Guilderland

Empowering all students

to Succeed

in the 21st

Century

CURRICULUM GUIDE

GUILDERLAND

Guilderland Central School District Mission Statement

To inspire all students to be active life-long learners, able to achieve their highest potential in a demanding and ever-changing global community.

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Guilderland High School Directory

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Timeline for Planning

- **December 2024:** Guilderland High School Curriculum Handbook is available online. Teachers at the high school begin recommending students for classes for the 2024 2025 school year.
- Jan. 3 8, 2025: Grade 11 scheduling begins
- Jan. 6 Feb. 14: 2025: Grade 8 scheduling begins
- Jan. 9 12, 2025: Grades 9 and 10 scheduling begins
- Jan. 31, 2025: Last day to request a level change
- Mar. 31, 2025: Teachers finalize level change recommendations
- May & June 2025: Class conflict resolutions are made
- June 6, 2025: Last day to submit course change requests for students entering ninth grade
- Add/drop period: Course changes must be made by the end of two ABCD cycles

Graduation and Testing Requirements

Course Descriptions	Course Requirements		
Required Subjects	Regents Diploma	Advanced Regents Diploma	
English	4 credits	4 credits	
Social Studies	4 credits	4 credits	
Math	3 credits	3 credits	
Science	3 credits	3 credits	
World Language	1 credit	3-4 credits *	
Health	½ credit	1/2 credit	
The Arts**	1 credit	1 credit	
Physical Education	2 credits	2 credits	
Electives	3 ½ credits	½ - 1 ½ credits	
Total	22 credits	22 credits	

*To earn the advanced designation, the student must complete one of the following:

- A World Language (3-4 credits)
- Career and Technical Education (5 credits) plus one credit in World Languages; Career and Technical Education includes Business and Tech Programs
- The Arts (5 credits) plus one credit in a World Language

**The Arts include Visual Art, Media Art, Design and Drawing for Production, Dance, Theatre, and Music

Testing Required for Graduation

Regents Diploma:

Minimum score of 65 required on all exams.

- 1 Math Regents
- 1 Science Regents
- 1 Social Studies Regents
- English Regents

AND at least one of the following:

- Humanities Pathway: A minimum score of 65 on a second Social Studies Regents or state-approved alternative.
- STEM Pathway: A minimum score of 65 on a second Science Regents or a minimum score of 65 on a second Math Regents or a state-approved alternative.
- Bi-literacy (World Language) Pathway: Completion of a world language sequence and passing a state-approved World Language assessment.

- CTE Pathway: Completion of a state-approved CTE program and assessment, Business Management.
- CDOS Pathway: Completion of all the components of the CDOS Commencement Credential.
- Arts Pathway: Completion of an additional Arts course and state-approved arts assessment. The 4+1 IAAP Portfolio is the state-approved assessment for the Visual Arts Pathway. Course 5611 (AP) Music Theory culminates in the state-approved assessment for Music.

Regents Diploma with Honors

Earning a computed average of 90 or above on the five required exams for the diploma.

Advanced Regents Diploma

All of the above exams plus additional tests, listed below, with a minimum score of 65 required.

- 2 additional Math Regents exams
- 1 additional Science Regents exam
- 3-4 credits in World Languages & Cultures and a minimum score of 65 on Checkpoint B **OR** a five-unit sequence in art and design, music, business, technology, or career and technical education CTE).

Advanced Regents Diploma with Honors

Earning a computed average of 90 or above on the eight required exams for the diploma.

Advanced Regents Diploma with Mastery in Math

Earning an 85 or better on the three required Regents exams in math.

Advanced Regents Diploma with Mastery in Science

Earning an 85 or better on the three science Regents exams.

Seal of Biliteracy

The New York State Seal of Biliteracy (NYSSB) is an award given to high school graduates who have demonstrated a high level of proficiency in English and one or more world languages. The NYSSB encourages the study of languages and affirms the value of diversity in a multilingual society. This award is denoted by a seal affixed to the student's diploma and a notation on the student's high school transcript. To earn the NYSSB, students must demonstrate proficiency in English and one or more world languages. Students can earn points toward the NYSSB in a number of ways, including: completing coursework in English and/or French 6 or Spanish 6 with an average of 85% or better; earning a set score on an approved assessment in English and/or a world language; and presenting a Culminating Project in English and/or a world language that demonstrates the required level of proficiency in all three modes of communication.

Seal of Civic Readiness

The New York State Seal of Civic Readiness is an award given to high school graduates who have demonstrated a high level of proficiency in civic knowledge and civic participation. In particular, the Seal of Civic Readiness distinction reflects the following:

- student understanding of a commitment to participatory government and civic values;
- successful completion of an action project in civics or social justice; and
- recognizes the value of civic engagement and scholarship.

This award is denoted by a seal affixed to the student's diploma and a notation on the student's high school transcript. To earn the Civic Seal of Readiness, students must demonstrate proficiency in Civic Knowledge through successful completion of required and elective Social Studies courses, associated Regents exams in Global History and United States History, and Teacher Corps (and its Civics Capstone project). Through Teacher Corps, students use teaching and learning as a civic-minded approach and change agent to make a positive, meaningful impact within their own community.

Technical Endorsement (Business Management)

Successfully complete an NYSED-approved CTE program of study that includes:

- passing a minimum of 3.5 CTE credits
- passing each part of a 3-part technical assessment (written, demonstration, project components) [CR 100.5(d)(6)(i)(b)]

A seal is affixed to a Local, Regents, or Regents with Advanced Designation diploma.

Course Levels

Students are enrolled in different level courses. Assignment to Advanced Placement, Honors and Regents is based on abilities and skills evidenced by standardized tests, achievement in previous courses, portfolios, performances, and teacher recommendations.

Student evaluation is a continuous process. Due to the differences of abilities, interests, and needs within individuals, students may be placed in different levels for different subject areas. The instruction level of the course is noted on the report card, the permanent record card and transcript.

College Level Courses and Advanced Placement through the College Board

Guilderland High School offers courses for college credit through a variety of colleges including Albany College of Pharmacy, Hudson Valley Community College, Rochester Institute of Technology, Siena, SUNY Schenectady, Syracuse, and the University at Albany. Students are able to earn college credit upon successful completion of the course (including any final exams), and payment of tuition fees by the student. Students may be able to transfer these credits to the college which the student ultimately attends after graduation from high school. Financial Aid *may* be available for students who qualify.

Advanced Placement classes work toward preparation for that subject's AP exam in May. The tests are open to any college bound student for the exam fee. Students must register for these exams in the fall of the school year in which the exam will be taken. Many colleges will grant credit or advanced standing to students who earn a score of 4 or 5 on the AP exam.

Honors Courses (H)

Honors level courses are designed to challenge students by providing enrichment through in-depth study. Emphasis is placed on the quality of achievement. Students in Honors level courses will take Regents examinations whenever they are offered in that subject.

Regents Courses (R)

Courses at this level meet the New York State Regents standards. Average to above average students successfully completing these courses are well prepared to pursue higher education.

Examinations

Advanced Placement Examinations

These college-level tests are given in May and are open to all students; however, there are AP classes for most students who take these tests. Test results are generally received by the school in July and therefore are not computed into a student's final class average. Depending on the respective college policy, students may receive college credit for successful completion of an AP course and a higher score on the AP exam. There is a student fee payable to the College Board (2024-2025 fee - \$99 per exam).

Regents Examinations

All students enrolled in classes which culminate in a Regents exam take these tests, which are prepared by the New York State Department of Education.

Local Examinations

These tests are locally prepared examinations, which are approved by the curriculum supervisor in the respective department and are used whenever Regents examinations are not specifically offered.

Policies

Auditing a course

A course audited is listed on the permanent record card as an "Audit" with no credit issued. Students may audit courses under special circumstances. The audit request must be approved by the School Counselor, Instructional Administrator, teacher and parent prior to the beginning of each course. Students requesting to audit a course are expected to complete all of the work assigned.

Doubling

In grades 9-11, students may not take two courses simultaneously in the same academic area where one is the prerequisite for the other. An exception is made for the "bona fide" accelerated student and for physical education make-up.

Course Drop/Add

All the underclassmen may drop a course only if it is replaced by another course. Course changes must be made by the end of two ABCD cycles. This policy will also apply to seniors carrying a six-class load.

NCAA Eligibility

The NCAA has strict academic eligibility requirements for prospective students/athletes to participate in Division I and II intercollegiate athletics. It is the responsibility of the student and parent to check https://web3.ncaa.org/ecwr3/, for up-to-date course eligibility requirements.

The following courses WILL NOT meet the NCAA requirements for English:

- Acting and Directing I
- Acting and Directing II
- Cinema as Literature
- Digital Broadcasting: News and Sports
- Screenwriting

The following courses will not meet the NCAA requirements for Math:

- Accounting/College Accounting
- Applied Math 1
- Applied Algebra 2 & Trig.
- Applied Geometry
- Real Life Math
- Intro to Game Design
- Algebra 2 Two Year, Year 1 & Algebra 2 Two Year, Year 2 each count for .5 credit toward NCAA requirements

The following courses will not meet the NCAA requirements for Science:

- Health Sciences
- Nursing
- Physical Therapy
- Bioethics and Clean Energy

Art & Design

There are three Art & Design courses that meet the requirements for the Fine Arts Credit. These foundational courses are: 5002 Studio in Art, 5006 Studio in Creative Crafts, and 5008 Studio in Media Arts. Students taking any one of these comprehensive courses are eligible to take art elective courses that require a prerequisite. Please <u>CLICK HERE</u> to see a visual guide of the following Art & Design courses.

5002 Studio in Art

Grade: 9, 10, 11, 12 Exam: Local Prerequisite: None Offering: Full year (1 credit) Reading Level: Mixed

This is a full-year foundation course that is traditional Fine Arts based. Students will likely create drawings, 2D designs, 3D work, paintings, and digital media art and may use a variety of materials such as pencil, markers, pastels, collage, paint, and 3D materials. Students will be taught strategies for creativity, innovation and problem-solving skills using critical thinking and higher-order thinking. Students will learn to communicate their ideas through their artwork. At the end of this course students will be able to demonstrate their creative and personal artistic expression; demonstrate the ability to be independent and self-directed learners; develop an appreciation for the history of art and art-related careers; identify the Elements of Art and Principles of Design; and demonstrate an understanding of global and aesthetic awareness. A local final exam is required at the end of this course. **This course meets the Fine Arts requirement for graduation**.

5006 Studio in Creative Crafts

Grade: 9, 10, 11, 12 Exam: Local Prerequisite: None Offering: Full year (1 credit) Reading Level: Mixed

This is a full-year foundation course based on Craft media and techniques including, among other things, weaving, fiber art, ceramics, handmade books, and baskets. Students will be taught strategies for creativity, innovation, and problem-solving skills using critical thinking and higher-order thinking. Students will learn to communicate their ideas through their artwork. Students will be able to demonstrate their creative and personal artistic expression; demonstrate the ability to be independent and self-directed learners; develop an appreciation for the history of Craft and art-related careers; and demonstrate an understanding of global and aesthetic awareness. A local final exam is required at the end of this course. **This course meets the Fine Arts requirement for graduation.**

5008 Studio in Media Arts

Grade: 9, 10, 11, 12 Exam: Local Prerequisite: None Offering: Full year (1 credit) Reading Level: Mixed

Students will make art in traditional and digital ways to explore the Elements of Art and Principles of Design. Students will be taught strategies for creativity, innovation, and problem-solving skills using critical thinking and higher-order thinking. Students will learn to communicate their ideas through their artwork. Lessons will include visual and media arts history, aesthetic awareness, creative and performance-based projects, and careers in visual and media art. Students will explore personal ideas and imagery created within the spectrum of the visual and media arts disciplines. Classes may be taught in art studio classrooms and computer labs designed for Media Arts instruction. Students will use a mix of hands-on and digital tools. A local final exam is required at the end of this course. **This course meets the Fine Arts requirement for graduation**.

5102 Drawing and Painting

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: 85% three-quarter average in Studio in Art, Studio in Media Arts or Studio in Creative Crafts and teacher recommendation. Offering: Full year (1 credit) Reading Level: High

This is a full-year course recommended for prospective art and design majors and is devoted to advanced exploration and experimentation in drawing and painting media. There is a heavy emphasis on drawing/rendering from life (drawing what you see). At the end of the course, the student will be able to: demonstrate a more extensive understanding of the art process by using rough sketches, visual research, and extensive planning to complete several projects; exhibit improvement in visual fundamentals such as lighting, perspective, and proportion as well as new techniques such as chiaroscuro and foreshortening; identify various artists by their style, create dynamic compositions inspired by these styles, prepare, present and display finished artwork.

5244 Sculpture

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: None Offering: One semester (½ credit) Reading Level: Average

Get hands-on with many types of materials including wood, wire, clay, cardboard, stone, metal, silicone rubber, plaster, foam block, found objects and 3D computer programs for 3D printing. Sculpture is the oldest known form of art created by humans. You will learn how to create sculptures using classic and contemporary techniques including subtractive, additive, or both, casting and joining. You will build realistic and abstract sculptures of a variety of subjects such as animals, portraits, figures, hands, creatures, and characters. You will learn to mount and display your artwork for viewing and art shows! Learn how to use your mind to visualize and your hands to construct artwork in three dimensions!

5245 Sculptural Innovations

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: Sculpture or Creative Ceramics 2 Offering: One semester (½ credit) Reading Level: Average

This half-year advanced course will enable students to further explore and develop sculptural and other three-dimensional artmaking. Students will learn new techniques in sculpture to express their creative ideas in art. For example, students will carve, cast, model, and assemble in wood, clay, plaster, and wire along with many other materials.

5122 Graphic Design

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: 80% three-quarter average in Studio in Art, Studio in Media Arts or Studio in Creative Crafts, or teacher recommendation Offering: Full year (1 credit) Reading Level: Average/High

In this full-year course, you will learn how to design images to communicate ideas and messages. You will develop your skills with layout and design, typography, illustration, corporate identity (logos), and computer technology. Some of the software used include Adobe Photoshop CS6 and Adobe Illustrator CS6. You will also learn about copyright laws, printing processes and procedures. By the end of this course, you will have design and presentation skills that are essential in college courses and in the workplace.

5132 Creative Ceramics I

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: 80% average in Studio in Art, Studio in Media Arts or Studio in Creative Crafts Offering: One semester (½ credit) Reading Level: Average

This course is an introduction for students to the basics of ceramics. The students will focus on learning hand-building techniques in clay. They will also explore the historical, technical, aesthetic, and cultural aspects of ceramics and be introduced to throwing on the wheel. Students will explore personal ideas and imagery in clay while using their innovative and critical thinking skills to prepare, present and display finished ceramic artwork.

5142 Creative Ceramics 2

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: 80% average in Creative Ceramics I and teacher recommendation Offering: One semester (½ credit) Reading Level: Average Students will learn advanced techniques, higher-level craftsmanship, and concepts beyond the foundational techniques in Creative Ceramics 1. They will further develop personal ideas, images, and forms through hand-building and wheel-throwing in clay. Students will engage in all aspects of clay preparation, clay construction, glazing applications, and firing methods. Students will have the opportunity to prepare, present, and exhibit a body of ceramic artwork.

5162 Cartooning

Grade: 10, 11, 12 Exam: Portfolio Prerequisite: Studio in Art, Studio in Media Arts or Studio in Creative Crafts Offering: One semester (½ credit) Reading Level: Average

This course focuses on the development of original cartoon characters and storylines. Students will be taught how to research, design, create and manipulate their own characters in a variety of mediums including traditional two-dimensional pencil and ink as well as digital illustration. Students will learn to solve artistic problems independently and collaboratively as they hypothesize, experiment, interpret, and communicate ideas through cartoons. At the end of this course, students will: demonstrate a progression from realistic portrait and figure proportions to exaggerated expressions and figures; demonstrate effective cartoon lettering and perspective; create recognizable caricatures of famous people; produce professional-style comic strips, single-panel cartoons, and graphic novel pages.

5172 Animation

Grade: 9, 10, 11, 12 Exam: Portfolio Offering: One semester (½ credit) Reading Level: Average

This course focuses on the movement and filming of characters, cartooning and storylines using traditional and digital media manipulation techniques. Students will imagine, communicate, experiment, and synthesize their ideas through digital literacy. At the end of this course students will be able to demonstrate a progression from fundamental movements of squash and stretch and metamorphosis, to complex character walk cycles; be introduced to various software including Flip-a-Clip, Stop-Motion Studio, and Adobe Premiere Pro; complete individual animations, from concept to drawing to sound, to final animation; and prepare, present and display finished artwork.

5007 Art & Game Design

Grade: 9, 10, 11, 12 Exam: Local Offering: One semester (½ credit) Reading Level: Average

In this course, students will use Construct 3, or a similar web-based game editor, to learn the fundamentals of game design, including character development, environmental design, and level design. Students will have the opportunity to collaborate with classmates in group projects and develop and strengthen their problem-solving and teamwork skills while creating fun and engaging games. Students will learn about the different roles and responsibilities of game designers, programmers, and artists. By the end of this course, students will be able to create their own games from scratch. **No prior knowledge of coding is required**.

5005 Advanced Studio in Art

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisites: 80% three-quarter average in Studio in Art or Studio in Media Arts and Creative Crafts and/or teacher recommendation. Offering: Full year (1 credit) Reading Level: Mixed

This course is designed to further develop students' ideas in art through advanced understanding of the Elements of Art and Principles of Design. The course will focus on further developing students' skills and techniques in two and three-dimensional arts and in digital artmaking to an advanced elective. Students will work on project based activities that focus on creativity, innovation, responsibility, independence and self-directed learning. At the end of this course students will be able to: demonstrate critical and higher order thinking skills; execute and solve problems through the creative process; articulate and communicate their personal expression in the visual arts; identify various artist styles and art historical periods; present the beginnings of the portfolio development process; prepare, present and display finished artwork.

