

Germantown Central School District

123 Main Street
Germantown, NY 12526



2023-2024 Course Descriptions Handbook Grades 7 - 12

“Sail to Success”

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Dear Students,

At Germantown, our mission is to provide opportunity, resources, environment, and instruction so that all students may be productive, successful, independent, responsible, and contributing members of our global society.

Beginning in grade 7, your school counselor will meet with you annually to develop and revise your course selections and to develop a program of study that will result in graduation, as well as prepare you for your post-secondary education. Whether you choose to enter college, the military or the workforce, our priority is that you are able to do so successfully.

This guide is intended to provide you with information regarding the requirements for graduation and the many opportunities to explore and develop your interests. Each department has created course descriptions so that you are better able to plan your program of study.

Please keep in mind that courses will be run based on multiple factors: having certified teachers available, student interest to meet enrollment requirements and scheduling. Please rank your elective choices, so that you have multiple options, should your first choice not be available.

Sincerely,

Stacy D. Hilton, Principal

Devin Jackowski, 7-12 School Counselor

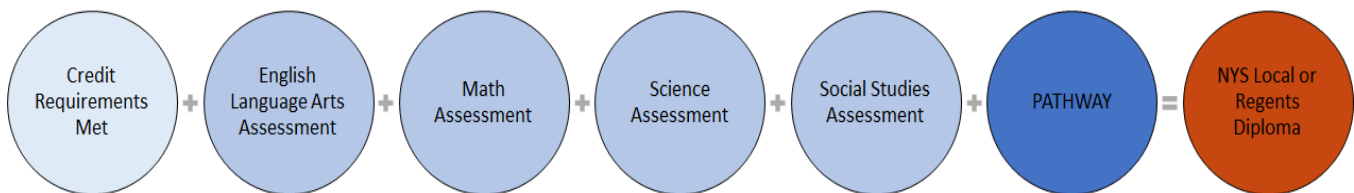
New York State Graduation Requirements

Course	Minimum credits required
English	4
<p style="text-align: center;">Social Studies</p> <p style="text-align: center;"><i>Distributed as follows:</i></p> <ul style="list-style-type: none"> • U.S. History (1 credit) • Global History and Geography (2 credits) • Participation in Government (1/2 credit) • Economics (1/2 credit) 	4
<p style="text-align: center;">Science</p> <p style="text-align: center;"><i>Distributed as follows:</i></p> <ul style="list-style-type: none"> • Life Science (1 credit) • Physical Science (1 credit) • Life Science or Physical Science (1 credit) 	3
Mathematics	3
World Languages	1 *
Visual Art, Music, Dance, and/or Theater	1
<p style="text-align: center;">Physical Education</p> <p style="text-align: center;">(participation each semester, 1/4 credit earned per semester)</p>	2
Health	1/2
Electives	3 1/2
Total	22

Assessment Requirements for a Regents or Local Diploma

In addition to successful completion of the appropriate 22 units of credits, in order to earn a Regents or local diploma, students must pass:

- 4 Regents exams or Department-Approved Alternatives, one in each discipline (English language arts, mathematics, science, social studies); and
- One Pathway
 - We offer the CTE Pathway in Carpentry at Germantown, as well as other CTE options at Questar.



Assessment Requirements for a Regents Diploma with Advanced Designation

In addition to successful completion of the appropriate 22 units of credit, in order to earn a Regents diploma with advanced designation, students must pass two additional math assessments and one additional science assessment along with the required 4-5 assessments included in any of the pathways. This totals 7 Regents exams or [Department-Approved Alternatives](#) and one pathway.

English Language Arts	Math	Math	Math	Science	Science	Social Studies	Pathway
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In addition, to earn the advanced designation, students must choose one of the three sequence options below:

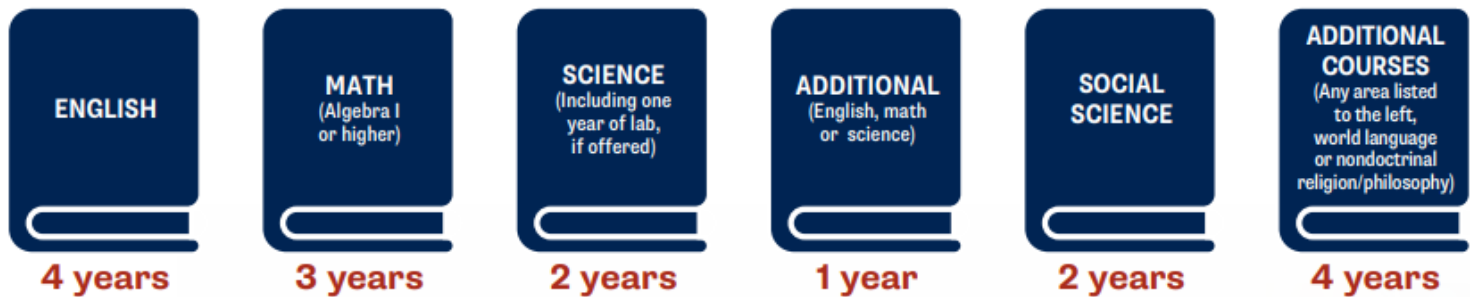
2 additional credits in World Languages (for a total of 3 credits) and the locally developed Checkpoint B World Languages Exam	5-unit sequence in the Arts	5-unit sequence in CTE
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For additional information, please see:

<http://www.nysed.gov/common/nysed/files/programs/curriculum-instruction/diploma-and-credentials-summary-requirements.pdf>

Division I Academic Requirements

To study and compete at a Division I school, you must earn 16 NCAA-approved core-course credits, earn a minimum 2.3 core-course GPA and submit your final transcript with proof of graduation to the Eligibility Center. CORE-COURSE REQUIREMENTS Earn 16 NCAA-approved core-course credits in the following areas:



Course of Study

Prior to entering Grade 9, each student’s parents/guardians are afforded an opportunity to meet with the School Counselor to choose a course of study. This session will allow all parties to review academic potential, staff recommendations, and student/parent educational goals. We are hopeful that this process provides a sound basis for course selection decisions and for subsequent student/parent and counselor meetings. Parents are encouraged to discuss courses and programs with their children. A TOTAL OF 22 CREDITS ARE NEEDED TO MEET HIGH SCHOOL GRADUATION REQUIREMENTS.

Changing Your Course Selections

Courses and teachers are scheduled according to student choice and/or availability of course offerings. Students have the opportunity to add or drop courses (with teacher/parent permission) during the set Add/Drop period, which ends after the first two weeks of the 1st and 2nd semester. The date ending the Add/Drop period is announced in homerooms and posted on Germantown CSD’s Facebook page. Changes can only be considered on a space-available basis.

Final Exams

All courses have a required final exam which is weighted at 20% of the final average. For courses ending in a Regents Exam, that will be the final exam.

Earning Credit and Grade Promotion Grades 7-8

Students in grade 7 are required to successfully complete the following courses in order to be promoted to grade 8: English 7, Math 7 or Math 7/8, Science 7, Social Studies 7, Physical Education, Technology 7, Health 7, Art 7 and may elect to take one of the following: Band, General Music or Chorus.

Students in Grade 8 are required to successfully complete the following courses in order to be promoted to grade 9: English 8 or English 9*, Math 8 or Algebra 1*, Science 8 or Living Environment*, Social Studies 8, Physical Education, FACS, and one of the following: Band, General Music or Chorus (if not completed in grade 7). Students in Grade 8 may also take Spanish I, DDP or Studio Art, for credit.

*High school accelerated course

Grades 9-12

Credits are earned based on successful completion of a course: earning a 65, including the final exam grade.

