MILLBROOK CENTRAL SCHOOL DISTRICT
MILLBROOK, NEW YORK 12545

MILLBROOK HIGH SCHOOL COURSE & CURRICULUM GUIDE
2020-2021

ADMINISTRATION

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GUIDANCE DEPARTMENT

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VISUAL ARTS

STUDIO  1 credit
This course is a prerequisite for any other High School Visual Art courses offered in the curriculum guide.
Studio Art is the High School basic Visual Art Course. The class is open to all students and satisfies the State Mandate for the Arts. It is one period every day for the entire school year. The Studio Art student explores the Principles and Elements of Design while creating a variety of artwork from an assortment of media. The course is ‘process’ not ‘product’ oriented and is designed for all motivated students to succeed in both the planning stage and the creation of artwork. Lessons in drawing, painting, printmaking, graphic design and sculpture are completed while incorporating some individual choice in design and subject. Art history will be incorporated to inspire students to create their own original work. A ‘Showcase Portfolio,’ which includes all work created during the course is sent home at the end of the school year. Several student displays and exhibitions are planned for each year.

INDEPENDENT STUDY  1 credit
Prerequisite- 3 credits, in any combination, of Drawing/Painting & Mixed Media/Graphic Design/Sculpture/ Ceramics & Functional Art and teacher approval based on a portfolio review.
This course is for the serious, experienced art student who is interested in pursuing art as a lifelong interest or career. Independent Study involves collegiate level challenges that will complete the art student’s experience and preparation for continuing education in the Visual Arts. Students will be given the freedom to choose their own projects, usually stemming from a certain idea, theme or material. With this freedom comes more responsibility as well. Students will be required to meticulously design and self-assess their own projects. Lessons are closely monitored to further build up artistic direction and personal vision. By improving weaker areas of knowledge and broadening experience, students are helped to prepare for college. A sketchbook will be very important throughout this process, and should serve as a visual record of the students’ process. This will include all planning, intentions, experimentations and reflections. Part of the curriculum will be dedicated to developing an art portfolio, possibly with college admissions in mind.

GRAPHIC DESIGN I  1 credit
Prerequisite- Studio Art or PLTW Design & Drawing for Production
Graphic Design is a full year course that meets every day in the mac lab. Students will use various programs on the mac as well as the Adobe Creative Cloud Suite such as Photoshop, Illustrator, and After Effects. This class will give the students the knowledge and hands on experience they need in order to create meaningful, well designed projects and learn about graphic design as a potential career. Students will study trends in graphic design, influential designers and create artwork both commercial and creative inspired by these influences. Students have access to all photography, videography equipment as well as drawing tablets and iPads for creation. A digital portfolio is created throughout the course.

GRAPHIC DESIGN II  1 credit
Prerequisite- Graphic Design I
Graphic Design II is a full year elective course that meets every day in the mac lab. In this course students will go beyond project completion and learn how to work as a true graphic designer. The course will deepen knowledge of Adobe programs such as Photoshop, Illustrator and in Design. Students will also learn animation techniques using After Effects and video editing in Premiere Pro. Students will work within a design team, creating design briefs and sketches to present to a client.
Throughout the course students will expand upon their digital portfolio, complete a personal branding project and explore options for internships or college programs in graphic design.

**MEDIA DESIGN & PRODUCTION I**   1 credit  
*Prerequisite- Studio Art or PLTW Design & Drawing for Production*  
Media design is a course that introduces the tools, techniques, and concepts behind the production of digital media with a focus on video. Students will learn how to use digital photography and videography film equipment as well as film history, theory and film production. Students create both individual film projects as well as complete films within a group. Students explore how to plan, record, edit and produce a news video for the school, taking on different production roles. Students work with real life assignments, and the projects may vary depending on the needs and wants of the district.

**MEDIA DESIGN & PRODUCTION II**   1 credit  
*Prerequisite- Media Design & Production I*  
This course expands upon the basics of video production learned in Media I and allows students to explore the more advanced roles of production. Students will take a more active role in the acting and post-production work being completed in the film studio. Students will also act as mentors to the students in Media I, helping them become more comfortable with the equipment and completion of assignments. Students will complete a film reel portfolio and explore options for internships or college programs in media production.

**SCULPTURE** .5 credit  
*Offered in the Fall*  
This course is designed for the imaginative and innovative student, looking to broaden their high school visual art experience. Exposure to Contemporary Art and Artists will inspire creative, out-of-the-ordinary artworks produced during this course. Students will learn mold-making techniques, as well as using materials such as chipboard, wire, plaster, styrofoam and 3D-printing pen. Some nontraditional materials, such as recycled objects, will be incorporated into individually designed lessons. Collaborative works of art will also be part of this course. Students will study and research a variety of contemporary artwork, which will be reflected in students' personal art. Although this class has a sculptural focus, drawing will be an important aspect of the course! All projects must be investigated, planned and drawn in a sketchbook prior to beginning the 3D process.  
*This course is a prerequisite for the Ceramics & Functional Art course.*

**CERAMICS & FUNCTIONAL ART** .5 credit  
*Offered in the Spring*  
*Prerequisite- Sculpture*  
This course is designed for the imaginative and innovative student who wants to develop their sculpture skills. Students will be using earthenware and will learn a range of different hand-building, throwing and glazing techniques. Focus will also be placed on creating functional artwork, either out of ceramic or another medium, such as fiber art and mosaic. A sketchbook will be very important throughout this process, and should serve as a visual record of the students’ process. All experiments, drawings, ideas, inspiration, intentions, reflections and research should be recorded in a journal on a daily basis, as well as researching art history to gain expertise.

