) and software instruments. The course meets daily for one period.

Piano and Performance

Prerequisites: None

Credits: 1/Full Year

This course is for students who wish to learn to play piano and is designed to help students develop skills both individually and in small groups. Students will learn fundamental skills on the piano, exploring a variety of repertoire that directly applies to performances. A command of the basic elements of music is developed through exercises in music reading, composing, and arranging. Throughout the course, students will understand basic placement and alignment, music notation, melody construction, left hand bass line and chord construction, chord progression and function, scales, improvisation, composition, arranging, accompanying, and performance practices. Performance based assessments provide authentic ways for students to demonstrate and apply their understanding of the content and skills within the standards. The performance-based assessments will provide formative and summative information to inform instructional decision-making and help students move forward on their trajectory of learning. All experience levels are welcome as the course starts with training in basic skills. *This course is offered every other year, opposite Music Theory, and will be offered in the 2025-26 school year.*

Music Theory (CHS)

SUNY Schenectady - MUS 147

Prerequisite: None

Credits: 1/Full Year (3 College Credits)

Music Theory is a comprehensive and engaging exploration of the fundamental principles that underlie the art of music. This course is designed for students who have a passion for music and a desire to deepen their understanding of its inner workings. Upon completion of this class, students will possess the skills to intricately analyze musical compositions and acquire strategies to compose their own pieces. Additionally, the course includes a concise overview of music history, spanning from the Middle Ages to the 19th century. No prior musical background or talent is required for successful completion of this class. This class is recommended for students who are interested in pursuing a career in music, anticipate taking music classes in college, or simply enjoy listening to or performing music. The course meets daily for one period. As college credits are earned through the successful completion of the course, applicable registration fees as set by the college do apply. *This course is offered every other year, opposite Piano and Performance, and will be offered in the 2026-27 school year.*

PHYSICAL EDUCATION

All high school students are required by the New York State Education Department to take Physical Education. The course is offered every other day.

Physical Education – Grades 9-12

Prerequisite: None

Credits: .5/Full Year

As a multi-grade level course, Physical Education includes instruction in lifetime activities, as well as team and individual sports. The units of instruction include CPR/AED instruction, archery, ultimate frisbee, soccer, football, volleyball, basketball,

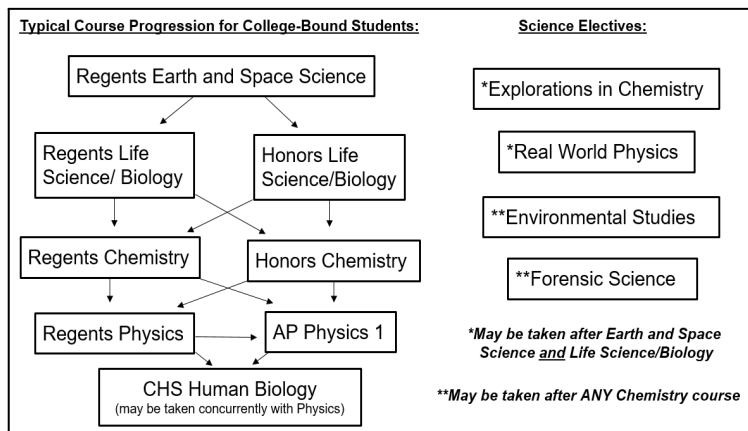
badminton, pickleball, team handball, tennis, fitness, and a variety of novelty games. Additional units include cooperative games and other novelty activities.

SCIENCE

The Science Department offers a wide variety of course selection and electives to meet all of our students' course requirements and interests. Students are required to successfully complete three units of study and earn a passing score on one Regents exam in science to graduate with a Regents Diploma. The Life Science: Biology course must be successfully completed as one of the three units of study. Students in pursuit of an Advanced Regents Diploma are required to pass two Regents exams in science. Electives include Explorations in Chemistry, Real World Physics, Forensics, Environmental Studies, and Human Biology (a College in the High School course). The Science Department strongly recommends that students pursue four units of study in science upon graduation, no matter their plans after graduation.

The following courses meet for a double period every other day to meet the laboratory requirements of the course:

- Earth and Space Science
- Life Science: Biology
- Physical Science: Chemistry
- Physical Science: Physics
- Human Biology
- AP Physics 1



Earth and Space Science

Prerequisite: None

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

The Earth and Space Science course offers a comprehensive exploration of the Earth's systems and the universe, aligning with the New York State Learning Standards for Science (NYSSLS). Students will engage in inquiry-based learning and student investigations as they explore key concepts such as Earth's structure, plate tectonics, weather and climate, and astronomical phenomena. Through hands-on experiments and collaborative projects, they will develop critical thinking skills while analyzing the interactions between geosphere, hydrosphere, atmosphere, and biosphere. The course will also

address human impacts on the environment and promote sustainable practices. By the end of the course, students will gain a deeper understanding of the natural world and be empowered to make informed decisions about scientific and environmental issues. The student must successfully complete 1200 laboratory minutes to qualify for the Regents Exam.

Life Science: Biology

Prerequisite: None

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

This year-long Biology course offers students a comprehensive exploration of life science concepts with a focus on inquiry-based learning and real-world applications. Students will engage in the study of cellular biology, genetics, evolution, ecology, and human body systems while making connections to environmental issues, public health, and biotechnology. The course is structured around driving questions and phenomena that encourage critical thinking and the development of scientific skills. Students will frequently engage in hands-on laboratory work, collaborative discussions, and the use of models to explore biological processes. Key emphasis is placed on analyzing data, developing scientific explanations, and constructing evidence-based arguments.

Through student investigations and real-world applications, students will investigate pressing topics such as genetic engineering, climate change, biodiversity, and human impact on ecosystems. Assessment is ongoing and includes a variety of formats, such as projects, performance tasks, and formative quizzes, all designed to measure both content knowledge and the ability to apply scientific practices. Students take the Life Science: Biology Regents exam in June as a final course assessment. The student must successfully complete 1200 laboratory minutes to qualify for the Regents Exam.