Units Required to Enter Grade 10: 5.5

Units Required to Enter Grade 11: 11

Units Required to Enter Grade 12: 16.5

Units Required to Graduate: 22

Catalog Key

Course Title: Regents titles are used when available. Locally prepared courses use titles which represent course content.

Course Weight: Full year courses are weighted at 1.0. Half year courses are weighted at .5. AP courses are weighted at 1.06. Course weight will factor into overall GPA and class ranking.

Credits Assigned: units of credits are given upon successful completion of a course.

GPA: Grade point average is the average of all courses taken in grades 9-12. GPA is used to determine class ranking.

Prerequisite: Requirements for entry into the course.

Semester Hours: Courses taken for college credit earn both high school credit and college credit. College credit is awarded in semester hour units.

Advanced Placement Program

What is the AP Program?

The College Board's® Advanced Placement Program® enables students to pursue college-level studies while still in high school. Course credit is linked to AP exam scores and is determined by individual institutions. Students should consult the college/university that they will attend to find out the school's policies on awarding credits. Policies may differ greatly from school to school and even within departments in a single university. Families are responsible for the exam fee (\$97/\$62 for eligible students during the 2023-2024 school year). This fee is due to the High School Office by October 1st.

Visit the College Board® online at <http://collegeboard.com/> for more information on the AP Program®, SAT®, PSAT/NMSQT®, applying to Colleges and Universities, and Financial Aid.

Dual High School/College Program

If students are enrolled in the Dual High School/College Program, they will be expected to perform at an advanced standard in an accelerated and/or enriched environment. If available that particular year, students may opt for college credit in *Research Methods* through SUNY Albany, a three year long research course, and/or various courses through Columbia Greene Community College. Students may also choose not to obtain college credit through University in the High School courses, and simply obtain credits toward high school graduation. Please note, college credit is offered by the cooperating College/Universities at a reduced cost.

The necessary paperwork is given directly to the student, as well as mailed home. Fall semester applications are distributed during the summer, spring semester and full year course paperwork is distributed in class around December. Course instructors may also provide specific paperwork at the beginning of the participating school year- depending on the cooperating College/University requirements. Students must complete and hand in this paperwork by the set deadline to obtain college credit.

Admission is dependent upon successful completion of the application and college approval.

Career and Technical Education

We offer the following courses to students beginning in grade 11. These programs are located at the Hudson or Cairo-Durham Questar locations. The district provides bussing. Students are required to apply to these programs. Acceptance is based on grades, attendance and credits earned. Some core courses are integrated into the program. Further details can be provided by the school counselor.

Career Tech Programs

- Agriculture Science
- Automotive Technologies
- Aviation
- Nursing Assistant*

- Construction Technologies
- Cosmetology
- Criminal Justice
- Culinary Arts
- EMT & Health Careers*
- Gaming/Multimedia
- Heavy Equipment Repair and Operation
- HVAC/R & Green Technologies
- Welding/Metal Fabrication

Career Studies Programs

- Automotive Services
- Building Trades
- Introduction to Employment
- Introduction to Food Services

*These courses begin in grade 12.

COURSE DESCRIPTIONS

ART DEPARTMENT

Successful completion of 1 unit of credit The Arts is required for graduation. Students may complete 5 credits in The Arts for a Regents Diploma with Advanced Designation.

Art 7

This course is designed to give the 7th grade student an overview of art techniques, materials, and terms. Emphasis will be placed on the development of 2-D and 3-D skills, and preparing them for high school Studio Art.

Studio Art

Grades: 8-12

1 unit of credit

Studio Art is a foundation Art class that explores the Elements of Art and Principles of Design using a variety of Art techniques such as painting, drawing, printmaking, and sculpture, in various media. This class will emphasize developing an appreciation for the visual arts through understanding and exploring your own artistic voice in new creative ways. This is the preparatory class for Drawing and Painting, and an excellent starting point for all future art courses.

Advanced Studio Art

Prerequisite: Studio Art

Grades: 9-12

1 unit of credit

Continuing your foundation in Art, you explore a variety of techniques such as painting, drawing, printmaking, and sculpture in further depth.

Drawing and Painting

Prerequisite: Studio Art or teacher permission

Grades: 9-12

1/2 unit of credit

Drawing & Painting is a studio class in which students will learn drawing and painting skills, and start to develop a personal style. Using charcoal, graphite, oil paint, acrylic paint, watercolors, and a variety of other materials, students will learn how to shade, mix color, and create excellent compositions. A variety of styles will be explored- it is not necessary that you come to this class already knowing how to draw things realistically - you will learn how! The emphasis is on learning various techniques, not exclusively photo-realism. This class will strive to eliminate the intimidation factor many face when confronting a blank page. We will depict various subjects: still life, landscape, figure and abstract composition. This is an excellent class for anyone planning to pursue art, or who simply wishes to create art as a rewarding hobby.

Ceramics

Prerequisite: Studio art

Grades: 9-12

1/2 unit of credit

A general course involving hand-building techniques to construct forms out of clay through coiling, slab construction, molding, and beginning wheel. Projects will introduce students to various ideas and uses of clay, both traditional and nontraditional. Creative work will be encouraged.

Advanced Ceramics

Prerequisite: Ceramics

Grades: 9-12

1/2 unit of credit

In this class, you will learn the basics on how to use a potter's wheel and throw some pieces, as well as build on your hand-building knowledge from your introduction to ceramics. You will also survey the work of modern day ceramic masters. You will work more independently and consult with the instructor to design your own final project that will showcase your unique artistic view and strongest skills. You will also experiment with advanced glazing techniques such as under-glazing and sgraffito. Enjoy another year of clay!

Digital Photography

Grades: 9-12

1/2 unit of credit

This course is an introduction to the fundamentals of photography using the digital camera, photo-editing software, and inkjet printing. The student will be instructed in the techniques of camera work, pre-visualization, and how to make and present finished prints. A strong emphasis will be placed on developing aesthetic judgment through a series of assignments and critiques. Classroom lectures will be a combination of technical instruction and discussion on the history of photography as an art form. Printmaking time is an integral part of the course and facilities will be available outside of class hours.

Advanced Digital Photography

Prerequisite: Digital Photography

Grades: 9-12

1/2 unit of credit

A continuation of Digital Photography, you will enjoy entirely new projects that focus on fine art photography skills and more advanced Photoshop techniques. You will work to develop an image portfolio and also do a photographic series on a theme of your choosing. You will be given an opportunity to do independent projects and explore the work of today's top photographers as a source of inspiration. You will be encouraged and given project time to enter Digital Photography contests in pursuit of scholarships and resume building. This is an excellent course for anyone considering art or photography as a career, as well as anyone who just enjoys working/playing in Photoshop!

American Landscape Art

Prerequisite: Studio art

Grades: 9-12

1/2 unit of credit

If you enjoy drawing and painting landscapes or just want to learn how, then this is the class for you! Learn how to make beautiful landscape art in acrylics, watercolor, pencil, colored pencil, printmaking, and textured painting on wood. You will explore a variety of media, and a variety of styles and skills. You will also survey work by the great landscape artists of the Hudson Valley, including Frederic Church and Thomas Cole. We will work mostly from photos that you take, but also from imagination, and if weather permits, outside drawing sessions. You will learn what Plein Air painting is, how to “capture” a sense of light, and how to create a naturalistic look. You do not need to be a gifted painter or someone who can draw meticulously to enjoy this class. Just come to learn something new and enjoy your projects!

Sculpture

Prerequisite: Studio art

Grades: 9-12

1/2 unit of credit

In this class, you will learn the basics of sculpture through hands-on projects, using both historical and cutting-edge modern examples as sources for inspiration. You will learn relief, high relief, and 3-Dimensional sculpture. You will learn a variety of techniques such as copper embossing, freeform wire sculpture, found object/recycled assemblage, and work in a variety of media, including clay. You will also learn how to create, on the computer, a small-scale 3-D sculpture that we will fabricate using our new 3D printer!