5171 Advanced Animation

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: Animation Offering: One semester (½ credit) Reading Level: Average

This course explores additional media used in Animation. Students will be taught creative problem-solving skills including communication and collaboration, and critical thinking in art. At the end of this course, students will be able to work independently during class, develop a series of animation pieces related to their individual style of work, demonstrate self-motivational skills and the completion of long-term goals and choose from creative and advanced styles of animation, such as Paper/Cell Animation, Computer Animation and Stop Motion.

5174 Studio in Photography 1 in Art

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: None Offering: One semester (½ credit) Reading Level: Average/High

Explore your visual language with the use of the DSLR cameras and Adobe Suite computer programs. You will learn about the art of photography, discuss its history and where photography is today in our ever-changing technological world. We will delve into different realms of photography including documentary, portraits, landscapes, studio, and street photography, and how to set up and create photoshoots. You will also learn about studio lighting vs. available light and how to capture the best composition. You will build a digital portfolio and website. Find out how to create better compositions, make amazing photographs, and display your work.

5176 Studio in Photography 2 in Art

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: 80% average in Studio in Photography Offering: One semester (½ credit) Reading Level: Low/Average/High

This course is a continuation of Studio in Photography 1 in Art. You will draw upon your existing knowledge to compose photos and build your digital portfolio. You will dive deeper into the world of photography and develop your artist voice in your photographs. You will use DSLR cameras and further your skills in Adobe editing programs. You will even do a project with Polaroid cameras! We study contemporary and historical photographers and the contributions they bring to the world of photography to help us understand why people take photographs and what they are about. Change the way you see the world to better enhance your compositions. "A trip to the grocery store is just a trip to the grocery store. Bring your camera with you on your trip and now the whole world has changed and can be viewed through the eyes of a photographer." -John Free

5246 Fashion Illustration & Design

Grade: 10, 11, 12 Exam: Portfolio Prerequisite: Studio in Art, Studio in Media Arts or Studio in Creative Crafts Offering: One semester (½ credit) Reading Level: Average

This is a half-year course to introduce and explore three-dimensional forms/concepts in Fashion. Students will learn to design, illustrate, and create wearable objects. Students will be introduced to basic skills in hand sewing and sewing machines. By the end of the course, students will have developed a concentrated collection of pieces that are both personally meaningful and inspired by fashion trends, history, and global cultures.

5202 Advanced Art 1

Grade: 11, 12 Exam: Portfolio Prerequisite: 85% average in Drawing & Painting and/or teacher recommendation Offering: Full year (1 credit) Reading Level: Average/High

This is a full year course with an emphasis on moving towards self-directed projects and portfolio development. Students will create artwork with the help of general prompts. The object is for students to begin to problem-solve creatively, set up imagery on their own, and have a better understanding of architectural space and forms as they apply to interior, exterior, still life and figurative compositions. Students will investigate purposeful style and use a variety of drawing and painting mediums, often with students selecting the best medium for their creative idea. The use of digital resources will be discussed and used as it relates to the application of the student's individual projects. By the end of this course, the student will produce 6-8 portfolio ready pieces that encompass both breadth and thematic images.

5212 Advanced Art 2

Grade: 11, 12 Exam: Portfolio Prerequisite: 85% three-quarter average in Advanced Art I and teacher recommendation. Offering: Full year (1 credit) Reading Level: Average/High

A full-year course for the self-directed student emphasizing continued development of a college portfolio. At the end of this course students will be able to: develop a body of work that demonstrates additional risk taking and problem solving in technical and expressive modes of making art; visually communicate and adapt one or more of the following: abstractions of mechanical objects, psychological imagery, architectural space and social concerns; and prepare, present and display finished artwork.

5201 AP Studio Art

Grade: 12 Exam: AP Exam (2024-2025 fee \$99) Prerequisite: 85% three-quarter average in Advanced Art I and teacher recommendation. Offering: Full year (1 credit) Reading Level: Average/High

AP Studio Art is a course for students capable of doing college-level studio work while they are in high school, who are willing to devote the time and energy necessary to complete a rigorous and challenging course designed for the college-bound student. This course is designed as an intensive one-year program (including summer work*). Students need to be self motivated and able to set long term goals. For this class, students will select an AP portfolio (discuss options with your art teacher), and will be guided to develop a body of work that demonstrates inquiry through art and design. In addition to finalized pieces of art, the portfolios include process documentation and written information about the work presented. The class is designed to prepare students for the Advanced Placement in Studio Art exam where students submit their art portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. It is expected that students will sit for the AP exam in May..

*Summer work is required, students will meet with the teacher at the end of the previous year to discuss.

5302 Portfolio Prep

Grade: 12 Exam: Portfolio Prerequisite: Studio in Art, Studio in Media Arts or Studio in Creative Crafts and/or teacher recommendation Offering: One semester (½ credit) Reading Level: Average

The portfolio prep class is geared toward highly motivated seniors interested in preparing and strengthening their portfolios. This course helps to ensure that students are prepared to meet their individual artistic goals after high school. Students will create their own objectives (with guidance from the art teacher) for the class based on what they need for their portfolios, their chosen medium, and areas of visual interest. This is an excellent opportunity to take risks and try out new ideas. Students must be proficient in the mediums they choose, and have the initiative to take it to a higher level with the teacher as a mentor. This framework provides the student with time to create the art they want while obtaining the feedback they need to improve it to make it better. Areas of concentration may include but are not limited to Drawing, Painting, 2D and 3D

Design, Mixed Media, New Media Art, Website Building, Sculpture, Printmaking, Photography, Film (still and moving), Branding, Fashion Design, Illustration, Cartooning, Animation, Vlogging, Influencing, Original Computer Based Music/Sound Creation, Videography and Editing. Because this course is meant to supplement the intermediate and advanced curricula of the art department, students will take this class in addition to the art classes they are taking in their sequence. Students interested in art should consider taking this class even if they are not planning on pursuing an art career or majoring in art in college as many colleges are now providing scholarship money to students who submit their art portfolio as a supplement to their application. "Just be yourself, there is no one better." — Taylor Swift

5173 Studio in Film

Grade: 9, 10, 11, 12 Exam: Portfolio Prerequisite: None Offering: One semester (½ credit) Reading Level: Average

This course will focus on creative filmmaking/videography. Students will become engaged with the artistic language of film. Through a variety of visualization exercises, students will learn storytelling and expression as they develop their skills with the camera and editing software programs. Students will be producing and editing their own film concepts which can range from Narrative Drama, Comedy, Action, Public Service Announcements, Music Videos, Visual Art/Experiment, and Documentary/Mockumentary. The focus will be placed on learning computer editing, lighting, sound, technical camera skills, and collaborating with peers. Students will be self-directed in imagining, experimenting, and producing short sequenced videos and films. Students will write scripts, shoot sequences with digital cameras, and edit videos and sound in computer-based software programs.

5180 Advanced Media Arts

Grade: 10, 11, 12 Exam: Portfolio Prerequisite: 80% three-quarter average in Studio in Art, Studio in Media Arts, or Studio in Creative Crafts. Offering: One semester (½ credit) Reading Level: Average/High

This course is intended to explore more advanced concepts in Media Arts through the Elements of Art and Principles of Design. Continued access to large format and 3D printing will be available to students when creating works. Students will be expected to participate in project-based problem solving activities where creativity, innovation, responsibility, independence and self-directed learning will be explored. Students will explore and create traditional and contemporary modes of visual communication through various computer applications to include, but not limited to, Illustrator, Photoshop, Audition, Substance, as well as Tinkercad, Cura, and Cricut. At the end of this course, students will be able to: respond to a collection of media-based artwork that demonstrates an understanding of social, cultural and/ or political experiences, demonstrate critical and higher order thinking skills, solve problems through the creative process, articulate and communicate their personal expression in the Media Arts, identify various artist styles and art historical periods; prepare, present and display finished artwork.

Business

Business Courses				
College Executive Digital Technologies ¹	Personal Finance ^{1 2}			
Career and Money Skills	Marketing ¹			
Sports & Entertainment Marketing	Hospitality, Restaurant, & Tourism Management ¹			
Entrepreneurship 1	Corporate Law ¹			
Personal Law	Vocational Skills, Career & Finance Management			
Basic Computer Applications	Social Media Marketing & E-Commerce			
College Accounting ¹ ²	Accounting I ²			
Real Life Math ²	InvestEd			

¹College Credit Course

² Satisfies Math or Social Studies Graduation Requirement

GHS CTE Program of Study – Business Management			
	Education: /anagement 3.5 Units		
UNITS	COURSE		
Pathway	hway Program Requirements: 2.0 credits		
.5	Career and Financial Mgmt. (CFM) – Not Optional		
.5	Workplace Experience: Not Optional Business Mgmt.		
1.0	Accounting OR College Accounting, OR Real Life Math (SCED Code: 02154)		
Pathway Program Customization: 1.5 credits			
	Choose any 3 courses from the list below: .5 – College Entrepreneurship & Management .5 – College Hospitality Management .5 – College Hospitality Management .5 – College Executive Digital Technologies (formerly Computer Essentials) 1.0 – College Marketing .5 – Social Media Marketing .5 – Social Media Marketing .5 – College Corporate Law .5 – College Corporate Law .5 – Personal Law .5 – College Personal Finance .5 – Inve\$tEd: Building Wealth for Life*		
	Business M UNITS Pathway .5 .5 1.0 Pathway 1.5		

Work-based Learning Programs			
Career Internship Program	Work Experience Program		
	STW CSP #8561 Alternatively Assessed or CDOS		

School to Work Class 1 Credit	Credential Co-Taught Class STW CDOS #8562 Students seeking CDOS Credential as	
	Standalone or Pathway to Graduation (4+1) Co-Taught Class	
AND		
School to Work	Internal STW #8564 1 or 2 Blocks at GHS Job Coach Supported Work Experience	
Work-Based Learning	External STW #8563 2 Blocks – GHS or Community Based Job Coach Supported Work Experience	

Students participating in at least 216 hours of any Career and Technical Education (CTE) Credits, including 54 hours of Work Based Learning may be eligible for the CDOS Pathway option for graduation. (*This can be done in a variety of ways and hours may be accrued beginning in 9th grade. See NYSED website for details*)

All Business courses may be used for CTE or CDOS credential hours. (Full year = 108 hours, 1/2 year = 54 hours)

6004 Career and Money Skills

Grade: 9, 10, 11, 12 Exam: Local Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed

Learn about the economy, explore a variety of jobs and careers and develop skills for success in our ever-changing global workplace. This course will increase your understanding of how to manage your money. You will learn to apply financial decision-making skills to topics including: money management, spending, and credit, as well as saving and investing. The course includes practical, hands-on projects such as: creating job/career based personal budgets, using checking and saving accounts, increasing your understanding of investing and retirement planning, gaining knowledge of handling debt and credit management, and understanding insurance and taxes.

6372 College Executive Digital Technologies

Grade: 9, 10, 11, 12 Exam: Local Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Basically the most useful class you will ever take! Students will learn how to use computer programs such as Microsoft Word, PowerPoint, Excel, Access, Publisher and Google programs to enhance their ability to complete assignments during their high school career and beyond. Touch typing will be reviewed. **You can earn three transferable college credits**. (SUNY Schenectady - Intro to Computers - CIS 121).

6132 Sports & Entertainment Marketing

Grade: 9, 10, 11, 12 Exam: Project Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed

This course explores the significant growth of sports and entertainment marketing. Through real-life case studies and hands-on projects with a lot of computer and internet use, students will study the basic principles of marketing and business then apply them to past and present sports and entertainment industries. Students will study promotion, product placement, endorsements, ethics, risk management and the economy.

8346 Social Media Marketing & E-Commerce

Grade: 9, 10, 11, 12 Exam: Local Offering: One semester (½ credit) Reading Level: Mixed Prerequisite: None

Social media has helped give consumers a voice, connect them with their friends and other like-minded consumers, and has given them considerable power over sellers and brands. This course takes an in-depth look at social networks and social media platforms (ex: Twitter, Facebook, LinkedIn, YouTube, Google, etc.), Internet businesses, Internet marketing and advertising and the role that social media, marketing and advertising play in a global environment. Students will learn how social media strategies can be used effectively in marketing programs, when they should be used, how to build, measure, track, and evaluate their performance and effectiveness.

6092 College Personal Finance

Grade: 11, 12 (preference to seniors) Prerequisite: None Offering: One semester (½ credit) Exam: Local Reading Level: Mixed HVCC 2024-2025 tuition rate: \$70 per credit hour (three credits)

How does the consumer drive the American market? Which budgeting, saving, and investing habits ensure a financially secure adulthood? Study the fundamentals of economics in order to make logical economic choices of your own. Learn about employment laws and issues, banking, budgeting, investing, insurance, credit, bankruptcy, and responsible financial management. This course fulfills the Economics graduation requirement. You can earn three transferable college credits. (HVCC-ACTG 120).

6122 College Marketing

Grade: 10, 11, 12 Exam: Local Prerequisite: None Offering: Full year (1 credit) Reading Level: Mixed/High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Designed to teach students about one of today's fastest growing and most exciting fields. This course provides an excellent opportunity to explore the effects of the marketplace on our economy. If you are planning a career in business administration, marketing, advertising, retailing, or would like to own/operate your own business one day, this course is for you! Learn about current trends in marketing as you develop your decision making skills while completing hands-on projects. This is an excellent course for those who have an interest in pursuing business and marketing studies in college. **You can earn three transferable college credits**. (SUNY Schenectady - Principles of Marketing - MKT 223).

6162 College Corporate Law

Grade: 10, 11, 12 Exam: None Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Develop important life skills as you study legal ethics, criminal law, civil law, court systems, trial procedures, legal problems in society, contract law, and legal aspects of starting a business. Study fascinating cases as you learn how American law affects your everyday life. **You can earn three transferable college credits**. (SUNY Schenectady - Business Law - BUS 121)

6172 Personal Law

Grade: 10, 11, 12 Exam: None Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed

Emphasis is placed upon current and relevant topics that will enhance student understanding of legal aspects relating to real life. Through case studies and hands-on projects, students will examine some of the legal rights and responsibilities we have as individuals. Whether you're interested in a career in law or you just want to make the most of your adult life, this is a course for you.

6222 College Entrepreneurship & Management

Grade: 10, 11, 12 Exam: Local Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Are you interested in management and/or running your own business? Would you like to create and market your own product(s)? This course emphasizes career and college readiness skills through bridging classroom lessons with business management concepts and real world business exposure opportunities. Students will partner with community businesses through direct interaction such as the Junior Achievement program and guest speakers. **You can earn three transferable college credits.** (SUNY Schenectady - Intro to Business - MGT 123).

6125 College Hospitality, Restaurant & Tourism Management

Grade: 11, 12 Exam: Project Prerequisites: None Offering: One Semester (½ credit) Reading Level: Average SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

The hospitality industry is one of the most fascinating, fun and exciting industries in which to work. This introductory course provides an overview of the hospitality, restaurant, and tourism industries. We will study these industries' growth and development, their distinguishing characteristics, trends and current concerns. Students are introduced to career opportunities and the employability skills needed to succeed in specific hospitality fields. **You can earn three transferable college credits**. (SUNY Schenectady - Intro to Hospitality - TAT 121).

6232 Accounting I

Grade: 10, 11, 12 Exam: Local Prerequisite: Two years high school math Offering: Full year (1 credit) Reading Level: Average

Develop real-life accounting skills while studying accounting systems. Learn the principles and procedures of double-entry accounting and develop practical skills using Microsoft Excel. **This course fulfills the third unit of math, required for graduation.**

6231 College Accounting

Grade: 11, 12 Exam: Local Prerequisite: Regents Level Algebra 2 & teacher/counselor recommendation Offering: Full year (1 credit) Reading Level: Mixed/High HVCC 2024-2025 tuition rate: \$70 per credit hour (four credits)

Are you a college bound student interested in business, finance, economics or marketing? If so, this course is for you! Study principles of accounting and develop practical accounting skills using Microsoft Excel. Expand your ability to succeed in a college business program by learning the basics of the accounting cycle, financial statement analysis, and coverage of asset, liabilities and stockholders equity. You'll learn how to be a savvy investor, by analyzing corporations to determine whether they'll be a good investment for your stock portfolio! **College Accounting also fulfills the third or fourth unit of math, required for graduation. Students can earn four college credits.** (HVCC - Financial Accounting - ACTG 110).

6371 Basic Computer Applications

Grade: 9, 10, 11, 12 Exam: Project Prerequisite: None Offering: One semester (½ credit) Reading Level: N/A

A two part course of introductory keyboarding instruction (emphasis on proper finger placement and positioning) followed by an introduction to Google Apps, Microsoft Word, Excel and PowerPoint.

6200 Real Life Math

Grade: 11, 12 Exam: Local Prerequisites: 2 yrs. HS math Offering: Full year (1 credit) Reading Level: Mixed

This course is designed for students seeking **a third year of math credit**. This class furthers mathematical concepts and computational skills using practical business applications such as bank services, payroll,

annuities, stocks and bonds, and business and consumer loans. Important financial literacy skills involving investing, saving for retirement, housing choices and other real-life math situations form the basis for this course.