Life Science: Biology Honors

Prerequisites: Earth Science final course average of 92% or higher, 85% or above on the Earth Science Regents Exam, Previous Math final course average of 85% or higher, and Teacher Recommendation

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

The Honors course follows the same curriculum as the Regents Level but moves at a slightly faster pace and goes further in depth on some concepts. The course ends with a Regents Exam in June. The student must successfully complete 1200 laboratory minutes to qualify for the Regents Exam.

Physical Science: Chemistry

Prerequisite: Life Science: Biology, Integrated Algebra

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

Physical Science: Chemistry is a high school science course that focuses on the fundamental concepts of chemistry, including the structure and properties of matter, chemical reactions, energy transfers, and the behavior of substances at the atomic and molecular level, essentially combining key aspects of physics

and chemistry to explain physical phenomena. Investigations explain science as a process of inquiry and investigation to explain natural phenomena, providing guidelines and methods for designing and conducting experiments. The student must successfully complete 1200 laboratory minutes to qualify for the Regents Exam in Physical Science: Chemistry. Students will take the Regents Exam in Physical Science: Chemistry. Chemistry is strongly recommended for any college-bound student.

Physical Science: Chemistry Honors

Prerequisite: 92% or above in Life Science: Biology, Math final average 85% or higher for Integrated Algebra, and Teacher Recommendation

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

The honors program is an enrichment of the Physical Science: Chemistry course. Each unit that is taught goes into greater depth and at a faster pace. Physical Science: Chemistry Honors is a high school science course that focuses on the fundamental concepts of chemistry, including the structure and properties of matter, chemical reactions, energy transfers, and the behavior of substances at the atomic and molecular level, essentially combining key aspects of physics and chemistry to explain physical phenomena. Investigations explain science as a process of inquiry and investigation to explain natural phenomena, providing guidelines and methods for designing and conducting experiments. The student must successfully complete 1200 laboratory minutes to qualify for the Regents Exam in Physical Science: Chemistry. Students will take the Regents Exam in Physical Science: Chemistry. Chemistry is strongly recommended for any college-bound student.

Physical Science: Physics

Prerequisite: Integrated Algebra, Geometry, Life Science: Biology, Earth and Space Science; concurrent enrollment in Algebra II with Trig or higher

Credits: 1/Full Year

Contact Time: Course meets daily, double period sessions every other day.

The Physical Science: Physics course focuses on the fundamental principles of physics, providing students with a foundation in topics such as motion, forces, energy, and waves. Students delve into Newton's laws of motion, exploring concepts like acceleration, momentum, and the relationship between force and motion. The course also covers work, energy, and power, emphasizing the conservation of energy and different forms of energy transfer. In addition, students study the properties of waves, including sound and light, along with their behaviors such as reflection and refraction. Electricity and magnetism are explored through concepts of electric fields, circuits, and magnetic forces. Lastly, modern physics will focus on concepts of quarks, energy levels, and nuclear physics. Laboratory experiments are a crucial component, enabling students to conduct investigations and apply their understanding of physics in real-world contexts, ultimately preparing them for the Regents exam. All students must complete 1200 laboratory minutes to qualify for the Regents Exam in Physical Science: Physics. Physics is strongly recommended for any college-bound student, especially those interested in STEM careers.

AP Physics 1

Prerequisite: Successful completion of Earth and Space Science, Biology, Chemistry, Geometry, Algebra II (or concurrently); Chemistry Regents Exam score of 85% or higher

Credits: 1/Full Year

AP Physics 1 is an Algebra based introductory college level Physics course. Students cultivate their understanding of Physics by developing models of physical phenomena through inquiry-based investigations. Students build understanding of physical models as they explore and solve problems in these content areas: kinematics; forces and translational dynamics; energy and momentum of rotating systems; oscillations; and fluids. AP Physics 1 is equivalent to the first course in an introductory college course sequence in algebra based physics. This course requires that 25% of the instructional time be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to demonstrate the foundational physics principles and apply the science practices. There is also a lab period that will for double periods every other day to meet this requirement.

Human Biology

SUNY Schenectady – BIO 112

Prerequisite: Earth Science, Living Environment, Chemistry, Physics (or concurrently)

Credits: 1/Full Year

This course is an introduction to the structure and function of the human body with an emphasis on anatomy and physiology of the major organ systems. The human body as a biological system having a hierarchical organization is explored. An understanding of cell and molecular biology, DNA synthesis and gene expression, and human diseases and disorders will be incorporated. Lab exercises use anatomical models, microscopes, dissections, virtual exercises and chemical analyses. Course expectations include independent work in the lab and online textbook learning outside of class. Students who are interested in a health-related career are strongly encouraged to enroll. However, this course is relevant for any student preparing for the rigors of college-level learning. As college credits are earned through the successful completion of this course, applicable registration fees as set by the college do apply. Successful completion guarantees 4 SUNY General Education credits if the student attends a SUNY school after graduation. Students attending a private institution after graduation must negotiate the transfer of credits with their college advisor.

Explorations in Chemistry

Prerequisite: Living Environment, Earth Science, Passed one Science Regents Exam

Credits: 1/Full Year

This is an activity-based course that provides students with an introduction to the major concepts in chemistry and their application to our daily lives. Students will engage in scientific inquiry and practice the rules of safety required in a chemistry lab. The course focuses on the classification and structure of matter, the history of chemistry, the use of models, and experimental design. Topics vary based on student interest, but may include: separation techniques, types of chemical reactions, acids and bases, and the chemistry of food, industry, and the environment. While not as comprehensive or rigorous as

Regents Chemistry, it is a college preparatory course for non-science majors. This course can also be taken before a student enters Regents Chemistry as an introduction to the major concepts of chemistry.