Introduction to Filmmaking

Prerequisite: Computer apps or Digital Photography

Use a flash drive, copy files to and from a flash drive, move and copy files within file manager, make a folder, navigate to files easily, save or open a file, save as, cut and paste, and know some basic file extensions- .jpg, .mp4, .mov, .doc, .mp3.

Grades: 9-12

1/2 unit of credit

In this half-year course, you will learn how to produce a short video from beginning to end. You will go from concept and story boarding to video production and a wide range of video editing techniques: combining, cutting, audio, adding titles, credits, still frames, slow-motion, and more! Your movie will follow industry-standard steps from beginning to end. You will be learning the program Adobe Premiere- one of the most powerful programs used in the movie industry! You will also learn how to create great footage using sound composition framing, lighting, and sound techniques. This class will culminate in a popcorn fueled in-class film festival!

Graphic Design

Prerequisite: Studio art

Grades: 9-12

1/2 unit of credit

Learn the basics of graphic design, what makes one design look so-so, and another look great? Learn how to use type, color, images, and other artistic elements to reach a specific target audience and effect powerful visual communication. You will create logos, page designs, and even some packaging design using Gestalt design principles. Want to design an awesome T-shirt for your band or class? Then this class is for you! This class is an excellent choice for anyone who enjoys digital art! We will often meet in the computer lab.

Yearbook

Grades: 9-12

1 unit of credit

Yearbook is a hands-on, activity-based course that focuses on the development of skills leading to a finished book. Students will learn the fundamentals of photographic composition, scanning, how to use online software to create pages, and the basics of design. They will learn marketing techniques and practice skills for selling and designing advertising. Students will work as a team to place the content in the yearbook and prepare the yearbook for printing. This is a class that requires time spent taking photos outside of class hours. The yearbook team is responsible for the overall look of the book- they choose the cover every year!

College Drawing

Prerequisite: Studio Art, Drawing and Painting

Grade: 12

1 unit of credit and/or 3 sem. hours

This is a drawing course that uses direct observation- you draw what you see! It will include natural and man-made objects, figure and portrait drawing, landscape, and basic perspective. You will use charcoal, pencil, ink, crayon, conte crayon, and watercolor pencil.

BUSINESS DEPARTMENT

Successful completion of Personal Finance and Computer Applications are required to graduate from Germantown.

Computer Applications and Coding

Grades: 9-12

1/2 unit of credit

In this course, students are introduced to line coding through various hands-on projects. These activities include circuit building using Arduino boards, online coding communities and robotic applications. Weaved within this curriculum, students will also learn essential skills needed to navigate the Microsoft Office Suite.

Advanced Computer Coding and App Writing

Prerequisite: Computer Applications

Grades: 9-12

1/2 unit of credit

This elective course will explore advanced programming using various coding languages and applications. In addition to online coding and robotics, students will learn to create various Apps for smartphones and handheld tablets. The course will place an emphasis on collaboration, problem solving and real world applications of various software.

Personal Finance

Grade: 12

1/2 unit of credit

This course prepares students for life after high school. Students will learn how to manage their money and make smart financial decisions. They will develop the knowledge that will help them become financially independent. Areas of study include budgeting, financial identity, student loans, career exploration, taxes, renting an apartment, buying a house, and many other topics of financial well-being.

ENGLISH DEPARTMENT

Successful completion of 4 units of credit in English Language Arts are required for graduation.

English 7

English Language Arts is comprised of the study of reading, writing, listening/speaking, and language skills, following the Common Core Standards, including: Completing a summer reading assignment based on self-selection of texts, interacting with each other to make connections to literature and analyze texts, reading texts independently, demonstrate comprehension and analysis. Students will practice reading comprehension, paragraph writing and editing skills in preparation for the ELA exam and final examination.

English 8

Students will continue to read, write, listen, and speak while studying several works of literature. Through fiction, drama, nonfiction and poetry reading, students will practice reading strategies and comprehension skills in alignment with state learning standards. They will study vocabulary and word families from Prestwick House's Greek and Latin Roots. The focus of writing will be on narrative, informational and argumentative writing. Students will practice and prepare for the ELA State Exam administered in the spring.

English 9

Grade: 9

1 unit of credit

In English 9 students work toward meeting the Next Generation standards and competencies needed to successfully participate in this ever-changing, global world. They study several modes of text including fiction, non-fiction, poetry, and drama. Literary terms are used to frame their text-based analyses. Students write essays to broaden their understanding of the works studied and to develop their writing skills. Students strengthen language skills through vocabulary acquisition, grammar, small and whole group discussions, and presentations. In addition, they will participate in small and large group discussions, and practice presenting in small and large group formats. Throughout each area of study, they will also practice standard English conventions in writing while working to expand their vocabularies.

English 10

Prerequisite: English 9

Grade: 10

1 unit of credit

In English 10 students will continue to develop the skills and competencies needed to successfully participate in this global 21st century world and to master the Next Generation English Language Arts Learning Standards. They will learn and practice these blended skills of reading, writing, and speaking through multiple modes aligned with key areas of study in Global Ten. They will read a variety of classic and contemporary texts, in order to analyze and respond to those texts, both literally and figuratively. They will analyze and write argumentative, informative, and narrative essays. There is also an in-depth research project where students will learn the skills needed to conduct research in all subjects.

English 11

Prerequisite: English 10

Grade: 11

1 unit of credit

In English 11 students work toward meeting the Next Generation English Language Arts Learning Standards. They study several major works of American literature and poetry, along with a play by William Shakespeare. Students write essays that both broaden understanding of the works studied and practice skills in preparation for the English Regents exam. At the same time students strengthen language skills through vocabulary, grammar/mechanics, and oral presentation practice. A Regents exam is given in June.

English 12

Prerequisite: English 11

Grade: 12

1 unit of credit

While English 12 is a full-year course, it is split into two basic sections: a first semester introduction to a variety of writing modes students will encounter in a college-level Intro to Writing course and/or the workplace; and a second semester survey of the forms and techniques of literature with emphasis on analysis and interpretation of selected novels, plays, short stories, essays, and poetry. Both semesters will include reading (non-fiction texts in 1st semester) and extensive practice in the writing process. This course is also designed to reinforce the structures and principles of effective research and essay writing. Students will demonstrate proficiency in various writing modes and speech/public speaking situations.

AP Seminar

Prerequisite: Teacher recommendation

Grade: 10

1 unit of credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

AP English Literature and Composition (Offered 2023-2024)

Prerequisite: Minimum grade of 85 cumulative and 90 in English, 2-3 credits of H.S. English and Teacher Recommendation

Grade: 11-12

1 unit of credit

The Advanced Placement English Literature and Composition course is designed to be a challenging, engaging, college level exploration of literature. To this end, students will read “widely and deeply” from both British and American writers, and from works written from the 16th Century through the present. Some works in translation (such as Russian, French, or Latin American) may also be included. Writing is also an integral part of the course, in such forms as analytical and argumentative essays, reader response papers, research papers, and timed essays modeled after the A.P. exam. Completion of written assignments, as well as development of wide-ranging vocabulary, will help students develop stylistic maturity in their writing. The overarching goal of A.P. English is for students to develop the critical reading, discussion, and writing skills that they will need for success in college courses as well as on the A.P. exam administered in May. It is important to note that students in A.P. English carry considerable intellectual responsibility for preparation and active participation in discussion, as these are essential to understanding, growth, and the refinement of ideas.

AP English Language and Composition (Offered 2024-2025)

Prerequisite: Minimum grade of 85 cumulative and 90 in English, (and History recommended), 2-3 credits of H.S. English and teacher recommendation for advanced-level work.