6302 Work Experience Program

Grade: 12 Exam: Project Prerequisite: None Offering: One semester (½ credit) Reading Level: N/A

Did you realize that you can earn high school credit for the job you currently have? This course consists of both a class and a work component. The class sessions for this course help develop your goal setting, decision making, job preparation, workplace communication, interpersonal and problem solving skills. In addition, you will enhance your knowledge of work relationships and learn to keep them positive and professional. You will have the opportunity to apply your newly learned skills in your workplace. Students will develop ready-to-work skills essential for the workplace, as well as an understanding of qualities needed for job success and personal growth.

Students who plan to enroll in Work Experience Program must meet the following criteria:

- MUST provide their own transportation to the employment site.
- New York State requires students to complete a minimum of 150 hours of work.
- Employer pay-stubs are required in order to receive credit for the course.
- New York State requires students to complete 27 hours of classroom instruction. Students must achieve 90% attendance levels to earn their certification.
- This course is offered only as a Satisfactory/Unsatisfactory grading scale.

6313 Career Exploration Internship Program

Grade: 12 Exam: Project Prerequisite: None Offering: One semester (½ credit) Reading Level: N/A

What is it like to be an accountant, doctor, graphic artist, auto mechanic or physical therapist? Why not find out before going off to college or starting a career? Career Exploration Internship Program (CEIP) is a non-paid internship experience that provides a link between school and career options. CEIP provides valuable hands-on experience in a variety of career choices. Working alongside their mentors, students discover the varying aspects of a prospective career, while learning what specific skills and education are needed for success. By interning in the professional world, students gain an understanding of the importance of positive work ethics, timeliness, and good study habits. In addition, they will have an opportunity to improve teamwork and human relations skills. Other career related topics such as resume writing, interviewing tips, teamwork, time-management and health & safety in the workplace are introduced during the classroom component of the program. Emphasis is placed on strengthening written and oral communication skills needed in the workplace.

Students who plan to enroll in CEIP must meet the following criteria:

• MUST provide their own transportation to off-site internship assignments.

- No more than five referrals for violation of GHS Code of Conduct in their junior year. Appeals may be considered on an individual basis.
- No more than 20 absences and/or tardies in their junior year. Consideration may be granted to students with extenuating circumstances.
- Parents and students will sign a contract documenting their understanding of the course expectations.
- New York State requires interns to complete 54 hours of on-site internship.
- New York State requires interns to complete 27 hours of classroom instruction. No more than 8 hours of classroom instruction may be missed.
- This course is offered only as a satisfactor.

8561 School to Work Community Skills Class (CSP)

The School to Work CSP class provides students enrolled in the STW Program with academic information and activities to reinforce the experiences students are having in their work settings. The students will engage in activities and lessons that develop their awareness and understanding of workplace concepts including: positive attitude, integrity, teamwork, attendance and punctuality, time management, good work habits, hygiene and work safety. In addition, students will work on career research, learn about resumes and interviewing and money management concepts. Students will be guided and supported during their lessons and activities by teachers and teaching assistants. This course will guide students to develop increased independence within a workplace setting and the community.

6370 Vocational Skills Career & Finance Management

Grade: 10, 11, 12 Exam: Project Prerequisite: None Offering: Full year (1 credit) Reading Level: N/A

Increase economic awareness by exploring a variety of jobs and developing communication and other soft skills for the workplace. This introductory course will increase your understanding of the workplace and develop employability skills, including resume and interview preparation. Course includes money management, budgeting, and being a good consumer. A practical projects-filled course.

8562 School to Work Career Development & Occupational Standards (CDOS) Class

The School to Work CDOS class provides students enrolled in the STW Program with academic knowledge and resources relating to careers, life and employment. Through participation in this course it is intended to help students develop the employability and life skills to be able to be employed upon their exit from high school. The information and activities discussed will reinforce the experiences students are having in their work settings. Students will engage in activities and lessons that develop their awareness and understanding of workplace expectations and concepts including: positive attitude, integrity, teamwork, attendance and punctuality, time management, good work habits, hygiene and work safety. In addition, students will work on career research, build resumes, complete job searches and practice interviewing techniques. Students will also learn about managing and budget money concepts. This course will guide students to develop skills and behaviors that will help them independently navigate within their workplaces and the community.

8563 School to Work External Experience

The School to Work External Experience (STW) is a community-based supported work-based program. Students participate in a supported work-based learning experience where job coaches help students gain job skills. The program provides students with a hands-on opportunity to experience and work in occupations that may be of interest to them and that will help them learn more about the working world.

8564 School to Work Internal Experience

The School to Work Internal Experience (STW) is a site-based work experience at GHS. Students participate in a work-based learning experience in school where job coaches help students gain job skills. Students learn about jobs that may be of interest to them and that will help them learn more about the working world.

Career and Technical Education

Students have the opportunity to take courses at the Career and Technical Education (CTE) centers through Capital Region BOCES at the Albany and Schoharie campuses. CTE programs allow students to earn three credits in the CTE program and potentially one credit of an integrated academic course in Math, Science, or English, depending on the program. Below is a listing of programs we participate in; please see the catalog through Capital Region BOCES (https://www.capitalregionboces.

org/career-technical-education/courses-programs/) for more specific information on each program. Campus tours, individual visits, and open houses are held throughout the year.

Architecture and Construction

Building Trades Carpentry Services Electrical Trades Heating, Ventilation, Air Conditioning and Refrigeration (HVAC) Entertainment Technology I and II

Education

Early Childhood Education

Government and Public Administration

Criminal Justice

Health Science

New Visions: Health Careers - Ellis and St. Peter's Hospitals (Off Campus, Transportation not provided) Sterile Processing Technician Two-year sequence of Health Careers

Hospitality

Culinary Arts and Hospitality Technology Culinary - Food Services

Information Technology

Game Design and Implementation Digital Media Design Network CablingTechnician/Smart Home Technology

Manufacturing

Manufacturing and Manufacturing Technology Welding and Metal Fabrication

Retail and Office Services

Cosmetology Global Fashion Studies I and II Pet Tech Retail and Office Services Vocational Training and Transition

Transportation, Distribution and Logistics

Auto Body Collision Repair and Refinishing Technology Automotive Services Automotive Trades Technology Automotive Youth Educational System (AYES) Automotive Technician Diesel Technology

English

The English Department strives to fulfill New York State's charge that all students work toward college and career readiness, as defined by the new Common Core Learning Standards. The literacy expectations of the CCLS focus on student achievement in English Language Arts pertaining to developing reading, writing, speaking and listening, and language skills.

Guilderland students study a wide range of fiction and non-fiction texts. Through reading, writing, and discussion, all students will develop broader perspectives, reconcile multiple textual interpretations, and become more critically aware of language and literature's aesthetic qualities. Students at each grade level will have the opportunity to engage with challenging texts in order to expand their literacy skills, deepen their understanding and critical thinking, and discover an appreciation for the role that literature plays in our lives. Additionally, students will study the structure of argument and become more skilled at presenting their ideas in a thoughtful and effective manner through writing and speaking.

English Courses					
Grade 9	Grade 10	Grade 11	Grade 12		
English 9R	English 10R	English 11R	Students are required to take a minimum of one credit of ELA electives beyond successful completion of the three year English sequence that culminates with the CC ELA Regents Exam at the end of grade 11. Some ELA electives can be taken in grades 11 and 12.		
English 9A	English 10A	English 11A			
English 9H	English 10H	AP Language & Composition			
		EXAM - English Language Arts			

E102 English 9 Regents

Grade: 9 Exam: Local Prerequisite: English 8 Offering: Full year (1 credit) Reading Level: Average

Through reading and writing in a variety of genres, students will study the role of language and the implications of audience, purpose and context. Direct instruction in writing research reports, reviews, literary essays and original literary texts will be provided, along with a formal speaking opportunity. Students will use journals or writing notebooks to keep track of their learning.

E101 English 9 Honors

Grade: 9 Exam: Local Prerequisite: English 8, teacher recommendation, skills based performance assessment, self assessment and at least a 90 average in Language Arts 8 Offering: Full year (1 credit) Reading Level: Challenging

Students will complete the 9th grade Regents ELA curriculum. In addition, this course emphasizes a progressive increase in text complexity, rigorous evidence-based conversation and analysis of text, emphasis on close reading engagement, advanced application of academic literary vocabulary, concepts, and skills, and reflective writing for individual and peer growth.

E130 English/Global History 9 - Aligned

Grade: 9 Exam: Local Prerequisite: English 8 Offering: Full year (1 credit) Reading Level: Average/High

This English course is aligned with Global History 9. It helps students to develop an awareness of various cultures ranging from 10,000 B.C.E. to 1750. Students will explore the art and literature of early civilization through readings, presentations, creative writing and research projects.

E212 English 10 Regents

Grade: 10 Exam: Local Prerequisite: English 9 Offering: Full year (1 credit) Reading Level: Average

Through reading and writing in a variety of genres, students will study how genre, form and technique shape a text and its ideas. Direct instruction in writing feature articles, persuasive multiple source papers, editorials, literary essays and original literary texts will be provided. Students will use journals or writing notebooks to keep track of their learning.

E211 English 10 Honors

Grade: 10 Exam: Local Prerequisite: English and teacher recommendation Offering: Full year (1 credit) Reading Level: Challenging

Students will complete the 10th grade Regents ELA curriculum. In addition, this course emphasizes a progressive increase in text complexity, rigorous evidence-based conversation and analysis of text, emphasis on close reading engagement, advanced application of academic literary vocabulary, concepts, and skills, and reflective writing for individual and peer growth.

E132 English/Global History 10 - Aligned

Grade: 10 Exam: Global Regents Prerequisites: English 9 Offering: Full year (1 credit) Reading Level: Average/High

This English course is aligned with Global History 10. It explores the relationship between literature and history. Students examine social studies units in depth, using fiction, poetry and non-fiction to deepen their understanding of the units. Students will develop an awareness of various historical events ranging from 1750 to the present.

E302CC English 11 Regents

Grade: 11 Exam: Regents Prerequisite: English 10 Offering: Full year (1 credit) Reading Level: Average

Through reading and writing in a variety of genres, students will study how writers use their language and craft to shape a text. Direct instruction in writing multiple source papers using primary and secondary sources, literary analysis essays, resumes and letters of application and thoughtful personal reflections (which may be the basis for college application essays) will be provided. This course will prepare students for the Common Core ELA Regents Exam in June.

E331CC AP English 11 - Language & Composition

Grade: 11 Exam: English Regents, AP Exam (2024-2025 fee \$99) Prerequisite: English 10 and teacher recommendation Offering: Full year (1 credit) Reading Level: Challenging

Students will study how our language works and engage in rhetorical analysis. There is a focus on the ways writers use language to shape a reader's reaction. Students will read a variety of challenging nonfiction texts from several genres and historical time periods. This course is designed to prepare students for the Advanced Placement Language and Composition exam in May as well as the Common Core ELA Regents Exam in June.

E134CC English/U.S. History & Government 11 - Aligned

Grade: 11 Exam: English & US History Regents Prerequisites: English 10 Offering: Full year (1 credit) Reading Level: Average/High

This aligned course centers on the cooperative discovery of the history and literature of the United States. Focused on the societal perception of "The American Dream," students will explore how this concept has evolved over time. There is great emphasis on independent reading, projects and presentations.

E415 College Writing

Grade:12 Exam: Local Prerequisites: English 11 Offering: One semester (1/2 credit) Reading Level: Average SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

This course provides a foundation in academic discourse by developing effective communication skills with an emphasis on expository writing; an oral presentation is required. This course is based on ENG 123: College Composition at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class

E416 College Literature & Writing

Grade: 12 Exam: Local Prerequisites: College Writing/AP Lang. & Comp. Offering: One semester (1/2 credit) Reading Level: Average/High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

This course encourages students to use writing to explore the ways in which literature functions as an art form. Writing and research techniques introduced in College Writing and AP Language & Composition are strengthened and refined. This course is based on ENG 124: Literature & Writing at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class.

E502 Creative Writing

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (1/2 credit) Reading Level: Average

Class activities in this half-year course include posting to a blog as well as intensive work on completing finished pieces in a variety of genres, but with primary emphasis on poetry, short fiction and long fiction. Students share their work with others in the class.

E503 Picture Books: Art, Impact, & Education

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester ($\frac{1}{2}$ credit) Reading Level: Average

This is an elective, half year course that focuses on the purpose, significance, and impact of picture books on the literature world and society (as a mirror of social change). The goal of this course is to showcase a variety of picture books published from the early Caldecott Award winners to present day. This includes fiction, nonfiction, wordless, etc. The objectives of this course are rooted in the reading of a multitude of picture books in various genres (fiction & nonfiction), storytelling and sequencing skills, the use of art and language in picture books, read alouds, thinking critically about the books themselves, and the construction of two separate picture books by the students; one fiction, one nonfiction biography. Additionally, a goal is to broaden the students' understanding of why picture books have a place in school libraries, classrooms, homes, and universities and how these books are a reflection of the changing world.

E512 Cinema as Literature

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

Much of today's information and entertainment is provided through the medium of film. This course is devoted to the study of movies and how they communicate. Comparison of literary and cinematic versions of stories is a part of this course. A significant amount of reading and writing is required as well as class time viewing, discussing, and creating movies.

E522 Digital Broadcasting: News & Sports

Grade: 11, 12 Exam: None Exam: Local Offering: One semester (½ credit) Prerequisite: Instructor permission Reading Level: Average

Students will work to produce a daily newscast, *The GHS Reporter*, that runs during our Homeroom period. In addition to generating story ideas relating to the school and community, students will learn how to write interview questions, write a news story using several sources, determine visuals that will enhance the story for the television audience, and use digital technology to pull it all together. Students will also learn to write effective news stories to be read from the anchor desk, taking advantage of print and digital sources to fill our Headlines, Sports, Local News and Entertainment segments.

E523 Screenwriting

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

Students study the format, style and techniques of writing screenplays for feature films. Students will study several exemplary films; they will read and critique four full-length screenplays. Students will use what they have learned to write their own original full-length screenplay.

E603 Journalism

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

Students will study scholastic and professional media publications to inform their creation of work for Guilderland High School publications. Specifically, students will practice, develop and apply a number of literacy skills. In reading and writing, students will work with news, feature, sports, column, editorial, commentary, and creative writing forms. In addition, students will be exposed to skills that support understanding of narrative through the practice of multimedia storytelling, including recording and editing audio interviews, creating photographic stories, and capturing video footage. Throughout this process students will practice the verbal communication and cooperative leadership skills essential to successful professional publications

E701 College Public Speaking

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

This course helps students overcome self-consciousness, think clearly and logically, listen critically, and learn to speak formally with effectiveness and integrity. Students will speak frequently on a wide variety of topics and for many purposes. This includes using effective rhetorical techniques, understanding language use, the impact of the audience, analyzing the content and form of speeches, and engaging in persuasive speaking. This course is based on COM 105: Public Speaking at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class.

E722 Shakespeare

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

Students in this course engage in the study of Shakespeare's work by playing with moments and scenes from Shakespeare's plays. No acting experience is necessary! Through playing a Shakespearean role, students learn how to speak Shakespeare's English, how to understand his characters, and how to help an audience feel the power of his ideas. Students submit periodic written reflections about their process of making sense of Elizabethan language, of making sense of the Shakespearean characters they are playing, and of making sense of Shakespeare's themes not only in his plays, but also in the hallways of Guilderland High School and wherever else they see his themes being lived out today.

E712 Literature of Social Injustice

Grade: 12 Exam: Local Prerequisites: English, 10, 11 Offering: One semester (½ credit) Reading Level: Average

This is a writing-intensive, experience-based course in which students will study several groups of oppressed people. Students will explore aspects of diversity and tolerance through a variety of activities. Issues will be examined through literature, writing, field trips, research, and guest speakers. Topics such as poverty, disabilities, and gender will be explored.

E422 The Holocaust through Literature

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

This is a reading-intensive course in which students will study the Holocaust through a variety of lenses. Students will study the Holocaust as it relates to victims, perpetrators, bystanders, resisters, and rescuers. Issues will be examined through literature, writing, research, and guest speakers.

E811 AP English 12 - Literature & Composition

Grade: 12 Exam: AP Exam (2024-2025 fee \$99) Prerequisites: English 11 and teacher rec. Offering: Full year (1 credit) Reading Level: Challenging

This course emphasizes critical reading in literature and writing about literature and related ideas. It is for students capable of doing college-level work in English while they are in high school, who are willing to devote the energy necessary to complete a rigorous and demanding course designed for the college-bound student. The short-term goal is to enable students to demonstrate their achievement in college-level work by taking the Advanced Placement English Examination in Literature and Composition. The more important long-term goals of the course are to expose students to a variety of genres: articles, critical essays, poetry, plays, and novels in order to explore what authors reveal about the human condition – in physical space as well as places within the human spirit. Students will look at the distinct qualities, which make some books great (even "classics"). In addition, students will write essays that incisively, yet substantively, persuade the audience to "stand next to you" and your thinking on a particular subject. It is expected that students will sit for the AP exam in May. Students will complete a summer project to prepare for this course.

E801 College English

Grade: 12 Exam: None Prerequisites: English 11 and teacher rec. Offering: Full year Reading Level: Challenging Syracuse 2024-2025 tuition rate: \$115 per credit hour (6 credits)

SUPA is Syracuse University Project Advance, in which Syracuse University classes are taught by adjunct professors on high school campuses. SUPA English is a full-year course (6 SU credits) consisting of two semester-long courses. WRT 105: Practices of Academic Writing focuses on the aims, strategies, and conventions of academic prose, especially analysis and argument, and involves the study and practice of writing processes, including critical reading, collaboration, revision, editing, and the use of technology. We write as a mode of thinking, to make an argument, to communicate, and to wrestle with issues of power, history, difference and community, especially as played out in contemporary culture. In ETS 181: Class and Literary Texts, we focus on questions of social class that have long been a focus of novelists', poets' and essayists' work. Parallel to the ways that writers affect and engage social class, critical readers can engage with the concepts of social class as they read. Concerned with the social divisions of privilege, wealth, power and status, these concepts provide a set of lenses through which to read the world of work, home and community in a range of literary and other texts. This course provides an introduction to these concepts and exposes students to key texts in literature, film and other media as a way of fostering critical engagement and developing richer social responsibility through textual interpretation. Both courses employ a portfolio model, where students collect and evaluate work over time. Hence, there is no exam associated with the course.