Real World Physics

Prerequisite: Earth Science, Living Environment, Passed one Science Regents Exam

Credits: 1/Full Year

This is an activity-based course that provides students with an introduction to the major concepts in physics and their application to our daily lives. Students will engage in scientific inquiry and practice the rules of safety required in a physics lab. The course focuses on mechanics, energy, waves, electricity, new advances in the field of physics as well as incorporating the history of physics and experimental design. Topics vary based on student interest. While not as comprehensive or rigorous as Regents Physics, it is a college preparatory course for non-science majors. This course can also be taken before a student enters Regents Physics as an introduction to the major concepts of physics.

Forensics

Prerequisite: Earth Science, Living Environment, Chemistry or Physics (or concurrent enrollment in Chemistry/Physics); Passed one Regents Exam in Science.

Credits: 1/Full Year

This course is an introduction to the science of crime scene investigation. It will introduce students to what evidence is, how it is collected, and the scientific foundation for the examination of physical, chemical, and biological items of evidence. In this class, students will be exposed to all fields of forensic science and criminal studies. Students will participate in hands-on activities that will replicate actual procedures done by forensic personnel. Topics of study include fingerprints, blood spatter, toxicology, DNA, skeletal remains, hair and textiles, arson, bite-marks, and tool-marks. Students will participate in hands-on activities and labs as well as research and discuss forensic careers. Area professionals are invited to share their experiences. Students may take another science course concurrently in addition to this elective during their high school career.

Environmental Studies and Global Environment

Prerequisite: Earth Science, Living Environment, Chemistry or Physics course (or concurrent), Passed one Science Regents Exam

Credits: 1/Full Year

This course takes a solutions-based approach to investigating current and future environmental problems. Through a historical lens, students will analyze the current model of American society and how events since American settlement have fostered the normality's of urban and suburban planning, transportation, as well as food and energy production. What current environmental problems are resulting from this model? What scientific evidence do we have? What future problems may arise? What options do humans have in utilizing resources responsibly and equitably? These are some of the many questions that this course is designed to answer through a hands-on-project-based-learning approach. This course is taken for a full year, elective science credit. Ultimately, this course seeks to develop students and citizens who have a greater

appreciation and sense of wonder for the natural environment around us.

SOCIAL STUDIES

Upon completion of the Social Studies program, the successful student will be able to demonstrate the ability to make rational and informed decisions about economic, social, and political questions confronting himself or herself, the society, and the interdependent world. Such decisions will draw upon the lessons of history and the social sciences.

Global Studies 9

Prerequisite: Social Studies for previous grade year

Credits: 1/Full Year

Students in this course gain an understanding of the six social studies practices and the 10 unifying historical themes that recur across time and place. With a focus on historical thinking and writing skills, students will gain a working knowledge of the challenges and issues that people have experienced over time, as well as the impact humans have had on our environment and each other.

Global Studies 10

Prerequisite: Social Studies for previous grade year

Credits: 1/Full Year

The New York State Global History and Geography Regents Exam is given at the end of 10th grade. It requires students to have some mastery over the six Social Studies practices and the 10 unifying historical themes that recur across time and place. Students should also have working knowledge of the challenges and issues that people have experienced over time, as well as the impact humans have had on our environment and each other.

AP World History

Prerequisites: 90+ average in Social Studies 9 and teacher recommendation

Credits: 1/Full Year (Global History 10 Credit)

This college-level course is designed to provide sophomore students with the analytical and factual knowledge necessary to competently understand the development of the modern world from 1200 CE to the present. Students will cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Students will be assessed via their ability to analyze complex historical documents through various lenses, and through written and oral communication. The course prepares students for college and other Advanced Placement classes through its intellectual rigor, academic complexity, and by placing demands upon students equivalent to those made by a full-year introductory college course. This class is assessed and credit would be awarded via a College Boards Advanced Placement Exam which takes place in May. Students will also sit for the Global 10 Regents Exam in June.

U.S. History and Government

Prerequisite: Social Studies 9 and 10

Credits: 1/Full Year

The New York State Regents exam, which is given at the end of 11th grade, will require that all students have some mastery and understanding of the basic structure, function and operation of the American government. Students will also acquire knowledge concerning American History from the settling of the continent by Native Americans to present day.

AP U.S. History

Prerequisite: 90+ average in Social Studies 9/10 and teacher recommendation

Credits: 1/Full Year

This college-level course is designed to provide students with the analytic and factual knowledge necessary to deal critically with the problems and material in U.S. history. Students will use analytical skills, along with research and argument to critically evaluate the facts and problems in U.S. history. The course prepares students for college courses by making demands upon them that are equivalent to those made by a full-year introductory college course. Students are expected to not merely recall historical facts, but to also assess their relevance, their reliability, and their importance to historical problems in U.S. history. Through both written and oral communication, students will make conclusions based on informed judgments. These conclusions should be clearly and persuasively presented throughout the school year.

Social Studies AIS Lab

Prerequisite: Placement based on Global History or US History and Government grade or Teacher/Counselor Recommendation

Credits: 0/Full Year

The purpose of this lab is to focus on the content and skills needed for students to successfully complete either their Social Studies graduation requirements, including the Global History or U.S. History and Government Regents Exams. Multiple measures will be used to determine which students are recommended for Social Studies AIS lab. As part of the state-mandated Academic Intervention Services program, 11th grade students who fail the Global History Regents Exam or 12th grade students who fail the U.S. History Regents Exam will also be placed in this lab until they successfully complete the required examination.

Participation in Government

Prerequisite: Social Studies 9-11

Credits: .5/Half Year

Creating good active citizens is the purpose of the course. The course emphasizes the interaction between citizens and government at all levels: local, state and federal. Good citizenship and student participation in the processes of government is encouraged. Participation in Government is a performance-based course.

Economics

Prerequisite: Social Studies 9-11

Credits: .5/Half Year

This course includes the basic economic concepts and understanding that all people need to function effectively and

intelligently in the modern world as citizens and participants in the economy of the United States and the world. This includes examining the nature of business, personal finance, supply and demand, as well as skills such as budgeting, filing taxes, investing in the stock market/retirement, and several others.