Grade: 11-12

1 unit of credit

AP Language is an introductory college-level course open to qualifying 11th or 12th grade students. In the course, students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style. Course content is wide-ranging, including units on Pop Culture, The Environment, Gender, Criminal Justice, and Education. Students analyze texts like speeches, essays, legal arguments, editorial writing, creative nonfiction, satirical writing, and advertisement. Completion of reading and writing assignments, as well as development of wide-ranging vocabulary, will help students develop stylistic maturity in their writing. Students take a College Board AP exam in May, and a qualifying score provides college credit and/or advanced placement in college courses. The overarching goal of AP English is for students to develop the critical reading, discussion, and writing skills that they will need for success in college courses as well as on the AP exam. It is important to note that students in AP English carry considerable intellectual responsibility for preparation and active participation in discussion, as these are essential to understanding, growth, and the refinement of ideas.

College English 101/English

Prerequisites: 85 in English 11

Grade: 12

1/2 units of credit and/or 3 sem. hours

This is an introductory college-level course emphasizing the processes and patterns of writing college-level essays. Included are reading assignments; extensive practice in writing clear, well-developed, grammatically correct essays; a research paper; and an oral presentation.

College English 102/English

Prerequisites: Completion of CGCC EN 101

Grade: 12

1/2 units of credit and/or 3 sem. hours

This introduction to writing about literature is conducted as a survey course in which students use the writing skills they have developed in EN 101 to analyze and discuss literary texts. These will include poetry, short stories, novels and drama. Every student's ability to contribute to class discussion about the various texts is essential. The course includes analytical essays, a research paper, and an oral presentation.

Journalism

This is an elective credit, unless 3 units of English have already been successfully completed.

Grades: 9-12

1 Unit of credit

The primary focus of the Journalism class is the production of the school newspaper, *The Stylus*. Being part of the school paper allows students a voice in school life, helps capture the interests and issues of our times, and helps sharpen writing skills! Students have writing and editing responsibilities and the staff collaborates to determine the content of each issue of the paper. Students have the freedom to choose the articles they write, with the guidance of the teacher. During the production weeks between each issue, students work on improving research, reporting, and profile writing skills. In addition, the class discusses issues, ethics, and controversies in journalism, and, time permitting, views films that explore such issues. Nearly all work can be completed during class. An interest in writing and an 85 average in English class are recommended.

Public Speaking

This is an elective credit, unless 3 units of English have been successfully completed.

Grades: 9-12

1/2 units of credit

This class is an introductory class in Public Speaking using formal and informal discussion and presentations. Students will learn to engage effectively in discussions; respond to an audience; evaluate a speaker's point of view, reasoning and evidence; and learn to give well-prepared, logical speeches. Assessments include class discussions, speech preparation, speech delivery, visual aids and evaluations of other speeches. Each speaking assignment will include a range of choices. This course is aligned with the Next Generation English standards.

Dystopian Novels & Literature (1 semester)

Prerequisite: English 10

Grades: 11-12

1/2 units of credit

What causes just societies to crumble, unjust societies to rise to power, and how do people react to the aftermath? In this course, students will investigate dystopian themes in literature, exploring how authors use literary techniques to address social issues, particularly involving the role of individuals in corrupt societies. Students will read a variety of novels and be expected to participate in literary discussions, write analytically, and think critically. Potential texts include *Lord of the Flies*, *1984*, *Brave New World*, *Fahrenheit 451*, *Anthem* and various essays and short stories. Students must be in 11th or 12th grade or have a teacher's recommendation to take this course.

Sports Literature & Composition (1 semester)

Prerequisite: English 10

Grades: 11-12

1/2 units of credit

Sports Literature and Composition will be a project-based course that examines the connection between sport and society from multiple perspectives as students explore the significance of individual and team athletics. Students will create their own documentary/podcast based upon a sports memoir and conduct research on a sports scandal, presenting their findings. The course will culminate in students creating their own sports, a project that includes: writing a rulebook, designing a marketing plan, and creating and implementing a plan to teach the sport to new players. The course is designed to improve reading, writing, listening and speaking skills. Students must be in 11th or 12th grade or have a teacher's recommendation to take this course.

HEALTH, FOOD AND CONSUMER SCIENCE DEPARTMENT

Successful completion of 1/2 credit of Health is required for graduation.

Health 7

Students will gain knowledge in the basic body system, changes that accompany puberty, STD's, non-communicable and communicable diseases, the effects of alcohol/drug use on the body, and safety and first aid. Students will also study different influences that affect health decisions and behaviors, understand the need for personal involvement in improving their environment and analyze how culture, media and technology affects decision making regarding personal and community health issues, and understand the importance of physical activity and proper nutrition in their daily lives.

Health, Family and Consumer Sciences 8 (HFCS)

Students will learn how to manage money, time, and personal issues, how to have positive relationships in the home and school, how to deal with peer pressure, and bullying, conflict resolution, write a resume and fill out a job application. They will also learn about child development and how to take care of a baby (Baby Think-It-Over project). They will also learn basic cooking techniques and how to do basic sewing.

College Health Critical Issues in Health

Grade: 12

1/2 unit of credit and/or 3 sem. hours

An introductory course dealing with the current critical issues involved in promoting and maintaining a wellness lifestyle. Emphasis is placed on viewing health in a multidimensional manner and assuming responsibility for maintaining one's health. Major issues to be addressed include stress, cardiovascular diseases, cancer, drugs, nutrition, environmental health, and physical conditioning. During the safety and first aid section, students will learn "hands only" CPR, how to properly use an AED, "Stop the Bleed" training, and some basic first aid techniques.

Food & Culture

Grades: 9-12

1/2 unit of credit

This course will introduce students to the meal patterns and food preparation methods for different regions throughout the world. A variety of foods from these places will be prepared. Students will choose a country from that area and complete a small research project on that country.

College Nutrition and Wellness (Fitness and Nutrition)

Grades: 10-12

1/2 unit of credit and/or 3 sem. hours

Course introduces students to the basics of nutrition and nutritional trends and the importance of supplementation and lifestyle in maintaining and promoting health, as well as disease prevention. In addition to nutrition, information regarding the 5 components of physical fitness will be addressed. Students will learn basic assessment measures for each fitness component, plus monitor their own independent fitness and nutrition program. Instruction will be given in proper weight-training techniques, safety measures and specific exercises for each major muscle group. Body weight and some free-weight equipment will be used.

College First Aid and Safety (HE 201)

Grades: 10-12

1/2 unit of credit and/or 3 sem. hours

Develops functional first aid capabilities to provide the initial emergency care necessary to sustain life support to victims of accidents or sudden illness. Students will be eligible to become certified in CPR and First Aid by satisfying the requirements established by the American Heart Association or National Safety Council.

MATH DEPARTMENT

Successful completion of 3 units of credit in Mathematics are required for graduation.

Math 7

Topics include: Integers, decimals and fractions, ratio, rates and proportions, application of percent, geometry and measurement, algebra (formulas, equations, and inequalities), interpreting graphs and charts, probability, statistics, and the real number system.

Math 7/8

Prerequisite: 90 or higher in each quarter in 6th grade mathematics, teacher recommendation and/or a score of high 3 or 4 on the state assessment.

Math 7/8 is an advanced seventh grade math class that includes topics covered in the 7th grade curriculum as well as the 8th grade curriculum. It is an advanced class for seventh grade students based largely upon using algebra in most of the topics covered. Topics include - Integers and operations with integers and rational numbers (decimals and fractions), ratio, rates and proportions, scale drawings, application of percent, measurement and geometry, interpreting graphs and charts, probability and statistics, algebra (formulas, equations, and inequalities), line and angle relationships with algebra, the real number system, graphing linear and quadratic functions, functions, interpreting functions, and polynomials.