E802 College Africana Studies

Grade: 12 Exam: None Prerequisites: English 11 and teacher rec. Offering: One semester Reading Level: Challenging Syracuse 2024-2025 tuition rate: \$115 per credit hour (3 credits)

SUPA is Syracuse University Project Advance, in which Syracuse University classes are taught by adjunct professors on high school campuses. SUPA Africana Studies is a half-year course (3 SU credits) consisting of one semester-long course: AAS/ANT 112: Introduction to African American Studies. The course introduces central themes that comprise the interdisciplinary subject of African American Studies. Also referred to as Africana Studies, African Diaspora Studies, or African and African American Studies, the field places the study of North Americans of African descent in a broader context that considers connections to the African continent and to other people of the African Diaspora. This framework enables students to explore common and divergent experiences and identities among varied Black populations. Course materials are designed to introduce students to scholarly approaches to experiences and identities of people of African descent. They offer first-hand experience in locating and analyzing the types of primary sources used to conduct research. Essays, exams, and primary source analyses stress the development of analytic skills. A final project offers practice in developing viable research topics, locating and analyzing sources, and making oral and visual research presentations.

E542 Sports Composition and Literature

Grade: 11, 12 Exam: Local Prerequisites: English 10, (pre or corequisite - English 11) Offering: One semester (½ credit) Reading Level: Average

This course is designed to use composition and literature – fiction, poetry, essays, biographies, autobiographies, journalism, and films – to illuminate and refine our understanding of the impact of sports on our personal and social lives. Some of the issues to be examined are: the nature of sport itself, the role of sports in defining values, the effects of competition, and racism/sexism in sports.

E552 Ethics of Digital Citizenship

Grade: 12 Exam: Local Prerequisites: English 10, 11 Offering: One semester (½ credit) Reading Level: Average

This course is a semester course that explores the process of establishing a productive and positive online presence. Although our current students are considered "digital natives," they are faced with increasingly complicated ethical and philosophical considerations as they shape their online presence and participate in digital citizenship. This course explores some of those issues, including (but not limited to): blogging, plagiarism, effective online forum participation, cyberbullying, social media as a force for political/social change/engagement, empathy and the web, online activism and vigilantism (i.e. Anonymous and Wikileaks) and the Internet as a democratizing force.

E943 Acting and Directing I

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

This course covers the duties of the actor and director with an emphasis on on-stage activities. Acting and Directing I is designed for students who are interested in theater, but who do not necessarily have any knowledge and/or experience. This course concludes with the preparation of scenes for public viewing. . Satisfactory/Unsatisfactory grading is available.

This course satisfies NYS' Fine Arts requirement. Underclassmen (9-11) can only take this class as an elective or to receive Arts credit. Seniors (12) can take this course for either ELA or Fine Arts credit.

E944 Acting and Directing II

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Acting and Directing I Offering: One semester (½ credit) Reading Level: Average

This course gives the serious student of acting the opportunity to use the skills and knowledge gained in Acting and Directing I and further explore areas such as characterization emphasis, improvisation, and script interpretation. This course concludes with the preparation of scenes for public viewing.

This course satisfies NYS' Fine Arts requirement. Underclassmen (9-11) can only take this class as an elective or to receive Arts credit. Seniors (12) can take this course for either ELA or Fine Arts credit.

E599 Civil Conversation and Advocacy

Grade: 12 Exam: Local Prerequisites: English 11 Offering: One semester (½ credit) Reading Level: Average

This course teaches students how to engage in and facilitate civil discourse on various researched topics. For example, students will learn how to choose topics, research based on individual inquiry, present the research to a group, and facilitate civil conversation and discussion based on their topics. In addition, students will also learn how to engage in academic discourse both orally and through writing. Civil discourse is a skill to help achieve the goal of lifelong learning, listening, speaking, synthesizing and disagreeing respectfully.

Reading & Library Information Science

8265 Literacy Tutorial

Grade: 9, 10, 11, 12 Exam: None Prerequisites: None Offering: One semester Reading Level: Mixed

Literacy Tutorial is designed for students who need developmental or remedial support in reading. More specifically, Literacy Tutorial is tailored to meet the student's individual reading needs, which include, but are not limited to, reading comprehension, written expression of comprehension, word study (including Wilson decoding), fluency, vocabulary development, and test taking strategies. Informal reading inventories and other diagnostic assessments are used to help determine a student's needs, establish learning targets for individual growth, and inform instruction. In addition, Literacy Tutorial provides English Academic Intervention Services to help support and prepare students for success on the Common Core English Language Arts (ELA)Regents Examination. This half-credit course is open to regular and special education students and can be taken more than once to provide sustained reading support.

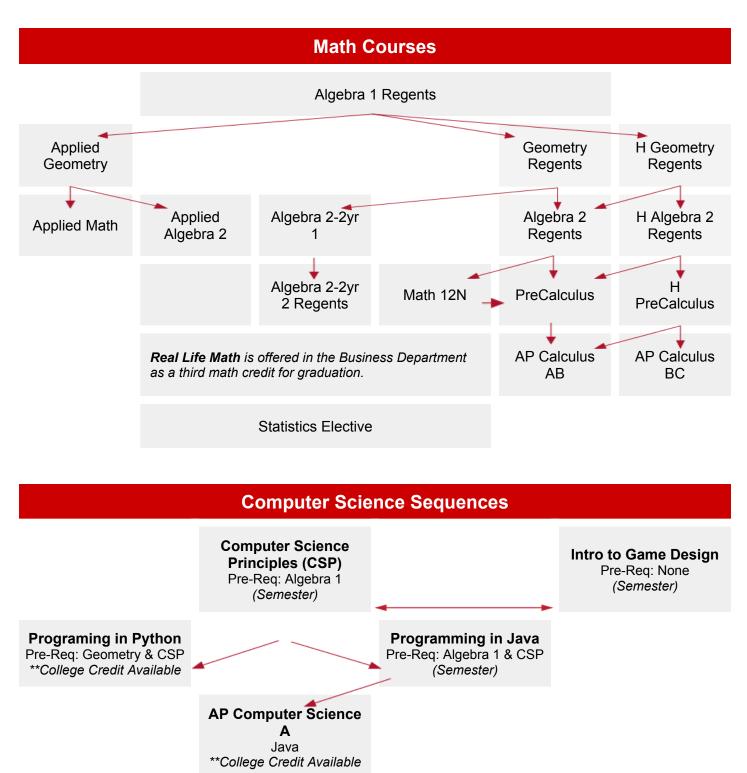
9899 E=mc^2 Exploring with Mindful Creativity and Curiosity

Grade: 10, 11, 12 Exam: Portfolio and journaling review Prerequisite: Instructor approval Offering: Full year (1 credit) Reading Level: High

Exploring with Mindful Creativity & Curiosity is a guided inquiry course that allows a student to choose their own topic to research and build their project throughout the school year. The librarians serve as the research and inquiry coordinators and facilitators of this program. Instead of following a traditional curriculum, the coordinators allow students to focus on innovation skills - the 5C's - *creativity, critical thinking, communication, collaboration, and curiosity.* The course's goal is not to master content, but to develop questioning skills to help facilitate the 5C's for a deeper understanding of what it means to think and learn, rather than memorize and recite.

Mathematics

New York State requires that all students must pass one math Regents Exam to get a diploma. For most students, this will be the Algebra 1 Exam. For an Advanced Regents Diploma, students must pass all three of the math Regents Exams: Algebra I, Geometry and Algebra 2.



2009 Algebra1

Grade: 9 Exam: Regents Prerequisites: None Offering: Full year (1 credit) Reading Level: Average

Algebra 1 is the first course in a three-year Regents sequence of courses aligned to the Next Generation Learning Standards. The course culminates with the Algebra 1 Regents Exam in June. Concepts taught in this course include factoring by various methods, equation solving (linear, quadratic, and exponential), statistics, functions, systems of equations, sequences, operations with polynomials, and graphing quadratics. Students will be required to justify mathematical statements, explain their mathematical reasoning, and apply these concepts to application problems. A graphing calculator will be required for the course; the recommended model is the TI-84+.

2025 Geometry

Grade: 9, 10 Exam: Regents Prerequisites: Algebra 1 (Three-quarter average of 75) Offering: Full year (1 credit) Reading Level: Average

Geometry is the second course in a three-year Regents sequence of courses aligned to the Next Generation Learning Standards. The course culminates with the Geometry Regents Exam in June. Concepts taught in this course include constructions, transformations, Euclidean proofs, quadrilaterals, similar triangles, basic right triangle trigonometry, coordinate geometry proofs and problems, solids and circles. Students will be required to justify mathematical statements, explain their mathematical reasoning and apply these concepts to application problems. A graphing calculator is required for the course; the recommended model is the TI-84+.

2024 Honors Geometry

Grade: 9, 10 Exam: Regents Prerequisites: Algebra 1 (Three-quarter average of 90) and teacher recommendation Offering: Full year (1 credit) Reading Level: High

This course is intended for students who have accelerated their mathematics program by taking the Algebra 1 course in 8th grade. Geometry is the second course in a three-year Regents sequence of courses aligned to the Next Generation Learning Standards. The course culminates with the Geometry Regents Exam in June. The course will include all the topics in the Regents Geometry course but it will be done in greater depth and at a faster pace. Additional topics will be added to the course as well. Students will be required to justify mathematical statements, explain their mathematical reasoning, and apply these concepts to application problems. A graphing calculator will be required for the course; the recommended model is the TI-84+.

2023 Applied Geometry

Grade: 10 Exam: Local exam Prerequisites: Algebra 1 Offering: Full year (1 credit) Reading Level: Average

This course is intended for students who have completed Algebra 1 and who need an extended time to understand geometrical concepts. Applied Geometry will be a hands-on math course with many projects throughout the school year that are focused on understanding the concepts through engaging activities. The course is NOT designed to cover all the concepts in the Geometry Regents Exam. A graphing calculator is required; the recommended model is the TI-84+.

2072 Applied Algebra 2 & Trigonometry

Grade: 11, 12 Exam: Local Prerequisites: Algebra 1 and Applied Geometry Offering: Full year (1 credit) Reading Level: Average

This course is intended for students who have completed the Algebra 1 course and the Applied Geometry course or for students who need an extended time to understand the advanced Algebra 2 mathematical concepts. Applied Algebra 2 & Trigonometry will be a hands-on math course with many projects throughout the school year that are focused on understanding the concepts through engaging activities. The course is not designed to cover all the concepts in the Algebra 2 Regents Exam. A graphing calculator is required; the recommended model is the TI-84+.

2075 Algebra 2 (Common Core)

Grade: 10, 11 Exam: Regents Prerequisites: Algebra 1 (Final average and regents of 75) and Geometry (Three-quarter average of 75) Offering: Full year (1 credit) Reading Level: Average

Algebra 2 is the third course in a three-year Regents sequence of courses aligned to the Common Core Standards. The course culminates with the Algebra 2 Regents Exam in June. Concepts taught in this course include functions, quadratic equations, complex numbers, rational expressions, trigonometry, exponents/logarithms, sequences/series, probability, and statistics. Students will be required to justify mathematical statements, explain their mathematical reasoning, and use these concepts in application problems. A graphing calculator is required; the recommended model is the TI-84+.

2076 Honors Algebra 2 (Common Core)

Grade: 10, 11 Exam: Regents Prerequisites: Geometry and teacher recommendation Offering: Full year (1 credit) Reading Level: High

This course is intended for students who have accelerated their mathematics program by taking Honors Geometry in grade 9. Algebra 2 is the third course in a three-year Regents sequence of courses aligned to Common Core Standards. The course culminates with the Algebra 2 Regents in June. The course will include all the topics in the Regents Algebra 2 course but will be done in greater depth and at a faster pace. Students will derive concepts, do more complicated examples, and be required to produce rigorous solutions. Students will also be required to justify mathematical statements, explain mathematical reasoning and use these concepts in application problems. A graphing calculator is required for the course; the recommended model is the TI-84+.

2077 Algebra 2 Two Year - Year 1 (Common Core)

Grade: 11 Exam: Local Prerequisites: Geometry (Common Core) Offering: Full year (1 credit) Reading Level: Average

This course is intended for students who need an extended time to complete the Algebra 2 curriculum or for students who did not meet the prerequisite requirements for the Algebra 2 course. Students will cover the entire Regents curriculum over the two years and take the Regents exam in Algebra 2 at the end of their senior year which is required for the Advanced Regents Diploma. A graphing calculator will be required for the course; the recommended model is the TI-84+.

2078 Algebra 2 Two Year – Year 2 (Common Core)

Grade: 12 Exam: Regents Prerequisites: Algebra 2 Two Year - Year 1 Offering: Full year (1 credit) Reading Level: Average

This course is intended for students who have completed the Algebra 2 Two Year - Year 1 course. For the second year of this course sequence, students will finish learning the concepts in the Algebra 2 curriculum and will review for the Algebra 2 Common Core Regents exam in June. A graphing calculator is required; the recommended model is the TI-84+.

2080 College Pre-Calculus (Common Core)

Grade: 11, 12 Exam: Local Prerequisites: Algebra 2 - Three-quarter average of 75 Offering: Full year (1 credit) Reading Level: Average SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Pre-Calculus is recommended for students planning to study engineering, science, computers, mathematics or business at the college level. This is the culminating course of the Common Core Standards. The course includes topics such as complex numbers, transformations, trigonometry, vectors and matrices, rational and exponential functions, and probability and statistics. Students will have the opportunity to earn SUNY Schenectady credit if they successfully complete the course (Pre-Calculus with Analytic Geometry, MAT 167). A graphing calculator is required; the recommended model is the TI-84+.

2083 Math 12N

Grade: 11, 12 Prerequisites: Algebra 2 Exam: Local Offering: Full year (1 credit) Reading Level: Average

This course is recommended for students who plan to attend a four-year college and not major in a science or math related field. The course will include the study of some or all of the following topics: functions (polynomial, rational, exponential, logarithmic, trigonometric), systems of equations, statistics, matrices and transformations. A graphing calculator is required. The recommended model is the TI-84+.

2081 College Precalculus Honors (Common Core)

Grade: 11, 12 Exam: Local Prerequisites: Algebra 2 Honors and teacher recommendation Offering: Full year (1 credit) Reading Level: High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Pre-Calculus Honors is intended for students who have completed Algebra 2 Honors. This course will cover in greater depth the topics of Precalculus (Common Core) as well as begin the study of Calculus. Additional topics will be studied, including sequences, series, limits, number theory, linear programming, spatial geometry, and linear algebra. Students will have the opportunity to earn SUNY Schenectady credit if they successfully complete the course (Pre-Calculus with Analytic Geometry, MAT 167). A graphing calculator is required; the recommended model is the TI-84+.

2092 Applied Mathematics

Grade: 11, 12 Exam: Local Prerequisites: Algebra I Offering: Full year (1 credit) Reading Level: Average

Applied Mathematics is a course that focuses primarily on financial applications of mathematics. The course will include both mathematical skills and theory. Students will investigate the application of mathematics in real world situations. A graphing calculator is required; the recommended model is the TI-84+.

2100 Computer Programming – JAVA

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Computer Science Principles Offering: One semester (½ credit) Reading Level: Average

This foundation computer programming course will introduce students to techniques of object-oriented programming using the JAVA language. Programs will require the use of numeric and string variables, conditionals, looping, class and method design, arrays, and array processing. Individual projects will be required.

2102 Computer Science Principles

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Algebra 1 Offering: One semester (½ credit) Reading Level: Average

Are you interested in computers and looking for a course to learn the basic concepts of how computer languages and programs work? In this semester course, students will learn how the computing world transforms problems into solutions. Students will learn how instructions are given to a computer and how the Internet works. Students will analyze problems, develop creative ideas, and collaborate in groups for solving real-world issues using computing. Students will develop a thorough grasp of the computing foundations and concepts relevant to college and career. This introductory course is designed for students who may have an interest in computer programming but want to investigate the field before taking additional programming classes.

2103 Introduction to Game Design

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

This course is a practical introduction to game design and game design concepts, emphasizing the basic tools of game design. Students will learn about how systems work and how they can be modified or changed. Students learn to think analytically and holistically, to experiment and test theories, and to consider other people as part of the systems they create and inhabit. Through the game design process, students cultivate skills involving: system-based thinking, creative problem solving, art and aesthetics, and writing and storytelling. This course uses "drag and drop" programming, no writing code is required.