SUPA Economics: The Economics of Personal Finance

Syracuse University - ECN 305

Prerequisite: Teacher recommendation, 90+ cumulative GPA in Social Studies, enrollment in both SUPA Economics and Public Affairs

Credits: .5/Half Year (3 College Credits)

This Syracuse University course offered through Project Advance covers essential aspects of consumer personal finance, including record keeping, budgeting and income statements, banking, saving, borrowing, using credit, investing, insurance, taxes, and planning for retirement and end-of-life considerations. Students will learn important institutional facts about different types of bank deposits; mutual funds; bonds, including US Savings Bonds; stock; mutual funds; loans, including credit cards, fixed and adjustable rate mortgages, auto loans, and student loans; retirement accounts, such as Individual Retirement Accounts and 401 (k) plans; tax deductions and credits; and aspects of health, property, and life insurance. Coverage of this institutional personal finance material will be framed within fundamentals of economic and financial analysis. The set of material gives students a framework for making efficient financial decisions within their future households; learning further financial information from experts as needed; and evaluating and applying to their planning changes in financial products or laws over time. Overall, the course provides an empowering foundation for students to navigate the financial world for their households over their professional and personal lives.

SUPA Policy Studies: Introduction to the Analysis of Public Policy

Syracuse University - PST 101

Prerequisite: Teacher recommendation, 90+ cumulative GPA in Social Studies, enrollment in both SUPA Economics and Public Affairs

Credits: .5/Half Year (3 College Credits)

This course is designed to provide students with basic research, communication and decision-making skills used in public policy analysis. In addition, students are required to read and analyze articles from newspaper databases on local, state and national public policy issues. The student determines which public policy issues are initially chosen for study and the instructor determines the semester skills project. The content coverage of the course, while important, is secondary to the development of a range of applied social science skills that help the student make more informed choices as a citizen, worker and consumer. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the university do apply.

Current Affairs in the 21st Century

Prerequisite: None

Credits: 1/Full Year

This exciting course allows students to discuss, examine and evaluate the important events and issues taking place around the world. The major goal of this class is for students to understand and appreciate the importance of world events in their life. Some topics covered include, but are not limited to: race and the American society, media, bias, philanthropy, and the impact of social media. Topics are covered monthly, but special emphasis is placed on staying up-to-date with news and events as they happen. This course is a must for students with an interest in current affairs and the events and issues that shape our world.

Psychology

Prerequisite: None

Credits: .5/Half Year

The Psychology course involves a systematic analysis of the behavior of humans and some animals, and the study of basic psychological phenomena. Major topics include: introduction to research methods, major schools of thought, and the biological basis of behavior, consciousness, perception, learning, memory, motivation, abnormal behavior, and stress. Students will learn more about social and biological aspects of human behavior as they draw from the course material to gain insight into their life and the lives of those around them. This course seeks to follow the National High School Psychology Standards. Students will keep a journal, participate in various classroom activities, complete quarter projects, and take quizzes and tests in order to be evaluated.

Sociology (CHS)

SUNY Schenectady – SOC 121

Prerequisite: None

Credits: .5/Half Year (3 College Credits)

This course involves a systematic introduction to the major sociological concepts for understanding the structure and dynamics of contemporary society. Major topics include an introduction to social methods of inquiry, major schools of thought, culture, social structure, socialization, self and social interaction, groups and social organizations, and racial and ethnic relations. Students will learn more about their interactions with other people and with social institutions as they proceed through this area of study. Students will participate in various classroom activities, complete a final project, and take quizzes and tests in order to be evaluated in this course. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

Sports History

Prerequisite: None

Credits: 1/Full Year

This course journeys from the early American past to the present, giving students a compelling grasp of the historical evolution of American sporting practices. Students gain insight that will allow them to develop new and alternate perspectives, examine sports as a social and cultural phenomenon, generate a better understanding of current sport practices, and consider future developments of sport in American life.

WORLD LANGUAGES

The World Languages program is offered in grades 9-12. We strive toward the following goals:

- Keep the second language alive by using it in the classroom. Teach students to understand, speak, read and write a second language
- Encourage students to continue the study of a second language long enough to attain proficiency in the four skills.
- Promote an understanding and appreciation of the value system and behavior patterns of the people whose language students are studying.

Students pursuing an Advanced Regents diploma must take three years of a language and pass the comprehensive department examination for the language. Second language training is advisable for the student who might want to attend a two- or four-year college, receive vocational or technical training, or develop skills which will enhance his/her life experiences through travel, communications, or knowledge of other cultures.

Spanish 9

Prerequisite: Teacher Recommendation

Credits: 1/Full Year

In Spanish 9, basic dialogs and patterns of Spanish are reinforced to develop a degree of fluency and a mastery of basic grammatical concepts. Elementary reading and writing are introduced. Cultural aspects of the language and Spanish-speaking peoples are explored. Special emphasis is placed on listening comprehension and conversational skills.

Spanish Level I

Prerequisite: None

Credits: 1/Full Year

In Spanish Level I, basic dialogues and patterns of Spanish are drilled to develop a degree of fluency and a mastery of basic grammatical concepts. Elementary reading and writing are introduced. Cultural aspects of the language and Spanish-speaking peoples are explored. Special emphasis is placed on listening comprehension and conversational skills.

Spanish Level II

Prerequisite: Successful completion of Spanish I

Credits: 1/Full Year

Emphasis is placed on an audio-lingual approach to develop language skills. Longer reading passages are introduced. More writing is emphasized by answering questions related to reading passages and free questions based on vocabulary dealing with school, family, sports, etc. There is a review of basic grammar structures and an introduction to more complex grammar patterns with a continued study of cultural concerns via use of the Internet, DVDs and videos.