Math 8

A pre-algebra course designed to prepare students for high school mathematics. Topics include: data analysis; algebraic expressions and algebraic equations, linear equations, rational and irrational numbers; geometry, area, volume, functions and their graphs, interpreting functions, similarity and transformations, congruence and probability.

Algebra I

Prerequisite: Math 8 or Math 7/8. (Students that have completed Math 7/8 will be recommended to Algebra I based on the following criteria: an 88 or higher for each quarter, an 80 or higher on the final, acceptable STAR assessment scores and/or state assessment scores, and/or teacher recommendation.)

Grades: 8-12

1 unit of credit

This class prepares students for the Algebra I Common Core Regents Exam. Topics include: algebra, graphing linear, absolute values and quadratic equations, linear and non-linear systems of equations, exponential functions, right triangles, trigonometry, radical expressions and polynomials, bivariate and univariate data. The final exam is the Algebra I Regents given in June.

Algebra IA

Prerequisite: Math 8 with teacher approval/recommendation

Grades: 9-11

1 unit of credit

Algebra Part IA is the first year of a two-year Algebra I program. This class and Algebra IB prepare students for the Algebra I Regents Exam. Some of the topics include: algebra, graphing linear and nonlinear functions, absolute values and quadratic equations, linear and non-linear systems of equations, exponential functions, ratios and proportions. The final exam is a local exam given in June.

Algebra IB

Prerequisite: Algebra IA with teacher approval/recommendation

Grades: 10-12

1 unit of credit

Algebra IB is the second year of a two-year Algebra I curriculum. Topics include: review of algebra, factoring polynomials, operations with radicals, quadratic equations, algebraic fractions, bivariate and univariate data, data analysis, statistics and probability, data collection and organization of data. The final exam is the Algebra I Regents given in June.

Algebra II

Prerequisite: Algebra I and teacher approval/recommendation

Grades: 9-12

1 unit of credit

This Regents course includes the study of sequences and series, complex numbers (quadratics with imaginary roots) absolute value, exponential and logarithmic functions, and circular functions and their graphs. There will be a continuation of topics in probability and statistics. The final exam is the Algebra II Regents exam given in June.

Intermediate Algebra 1

Prerequisite: Algebra I/IB and teacher approval/recommendation

Grades: 10-12

1 unit of credit

This course will expand on topics covered in Algebra I which may include: Linear expressions, equations and inequalities; functions; systems of linear equations and inequalities; exponential properties; polynomials; quadratic functions; roots and irrational numbers; Geometry; the study of sequences and series; absolute value; piecewise functions. Coding may be introduced and utilized as often as possible as it applies to the curriculum being covered.. The final exam is a local final given in June.

Intermediate Algebra 2

Prerequisite: Algebra I/IB and/or Intermediate Algebra A and teacher approval/recommendation

Grades: 10-12

1 unit of credit

This course will touch on the topics covered in Algebra II which may include: the study of sequences and series, complex numbers (quadratics with imaginary roots) absolute value, exponential and logarithmic functions, and circular functions and their graphs. There will be a continuation of topics in probability and statistics. The final exam is a local final given in June.

Geometry

Prerequisite: Algebra II/Algebra I with teacher approval

Grades: 9-12

1 unit of credit

Curriculum includes: properties of geometric shapes, transformations, quadratics function, right triangle, trigonometry, geometric proofs, analytical proofs, chords, secants and tangents. The final exam is the Geometry Regents exam given in June.

Mathematical Applications

Prerequisite: Algebra IA and IB, or higher

Grades: 11-12

1 unit of credit

A course designed for students who have completed the prerequisite math courses for a Regents diploma, but do not plan on working towards an Advanced Regents Diploma. This course emphasizes project-based mathematics using real world situations. Topics include some of the following: statistics, data analysis, consumer mathematics, networking, geometry, and tiling. The final exam is a local final given in June.

College Statistics/Statistics

This course is a requirement for all students enrolled in Science Research.

Prerequisite: Algebra I or IB

Grades: 10-12

1 unit of credit and/or 3 sem. hours

This is a first course in statistics and data analysis. Topics in descriptive statistics, probability and probability distributions and inferential statistics will be covered. NOTE: The TI-NspireCas calculator is required. Final exam is a local final or project.

College Precalculus /Precalculus

Prerequisite: Algebra II

Grades: 11-12

1 unit of credit and/or 4 sem. hours

This is a study of functions that model real world behavior. Linear, exponential, logarithmic, trigonometric, polynomial and rational functions are studied. This course serves as a foundation for students going on to Calculus. NOTE: The TI-Nspire CAS is required.. The final exam is a local exam given in June.

College Algebra/Senior Algebra

Prerequisite: 2 credits of Math

Grades: 11-12

1 unit of credit and/ or 4 sem. hours

This is a reform math course. Students will work in collaborative groups on activities in which the mathematics arises from context. Real life data is interpreted numerically, symbolically and graphically. Topics include: linear, quadratic, rational and exponential functions. NOTE: The TI-Nspire is required. (From the CGCC course description book.) The final exam is a local final given in June.

College Calculus 122/Calculus

Prerequisites: CGCC Precalculus/Precalculus

Grades: 11-12

1 unit of credit and/ or 4 sem. hours

This is the first course in the study of the concepts and procedures of Calculus. Topics include: Limits, The Derivative, Applications of the Derivative, and the Definite Integral. NOTE: The TI-Nspire CAS calculator is required. The final exam is a local final given in June.

PERFORMING ARTS DEPARTMENT

Successful completion of 1 unit of credit in The Arts are required for graduation. Students may complete 5 credits in The Arts for a Regents Diploma with Advanced Designation.

General Music 7-8

General Music is an exploratory class through which students will study the music of the past and present. The class will cover topics including music history from “Bach to rock,” basic elements of music and musicianship (written notation, rhythm, pitch, etc.), introductory-level instrument performance (piano, guitar, percussion), current events in music, careers in music, music technology, and music in our everyday lives. Project-based learning will be a regular part of this class.

Band 7-8

Prerequisite: 5-6 band or Instructor Permission

This performance-based course is a continuation of the elementary band experience offered in grades 4 through 6. Through this course, students will continue to develop skills on their instruments, while gaining experience performing in a variety of genres ranging from classical to modern. This course consists of classes in rehearsal format and other required components (such as concerts/performances), some of which will occur outside of the school day. Additional performing opportunities available to members are All-County Band, NYSBDA honor band, and the NYSSMA Solo and Small Ensemble Festival. Students in band 7-8 may also audition for the Germantown Jazz Band or the Germantown Marching Band.

Chorus 7-8

Chorus is a performance-oriented class which meets every-other day for the entire year during the school day. This course will teach students the basics of singing and how to properly use their voices. The group prepares a variety of music for three concerts a year. Attendance at scheduled performances is required.

Concert Band

Prerequisite: Band 7-8 or an Entrance Exam

Grades: 9-12

1/2 unit of credit

Germantown's 9th through 12th grade Concert Band is a continuation of Band 7-8. In this course, students will develop intermediate to advanced skills on their instruments, while gaining experience performing in a variety of genres ranging from classical to modern. This course consists of classes in rehearsal format and other required components (such as lessons and concerts/performances), some of which will occur outside of the school day. Additional performing opportunities that students can apply or audition for are All-County Band, Area All-State Band, Conference All-State Band, NYSBDA Honor Band, Drama Club pit orchestra, Germantown Jazz Band. and the NYSSMA Solo and Small Ensemble Festival.

Concert Chorus

Grades: 9-12

1/2 unit of credit

Concert Chorus is a performance-oriented class which meets every-other day for the entire year. This course will teach the fundamentals of singing including proper singing technique, note reading, and performance skills. The group prepares a variety of works for three school concerts each year. This course requires attendance at lessons and scheduled performances.