2106 College Computer Programming - PYTHON

Grade: 10, 11, 12 Exam: Siena College Prerequisites: Geometry and Computer Science Principles Offering: Full Year (1 credit) Reading Level: Advanced Siena 2024-2025 tuition rate: \$200 for course (3 college credits)

This is a college level course that focuses on the world of computing and computer science. It is a broad introduction to a variety of fundamental topics in computer science including robotics, the web, graphics and sound. It builds upon skills students learned in Computer Science Principles. This course is intended for students who have not taken AP Computer Science. Students will learn how to program and solve problems using a Python programming environment. Lab activities include multimedia applications in programming and robotics. Students will also acquire knowledge about computer systems in general, both hardware and software. This course may be taken for college credit through a partnership with Siena College, fee applies (CSIS-110 Introduction to Computer Science with Multimedia Python Programming)

2142 AP Computer Science

Grade: 10, 11, 12 Exam: AP Exam in May; Local Prerequisites: Geometry and Computer Programming - JAVA or PYTHON with teacher recommendation Offering: Full year (1 credit) Reading Level: Average

This college level course in computer science is designed to prepare students for the Advanced Placement exam in May. Colleges may grant credit or advanced standing based on the object-oriented performance on this exam. The major emphasis in this course is on programming methodology, algorithms, and data structures. Applications of computing provide the context in which these subjects are treated. Applications are used to develop student awareness of the need for particular algorithms and data structures as well as to provide topics for programming assignments to which students can apply their knowledge. JAVA is the programming language used in this course. All students taking this course will take the Advanced Placement exam in May.

2901 AP Calculus (AB)

Grade: 11, 12 Exam: AP Exam in May (2024-2025 fee \$99) Prerequisites: Pre-Calculus Offering: Full year (1 credit) Reading Level: High

This college level course in calculus is designed to prepare students for the Advanced Placement (AP) AB exam in May. Colleges may grant credit or advanced standing based on performance on this exam. The content involves differential and integral calculus - including limits, continuity, derivatives of implicit and explicit algebraic functions as well as logarithmic and trigonometric functions. Applications of the derivative and integral include curve sketching, area under a curve and volume. All students taking this course will take the Advanced Placement exam in May. A graphing calculator is required; the recommended model is the TI-84+.

2911 AP Calculus (BC)

Grade: 11, 12 Exam: AP exam in May (2024-2025 fee \$99); Local Prerequisite: PreCalculus Honors or AP Calculus AB Offering: Full year (1 credit) Reading Level: High

Advanced Placement (AP) Calculus BC is intended for students who have completed the Pre-Calculus Honors course. This college level course in calculus is designed to prepare students for the Advanced Placement BC exam in May. Colleges may grant credit or advanced standing based on performance on this exam. BC Calculus is considerably more extensive than AB Calculus. The topics covered in this course are equivalent to a second semester college course in calculus. All students taking this course will take the Advanced Placement exam in May. A graphing calculator is required; the recommended model is the TI-84+.

2094 Statistics

Grade: 11, 12 Exam: Local Prerequisites: Algebra I Offering: Full year (1 credit) Reading Level: Average

This course is intended for students looking for a third or fourth credit in mathematics. Students should have at least completed the Algebra 1 curriculum. Statistics is one of the most widely used applications of mathematics and this course is intended to teach students how to use statistics to interpret the world around them. Students will learn about collecting data and sampling techniques, organizing data for presenting information, analyzing data to make good decisions, and evaluating other people's studies to judge their validity. Students will be responsible for an independent statistics project at the end of the third quarter. A local final exam will be given in June. A graphing calculator is required; the recommended model is the TI-84+.

Miscellaneous

8683 Focus Family

Grade: 9, 10, 11, 12 Exam: None Prerequisite: Enrolled in Focus Program Offering: Full year / ½ block (½ credit) Reading Level: N/A

The foundation of Focus is the Family group. Each Family consists of a maximum of 12 students and one Focus teacher/ advisor. The Family is a group process, which utilizes the peer group to encourage positive youth development.

0948 Theatre Arts Independent Study

Grade: 10, 11, 12 Exam: None Prerequisites: See description below Offering: Full year (1 credit) Reading Level: N/A

Designed for students who wish to become involved in the technical and support aspects of theatrical production at Guilderland High School. Students are awarded one credit for 150 hours of approved work in theatrical production and support services for visiting groups.

Music

(Performing music students may be able to take Health in the other half of their music block.)

5512 Mixed Choir

Grade: 9, 10, 11, 12 Exam: Proficiency Prerequisites: None Offering: Full year / ½ block, (½ credit) Reading Level: N/A

This is a mixed voice choir where students develop their skills as independent singers and work on vocal skills in small group lessons, which are required and take place once per six-day rotation within the school day. Students also perform jointly with the Concert Choir. Students may take choir and band/orchestra in the same block and are encouraged to do so. This course can be used toward the arts requirement for graduation.

5532 Concert Choir

Grade: 10, 11, 12 Exam: Proficiency Prerequisites: Audition Offering: Full year / ½ block (½ credit) Reading Level: N/A

This select mixed choir performs a variety of musical selections in many styles from the standard choral repertoire including NYSSMA ensemble literature and works by contemporary composers. Auditions for this ensemble take place in January but may be arranged by appointment if a student is new to the choral program. Students are required to take a group lesson once per 6-day rotation within the school day, and students are encouraged to develop their solo singing and participate in NYSSMA. Students may take choir and band/orchestra in the same block and are encouraged to do so. This course can be used toward the arts requirement for graduation.

5562 Concert Orchestra

Grade: 9, 10, 11, 12 Exam: Proficiency Prerequisites: Previous string experience or conductor's permission Offering: Full year / ½ block (½ credit) Reading Level: N/A

Open to all students who have experience on an orchestral string instrument. Emphasis is on continuing technical development, aural and ensemble skills. There are approximately three performances per year, with music chosen from a variety of sources, including classics, folk, modern and original works. Wind and percussion students are chosen from the Symphonic Band and join the orchestra on a rotating basis. Students are required to take a group lesson once per 6-day rotation within the school day. Students may take choir and band/orchestra in the same block and are encouraged to do so. Students who wish to start a string instrument for the first time will be enrolled in lessons only until they have reached a skill level adequate to participate in this ensemble. This course can be used toward the arts requirement for graduation.

5502 Symphony Orchestra

Grade: 10, 11, 12 Exam: Proficiency Prerequisite: Audition Offering: Full year / ½ block (½ credit) Reading Level: NYSSMA level IV-VI

This performing ensemble plays musical selections from all time periods and styles. The orchestra performs at the winter and spring school concerts, the Pops Concert, the District Orchestra Festival, and the Graduation Ceremony on a rotating basis. Wind and percussion players are selected from the Wind Ensemble by the orchestra conductor and perform with the orchestra at various points throughout the year. Students are required to take a group lesson once per 6-day rotation within the school day. Students may take choir and band/orchestra in the same block and are encouraged to do so. This course can be used toward the arts requirement for graduation.

5542 Symphonic Band

Grade: 9, 10, 11, 12 Exam: Proficiency Prerequisites: Previous Band Experience or conductor's permission Offering: Full year / ½ block (½ credit) Reading Level: N/A

This performing ensemble is composed of students with previous experience playing a wind or percussion instrument. The ensemble will rehearse and perform exemplary literature from the Concert Band repertoire as well as arrangements of popular/commercial music. Emphasis is placed on a continuance of strengthening instrumental technique developing individual musicianship skills and performing ensemble concepts. Students are required to take a group lesson once per 6-day rotation within the school day. Students may take choir and band/orchestra in the same block and are encouraged to do so. The suggested practice time for students in this group is three hours per week. Students who wish to start a band instrument for the first time will be enrolled in lessons only until they have reached a skill level adequate to participate in this ensemble. This course can be used toward the arts requirement for graduation.

5552 Wind Ensemble

Grade: 10, 11, 12 Exam: Proficiency Prerequisites: Audition Offering: Full year / ½ block (½ credit) Reading Level: NYSSMA level V or VI

This performing ensemble is composed of students who are musically proficient and capable of performing at NYSSMA Level V - VI as a soloist. Students' suggested practice time for this group should be five hours per week. Every effort is made to maintain a well-balanced instrumental ensemble and might be limited to one player per part. Each student auditioning for this group must understand the responsibility they undertake when committing to this group. The ensemble will perform exemplary and demanding literature from the repertoire for Wind Ensemble. Students are required to take a group lesson once per 6-day rotation within the school day. Students may take choir and band/orchestra in the same block and are encouraged to do so. This course can be used toward the arts requirement for graduation.

5602 Music Theory and Composition

Grade: 9, 10, 11, 12 Exam: None Prerequisites: Prior knowledge of music notation and proficiency on an instrument or voice is recommended. Offering: Full year (1 credit) Reading Level: Average

Music Theory is open to all students of all musical backgrounds, although a prior knowledge of music notation and proficiency on an instrument or voice is recommended. The course covers all aspects of music including ear training, notation, keys, scales, chords, composition and analysis. Emphasis is on a theoretical understanding through aural comprehension. Theory is recommended to any student considering entering the field of music or desiring a deeper understanding of musical concepts. This course can be used to meet the arts requirement for graduation.

5611 AP Music Theory

Grade: 11, 12 Exam: AP exam in May (2024-2025 fee \$99) Prerequisites: Advanced Aural Skills training/ or MAP test Offering: Full year (1 credit) Reading Level: High

AP Music Theory is the next step for performing music students (both traditional and non-traditional) with a passion for music looking for depth in their high school musical experience. It is an advanced composition-based curriculum leading to the AP exam in May. The course covers more challenging aspects of music, including advanced ear training, dictation, scales/modes, altered chords, composition, analysis and music history. Emphasis is on a theoretical understanding through aural comprehension. AP Music Theory should be taken by any student considering a major or minor in any field of music or music production, but is open to any student looking for a challenging and immersive music experience.

5612 Music Technology I

Grade: 9, 10, 11, 12 Exam: None Prerequisites: None Offering: Full year (1 credit) Reading Level: Average

This hands-on, project-centered course is designed to give students the opportunity to acquire functional knowledge about music technology. Students will learn the basics of audio hardware, digital audio workstations, record engineering and production, MIDI programming and editing, and mixing through projects demonstrating both the creative process and the possibilities of music technology. Additionally, students will develop comprehensive musicianship skills with an emphasis on musical composition through technology. This course can be used to meet the arts requirement for graduation.

5613 Music in Our Lives

Grade: 9, 10, 11, 12 Exam: Project Prerequisites: None Offering: Full year (1 credit) Reading Level: N/A

Music in Our Lives is an elective designed for students to study different aspects of musical arts. Curriculum units include keyboard and ukulele instruction, composition and music technology. The course focus is on gaining life-long musical knowledge through hands-on activities while exploring social instruments on a recreational (non-performance) level. The course culminates in an independent project focused on a specific area of student interest. This course can be used to meet the arts requirement for graduation.

5614 Music Technology 2

Grade: 10, 11, 12 Exam: None Prerequisites: Music Technology 1 or teacher permission Offering: Full year (1 credit) Reading Level: Average

Music Technology 2 is designed for students who have completed Music Technology 1 and have acquired a functional knowledge about sound manipulation. Class will focus on advanced aspects of MIDI sound production, sequencing, editing, and composition/film-scoring. This course will be of interest to students who are pursuing a career in the music technology-related field.

Physical Education

8003 Physical Education 9-10 8013 Physical Education 11-12

Exam: N/A Prerequisite: None Offering: Full year (½ credit)(class meets once every four days) Reading Level: N/A

The Physical Education program builds upon the elementary and middle school programs with emphasis on the development of advanced techniques, strategies and greater competence in performing a variety of physical activities. The program stresses cooperation, sportsmanship, safety and fair play through a variety of team, large group, small group and individual activities. Health related physical fitness will be an integral part of each unit with students identifying, assessing, analyzing and working out to improve cardiovascular endurance, muscular strength and endurance, flexibility and body composition. The main goal of the program is to foster greater knowledge and enjoyment of, and lifelong participation in, physical activity.

8044 Focus Physical Education 11-12

Grade: 11, 12 Exam: N/A Prerequisite: Enrollment in Focus Program Offering: Full Year / ½ block (½ credit) Reading Level: N/A

Students are engaged in a variety of activities designed to promote an active, healthy lifestyle in which an individual's sense of personal confidence and self-esteem is increased in a cooperative, supportive atmosphere.

8066 CSP Physical Education

Grade: 9, 10, 11, 12 Exam: N/A Prerequisite: Students identified as physically challenged Offering: Full year (½ credit)(class meets once every four days) Reading Level: N/A

Students are provided with a variety of short activity units which provide ongoing individualized opportunities for participating in and enjoying lifetime activities and help to develop and maintain physical wellness.

8070 Introduction to Sports Medicine

Grade: 11, 12 Exam: Local Prerequisites: Successfully completed Health, Biology and 2 years of Physical Education Offering: One semester (½ credit) Reading Level: Average

The course in Sports Medicine is a 1/2 unit class designed to give students who are interested in health related careers the opportunity to be exposed to this subject area. The students will learn the basics of prevention, evaluation, treatment and rehabilitation of sports related injuries and gain a working knowledge of the athlete's body.

8014 Unified Physical Education

Grade: 10, 11, 12 Exam: None Prerequisite: 9th grade Physical Education and teacher recommendation Class Cap: 16 Offering: Full year (½ credit)(class meets once every four days) Reading Level: N/A

Unified Physical Education is an inclusive physical education course that unites student "athletes" (individuals with intellectual disabilities) and "partners" (individuals without intellectual disabilities) to explore a wide variety of activities. Unified Physical Education is a unique opportunity for students of varying ability levels to learn together on equal terms through ongoing fitness, sports, leadership and wellness activities. Students will be working with many students throughout the year by being a peer mentor/teacher. Students will earn their regular physical education credit in this course. This course is based heavily on attendance; students need to be consistently present for athletes.

8015- PE- Strength & Conditioning 1

Grade: 10, 11, 12 Exam: None Prerequisite: None Offering: One Semester (½ credit) Reading Level: N/A

In this half year course, students will be introduced to basic muscular anatomy, weight training theories/principles, and will apply that knowledge to training sessions in the weight room. Students will spend time both in the classroom and the weight room. The course will begin in the classroom with a basic introduction to the principles of strength training and understanding how the students musculoskeletal system works/responds to said training. From there the class will work on introducing and performing strength and conditioning exercises in the weight room. As the semester continues students will spend time in both the classroom and the weight room developing an understanding of concepts and then applying them in the weight room.

This course is open to 10th, 11th and 12th grade students only.

Projected Benefits

This course will provide a student who has no prior knowledge of strength and conditioning training the ability to develop a foundation of knowledge and skills that they can transfer outside of school. For students who have prior knowledge of strength and conditioning training this will reinforce or add to their current knowledge and provide them a further understanding of the physiological processes that are taking place in their body. Another benefit of this class will be the fact that it will meet every other day. This frequency means that a student will be given the opportunity to make actual changes to their health and wellness during the semester.

8016 PE- Strength & Conditioning 2

Grade: 10, 11, 12 Exam: None Prerequisite: PE-Strength and Conditioning 1 Offering: One Semester (½ credit) Reading Level: N/A

In this half year course, students will build on the previous knowledge and skills taught from Strength & Conditioning 1. They will further their knowledge of basic muscular anatomy, weight training theories/principles, and will continue to apply that knowledge to training sessions in the weight room.

The course will begin in the classroom with a review of the principles of strength training and understanding how the students musculoskeletal system works/responds to said training. Students will then be introduced to higher level principles and exercise techniques. From there the class will shift into the weight room, where students will put those theories into practice by developing and implementing a personalized strength program. This section of the course will be student driven resembling an independent study where they will be responsible for their own personal exercise program.

This course is open to 10th, 11th and 12th grade students who have previously completed 8015- PE- Strength & Conditioning 1

Projected Benefits

This course will provide a student the opportunity to further develop the skills and knowledge from Strength & Conditioning 1. By meeting at a higher frequency versus our traditional PE classes, students will be able to have real control and impact on their personal fitness. The individualized nature of this course will also allow students to find personal success and growth throughout the entire semester, giving them the confidence to apply these skills in their community.

PE946 Dance Choreography

Grade: 9, 10, 11, 12 Exam: Video taped work Prerequisites: None Offering: One semester (½ credit) Reading Level: N/A

Students will explore their own creativity through dance. Studies in improvisation, imaging to music and verbal direction, choreographic experimentation, and teaching and performing movement will challenge the student to explore his/her creative spark. Open to all students, no previous dance experience necessary. This course can be used toward The Arts requirement or the PE requirement for graduation.

PE947 Dance Styles

Grade: 9, 10, 11, 12 Exam: Performance Prerequisites: None Offering: One semester (½ credit) Reading Level: N/A

If you want to increase your knowledge of dance as a performing art, Dance Styles is the course for you. Through movement study and the use of a variety of dance resources, students will explore major dance styles from around the world. (No previous dance experience necessary.) This course is technique oriented. This course can be used toward The Arts requirement or the PE requirement for graduation.