Spanish Level III

Prerequisite: Successful completion of Spanish II

Credits: 1/Full Year Advanced Regents Credit

In Spanish Level III, the course consists of mastering all language skills with an emphasis on auditory and reading comprehension. A review of all grammatical structures with

liberated writing in guided composition work and visual and auditory dialogue is also included. There will be continued study of cultural material dialogue in the foreign language. A final exam comprising the four skills of the former New York State Regents is taken at the end of the course for validation of checkpoint “B” of the New York State Syllabus.

Spanish Level IV (CHS)

SUNY Schenectady - SPA 222

Prerequisite: Successful completion of Spanish III and must pass the Checkpoint B Exam.

Credits: 1/Full Year (3 College Credits)

Students’ ability to communicate in and comprehend Spanish will develop along with their knowledge of the language’s vocabulary and grammatical structures. Mastery of these skills will be enhanced through cultural awareness. This course is designed to give students an opportunity to earn college credit at SCCC, which can be transferred to other colleges. The syllabus followed is in cooperation with the SUNY SCCC CHS Program. Students must register through the university to be enrolled in the course. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

Spanish Level V (CHS)

SUNY Schenectady - SPA 224

Prerequisite: Successful completion of Spanish IV and teacher recommendation

Credits: 1/Full Year (3 College Credits)

The primary emphasis of the course is placed on readings, short compositions and class discussions. Students will use the skills of listening, speaking, reading and writing in Spanish, and gain knowledge of the cultures of the Spanish-speaking world. They will also develop insight into the nature of language and culture through comparison. Successful completion of the course will render college credits at SCCC, which can be transferred to other colleges. The syllabus followed is in cooperation with the SUNY SCCC CHS Program. Students must register through the university to be enrolled in the course. As college credits are earned through the successful completion of the courses, applicable registration fees as set by the college do apply.

CAPITAL REGION BOCES CAREER & TECHNICAL SCHOOL & PATHWAYS

Complete course guides are available in the Counseling Center. See your school counselor for more information.

- Students earn 4 Units for each year of study in one Career & Tech area.
- CTE programs are typically 2-year programs taken during grades 11 and 12.

Career & Technical Education is offered to our students through Capital Region BOCES at multiple campuses in the area. Enrolling in CTE courses provides our students with the opportunity to immerse themselves in a trade or profession learning the skills necessary to gain employment upon graduating and completing their program. Students choosing the CTE course of study spend half of their day at the BOCES

campus and half of their day at the high school working on the courses they need to earn their credits towards graduation.

Architecture and Construction

Building Trades

Students in the Building Trades program learn through standardized craft training programs developed by the National Center for Construction Education and Research (NCCER) and gain valuable experience through on- and off-campus projects. Students learn about safety, green construction and reading blueprints along with receiving extensive training in home energy efficiency. Students who pass the written exams and performance tests gain a portable skill set and may earn OSHA certifications, which are recognized by contractors and employers across the country.

Carpentry Services

This program offers career studies for students who want to learn hands-on at an alternative pace. Individuals trained and experienced in carpentry and building maintenance are always in demand in construction, finishing and rehabilitation of homes, office buildings, schools, hospitals, stores, parks and hotels. Students learn the skills needed for entry-level positions in the construction and building maintenance fields. Upon completion, students may continue their studies in the Building Trades program, through our Adult Education program or other institutions.

Heavy Equipment Operation, Maintenance and Repair

Experienced construction professionals and equipment operators are in high demand. This two-year program is based on the National Center for Construction Education and Research (NCCER) curriculum. Students will learn how to operate and maintain large construction-related equipment. Types of equipment may include backhoes, dozers, front-end loaders, and excavators. Students will also learn how to diagnose and repair common issues with diesel engines and heavy machines. The program enjoys specialized training at corporate sites, as well as instructional opportunities at our education centers, field trip experiences, internships, and job shadowing opportunities. In addition, students will have the opportunity to practice essential skills on our state of the art simulators to further enhance the learning experience, and, beginning in 2023, this program will roll out an extensive drone curriculum through which students will learn about the benefits of drone usage on job sites and in various careers. Upon graduation, students will have the option to pursue a number of career opportunities.

Electrical Trades

Students in this program learn basic electrical skills and cutting edge of 21st-century green technologies—preparing them for the in-demand field of electrical trades. Students learn fundamental skills in electrical theory, and through classroom instruction and hands-on shop lessons, they can become successful residential wiring professionals. In each theory class and lab, students construct the circuits discussed, gaining skill and experience as they move from residential into commercial and industrial wiring.

The materials, meters and methods used in this program give students an in-depth understanding of their field and the knowledge needed to work with the latest environmentally friendly technologies. Students may earn advanced standing in the National Joint Apprenticeship and Training Committee (NJATC) and International Brotherhood of Electrical Workers (IBEW) programs.

Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R)

Students in this program earn a solid foundation, positioning them for careers in the HVAC/R field where job opportunities currently outnumber qualified professionals. In a state-of-the-art classroom, students are prepared to test for federal Environmental Protection Agency (EPA) certification that is required to work in the industry.

Entertainment Technology I and II

Explore what happens backstage and in the studios through Entertainment Technology, a program offered in partnership with Proctors in Schenectady. The program is based in Proctors where students experience the world of theatre and film production, hands-on building skills and knowledge. Students learn about the technical aspects of theatre and film production including history, art and design interpretation, scenery, construction and painting techniques, tools and equipment, sound and recording, stage electrics and lighting, costuming and makeup. Backstage education is complemented by experiences in performance, art, music and practical building trades in a fun and creative atmosphere. Internships and job shadowing advance students' marketable skills while helping them explore careers. First-year students can earn credit for integrated science, and second year students can earn credit for integrated English. Upon completion of the program, students are well-prepared to continue their studies at college or enter the workforce.