Music and Theatre Technology

Grades: 9-12

1/2 unit of credit

In this fall semester course, students will learn how technology is used to enhance musical and theatrical performances. Items that will be studied include the operation of a light board, operation of a sound board, and the operation and use of various types of microphones, amplifiers, speakers and other A/V equipment. Audio and video recording and mixing, video projection, and several other topics may be studied as well if timing allows for it. One component of this course is “practical experience” and, through this component, students will apply what they learn in class as they assist with lighting and sound technology in school concerts and/or theatrical productions.

Musical Theater Analysis and Performance

Grades: 9-12

1/2 unit of credit

In this course, students will learn about the songs of musical theater and their composers. Students will analyze and perform several musical theater songs in a variety of styles, from the early 1900s to present time. They will also learn several elements of basic vocal technique, including appropriate vocal approaches to certain songs. Additionally, students will learn how the composers use various musical elements to convey the meaning of the song, and how to apply acting techniques to their vocal performance in order to convey the song’s story. Composers studied will include George and Ira Gershwin, Richard Rodgers and Oscar Hammerstein, Leonard Bernstein, Stephen Sondheim, Andrew Lloyd Webber, Jeanine Tesori, and Jason Robert Brown, among others. The material studied in this course will be highly student-driven and students will be required to work independently to an extent. Students will also learn how to give critical feedback and apply critiques to their own performance. No prior acting or singing experience is needed to take this course.

Music Theory I

Grades: 9-12

1 Unit of Credit

Music theory I is a non-performing music course where students will learn the fundamentals of music, including melody, harmony, rhythm, and form. Students will study basic western notation, scales, key signatures, intervals, triads, cadences, non-chord tones, part-writing and analysis of a score. Aural dictation and ear training are also an integral part of the course and will be taught throughout the year. Individual creativity is nurtured through both rhythmic and melodic composition. This course is highly recommended for any student wishing to pursue music in college or as a career. Prior music knowledge is not required, however experience in an ensemble or other music courses is beneficial.

Piano I

Grades: 9-12

1/2 unit of credit

This fall semester course is an opportunity for students with no piano experience to learn how to play piano and for students with some piano experience to improve their piano-playing ability. Students will learn the basic elements of playing the piano, such as hand position, note-reading, scales, and chords. Students will learn classical notation as well as chord symbols. Students with prior knowledge of music notation and piano basics will study advanced level music theory, while students new to music will learn basic music theory. This course is designed so that students may work at their own level and at their own pace. Many assignments throughout the course allow students to choose their own songs to play. Students do not need to own a piano or keyboard to take this course, though outside practice is helpful. No prior piano or music experience is necessary.

Piano II/Guitar I

Prerequisite: Piano I

Grades: 9-12

1/2 unit of credit

This course is a continuation of Piano I and will give students the opportunity to specialize in one or more musical areas. Students will take their knowledge of basic music theory and music literacy that they learned in Piano I and apply it to new concepts and more challenging music. In this course students may choose to learn guitar (basic or advanced, depending on prior experience) and/or electric bass, or they may elect to continue to study piano at a more advanced level. Students who elect to continue to study piano may choose to specialize in jazz piano, rock piano, or synthesized keyboard (including some study of MIDI), if they so desire. The material studied in this course will be highly student-driven and students will be required to work independently to an extent.

Piano III/Guitar II

Prerequisite: Piano II/Guitar I

Grades: 9-12

1/2 unit of credit

Students will have the opportunity to continue their studies in piano and/or guitar, as well as increase their understanding of music theory. Much of the repertoire/material studied in this class will be student-selected. Students do not need to own a piano, keyboard, or guitar to take this course.

Pop/Rock Ensemble I

Prerequisite: Concert Band or Concert Chorus or teacher recommendation

Grades: 10-12

1/2 unit of credit

This first semester course is a performance based course where students will learn the fundamentals of performing as a contemporary ensemble. Students will learn the basics of guitar, piano, bass, drums, and vocals, as well as how to work together in an ensemble setting. Students will have the opportunity to write their own music and be creative. Ensemble experience and knowledge of the fundamentals of music is required.

Pop/Rock Ensemble II

Prerequisite: Pop/Rock Ensemble I

Grades 10-12

1/2 unit of credit

This second semester course is a performance based course where students will build off of the fundamentals learned in Pop/Rock Ensemble I. Students will perform as an ensemble in at least one of the spring concerts as a requirement to showcase their knowledge and hard work. By the end of the course, students will be able to write their own songs and perform music in a variety of pop and rock genres on the guitar, bass, drums, piano, and/or vocals as an ensemble.

PHYSICAL EDUCATION DEPARTMENT

Successful completion of 2 units of credit in Physical Education are required for graduation.

Physical Education

Grades: 7-12

1/2 unit of credit

Students will participate in Physical Education to increase physical fitness, sportsmanship, skill development and lifetime sports skills. Students will demonstrate knowledge of different sports skills through participation and a written final exam.

College Weight Training

Grades: 11-12

1/2 unit of credit and/or 1 sem. hour

Educates students in the principles of weight training plus offers them a supervised personal weight training program. Students will be instructed in proper weight-training techniques, safety measures, and specific exercises for each major muscle group. Universal and free-weight equipment will be used.

SCIENCE DEPARTMENT

Successful completion of 3 units of credit in Science are required for graduation; including a minimum of one life science and one physical science.

Course	Type
Earth Science R	Physical Science
Living Environment R	Life Science
Chemistry R	Physical Science
Physics R	Physical Science
Chemistry in the Real World	Physical Science
Environmental Science	Life/Physical
Practical Physics	Physical Science
Forensic Science	Physical Science
General Chemistry 1 (CH101)	Physical Science
Green Technology	Physical Science
Science Research	Both Depending on Project
Biotechnology I	Life Science
Biotechnology II	Life Science
Palentology	Life Science
General Biology 1 (BIO 101) (if offered)	Life Science

Science 7 - Life Science

This is an introductory level course to the biological sciences. Students will engage in inquiry-based activities, such as laboratory experiments, creative projects, and technology-based lessons and research. In the 2021-2022 school year, we will focus on five major units: **Cell Biology, Classifying Life, Genetics, Diseases, and Ecology**. Within each unit, we will use the scientific method to help us make predictions, design experiments, and analyze and report data. We will incorporate scientific literature, as well as current technology to enhance the curriculum.

Science 8 - Physical Science

Students will study matter and energy, areas of chemistry and physics, to include the study of physical and chemical changes, atoms, the periodic table, motion, machines, forces, electricity, magnetism, light and sound.

Earth Science

Grades: 8-12

1 unit of credit

This course includes the study of geology, meteorology, astronomy, oceanography, mineralogy, earthquakes, earth history and the forces that make our planet. Emphasis is on problem solving, observation, data collection and interpretation. Required laboratory time is 1200 minutes. The Regents exam is offered in June. **8th graders need an 85 or better in Science 7 and teacher recommendation to participate.**

Living Environment

Grade: 9-12

1 unit of credit

In this course, you will embark on a journey to explore the living world around you. Too often, we take trees, animals and our very own bodies for granted. I hope that after this class is over, you will all walk around with a greater awareness of how remarkable life on planet Earth truly is. This course will prepare you for the Life Science - Biology (Living Environment) Regents Exam in June. This class covers the topics of ecology, biochemistry, evolution, molecular and human genetics, DNA technology, human physiology and human reproduction. Regents Biology is a rigorous and demanding course that requires studying at home to allow time for discussion, labs, and inquiry during class time. Required laboratory time is 1200 minutes.