Health

7802 Health Education

Grade: 10-12 Exam: Local Prerequisite: None Offering: One semester (½ credit) Reading Level: Mixed

Health is a one-semester course (1/2 unit) that is required by New York State for graduation. Given the fact most of our modern-day health problems represent poor decisions rather than medical failures, the primary goal of this course is to provide students with the necessary skills and knowledge that they can intelligently use to ultimately live a lifetime of appreciating and attaining wellness. The content in this course deals with knowledge (concepts, facts, generalizations and understanding); attitudes (values, appreciations); and skills (communications advocacy, decision making, planning and goal setting, and self management) in the areas of:

- 1. Introduction to Health & Wellness/Health Promotion
- 2. Mental/Emotional Health
- 3. Respect & Non-Violence
- 4. Nutrition & Fitness
- 5. Addiction
- 6. Human Sexuality

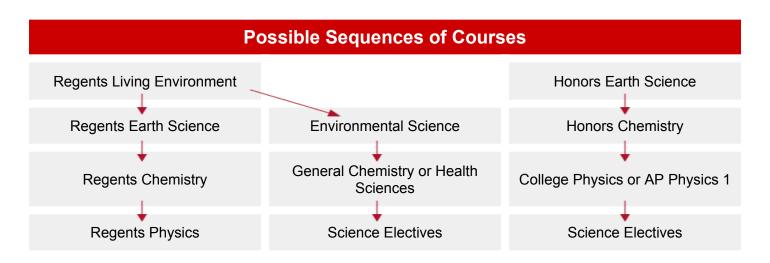
7800/7801 Health Education

Grade: 9-12 Exam: Local Prerequisite: None (if in grade 9, must also be in performing music) Offering: Full year / ½ block (opposite performing music) (½ credit) Reading Level: Mixed

Health is a 1/2 unit that is required by New York State for graduation. Given the fact most of our modern-day health problems represent poor decisions rather than medical failures, the primary goal of this course is to provide students with the necessary skills and knowledge that they can intelligently use to ultimately live a lifetime of appreciating and attaining wellness. The content in this course deals with knowledge (concepts, facts, generalizations and understanding); attitudes (values, appreciations); and skills (communications advocacy, decision making, planning and goal setting, and self management) in the areas of:

- 1. Introduction to Health & Wellness/Health Promotion
- 2. Mental/Emotional Health
- 3. Respect & Non-Violence
- 4. Nutrition & Fitness
- 5. Addiction
- 6. Human Sexuality

Science



Science Electives (dependent on enrollment)						
SUPA Biology	AP Chemistry	SUPA Forensics	Physiology			
Space Exploration	AP Physics 2	Health Sciences	Nursing (Semester)			
Pharmaceutical Science (Semester)	Physical Therapy <i>(Semester)</i>	Bioethics (Semester)	Biotechnology (Semester)			
Meteorology (Semester)	Natural Disasters (Semester)	Nanotechnology 1 <i>(Semester)</i>	Nanotechnology 2 <i>(Semester)</i>			
Clean Energy Technology (Semester)		Science Research Seminar				

3012 Regents Biology

Grade: 9 Exam: Regents Prerequisite: Grade 8 science Offering: Full year (1 credit) Reading Level: Average Meets: 3/4 days

This course is a detailed study of many aspects of modern biology. Topics include cell biology, genetics, ecology, evolution, and human biology. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3000 Honors Earth Science

Grade: 9, 10 Exam: Regents Prerequisites: Regents Biology and teacher recommendation Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 days

Honors Earth Science is a detailed study of the Earth and its environment and is intended for those students who accelerated in science in eighth grade. All of the topics of the Regents Earth Science curriculum will be covered, but will be done so in greater depth. Students will be expected to learn material at a fast pace and will complete a number of research projects throughout the year, many of which will require data collection outside of school. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3002 Regents Earth Science

Grade: 9, 10 Exam: Regents Prerequisite: Regents Biology Offering: Full year (1 credit) Reading Level: Average Meets: 3 / 4 days

This course is a detailed study of the Earth and its environment. Topics covered will include processes of change, Earth Model and its energy requirements, geology, meteorology, oceanography, and astronomy. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3063 Environmental Earth Science

Grade: 10 Exam: Local Prerequisites: Regents Biology Offering: Full year (1 credit) Reading Level: Average Meets: 2/4 days

This course is a study of the Earth and its environment. This includes ecology, the biosphere, land, forests and soil, water, energy and resources and societies and policy. This course is designed for students who need extended time to understand advanced scientific topics. The course is designed for students who do not wish to pursue further Regents level science courses. Topics will be covered in a project-based hands on manner with a focus on laboratory activities.

3032 Physiology

Grade: 11, 12 Exam: Local Prerequisite: Biology and Chemistry Offering: Full year (1 credit) Reading Level: Average Meets: 2/4 days

The Physiology (and anatomy) class provides a strong foundation for the study of the human body and is intended to provide a firm comprehension of the human body to students who aspire to a career in a health profession such as medicine, nursing, and physical therapy. The course explores interrelationships between different organ systems and their homeostatic functions. Students pay special attention to cells, tissues, and biochemistry as they delve through the structure and function of each body system. Also, they perform a series of hands-on laboratory experiments including the dissections of a cat, rat, and the major organs of a sheep. As they develop an understanding of the intricacies of the human body, students will research and present the effects of a specific disease on the body's organs and organ systems.

3102 Regents Chemistry

Grade: 10, 11, 12 Exam: Regents Prerequisite: Regents Biology and Algebra 2 or Algebra 2 Two Year, Year 1 concurrently Offering: Full year (1 credit) Reading Level: Average/High Meets: 3 / 4 days

This is a preparatory course for those who may take additional science in college. The major emphasis is on chemical theory, atomic structure, bonding, kinetics and equilibrium, acids and bases, oxidation reduction and electrochemistry, organic chemistry and nuclear chemistry. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3103 General Chemistry

Grade: 11, 12 Exam: Local Prerequisite: 1 year science Offering: Full year (1 credit) Reading Level: Average Meets: 2/4 days

This course is designed for students who need extended time to understand advanced scientific topics. Basic topics covered in this course include atomic structure, chemical reactions, solubilities and stoichiometry. There will be considerable laboratory work as part of this course. The course is designed for students who do not wish to pursue further Regents level science courses.

3111 Honors Chemistry

Grade: 10, 11 Exam: Regents Prerequisite: Honors Earth Science and/or teacher recommendation Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 days

Honors Chemistry will cover the same topics as Regents Chemistry, but in greater depth and with more rigor. This course offers students the opportunity to develop problem solving and critical thinking skills necessary for success at the college level. Laboratory activities will require the application of higher level, argument-driven inquiry skills. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3202 Physics

Grade: 11, 12 Exam: Local, (Regents exam optional) Prerequisite: Passed Regents Chemistry; Algebra 2 Offering: Full year (1 credit) Reading Level: Average/High Meets: 3 / 4 days

Regents Physics is a college preparatory course for students planning to pursue in college: engineering, professional sciences, technical training, medical and health-related fields. This course provides an in-depth study of mechanics, wave theory, electricity, magnetism, atomic and nuclear physics. The NYS Physics Regents exam is optional and will not count towards the student's overall grade in the course; however, if a student decides to take the Regents exam, the score will be reflected on the student's transcript. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3205 College Physics

Grade: 11, 12 Exam: Siena College (Regents exam optional) Prerequisite: Honors Chemistry and/or teacher recommendation Offering: Full year (1 credit) Reading Level: High Meets: 3/4 Days Siena 2024-2025 tuition rate: \$250 per semester (4 credits per semester)

College Physics is an algebra-based, college-level physics course that is affiliated with the curriculum of two undergraduate level courses offered at Siena College (General Physics 110 and General Physics 120). This is a survey course designed for Biology, Pre-Med, Environmental Science, and other similar college majors. Students will study topics such as mechanics, dynamics, thermodynamics, waves, electrostatics, optics, and nuclear physics. At the end of each semester, students will take a Siena final exam which will count towards 20% of their college transcript grade and 10% each towards their GHS course grade for the year. Each semester the students will have the ability to earn four college credits through Siena College. The NYS Physics Regents exam is optional and will not count towards the student's overall grade in the course; however, if a student decides to take the Regents exam, the score will be reflected on the student's transcript. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3021 College Biology

Grade: 12 Exam: Syracuse University/AP Exam (2024-2025 exam fee \$97) Prerequisite: Regents Biology and Regents Chemistry Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 Days Syracuse 2024-2025 tuition rate: \$115 per credit hour (8 credits)

College Biology is the full year (two-semester) freshman biology course offered at Syracuse University (Bio 121, 123, 124 - General Biology I and II and Biology Lab). This course takes the concepts from Regents Biology to a deeper level. Students will develop a thorough understanding of the evolution of all living things, past and present. We will be using modern lab equipment and standard methods to extract and make millions of copies of DNA, provoke bacteria to glow, measure light absorbance of chlorophyll, apply statistical analysis to genetic ratios, observe living and preserved specimens, and dissect a fetal pig. It is highly recommended that students in this course enroll with the University. Students may earn eight college credits by registering with the university and paying tuition. Students will have the option to take the AP Biology exam.

3121 AP Chemistry

Grade: 11, 12 Exam: AP Exam (2024-2025 fee \$99), Optional Siena College Prerequisite: Regents Chemistry, Algebra 2 and Physics Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 days Siena 2024-2025 tuition rate: \$250 for course (4 credits)

AP Chemistry is a college level course designed as a second chemistry course for high school students. Many topics in the course will be extensions of those studied in Regents Chemistry. Such topics as stoichiometry, chemical kinetics, and chemical thermodynamics will be studied in depth with a strong emphasis on mathematical models, data analysis and problem solving. Students are expected to take the AP exam as part of this course. Students may earn eight college credits (CHEM-110/111 and 120/121) by registering with the college and paying tuition.

3200 AP Physics 1

Grade: 11, 12 Exam: AP Exam (2024-2025 fee \$99) (Regents exam optional) Prerequisite: Honors Chemistry and Algebra II, teacher rec. Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 days

AP Physics 1 is an algebra based physics course equivalent to a first-semester college course. The course is for students who are intending to pursue degrees in Engineering, Physics, Mathematics, or Chemistry. The course will focus on Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, power, mechanical waves, sound, and an introduction to electrical circuits. Throughout the school year, students will focus on developing deep understanding of the concepts through hands-on explorations of physics content and inquiry labs. Students are expected to take the AP exam as part of this course. The NYS

Physics Regents exam is optional and will not count towards the student's overall grade in the course; however, if a student decides to take the Regents exam, the score will be reflected on the student's transcript. A minimum of 20 hours of laboratory work with satisfactory reports is required to take the Regents exam.

3204 AP Physics 2

Grade: 12 Exam: AP Exam (2024-2025 fee \$99) Prerequisite: AP Physics 1 and teacher recommendation Offering: Full year (1 credit) Reading Level: High Meets: 3 / 4 days

AP Physics 2 is an algebra based physics course equivalent to a second-semester college course. The course will continue the study that began in Physics 1 but will focus on fluid mechanics, thermodynamics, electricity and magnetism, optics, atomic physics, and nuclear physics. Throughout the school year, students will focus on developing a deep understanding of the concepts through hands-on explorations of physics content and inquiry labs. Students are expected to take the AP exam as part of this course.

3211 College Forensics

Grade: 12 Exam: Syracuse University Prerequisite: Chemistry or Topics in Biochemistry with teacher recommendation Offering: Full year (1 credit) Meets: 2/4 days Reading Level: High Syracuse 2024-2025 tuition rate: \$115 per credit hour (4 credits)

College Forensics (Forensic Science, Chem 113) is the freshman level Forensic Science course offered at Syracuse University. Students may earn four credits by registering with the university and paying tuition. This course provides an introduction to understanding the science behind crime detection. Students will investigate mock crime scenes, perform blood spatter analysis, compare fingerprints, bullet casings, hairs, fibers, soil and glass samples, and investigate the world of legal and illegal drugs. Students will perform PCR and DNA electrophoresis using modern equipment and techniques, learn different ways to determine time, cause and manner of death and many other topics of forensic investigations. This course will be especially advantageous for those interested in a career in forensic science, law enforcement or criminal justice. It is highly recommended that students enroll with the university.

3212 Space Exploration

Grade: 12 Exam: Local Prerequisite: Chemistry Offering: Full year (1 credit) Reading Level: Average Meets: 2/4 days

Space Exploration is a course focused on exploring the components of our universe. Students will start the course by learning about our solar system (the planets, moons of planets, and the Sun) and then will move to larger areas in space such as the exploration of the Milky Way Galaxy and other surrounding galaxies. Specific

topics covered include electromagnetic radiation, properties of the planets in our Solar System, properties of the Sun, stellar evolution, plotting constellations, black holes and exploring other galaxies.

3076 Biotechnology

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology and taking Regents/Topics in Biochemistry concurrently Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

What are GMOs and how do we genetically modify something? What are stem cells and why is there such a controversy surrounding them? This is biotechnology, and this industry is one of the largest growing fields in science. Biotechnology is the integration of biology, technology and engineering. Students will explore how drugs are developed, how genetic engineering is used in the production of food and crops, as well as looking at some medical applications. The course will be hands-on and will attempt to provide students with skills used in the biotech industry.

3077 Clean Energy Technologies

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

In today's ever-changing world, creating an environment that is sustainable for us is becoming increasingly important. Clean energy systems can help with this need. Wind turbines, solar cells, and geothermal heating/cooling systems are all examples of clean energy technology - all of which are changing the world and providing employment opportunities in the area. In this course, students will be exposed to what sustainability means with regard to energy usage, and will explore the concept of energy and energy efficiency by learning about the many ways energy can be harvested. Topics include wind, solar, geothermal and hydroelectric energy. Each form of energy will be analyzed with regard to its efficiency, environmental impact, and economic cost, as well as the feasibility of each particular method, both locally and globally. This course utilizes a hands-on, project-based approach.

3078 Nursing

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

In this course, students will learn about the profession of nursing and the skills needed in this medical field. Students will explore how their understanding of human biology is applied to health care in terms of diagnosis of ailments, treatment of symptoms, and the usage of medical technology. Hands-on skills will allow students to learn about the daily routines a nurse might encounter. Course work includes: the history of nursing, researching advanced degrees, nursing and medical ethics. Students will use their knowledge of biology and human body work through case studies in order to help develop thinking skills needed for nursing school.

3079 Physical Therapy

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

Have you ever thought about becoming a physical therapist and wondered about the type of work involved? In this semester-long class, students will learn about the profession of physical therapy and the different applications in the medical field from sports medicine, to rehabilitation from injury, to geriatric services. Students will apply what they have learned from Regents Biology about the human body to real life case studies and the therapies involved. Students will explore different techniques for physical therapy and how the practices affect the health of the patient.

3214 Meteorology

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology and Regents Earth Science Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

In this course, students will explore how the atmosphere works in terms of weather and climate. This course will use basic chemistry and physical science to explain the principles and phenomena of the atmosphere. Students will study the science behind day-to-day weather, climate and air pollution, as well as examine the fields of broadcast and aviation meteorology.

3215 College Pharmaceutical Science

Grade: 11, 12 Exam: Local Prerequisite: Regents Biology and Regents/Topics in Biochemistry Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days Albany College of Pharmacy 2024-2025 tuition \$100 per credit hour (3 credits)

Pharmaceutical Science is a semester course, where students will explore the growing field of pharmaceuticals and get a dose of the essential skills necessary for this growing career in the healthcare field. Students will investigate the fundamentals of pharmacy practice, drugs and their therapeutic effects on body systems, and pharmaceutical headlines. This hands-on and minds-on course will give students the opportunity to perform pharmaceutical experiments and calculations that will replicate on-the job scenarios and data analysis. Pharmaceutical Science is affiliated with Albany College of Pharmacy and Health Sciences and students may earn a total of three (3) credits of ACPHS elective credit by paying tuition at the current rate (PSC 107 Introduction to Pharmaceutical Sciences). Students will gain relevant knowledge, skills, and confidence necessary to provide safe and effective care in their professional careers as well as in their own personal lives.

3216 College Nanotechnology 1: Intro to Material Science

Grade: 11, 12 Exam: Local Prerequisite: Regents Chemistry and taking Physics concurrently Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days SUNY Schenectady 2024-2025 tuition rate \$70 per credit (3 credits)

This course is a general introduction to the study of materials: metals, ceramics, polymers, and electronic materials. Students will learn about the basic molecular structures of materials. Students will investigate the relationship between bonding, structure (crystals and microstructure) and properties of these materials. The course will examine some elementary principles of thermodynamics as they apply to materials, mechanical properties of materials, and the electronic, optical, and magnetic properties of materials. Students will have the ability to earn SUNY Schenectady credit through this course. (NMT 150-3 credits)

3217 College Nanotechnology 2: Intro to Nanoscale Materials

Grade: 11, 12 Exam: Local Prerequisite: Nanotechnology 1 Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days SUNY Schenectady 2024-2025 tuition rate \$70 per credit (3 credits)

This course introduces students to the field of nanoscale materials. Nanoscale materials have chemical and physical properties that are significantly different from those of bulk materials. This course examines the underlying principles of size-dependent properties and the processing and fabrication of these materials at the molecular level. This course will cover the synthesis and assembly of nanoscale materials based on top-down and bottom-up approaches. The application of nanodevices made from nanoscale materials will also be discussed. Students will have the ability to earn SUNY Schenectady credit through this course. (NMT 152-3 credits)

3080 Health Sciences

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology Offering: Full year (1credit) Reading Level: Average Meets: 2/4 days

In this full year course, students will focus on the application of science in the medical field. Students will begin with a study of the organ systems. This course will then shift to a focus on disease and illness where students will learn about symptomatology, diagnosis, and treatment. Students will do case studies where they will use the information to make medical diagnoses. Students will then transition to a study of nutrition and how foods

interact with the body. The course will end with a study of medical careers and a research project focused on the topics of the year.

3218 Natural Disasters

Grade: 10, 11, 12 Exam: Local Prerequisite:Biology and Earth Science Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

In this project based course, study will focus on natural disasters: earthquakes, volcanic eruptions, tropical storms and blizzards. Students will explore the scientific causes, as well as the historical effects these events have had on human civilization, as well as investigate preparations that can be made to protect life and property in future events. Concepts will touch on earth science, biology, history and ethics.

3075 Bioethics

Grade: 10, 11, 12 Exam: Local Prerequisite: Regents Biology Offering: One semester (½ credit) Reading Level: Average Meets: 2/4 days

This **discussion-based** course will explore ethical issues and decision-making processes involved in biomedical science, as viewed from legal, medical, social, and philosophical perspectives. Students will learn to use ethical concepts to analyze and evaluate real-life cases, understand, articulate and defend philosophically and ethically sound positions, and engage critically and respectfully with opposing views. Students will utilize primary texts including philosophical essays, court decisions and opinion pieces. Examples of topics that will be discussed are: questions pertaining to the beginning and end of life, biotechnology and genetic experimentation, justice in health-care, responsibilities of physicians, environmental health, and other pertinent subjects. Real and hypothetical cases will be discussed.