Plumbing Technology

The Plumbing Technology course is a comprehensive, hands-on one-year program designed to prepare students for entry-level positions in the plumbing industry. Students learn essential skills, including safety protocols, plumbing math, and blueprint reading, while working with various piping materials such as plastic and copper. The course covers key plumbing systems such as drain, waste, and vent (DWV) systems, water distribution and the installation of fixtures like sinks, faucets and toilets. Students will also explore environmentally sustainable practices, including the use of PEX piping, grey water recycling systems and solar water heaters. The curriculum emphasizes professionalism, plumbing codes and career readiness, culminating in a capstone project where students design, install and troubleshoot a small-scale plumbing system.

Education

Early Childhood Education

Interested in a career in education or operating your own daycare center? The Early Childhood Education program is for you! In this course, students learn the fundamentals of how children develop as they prepare for entry-level employment or further educational training.

Students learn the basics and methodology of child development and early childhood education while gaining a solid foundation in classroom arrangement, classroom management and curriculum development for infants/toddlers/preschoolers and young children. Students will also learn how to communicate and work with parents/guardians and staff in an education setting.

Through on-site, work-based learning in a daycare center, students also gain formal childcare hours required to apply for Child Development Associate (CDA) certification. Other certifications and professional training includes Infant/Child CPR and First Aid Certification, Mandated Reporter Training, Shaken Baby Syndrome Training and Foundations in Health and Safety Training.

Government and Public Administration

Criminal Justice

Security, law enforcement and the criminal justice field are central to sound management of public and private enterprise.

Open to juniors and seniors, the Criminal Justice program teaches students about the history, theory, practices and recent developments in these professions. They learn about police, court and prison systems, operation of security and protection programs and security procedures in public, commercial and residential settings.

Hands-on learning teaches patrolling and investigative skills, including radio use, note-taking, evidence gathering, dealing with safety hazards and emergency situations, lifting fingerprints, photographing and diagramming crime scenes.

Criminal Justice students also study civil and criminal law. Students completing the program may enter the profession or continue their education at college or law enforcement or protection academies.

Health Science

New Visions: Health Careers

The New Visions Health Careers program is a one-year, honors-level course that is designed for high school seniors interested in a career in medicine. This is a competitive, rigorous, immersion-based program.

Students in this program obtain up to 130 observation hours in over 30 different clinical rotations. Clinical rotations take place at their respective hospitals and several off-site clinics throughout the region. Students learn about different health related careers and career opportunities through clinical rotations, guest speakers, medical grand rounds and field trips. As a result, students form a clearer vision of their college and career goals by acquiring first-hand knowledge of the day-to-day demands and rewards of various health care professions.

The course provides an integrated curriculum that covers the subject areas of bioethics, anatomy and physiology, public health policy, economics of healthcare and explores the role of government in health care.

Sterile Processing Technician

Sterile processing technicians decontaminate, inspect, package and sterilize equipment and devices used in the healthcare environment. These items range from complex devices to simple, hand-held surgical instruments. Technicians serve a vital role in the healthcare industry, combating the spread of hospital-borne illnesses, as well as diseases.

Students will learn what it takes to enter this industry and even gain clinical experience at Albany Medical Center and Ellis Medicine. Sterile Processing Technicians find employment in hospitals, ambulatory surgical centers, medical laboratories, birth centers and other facilities where sterilized equipment is needed.

Two-Year Sequence of Health Careers

Students must complete both years of the program in order to earn a Career and Technical Education endorsement on their high school diploma.

With double-digit job growth forecast across the home health aide, personal care assistant and nurse assistant careers, this is a great program for someone looking to get into the healthcare industry!

Students take courses their junior and senior years to earn certification as a Personal Care Aide (PCA), Home Health Aide (HHA) and Nurse Assistant (NA). While doing so, students earn American Heart Association BLS/CPR and First Aid certifications and gain valuable hands-on experience in area healthcare and direct support facilities.

Below is the breakdown of how the sequences works:

Home Health Aide/Personal Care Aide – Year One Sequence

Students will learn through clinical training and classroom preparation how to provide valuable skills in conjunction with professional nurses in a home health care setting. Services range from health-related tasks such as obtaining vital signs to doing laundry, personal care and housekeeping. Students will complete 108 hours in a clinical setting.

Nurse Assistant – Year Two

Students learn total patient care through training in the classroom and off campus. They prepare to take the Nurse Assistant examination (Prometric) that qualifies NAs upon successful completion of the exam to work in any nursing home in New York State. Students complete 108 hours of clinical work in a nursing home.

Hospitality

Culinary Arts and Hospitality Technology

From food service worker to executive chef, the culinary and hospitality industries offer a world of career possibilities. Learning takes place in the classroom, kitchen, dining room and work-based learning sites. Students can intern at local restaurants, hotels and other businesses and participate in public service events and culinary skills competitions.

Academic Prerequisites:

Career & Financial Management (Introduction to Occupations) is required for students entering the first year of Culinary Arts.

Culinary: Food Services

Food Services students prepare for a range of positions by learning in a professional kitchen and dining room, as well as in the classroom. Students put their skills to the test with actual customers in school and the community, and job placement assistance is provided.

Students completing Food Services will have valuable, independent living skills and may begin working or advance to the Culinary Arts and Hospitality Technology program.

Food Services is a career studies program for students who want to learn hands-on at a modified pace. The program is designed to meet individualized educational program provisions through challenging, developmentally appropriate career prep experiences. Career Studies programs are taught by teachers with substantial real-world experience in their trades.

Information Technology

Game Design and Implementation

The gaming industry has grown, surpassing annual revenues in Hollywood and professional sports combined. To meet demands, our Game Design and Implementation program is a two-year program created for those interested in careers in game development. Students learn about fundamental game design principles, the history of games, 2D and 3D art asset creation, and programming in Unity and C#. They collaborate in teams to create a variety of analog and digital games to simulate a real-world game studio experience. Using project-based learning, students design original video games as well as create a virtual video game design company. Additionally, they earn math (year 1) and English (year 2) credits while creating a masterwork portfolio that will showcase their value.