Chemistry

Prerequisite: Living Environment (75+ on Regents Exam), Algebra I (75+ on Regents Exam)

Grades: 10-12

1 unit of credit

This is the study of matter, its structure, properties and composition and the changes that matter undergoes. Some of the topics include: atomic structure, ionic and covalent bonding, acid and base theory, periodic table, electrochemistry and organic chemistry. Required laboratory time is 1200 minutes. A Regents exam is offered in June.

Chemistry in the Real World

Prerequisite: Living Environment

Grades: 10-12

1 unit of credit

This course is designed to stimulate an understanding of Chemistry in your life. Centered on laboratory experiences, an appreciation of chemical processes and reactions are met through problem solving. This course will be project-based and will incorporate digital presentations and lab activities.

Approximately four weeks will be spent on the following topics:

- ☐ Chemistry of Nutrition
- ☐ Household Chemistry
- ☐ Hazardous Chemicals
- ☐ Medicinal Chemistry

Environmental Science

Prerequisite: Earth Science and Living Environment

Grade: 10-12

1 Unit of Credit

The goal of this course is to provide you with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems, both natural and man-made, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving and/or preventing them.

This course is interdisciplinary; it embraces a wide variety of topics from different areas of study including geology, biology, chemistry and geography.

At the end of this course, students will have the option to take the AP Environmental Science Exam.

Physics

Prerequisite: Trigonometry, Chemistry

Grades: 11-12

1 unit of credit

This is a study of the fundamental laws of nature. Topics include: mathematical applications; motion; gravity; light; sound; magnetism and electricity. Required laboratory time is 1200 minutes. May include a field trip to an amusement park. A Regents exam is given in June.

Practical Physics

Prerequisite: Algebra

Grades: 10-12

1/2 unit of credit

Students will explore concepts of physical science pertaining to everyday situations. The course will be very hands-on and project oriented. Topics include basic household electricity, electric motors, solar energy and Nano science with an emphasis on environmental awareness and alternative fuel sources. Basic algebraic skills are used in some topics.

Forensic Science

Prerequisite: Living Environment

Grades: 10-12

1/2 unit of credit

For the non-science major, an introduction to the basic scientific theory and techniques used in criminal investigation. Topics include: proper handling and preservation of crime-scene evidence; glass, soil, fingerprint, drug and paint chip examination, hair analysis; cloth, fiber, the uses of spectrophotometry, chromatography, and other instrumental methods in evidence analysis. Also, the description of serological techniques, DNA profiling, and toxicological techniques. Course covers sufficient inorganic and organic chemical concepts for students to gain an elementary understanding of the various analytical techniques.

College General Chemistry 1(CH 101)

Prerequisite: Chemistry (75+), Integrated Algebra (80+)

Grades: 11-12

1 unit of credit and/or 4 sem. hours

A comprehensive introduction to chemical theories. Major topics include atomic structure, stoichiometry, dimensional analysis, ideal gas laws, chemical bonding, and molecular geometry. This course will contribute to the development of the students' abilities to think clearly and to express their ideas, orally and written, with clarity and logic. Students in such a course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems.

College Science Research

Co-requisite: Statistics

Grade: 10-12

1 unit of credit per year and 12 credits from SUNY Albany

Designed to provide students with an understanding of research methodology in the natural and social sciences. The course is directed to those students who wish to pursue excellence and progress into advanced areas of original research. Emphasis is on both laboratory and bibliographic research. Group seminars and individual consultations with doctoral-level scholars are arranged. This is a 3-year research course worth 3 high school science credits. Students would earn 12 college credits over the 3 years and 2- summers at a cost of \$720 (4 payments of \$180). One year of statistics must be taken within the first 2 years of Science Research.

General Biology I

Prerequisites (any ONE of the following): Minimum score of 80% in Regents-level Chemistry taken within the last five years. College-level Biology or Chemistry lab science course with a grade of C or better taken within the last five years (includes high-school AP Biology). A score of 75% or better on the College science placement exam or permission of instructor.

Grades: 10-12

1 unit of credit and/or 3 sem. hours

The first in a two-course sequence (BI 101 and 102) designed for students who plan to major in the life sciences. Topics covered in this course include the chemical basis of life, cell structure, cellular metabolism, cell division, as well as Mendelian and molecular genetics. The laboratory portion of the course focuses on the scientific method, use of the microscope and other lab equipment, and methods for data analysis and presentation. Lab activities will complement the lecture topics.

Green Technology

Prerequisite: Living Environment

Grades: 10-12

1/2 unit of credit

This course will examine current and future sources of green and sustainable technologies. Emphasis will be placed on comparing and contrasting conventional technologies with green technologies. Students will conduct hands-on activities to learn how green technologies work. Basic concepts of electricity, power generation, computers, and transportation will be discussed.

Biotechnology I

Prerequisites: 80+ in Living Environment and Algebra I and pass both Regents

Grades: 10-12

1 unit of credit

Students will receive a comprehensive introduction to the scientific concepts and laboratory research techniques currently used in the field of Biotechnology through problem-based learning and hands-on experiments. Students will learn the basic concepts of the biological and chemical processes of cells, tissues, and organisms. Students will also gain understanding in DNA replication, transcription, and translation. Furthermore, students will explore and evaluate career opportunities in the field of biotechnology through extensive readings, laboratory experiments, class discussions, research projects, guest speakers, and workplace visits.

Biotechnology II

Prerequisites: Biotechnology I

Grades: 11-12

1 unit of credit

Biotechnology II is a continuation of Biotechnology I and is designed to give students an understanding of the scientific concepts and laboratory research techniques currently used in the field of biotechnology. In this course, students attain knowledge about the field of biotechnology and deeper understanding of the biological concepts used. In addition, students further develop the laboratory, critical thinking, and communication skills currently used in the biotechnology industry, including use of a fume hood while learning the principles of plant tissue culturing, plant propagation, and cloning. The course will culminate in a student-driven independent research project.

Paleontology

Grades: 11-12

1/2 unit of credit

Paleontology is the study of prehistoric life, covering everything from early bacteria, to Dinosaurs, to our most recent ancestors. We will be learning the history of life on Earth, through video, research, writing, and hands-on lessons. The beginning of the class will focus on field work and how paleontologists find and excavate samples, followed by how these scientists study modern life in order to understand how life worked in the past. The class grades will be based on short writing assignments, hands-on labs, and larger research papers.

SOCIAL STUDIES DEPARTMENT

Successful completion of 4 units of credit in Social Studies are required for graduation.

Social Studies 7 – History of the United States & New York State I:

Grade 7 Social Studies is first of a two-part curriculum, and is arranged chronologically and incorporates geography as well as economic, social, and political trends. The course content is divided into ten key ideas, tracing the human experience in the United States from pre-Columbian times until the Civil War, with a focus on the people, events, and places in New York State as applicable.

Social Studies 8 – History of the United States & New York State II:

Grade 8 Social Studies is second of a two-part curriculum, and is arranged chronologically and incorporates geography as well as economic, social, and political trends. The course content is divided into ten key ideas, tracing the human experience in the United States from Reconstruction up through present day, with a focus on the people, events, and places in New York State as applicable.

Global History and Geography 9 & 10

Grades: 9-10

1 unit of credit for each course

This two-year social studies program is designed to develop historical and cultural comprehension of various regions and nations outside of North America. In grade 9 students will study the Middle East, Africa, South and Southeast Asia and East Asia. In grade 10, students will study Latin America and Europe. Topics include: the geographic/historical setting, the dynamics of change, contemporary nations and cultures, economic development, the area within the global content and historical concepts. A Regents exam is given at the end of Global Studies 10.