3070 College Science Research Seminar

Grade: 10, 11, 12 Exam: Local Prerequisite: None Offering: Full year (1 credit) Reading Level: Advanced Meets: 2/4 days University at Albany tuition 2024-2025 tuition rate: \$190 for the course (total of six courses over the second and third years for 12 credits)

Science Research Seminar is a three-year sequence of courses (typically begun in the sophomore year) in which students choose a topic and carry out an original research project on that topic. The student does ALL of what professional researchers do, from journal readings to finding a mentor, planning a project, and carrying it out to an appropriate research conclusion. As the work progresses, the student writes research papers, creates posters, and presents research findings at available competitions and symposia as determined

appropriate by the instructor. During the student's second and third years in the program, they may elect to take the course for college credit for a total of up to twelve credits at the State University of New York at Albany. All students are welcome in the program regardless of past academic history. The only prerequisite is that the student be a self motivated, hard worker. Juniors and seniors who have an interest in research are welcome to join the course for the first year and will still gain valuable research knowledge.

Social Studies

The Social Studies Department strives to ensure that all students are prepared to become active, productive, informed, responsible, and efficacious citizens. Guilderland students are required to take four social studies credits that reflect Global History and Geography, U.S. History and Government, Economics, and Public Policy. Not only will students engage with important historical content and related concepts, but students will also leverage their literacy skills in the areas of close reading, argument and explanatory writing, and using textual evidence.

In addition to learning how to use core discipline-specific lenses, students will also focus on building skills to effectively evaluate primary and secondary sources to better understand the historical past. Additionally, students will also learn how to develop inquiry questions, conduct research, and communicate their findings as active, informed citizens.

Social Studies Courses						
Grade 9	Grade 10	Grade 11	Grade 12			
Global History 9R	Global History 10R	US History 11R	Public Policy 12R	Economics 12R		
Global History 9A	Global History 10A	US History 11A	College US Government & Politics (SCCC)	SUPA Economics		
Global History 9H	College Global History 10 (SCCC)	US History H				
	AP European History	AP US History	AP US Government & Politics			
	Exam -Global History Regents	Exam-US History Regents	Social Studies electives can be taken in Grades 11 and 12			

1002C3 Global History & Geography 9 - Regents

Grade: 9 Exam: Local Prerequisite: Social Studies 8 Offering: Full year (1 credit) Reading Level: Average

The Global History and Geography I program is a comprehensive study of global societies through the use of the social sciences of anthropology, archeology, economics, geography, history, law, philosophy, political science, and sociology. The course of study will include the following topics and timeline: (1) The First Civilizations [10,000 BCE-630 CE]; (2) Classical Societies [600 BCE – 900 CE]; (3) An Age of Expanding Connections [500 CE-1500 CE]; and (4) Global Interactions [1400 CE-1750 CE]. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry.

1001C3 Global History & Geography 9 - Honors

Grade: 9 Exam: Local Prerequisite: Social Studies 8, teacher recommendation, skills based performance assessment, self assessment and at least a 90 average in Social Studies 8 Offering: Full year (1 credit) Reading Level: High

Students will complete the 9th grade Global History and Geography I curriculum. In addition, this course emphasizes a progressive increase in text-based primary source documents; rigorous evidence-based historical research, interpretation and analysis; advanced application of academic discipline specific social studies vocabulary, concepts, and skills; and research based historical writing to explore and evaluate enduring issues. This course requires more frequent and longer reading of primary and secondary sources.

1012C3 Global History & Geography/English 9 - Aligned

Grade: 9 Exam: Local Prerequisite: Social Studies 8 Offering: Full year (1 credit) Reading Level: Average/High

Global History and Geography I and English 9 classes are aligned so that students are engaged in rigorous, project-based instruction with opportunity for collaborative learning experiences. This program is a comprehensive study of global societies through the use of the social sciences of anthropology, archeology, economics, geography, history, law, philosophy, political science, and sociology. The course of study will include the following topics and timeline: (1) The First Civilizations [10,000 BCE-630 CE]; (2) Classical Societies [600 BCE – 900 CE]; (3) An Age of Expanding Connections [500 CE-1500 CE]; and (4) Global Interactions [1400 CE-1750 CE]. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry.

1022C3 Global History & Geography 10 - Regents

Grade: 10 Exam: Regents Prerequisite: Global History 9 Offering: Full year (1 credit) Reading Level: Average

This program is a continuation of Global History and Geography I and will culminate in a Regents exam. The course of study follows the curriculum for Global History and Geography II and will include the following topics and timeline: (1) The World in 1750; (2) An Age of Revolutions, Industrialization, and Empires [1750-1914]; (3) Crisis and Achievement in the 20th Century [1914–Present]; and (4) Contemporary Issues. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry. Students taking this course will be prepared to take the required NYS Global History and Geography Regents Examination in June.

1021aC3 College Global History & Geography

Grade: 10 Exam: Regents Prerequisite: Global History 9 and teacher recommendation Offering: Full year (1 credit) Reading Level: High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Students will complete the 10th grade Global History and Geography II curriculum. In addition, this course emphasizes a progressive increase in text-based primary source documents; rigorous evidence-based historical research, interpretation and analysis; advanced application of academic discipline specific social studies vocabulary, concepts, and skills; and research-based historical writing to explore and evaluate enduring issues. This course requires more frequent and longer reading assignments of primary and secondary sources. Students taking this course will be prepared to take the required NYS Global History and Geography Regents Examination in June. Note, students may also earn three college credit hours upon successful completion of this class since this course is based on HIS 127: Western Civilization since 1650 at SUNY Schenectady.

1034C3 Global History & Geography/English 10 - Aligned

Grade: 10 Exam: Regents Prerequisite: Global History 9 Offering: Full year (1 credit) Reading Level: Average/High

Global History and Geography II and English 10 classes are aligned so that students are engaged in rigorous, project-based instruction with opportunity for collaborative learning experiences. This program is a continuation of Global History 9 and will culminate in a Regents exam. The course of study will include the following topics and timeline: (1) The World in 1750; (2) An Age of Revolutions, Industrialization, and Empires [1750-1914]; (3) Crisis and Achievement in the 20th Century [1914–Present]; and (4) Contemporary Issues. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry. Students taking this course will be prepared to take the required NYS Global History and Geography Regents Examination in June.

1901C3 AP European History

Grade: 10 Exam: AP Exam (2024-2025 fee \$99); Regents Prerequisite: Global History 9 and teacher recommendation Offering: Full year (1 credit) Reading Level: High

AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History, students investigate significant events, individuals, developments and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. All students taking this course will be required to take both the AP European History Examination in May and the Global History and Geography Regents Examination in June.

1042C3 United States History & Government - Regents

Grade: 11 Exam: Regents Prerequisite: Global History 10 Offering: Full year (1 credit) Reading Level: Average

This course provides an in-depth study of United States History from 1600 to the present. The Presidency, Congress and Supreme Court are examined, as well as the topics of immigration, foreign policy, economics and culture. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry. This course will prepare students to take the United States History and Government Regents Examination in June.

1041C3 United States History & Government - Honors

Grade: 11 Exam: Regents Prerequisite: Global History 10/AP European History and teacher recommendation Offering: Full year (1 credit) Reading Level: High

Students will complete the 11th grade Regents U.S. History curriculum. In addition, this course emphasizes a progressive increase in text-based primary source documents; rigorous evidence-based historical research, interpretation and analysis; advanced application of academic discipline-specific social studies vocabulary, concepts, and skills; and research-based historical writing to explore and evaluate enduring issues. This course requires more frequent and longer reading assignments of primary and secondary sources. This course will prepare students to take the United States History and Government Regents Examination in June.

1060 United States History & Government / English 11 - Aligned

Grade: 11 Exam: Regents Prerequisite: Global History 10/AP European History Offering: Full year (1 credit) Reading Level: Average/High

U.S. History and Government and English 11 classes are aligned so that students are engaged in rigorous, project-based instruction. Collaborative learning experiences center on the cooperative discovery of the significant history of the United States through the reading of diverse historical literature as well as a wide variety of nonfiction material. There is a great emphasis on the use of learning journals, reading independently, and preparing classroom presentations and projects, both individually and in groups. This course will prepare students to take the United States History and Government Regents Examination in June.

1911 C3 AP U.S. History

Grade: 11 Exam: AP Exam (2024-2025 fee \$99); Regents Prerequisite: Global History 10/AP European History and teacher recommendation Offering: Full year (1 credit) Reading Level: High

AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. History course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods beginning in the 15th century and ending in the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation and continuity and change over time; and developing historical arguments. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: United States and national identity; migration and settlement; politics and power; work, exchange, and technology; United States in the world; geography and the environment; and culture and society. All students taking this course will be required to take both the AP U.S. History Examination in May and the United States History and Government Regents Examination in June.

1062 Economics - Regents

Grade: 12 Exam: Local Prerequisites: US History Offering: One semester (½ credit) Reading Level: Average

This course includes a general overview of economic principles as it relates to the individual and society in both the product and factor market. The course also explores the role of the factors of production (land, labor, capital, and entrepreneurship), the consumer, government intervention, and the study and analysis of economic growth as well as money, banking, investment, and international trade. Students will also explore current economic problems and solutions using a cost/benefit framework. Macro and microeconomic points of view are both emphasized in this course.

1721 College Economics

Grade: 12 Exam: Local Prerequisites: US History and teacher recommendation Offering: One semester (½ credit) Reading Level: High Syracuse University 2024-2025 tuition rate: \$115 per credit hour (three credits)

SUPA is Syracuse University Project Advance, in which Syracuse University classes are taught by adjunct professors on high school campuses. SUPA English is a half-year course (3 SU credits) consisting of one semester-long course: ECN 203: Economic Ideas & Issues at Syracuse University. This course is an introduction to micro and macro economics and an examination of Western economic thought. More specifically, the course starts with microeconomics and a one-person society before examining how people make choices, especially when other individuals are introduced and resources become scarce. The course continues into Macro Economics and leads students to today's complex, industrialized society. Students will

examine the role government plays in creating and solving local and global economic challenges as well as learn how to become a more engaged economic citizen by gaining a better understanding of fiscal policy, financial markets, and the role of the consumer. Students may earn three college credit hours upon successful completion of class.

1802 Public Policy – Regents

Grade: 12 Exam: Local Prerequisites: US History Offering: One semester (½ credit) Reading Level: Average

This course centers on government structure, the policy process and societal issues. Students will explore other public policy issues through individual and group projects. This course also emphasizes the application of social studies specific skills such as document analysis, developing argument-based claims supported by document and historical evidence, and discipline specific inquiry.

1812 College U.S. Gov't & Politics

Grade: 12 Exam: N/A Offering: One semester (½ credit) Prerequisites: US History and teacher recommendation Reading level: High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

Students will complete the 12th grade Public Policy curriculum. In addition, this course emphasizes a progressive increase in text-based primary source documents; rigorous evidence-based research, interpretation and analysis; advanced application of academic discipline specific social studies vocabulary, concepts, and skills; and research-based writing to explore and evaluate enduring issues. This course requires more frequent and longer reading assignments of primary and secondary sources. Projects are assigned throughout the semester. This course is based on POL 123: United States Government and Politics at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class.

1931 AP U.S. Gov't & Politics

Grade: 12 Exam: AP Exam (2024-2025 fee \$97) Offering: One semester (½ credit) Prereq: US History and teacher recommendation Reading Level: High

AP U.S. Gov't & Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the U.S. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. More specifically, this course provides a thorough examination of the U.S. government's structure and operation, political systems and the policy process. Students will use primary and secondary information to critically evaluate general propositions about government and politics. This also includes presenting basic and relevant information, as well as

creating sustained written arguments pertaining to topics such as voting and elections, public opinion polls, federalism and the effect of ideology on the political process. Students must take the AP test in May.

1502 Psychology

Grade: 11, 12 Exam: Local Prerequisites: N/A Offering: One semester (½ credit) Reading Level: Average/High

This course attempts to answer questions students have about themselves and other people. Topics include sleep and dreams, learning processes, child development, adolescent psychology, personality, stress, abnormal psychology, altered states of consciousness, social psychology, marriage and research design.

1612 College Criminal Justice

Grade: 11, 12 Exam: Local Prerequisites: N/A Offering: One semester (½ credit) Reading Level: Average/High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

This is an introductory course designed to teach a basic understanding of the field of Criminal Justice. This course provides the philosophical and historical background of the agencies that comprise the criminal justice system. It focuses on the development of justice and law, crime and punishment, the administration of laws, the agency's function, career orientation and public policy. Additional topics include crime in the United States, policing, the court system and corrections. A visit to a state prison and many class speakers may be incorporated into the course. This course is based on CRJ 113: Intro to Criminal Justice at SUNY Schenectady. Students may earn three college credit hours upon successful completion of the class.

1601 College Social Problems

Grade: 11, 12 Exam: Local Prerequisites: N/A Offering: One semester (½ credit) Reading Level: Average/High HVCC 2024-2025 tuition rate: \$70 per credit hour (three credits)

This course is a study of major U.S. social problems with emphasis on their nature, scope, causes, consequences and possible solutions. Major topics covered include: political, educational and familial problems, inequality and poverty, environmental problems, crime and mental illness. This course is based on SOCL 110: Social Problems at HVCC. Students may earn three college credit hours upon successful completion of the class.

1613 Conflict, Justice & Peace

Grade: 11, 12 Exam: Local Prerequisites: N/A Offering: One semester (½ credit) Reading Level: Average/High

This course is a study of major U.S. military engagements (at home and abroad) to better understand the purpose, consequence and experience of military conflict vis-a-vis ethical considerations, human rights, national sovereignty, micro and macro-level tactics and strategies, and technology. Major topics may include but are not limited to: the experience of a soldier, tactics and strategies, war crimes, the purpose of war and conflict, civilians, the military industry complex, national politics, technology, etc. Additionally, the aforementioned topics will be examined through the following U.S. historical periods: The Revolutionary War, The Civil War, The Spanish-American War, WWI, WWII, The Korean Conflict, The Cold War, Vietnam, the Persian Gulf Conflict of the 1990s, and the modern War Against Terror, among other historical periods.

1622 College Current Issues in Criminal Justice

Grade: 11, 12 Exam: Local Prerequisites: Criminal Justice Offering: One semester (½ credit) Reading Level: Average/High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

This course is designed to allow study and discussion of those relevant issues of most current concern affecting components of the criminal justice system. Such issues as hiring practices, community relations, court decisions, and the impact of the mass media may be explored in relationship to the administration of justice in the United States. This course is based on CRJ 233: Current Issues in Criminal Justice at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class.

1101 College Black History in the United States

Grade: 11, 12 Exam: Local Prerequisites: Global History 10/AP European History Offering: One semester (½ credit) Reading Level: Average/High SUNY Schenectady 2024-2025 tuition rate: \$70 per credit hour (three credits)

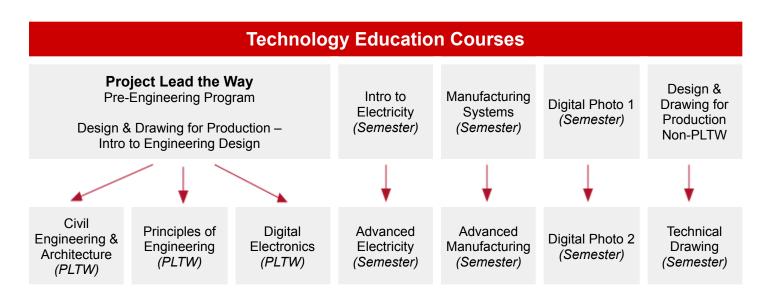
This course focuses on the history and experience of Black Americans in the United States, which spans the early pre-colonial era to modern times. For example, this course will cover individual and group experiences; agency; social, political, and economic institutions; discrimination and efforts to secure equal justice under the law and contemporary issues in the U.S. among other focal points. This course is based on HIS 130: Introduction to Black History in the United States at SUNY Schenectady. Students may earn three college credit hours upon successful completion of this class.

1300 Teacher Corps

Grade: 11, 12 Exam: N/A (end of year symposium) Prerequisites: Teacher Recommendation and Student Application Offering: Full year (1 credit) Reading Level: Average (Pending approval for college credit)

This full year course is designed to empower 11th and 12th graders to explore important civic issues impacting young children in our community. This includes, but is not limited to self-esteem, bullying prevention, decision-making, the impact of digital technology and social media, and diversity and tolerance among other areas. Participating students will build upon their current leadership and teamwork skills to explore how to effectively make a positive difference through teaching elementary students. In the first semester, students will undertake an in-depth study of the tools it takes to be a teacher and create engaging mini-lessons for their peers. Then, in the second semester, students will put their skills into action, teaching at elementary schools within the district with provided transportation. Open to committed juniors and seniors upon successful completion of an application process to include teacher/staff evaluations. The successful completion of this course may award three college credit hours and fulfill the Capstone requirements for the New York State Seal of Civic Readiness. Your opportunity to lead and inspire awaits!

Technology Education



Guilderland High School Technology Education is partnering with Project Lead the Way (PLTW), a national, non-profit organization, in order to offer a sequence of pre-engineering courses for Guilderland High School students. Our program has gone through the certification process and is a nationally recognized pre-engineering program. Design and Drawing for Production is the prerequisite course for all PLTW courses, but once completed, students can take any of the other courses in any order. Students have the opportunity to earn Rochester Institute of Technology college credit through these courses.