Upon completion of the program, students gain focus for higher education potential in specific fields including: game designer, 2-D or 3-D artist or animator.

Digital Media Design

Digital Media Design prepares students for creative careers in web design, multimedia communications, graphic design and other related areas. During the two-year program students develop professional level skills in Adobe software applications. They learn to apply design processes and design theory to improve the quality and consistency of their work.

In addition to digital output, the classroom lab provides specialty-printing experiences including wide format poster and banner printing, dye sublimation printing on metal, ceramics and textiles as well as t-shirt transfer printing.

Students demonstrate their technical abilities through the Adobe Certified Expert Program. In a two-year period, it is possible for students to earn up to five industry-recognized certifications. This combined with work samples provides students with the opportunity to graduate with an impressive portfolio.

For real-world experience, students participate in a variety of work-based learning activities designed to provide professional level practice including exposure to the expectations they will encounter in their future employment.

Students completing the program are prepared for rigorous college and post-secondary programs and/or are qualified for entry-level jobs within the visual communications field.

Network Technology

The Network Technology program provides students with the opportunity to earn industry recognized certifications in the fields of copper and fiber optic cabling, wireless technologies, Digital Literacy and Cybersecurity.

This two-year program develops a unique understanding of today's ever-growing field of network technology as well as integrating 11th grade Math and 12th grade English. Through lecture and hands-on activities, students explore this exciting field and gain the technical knowledge and professionalism needed to prepare them for careers in this exciting and growing field.

As part of our career and college readiness preparation—critical thinking, communication, collaboration, and public speaking skills are woven into the learning experience to prepare students for their post high school journey.

Certification Opportunities

- C-TECH Telecommunication Technologies & Network Cabling Specialist Copper 4.0
- C-TECH Grounding and Bonding: Copper Connectivity Systems
- CareerSafe OSHA-10 Construction Safety Card
- CareerSafe Cybersecurity Basics
- C-TECH Network Cabling Specialist Fiber Optic Based Systems 4.0
- C-TECH Wireless Antenna Installer/Technician
- TESTOUT/ CompTIA IT Fundamentals and Digital Literacy

Career Opportunities

- Network Installer
- Data Center Network Technician
- Fiber Optic Technician & Splicer
- Cybersecurity Technician
- Video Surveillance Installer
- Wireless Antenna Technician
- Certification Opportunities

Manufacturing

Manufacturing and Machine Technology

The program was developed in cooperation with local businesses and industries, colleges and professional associations to meet our region's growing demand for advanced manufacturing professionals.

Students focus on skilled manufacturing, machining and advanced manufacturing, and they learn how products are taken from concept to consumer using the latest technology to compete in a global marketplace.

They learn computer-aided design (CAD), engineering drawing and sketching and a number of computer programs used in today's highly technical manufacturing operations. Students benefit from partnerships with such advanced manufacturers as

Greno Industries Inc., NSH USA Corp., GE Vernova, PVA and P1 Industries, which offer opportunities for job shadowing and internships.

New Visions: Emerging Technologies

The New Visions: Emerging Technologies program offers students a comprehensive introduction to two rapidly growing industries: hydrogen fuel cell technology and semiconductor manufacturing.

Students gain hands-on experience and theoretical knowledge in advanced manufacturing, mechanical and electrical systems, hydrogen safety, and semiconductor processes. The program covers key topics such as fuel cell systems, pneumatics, automation, cleanroom protocols, and troubleshooting techniques.

Developed to meet the demands of these cutting edge industries, this course equips students with the skills needed for entry-level technician roles or further education in these high-demand fields.

Welding and Metal Fabrication

Welding and Metal Fabrication is a two-year program that is aligned with American Welding Society standards. During the duration of the program, students learn the skills and techniques necessary for success in a career that values well-trained, experienced professionals.

Students learn shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW), gas tungsten arc welding (GTAW), oxyfuel cutting and plasma cutting. They also learn about the operation of welding and metal fabrication machinery, blueprint reading and shop theory. Upon completion, students are prepared to seek employment or proceed with more advanced training at a technical school or college.

Upon completion, students are prepared to seek employment or proceed with more advanced training at a technical school or college.

Retail and Office Services

Cosmetology

Cosmetology students learn the competencies and skills needed to pass the New York state practical and written licensing exams through a program that meets the state-required 1,000 hours of instruction.

Students attend Cosmetology for two years. They apply theory and skills, and strengthen competencies through hands-on experiences including a clinic open to the community and a salon internship. Academics are integrated, and students may earn college credits.

Students apply theory and skills, and strengthen competencies through hands-on experiences including a clinic open to the community and a salon internship. Academics are integrated, and students may earn college credits. An internship totaling 125 hours is also required. Cosmetology students learn the competencies and skills needed to pass the New York state practical and written licensing exams through a program that meets the state-required 1,000 hours of instruction.

Global Fashion Studies I and II

Students enrolled in Global Fashion Studies have the opportunity to study creative design and core business concepts while applying them to the world of fashion. Further exploration will include careers in fashion, merchandising, marketing, retailing and e-tailing.

With society's ever increasing focus on fashion trends, star apparel and more, this field is perfect for students with strong design skills, a strong imagination or just a desire to stand out. Leadership skills are emphasized along with creativity, problem-solving, writing, communications and presentation skills. In addition, students are exposed to state-of-the-art technology skills used by fashion industry professionals. Hands-on fashion career exploration is included in all phases of this course. As a college prep program, students may have opportunities to research and visit top fashion colleges during their course studies.

Students will be guided through the development of a fashion trade portfolio highlighting their best work. Work-based learning opportunities will be available to students to work with local retailers at area shopping malls to learn visual display and merchandising.

Pet Tech

Pet Tech is a program designed for students who are interested in working with small domestic animals to learn basic care. Skills taught include animal behavior, care of a variety of classroom pets, basic dog training, pet grooming, care and best practices for boarding animals. Students also learn about customer service, written and spoken communication, office and computer skills, phone etiquette, budgeting and money management, inventory and ordering, advertising, basic accounting and business math - all skills necessary to operate in a business and retail setting.