US History and Government

Prerequisite: Global History 9 & 10

Grade: 11

1 unit of credit

This course begins with the colonial and constitutional foundations of the United States and explores the government structure and functions written in the Constitution. The development of the nation and the political, social, and economic factors that led to the challenges our nation faced in the Civil War are addressed. Industrialization, urbanization, and the accompanying problems are examined, along with America's emergence as a world power. A Regents exam is taken in June. Areas of study include: Colonial Foundations, Constitutional Foundations, Expansion, Nationalism, & Sectionalism, The Post-Civil War Era, and more.

Economics

Prerequisite: Successful completion of U.S. History 11

Grade: 12

1/2 unit of credit

This course examines the principles of the United States free market economy. Students will analyze the role of supply and demand in determining the prices that individuals and businesses face. Students will explore the challenges facing the United States free market in a global environment and various policy-making decisions available to the government to address these challenges. Areas of study include: Economic Principles, Consumers & Businesses, Taxation & Labor, and more.

College American Government

Prerequisite: Successful completion of U.S. History 11

Grade: 12

1/2 unit of credit and/or 3 sem. hours

An analysis of the American political system, with emphasis on the Constitution. Topics include American conservative and liberal political traditions, political parties, and the organization and operation of the executive, judicial, and legislative branches of government.

General Psychology

Grades: 10-12

1/2 unit of credit

An overview of the scientific discipline of psychology, including some of the methods and basic concepts of the field and major aspects of human behavior, such as emotion, learning, conditioning, motivation, personality, and development.

Historical Topics Through Film

Grades: 10-12

1 unit of credit

Since Thomas Edison patented America's first motion picture camera in 1891, the depiction of various historical topics through film has become a large part of our culture. For many people, watching a theatrical film on a particular historical topic is their only way of learning history – no matter how accurate the film. The films viewed in this course are theatrical films rather than documentaries, so they are reenactments of historical events not necessarily a documentary record.

This course treats films as texts deserving the same skills of critical thinking and analysis as other sources used within a history course. The course is designed to reveal that some films are valid historical sources offering a glimpse into the social, political, and cultural historical moment in which it was created. Some films are affected by poetic license, the agenda of the filmmaker and other factors that compromise their validity as historical sources.

This course is not intended to be a “eat popcorn and watch movies” course – The goal of this course is to learn further about specific historical topics by analyzing theatrical films.

TECHNOLOGY DEPARTMENT

Technology 7

Seventh Grade Technology Education course is designed to give each seventh grade student an educational experience and understanding of manufacturing, construction, production, and transportation technologies related but not limited to: design, tool manipulation, measurement, use of math skills, proper and safe use of tools, problem solving abilities and a creative experience. Students leave this part of their course with completed projects in each area of technology, which reflects their abilities and newly attained technological and hands-on knowledge. Students will engineer, evaluate, and modify projects based on the NYS technology standards.

Auto CAD

Prerequisite: DDP

Grades: 9-12

1/2 unit of credit

This course teaches students the operation and creative use of computer-aided design. To learn CAD, students must operate software that develops drawings and computer graphics. The software is relatively easy to use with its pull-down menus and descriptive icons. It will prepare the student for the natural transition to the next level of CAD.

Advanced CAD

Prerequisite: CAD

Grades: 10-12

1/2 unit of credit

A ½ unit course that explores the complex functions and abilities of CAD. In this course students will use pro-desktop to draw and design 3 dimensional objects. Students will get a feel for the engineering fields.

Advanced DDP

Grades: 9-12

1 unit of credit

Advanced DDP is an extension of the DDP class. In Advanced DDP the students will draw and design using CAD and Inventor. The students will develop solutions to problems, 3D print prototypes and build final projects. Students in Advanced DDP are expected to be self-motivated and have the desire to work independently and mentor DDP students as needed.

Agricultural Technology

Grades: 9-12

1/2 unit of credit

This course provides instruction in the foundations of the various segments of the agricultural industry. Agricultural career opportunities will be emphasized. Animal science, plant and land science, and agricultural mechanics skills will be the focus of the curriculum.

Carpentry

Prerequisite: DDP, Materials Processing, Residential Structures

Grades: 10 – 12

1 unit of credit

This course will prepare students for a career in the building trades through a combination of classroom theory and hands-on experiences. Students will gain experience using hand tools, portable power tools and industrial carpentry equipment. Students will also gain experience using a variety of carpentry materials including lumber, sheet materials, roofing materials, fasteners, finishes and hardware. Students will develop skills needed for framing, roofing, exterior, interior finish work and estimating carpentry jobs.

Students will learn how to:

- Safely use carpentry equipment
- Layout building footings and foundations
- Frame a floor
- Frame walls and ceiling
- Frame a roof
- Use roofing materials and methods
- Install windows and doors
- Finish exterior walls
- Install thermal insulation
- Interior wall and ceiling finishes
- Finish floors
- Construct Stairs
- Develop a Carpentry Career Path

Drawing and Design for Production

Grades: 9 - 10

1 unit of credit

This course will introduce students to technical drawing, sketching, 2D and 3D drawings, computer aided design and 3D printing. Students will gain experiences working safely in a shop, using hand tools, battery tools and power tools while making models. Students will also learn how to work as a team to develop a manufactured product. The basic carpentry skills learned in this class will help students be successful in our carpentry course.

Students will learn how to:

- Use the English measurement system
- Use drafting tools
- Construct geometric shapes
- Create Multiview and 3D drawings
- Dimension and scale drawings
- Develop patterns and working drawings
- Develop models and prototypes
- Develop a basic architectural plan
- Use the manufacturing process to produce a product

Materials Processing

Prerequisite: DDP

Grades: 10 – 12

½ unit of credit

This course will prepare students for our carpentry class and give students experiences working with different materials such as wood, plastic, and metal. Students will gain experience using finish carpentry tools and equipment. Students will build finish carpentry projects such as wall shelves, bookshelves, and tables. In addition, students will gain experiences developing materials list, reading projects plans and developing project plans. At the end of this course students will be expected to develop a full set of plans, materials list and full-scale wall shelf, bookshelf, or a table.

Students will learn how to:

- Safely use finish carpentry tools
- Select the correct building materials
- Draw finish carpentry plans
- Produce a finish carpentry project
- Use carpentry adhesives and finishes
- Use the correct wood joinery
- Estimate the materials cost and labor for a finish carpentry project

Residential Structures

Prerequisite: DDP

Grades: 10 - 12

1/2 unit of credit

This course will prepare students for our carpentry course and a field of study in carpentry. Students will study floor plan designs, local building codes and local architectural design. Students will also strengthen their technical drawing skills, sketching and computer aided design skills while preparing a plan for a residential structure. At the end of this course students will be expected to draw a residential plan and construct a scaled model of their residential plan.

Students will learn how to:

- Draw a floor and site plan using CAD
- Identify and use the correct framing system
- How to apply building codes in a plan
- Identify the different types of house styles in our area
- Build a scaled model of their plan
- Estimate a house renovation

WORLD LANGUAGES DEPARTMENT

Successful completion of 1 unit of credit in Language Other than English (LOTE) is required for graduation.

Spanish I

Grades 8-12

1 unit of credit

An introductory course designed to build and develop basic vocabulary and grammar concepts as well as enrich cultural knowledge of Spanish speaking countries. A final exam that meets the NYS Foreign Language Standards is given at the end of this course. This course is required for all students to acquire one credit for high school graduation.

Spanish II

Prerequisite: Spanish I

Grades: 9-12

1 unit of credit

A gateway course designed to increase proficiency and bring students from an elementary level to an intermediate level. In this course, students will expand their knowledge of vocabulary, grammar, and Spanish culture.

Spanish III

Prerequisite: Spanish II

Grades: 10-12

1 unit of credit

An intermediate course designed for students to learn more detailed vocabulary and grammatical concepts as well as enrich their cultural knowledge of Spanish speaking countries through the use of the Internet, creative dialogues, imaginative power points, and research.