PLTW courses make math and science relevant for students. By engaging in hands-on, real-world projects, students apply the skills they are learning in the classroom to everyday life. Students develop collaborative problem solving skills while preparing for post high school programs in technology and engineering. For more information see the PLTW website: www.pltw.org.

7632 Design and Drawing for Production (PLTW)

Grade: 9, 10, 11, 12 Exam: PLTW Exam Prerequisites: None Offering: Full year (1 credit) Reading Level: Average RIT 2024-2025 tuition rate: \$225 (based on exam performance)(3 credits)

This course stimulates students' understanding of the design process through challenges to develop creative solutions to project based problems. Develop skills in 3-D sketching, computer aided drafting (CAD), modeling, technical design, and production. Learn to use hand and power tools while producing prototypes of your designs. This hands-on course fulfills the one-unit Arts requirement for graduation. Students have the opportunity to earn three RIT college credits (CASTPLTW-101-88) based on their performance on the end of course exam.

7633 Design and Drawing for Production (Non-PLTW)

Grade: 9, 10, 11, 12 Exam: Local Exam Prerequisites: None Offering: Full year (1 credit) Reading Level: Average

Design and Drawing Non-Project Lead the Way is a pre-engineering course that is tailored to students who are interested in computer aided design but require a slower pace of instruction. Many of the PLTW topics will be taught but there is more of a focus on the NYS DDP curriculum. Students will develop skills in 3-D sketching, computer aided drafting (CAD), modeling, technical design, and production. They will learn to use hand and power tools while producing prototypes of their designs. This hands-on course fulfills the one-unit Arts requirement for graduation.

7642 Civil Engineering and Architecture (PLTW)

Grade: 10, 11, 12 Exam: PLTW Exam Prerequisites: DDP and Algebra 1 Offering: Full year (1 credit) Reading Level: Average RIT 2024-2025 tuition rate: \$225 (based on exam performance)(3 credits)

This course introduces students to civil engineering and architecture problem-solving processes. Students use state-of-the-art software to solve real-world problems and communicate solutions. Through hands-on projects and activities, students develop project planning, site planning, and building design skills. Students have the opportunity to earn three RIT college credits (CAST-PLTW-104-88) based on their performance on the end of course exam.

7592 Principles of Engineering (PLTW)

Grade: 10, 11, 12 Exam: PLTW Exam Offering: Full year (1 credit) Prerequisites: DDP, Geometry Reading Level: Average RIT 2024-2025 tuition rate: \$225 (based on exam performance)(3 credits)

Students explore a wide variety of careers in engineering and technology. They explore various technology systems and processes. Using activities, projects and problems, students learn first hand how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also addresses concerns about social and political consequences of technological change. Students have the opportunity to earn three RIT college credits (CAST-PLTW-102-88) based on their performance on the end of course exam.

7452 Digital Electronics (PLTW)

Grade: 11, 12 Exam: PLTW Exam Prerequisites: DDP, Geometry Offering: Full year (1 credit) Reading Level: Average RIT 2024-2025 tuition rate: \$225 (based on exam performance)(3 credits)

Digital electronics are the foundation of all modern electronic devices such as cellular phones, laptop computers, digital cameras and high-definition televisions. The major focus of this course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. Students will be involved in hands-on lab work and will be building circuits. One of the projects students will be involved with centers on the programming of robots. Students have the opportunity to earn three RIT college credits (CAST-PLTW-103-88) based on their performance on the end of course exam.

7552 Technical Drawing

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

Drawings are prepared and used as a form of nonverbal communication between the designer and builder of a product. Drawings show shape, size, location, and how to get from one place to another. Depending on the particular function, the drawings may be engineering drawings, blueprints, shop sketches, trade sketches, maps or specification sheets; however, they are all intended to communicate through universal language. Students in this course gain experience with drawing and sketching in several modes. Students work with different CAD applications.

7402 Manufacturing Systems

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

Students explore the concepts of custom and mass production as they form a manufacturing company. Departments, including research and development, finance, marketing, human resources and production, work together to design, manufacture, and sell one or more products. Students study current manufacturing techniques as a supplement to hands-on product development, market research, advertising, and production. Students will manufacture a mass-produced product or products that they will take home at the conclusion of the course.

7442 Advanced Manufacturing

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Manufacturing Systems Offering: One semester (½ credit) Reading Level: Average

This course is for students who want to continue their study of manufacturing and production processes and have an interest in developing their woodworking skills. More emphasis will be placed on the manufacturing of a student designed project created on the computer and put into production in the wood shop. New areas will include computer aided drawing, introduction of advanced machines, as well as customized part making and assembly procedures. Students will have the opportunity to learn and run the CNC machine with various attachments. Students may have the opportunity to create custom designed projects.

7532 Introduction to Electricity

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

Exploring the entire field of electricity, students study the nature of electricity, basic circuits and laws, instrumentation, and power systems. Gain hands-on experience with wiring techniques while learning electrical principles. Students build and test various circuits common to building construction.

7542 Advanced Electricity

Grade 9, 10, 11, 12 Exam: Local Prerequisites: Introduction to Electricity Offering: One Semester (½ credit) Reading Level: Average

This course is for students who want to continue their study of electricity and electronics. Students will explore additional possibilities with electrical wiring including multi-phase electrical systems, 240 volt wiring and testing, low voltage systems and wiring, circuit analysis and troubleshooting, circuit design. Students will be exposed to actual wiring scenarios, will be required to create technical drawings, use a hands-on approach to create the circuits, and use testing devices to check their work. Newer electrical technology and tools will also be explored.

7663 Digital Photography 1

Grade: 10, 11, 12 Exam: Local Prerequisites: None Offering: One semester (½ credit) Reading Level: Average

This course will introduce students to the elements of photographic composition, DSLR camera functions, various natural lighting techniques, and general traditional and digital photography techniques. Students will use Photoshop to touch up, enhance, collage, manipulate and create original and existing photographic images into professional compositions. Students will be encouraged to experiment, collaborate and design photographs through project based learning. They will shoot, analyze, reflect and critique their photographs individually and as a group. Students will mat some of their best and larger format prints for displaying and showings.

7763 Digital Photography 2

Grade: 10, 11, 12 Exam: Local Prerequisites: Digital Photography 1 Offering: One semester (½ credit) Reading Level: Average

This course is designed for students who are motivated and inspired to pursue digital photography. Students will explore further studies in composition, lighting techniques, and other related topics. Students will be encouraged to refine their camera and software editing skills. Students will design and develop a quality portfolio of works with an emphasis on presentation techniques.

World Languages & Cultures

4012 French 2

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Middle School French or French 1 Offering: Full year (1 credit) Reading Level: Average

This course builds upon students' Level 1 language skills and develops students' appreciation of the diverse cultures of the French speaking world. Students will continue to increase their vocabulary and develop interpretive, interpersonal and presentational communication skills. As students progress through the course, they are expected to reach the Intermediate-Low benchmark in the modes of communication.

4022 French 3

Grade: 10, 11, 12 Exam: Local Prerequisites: French 2 Offering: Full year (1 credit) Reading Level: Average

French 3 continues to explore the diverse French speaking world while building students' language skills around a variety of topics. There is an increased emphasis in vocabulary development, written compositions, audio interpretation, as well as reading and conversational skills. Upon completion of the course, students are expected to demonstrate proficiency at the Intermediate-Low/Mid level on the local final exam.

4032 French 4

Grade: 10, 11, 12 Exam: Checkpoint B Regional exam Prerequisites: French 3 Offering: Full year (1 credit) Reading Level: Average/High

This course explores the diverse French speaking world while building students' language proficiency around a variety of topics. There is an emphasis on interpersonal and presentation speaking and writing as well as using authentic resources for developing interpretive skills. The course culminates with a Checkpoint B exam in June and qualifies students to earn an Advanced Regents diploma. To earn Regents credit, students must demonstrate Intermediate-High language skills (65% or higher) on that exam.

4041 French 5

Grade: 11, 12 Exam: Local Prerequisites: Checkpoint B Offering: Full year (1 credit) Reading Level: Average/High University at Albany 2024-2025 tuition rate:\$190 for the course (4 credits) This college level course is recommended for all students who have demonstrated Intermediate-High language skills (85+ on Checkpoint B exam). French is used almost exclusively in the classroom. Students use French to discuss literature, film and current events. Enrolled students have the option to earn 4 college credits, with financial assistance available for those who qualify for Free/Reduced Lunch.

4051 College French 6

Grade: 12 Exam: Local Prerequisites: French 5 Offering: Full year (1 credit) Reading Level: Average/High University at Albany 2024-2025 tuition rate:\$190 for the course (4 credits)

This is an intermediate college-level course through which students use French to discuss literature, film, history and current events from the French speaking world. An emphasis is placed on developing conversational skills and expressing opinions in French. Enrolled students have the option of working towards the NYS Seal of Biliteracy and/or enrolling for college credit. Financial assistance for UHS tuition is available for those who qualify for Free/Reduced Lunch.

4112 Spanish 2

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Spanish 1 or 8th grade Spanish Offering: Full year (1 credit) Reading Level: Average

This course builds upon students' level 1 language skills and develops students' appreciation of the diverse cultures of the Spanish speaking world. Students will continue to increase their vocabulary and develop interpretive, interpresonal, and presentational communication skills. As students progress through the course, they are expected to reach the Intermediate-Low benchmark in the modes of communication.

4122 Spanish 3

Grade: 10, 11, 12 Exam: Local Prerequisites: Spanish 2 Offering: Full year (1 credit) Reading Level: Average

Spanish 3 continues to explore the diverse Spanish speaking world while building students' language skills around a variety of topics. There is an increased emphasis in vocabulary development, written compositions, audio interpretation, as well as reading & conversational skills. Upon completion of the course, students are expected to demonstrate proficiency at the Intermediate-Low/Mid level on the local final exam.

4132 Spanish 4

Grade: 10, 11, 12 Exam: Checkpoint B Regional exam Prerequisites: Spanish 3 Offering: Full year (1 credit) Reading Level: Average/High

This course explores the diverse Spanish speaking world while building students' language proficiency around a variety of topics. There is an emphasis on interpersonal and presentation speaking and writing as well as using authentic resources for developing interpretive skills. The course culminates with a Checkpoint B exam in June and qualifies students to earn an Advanced Regents diploma. To earn Regents credit, students must demonstrate Intermediate-High language skills (65% or higher) on that exam.

4141 College Spanish 5

Grade: 11, 12 Exam: Local Prerequisites: Checkpoint B Offering: Full year (1 credit) Reading Level: Average/High University at Albany 2024-2025 tuition rate:\$190 for the course (4 credits)

This college level course is recommended for all students who have demonstrated Intermediate-High language skills (85+ on Checkpoint B exam). Special emphasis is on conversational skills and the ability to read and appreciate Spanish literature, as well as synthesis of grammar and vocabulary learned in previous Spanish courses. Spanish is used almost exclusively in the classroom. Students use Spanish to discuss literature, film and current events. Enrolled students have the option to earn 4 college credits. Students who have maintained an 85 or higher in this course are encouraged to enroll in Spanish 6. Enrolled students have the option to earn 4 college credits, with financial assistance available for those who qualify for Free/Reduced Lunch.

4151 College Spanish 6

Grade: 12 Exam: Local Prerequisites: Spanish 5 Offering: Full year (1 credit) Reading Level: Average/High University at Albany 2024-2025 tuition rate:\$190 for the course (4 credits)

This is an intermediate college level course through which students use Spanish to discuss literature, film, history and current events from the Spanish speaking world. An emphasis is placed on reading, developing conversational skills, and expressing opinions. Spanish is used almost exclusively in the classroom. Enrolled students will have the option of working towards the NYS Seal of Biliteracy and/or enrolling for college credit. Financial assistance for UHS tuition is available for those who qualify for Free/Reduced Lunch.

4312 Italian 2

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: Middle School Italian or Italian 1 Offering: Full year (1 credit) Reading Level: Average

This course builds upon the basic skills learned in Italian 1. Throughout Italian 2, students will experience an enhanced emphasis on vocabulary development, written compositions, audio interpretation, reading comprehension, and conversational skills. Appreciation for Italian culture is integrated throughout the lessons. As students gain confidence and mastery, they will be expected to consistently and increasingly use their Italian language skills throughout the course.

4322 Italian 3

Grade:10, 11 Exam: Checkpoint B Regional exam Prerequisites: Italian 2 Offering: Full year (1 credit) Reading Level: Average

This course is designed to enhance proficiency in the four target areas of listening, speaking, reading, and writing in Italian, while fostering a deeper appreciation of Italian culture. Building upon the achievements in Italian 2, Italian 3 culminates in the Checkpoint B Regional Exam—an end-of-year assessment evaluating student proficiency in Italian. As students' confidence and mastery develop, they will be expected to consistently and increasingly use their Italian language skills throughout the course.

4332 College Italian 4

Grade: 11, 12 Exam: Local Offering: Full year (1 credit) Prerequisites: Italian 3 and teacher recommendation Reading Level: Average/High HVCC 2024-2025 tuition rate: \$70 per credit (three credits)

This is the final course in the Italian program, offering students the opportunity to earn three college credits. In this accelerated course, students will further deepen their knowledge and appreciation of Italian culture, while developing language skills necessary for effective analysis, interpretation, and communication in Italian. Enrolled students have the option to earn 3 college credits, with financial assistance available for those who qualify for Free/Reduced Lunch.

4335 American Sign Language (ASL I)

Grade: 9, 10, 11, 12 Exam: Local Prerequisites: None Offering: Full year (1 credit) Reading Level: Average

This introductory course is designed to immerse students in the visual and gestural richness of American Sign Language (ASL). Students adhere to a 'no voice' policy while learning ASL's fundamental structure and vocabulary. Students learn about Deaf culture, enhance their expressive skills and proficiency in receptive skills such as fingerspelling and basic conversational techniques

4336 American Sign Language (ASL II)

Grade: 10, 11, 12 Exam: Local Prerequisites: ASL I Offering: Full year (1 credit) Reading Level: Average

The course aims to enhance knowledge of ASL vocabulary, syntax, semantics, and pragmatics. Students will expand their conversational abilities, including techniques such as shoulder-shifting, turn-taking, and discussing culturally relevant topics. Additionally, students will learn to narrate simple experiences and events using ASL and adhering to a 'no voice' policy throughout all classes.

4337 American Sign Language (ASL III)

Grade: 10, 11, 12 Exam: Checkpoint B Regional exam Prerequisites: ASL II Offering: Full year (1 credit) Reading level: Average

In this advanced course, students develop expressive and receptive language skills with an increased emphasis on complex vocabulary, grammatical structures, classifiers, and cultural awareness. Fluency in functional conversational skills within cultural contexts is emphasized and the morphology and grammar of ASL will be explored in depth. This course has a 'no voice' policy and is a requirement for students seeking to earn their Checkpoint B World Language credit.

4400 Each One, Teach One

Grade: 11, 12 Exam: None Prerequisites: 85% on Checkpoint B Regional exam and/or teacher recommendation Offering: One semester (1 credit) Reading Level: Average

Each One, Teach One is a course designed to inspire, recruit and train future teachers. After spending a number of weeks developing a foundation in educational philosophy and instructional strategies, students will have hands-on experiences in teaching a World Language to students at an elementary school in the district.

4424 ENL CONTENT 9/10

Grade: 9, 10 Exam: NYSESLAT when appropriate Prerequisites: None Offering: Full year (1 credit) Reading Level: Mixed

This course is specially designed for non-native speakers of English who have been identified as transitioning/expanding English Language Learners (ELL) according to the state-approved identification/achievement assessment (the NYSITELL/NYSESLAT). Placement after the first year in the program will be based on NYSESLAT scores. Students focus on the four modalities; listening, speaking, reading and writing with aspects of culture integrated into the curriculum. Content ENL 9-10 is designed to help transitioning/expanding level students prepare for core content classes including ELA, Math, Science, and History. Students learn skills to be successful in reading for understanding, note taking using academic vocabulary and using correct grammatical structures.

*Credit will be offered for up to two years at the same level.

4425 ENL CONTENT 11/12

Grade: 11, 12 Exam: NYSESLAT when appropriate Prerequisites: None Offering: Full year (1 credit) Reading Level: Mixed

This course is specially designed for non-native speakers of English who have been identified as transitioning/expanding English Language Learners (ELL) according to the state-approved identification/achievement assessment (the NYSITELL/NYSESLAT). Placement after the first year in the program will be based on NYSESLAT scores. Students focus on the four modalities; listening, speaking, reading and writing with aspects of culture integrated into the curriculum. It fulfills the ENL requirement for students in 12th grade who do not have co-taught classes and students in 11th grade who are transitioning/expanding. Class curriculum is designed to meet individual student needs and will vary year to year.

*Credit will be offered for up to two years at the same level.

4426 ENL NEWCOMER

Grade: 9, 10, 11, 12 Exam: NYSESLAT when appropriate Prerequisites: None Offering: Full year (1 credit) Reading Level: Mixed

This thematically designed course is specially created for non-native speakers of English who have been identified as entering, emerging or transitioning English Language Learners (ELL) according to the state-approved identification/achievement assessment (the NYSITELL/NYSESLAT). Placement after the first year in the program will be based on NYSESLAT scores. Students focus on the four modalities; listening, speaking, reading and writing with aspects of culture integrated into the curriculum. ENL Newcomer is

designed to assist entering, emerging and transitioning students by introducing basic foundational English skills for core classes including ELA, Math, Science, and History.

*Credit will be offered for up to two years at the same level.



Guilderland

CURRICULUM GUIDE

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