Retail and Office Services

This program is designed for students who are interested in working with others in an office, retail or customer service setting and want to learn basic, business-related skills. Students learn about customer service, written and spoken communication, office and computer skills, budgeting and money management, inventory and ordering, advertising, basic accounting and business math.

Retail and Office Services students also build skills in problem-solving, organizing, business and telephone etiquette and working as a team. They rotate through internships in retail and office locations.

They work hands-on and as a team at the Campus Store and in the classroom. By gaining experience during class and in the field, students are well prepared to get a job and keep it. They benefit both personally and professionally. Retail and Office Services is a career studies program for students who want to learn hands-on, at an alternative pace. The program provides challenging, developmentally appropriate career prep experiences.

Vocational Training and Transition

Self-confidence. Independence. Work experience. Job training.

This program, based at our Albany campus, provides students with the opportunity to put all of the pieces together and start building a future. Students discover their strengths, build self-esteem and gain confidence in their abilities. At the same time, they receive training with an emphasis on job-related skills, leadership and organizational skills, and decision-making skills. Students have the opportunity to apply their knowledge and skills at local businesses, including Crossgates Mall and Price Chopper.

This is a career studies program for students who want to learn hands-on at a modified pace. The program is designed to meet individualized educational program provisions through challenging, developmentally appropriate career prep experiences.

Transportation, Distribution and Logistics

Automotive Collision Technology

Automotive Collision Technology is a two-year program in which students learn about ever-changing materials, methods, and technology in this high-paying industry. Students explore career opportunities as well as participate in a work based learning experience at various local collision repair centers.

Students repair damaged vehicles back to pre-accident condition. They learn the proper way to repair vehicles per the manufacturer's recommendations. Students perform high-tech welding methods such as MIG and STRSW as well as Nitrogen Plastic Welding. Students will repair, replace, and align body panels on various vehicles as well as spray single-stage paint, base coat, clear coat, and three-stage pearl finishes. From the initial estimate to the final detail, students learn what is needed to get cars looking good again.

Students also work towards these industry level certifications; I-Car Refinishing Prolevel, I-Car Non-Structural Prolevel 1, ASE Refinishing, EPA 609, and Sp2 certifications.

Program is an (I-Car) Professional Development Program Education Edition (PDP-EE) training center.

Refinishing – Year One

Students learn how to repair and refinish today's vehicles and return them to pre-accident condition. They use single-stage paint, base coat clear coat as well as three-stage pearl finishes. From preparing for paint to spraying paint and adding the final details, students learn what is needed to get cars looking good again. Students also work towards obtaining an Automotive Service Excellence (ASE) certification.

Collision Repair – Year Two

Students repair damaged vehicles back to pre-accident condition. They learn the proper way to repair vehicles per the manufacturer's recommendations. Students perform high-tech welding methods such as MIG and STRSW as well as Nitrogen plastic welding. Additionally, students will create damage appraisals, calculate repair costs and establish estimates. Students can work towards obtaining an Automotive Service Excellence (ASE) certification.

The program is accredited by the National Institute for Automotive Service Excellence (ASE).

Career Opportunities

- Painter
- Body technician
- Glass technician
- Auto body supply retailer
- Shop manager
- Prep technician
- Detailer
- Painter helper
- Disassembly tech
- Production manager
- Estimator

Units of Study

- Parts replacement
- Welding
- Panel replacement
- Estimating
- Glass replacement
- Sheet metal repair
- Tools and equipment
- Painting
- Buffing
- Detail
- Paint mixing
- Personal safety

Automotive

This program is designed for students who are interested in working on vehicles and small engines and want to learn both in the classroom and in a hands-on garage.

Students learn about basic automotive and small engine maintenance and repair, general service station duties, and exhaust and engine systems. They work on donated and student vehicles and engines and build key skills such as teamwork, communication and customer service.

Automotive Trades Technology

From computerized diagnostics to hands-on repair, students in the Automotive Trades Technology program learn how to service and maintain all types of cars and light trucks. This two-year program covers a range of topics, from engine theory and introduction to hybrid vehicle technology to specialized tools and equipment and customer service and shop management.

Students work on late-model vehicles donated by auto manufacturers as well as actual customer vehicles that are brought to class for servicing and repair.

In this ASE Education Foundation-accredited program, students can earn ASE/EPA 609, SP/2 and ASE certifications.

Automotive Youth Educational System

In this ASE Education Foundation-accredited program, students learn the basics of auto technology and may have the opportunity to work as paid interns at sponsoring auto dealerships. They learn about engines, electrical and computer systems, suspension and brakes and receive an introduction to hybrid vehicle

technology. They have the opportunity to earn college credit and work toward an associate's degree through Hudson Valley Community College through the University in High School Program.

Students interested in enrolling in AYES must be recommended to the program by an automotive instructor, and complete a transcript review and interview process.

Upon completion of the program, students can earn ASE/EPA 609, SP/2 and ASE certifications.

Diesel Technology

Medium- and heavy-duty trucks require educated and experienced technicians for their maintenance and repair. Students in this program work on late-model trucks and diesel engines to gain this knowledge. They learn electrical and electronic theory, which they apply to computerized control systems used on today's trucks. They also learn how to service and maintain steering, suspension, chassis and braking systems.

Students are taught about alternative fuels and about hybrid vehicle technology. They also learn vehicle air conditioning recovery and recycling service procedures, and upon completion of the training, may test for Environmental Protection Agency (EPA) approved certification.

Automotive Service Excellence (ASE)-style testing during the Diesel Tech program prepares students to pursue certification after graduation. Upon completion of the program, students may secure employment as entry-level technicians or advance their education and training. Diesel Tech at Career & Tech is the only high school-level program in the state to earn certification by the National Automotive Technician Education Foundation/ Institute for Automotive Service Excellence (NATEF/ASE).