**DRAWING** .5 credit  
*Offered in the Fall*  
*Prerequisite- Studio Art*  
This class is for the enthusiastic art student and focuses on developing drawing skills. It meets every day for one semester. Although a focus will be placed on pencil, students will also use charcoal, colored
pencils, conte, pastels and ink. A variety of styles will be explored while completing long-term, quality art projects. With some freedom of choice in planning projects, students will begin to develop personal style and direction while improving their technical skills.

A sketch book will be completed with work reflecting personal interests outside of the class artwork. Students will be responsible for exploring original ideas that will be the basis for certain projects, as well as researching art history to gain expertise and develop their theme. Part of the curriculum will be dedicated to developing an art portfolio, possibly with college admissions in mind.

*This course is a prerequisite for the Painting & Mixed Media course.*

**PAINTING & MIXED MEDIA .5 credit**

*Offered in the Spring*

*Prerequisite- Drawing*

This class is for the enthusiastic art student and focuses on the development of skills through a range of materials and concepts. It meets every day for one semester. Students will create unique, original and nontraditional works of art by using familiar materials to create mixed media artwork. Many printmaking skills such as relief, reduction, mono-printing and etching will be implemented. The class will also investigate various painting techniques, such as watercolor, acrylic, gouache, and oil. With some freedom of choice in planning projects, students will begin to develop personal style and direction while improving their technical skills. A sketchbook will be very important throughout this process and should be a visual record of your journey in the class. All experiments, drawings, ideas, inspiration and research should be recorded in a journal, as well as researching art history to gain expertise. Part of the curriculum will be dedicated to developing an art portfolio, possibly with college admissions in mind.

**BUSINESS EDUCATION**

**ENTREPRENEURSHIP .5 credit**

You will discover the world of entrepreneurship, and learn the skills to succeed as a small business owner. Students will learn about all aspects of business ownership, including human resources, financial management, business ethics, social responsibilities, communications, marketing, and management concepts. Students will study the development of business plan. Technology will be integrated throughout the course.

**THIS IS A TWO-PART COURSE, MUST TAKE SOCIOLOGY OF SPORTS 2ND SEMESTER**

**SOCIOLOGY OF SPORTS .5 credit**

This course focuses on sports as social and cultural phenomena. Students will learn to use sociological concepts and critical thinking to discover how sports affect multiple spheres of our social life. The main focus will be on sports in the United States. Sports in other societies will be explored to help us better understand United States sports through comparison and contrast. Students will be encouraged to reflect on their own experiences as participants and spectators, and to connect these with larger social issues.

**BUSINESS LAW 1 credit**

Business law is a year-long course that examines the law as it pertains to both businesses and private citizens. Vocabulary is a very important part of the course as the law has its own language. We will use case studies and examinations to work through what can sometimes be the confusing world of the legal interpretation. This course is recommended for any student who has potential interest in a career in criminal justice or business, or any student wanting to generally educate him or herself just to be aware of one’s rights.
BUSINESS OF PROFESSIONAL SPORTS  1 credit
This course will examine the sports of Major League Baseball, the National Football League, the National Basketball Association, and the National Hockey League from their inceptions to the present. We will look at things like the explosion in salaries and the introduction of salary caps, the introduction and use of agents to negotiate contracts, the advent of free agency, the players’ unions and the power they wield, the promotion of teams, the difficulties that small market teams face, and other topics. We will use appropriate films to illuminate and reinforce some of the topics and Sports Illustrated articles to identify other topics.

FINANCIAL MATH  1 credit
A practical look at information needed by all citizens who want to be successful in the real world, financial math will look at topics like gross and net income, budgeting, checking and savings accounts, credit and debit card use, car purchases and leases, house purchases and apartment rentals, life/auto/health insurance, and other important pieces of information.

BUSINESS MANAGEMENT 1 credit
Business management is a very comprehensive course that examines the global economy and the knowledge necessary to succeed in that environment. The student will be exposed to the business organization, human resource management, finance and accounts, marketing, and operations management.

TRIAL TECHNIQUES 1 credit
Trial Techniques is the companion class to the Mock Trial team competition. In Trial Techniques, students will learn the basics of running a legal trial. We will use fictional civil and criminal cases to learn how to:
- outline the elements of a crime or civil action,
- prepare an opening statement,
- do a direct and cross examination of witnesses,
- make legal objections, and
- deliver closing arguments.
This class is for anyone interested in:
- law as a future career,
- the art of persuasion and advocacy,
- becoming a better public speaker or
- just learning about how the legal system works in general.
The goal is to have a trial every week. Whether you are on the prosecution/plaintiff’s side or on the defense, you are learning new trial skills as an attorney or witness by actually playing that role at trial.

ENGLISH

ENGLISH 9 REGENTS  1 credit
This course is designed for all 9th grade students. Expository writing expectations are reviewed and a variety of essay types are introduced. Development of vocabulary and appreciation of literature in various genres is analyzed, compared, contrasted and critiqued to promote critical thinking skills assessed by the revised NYS Regents. Titles that may be read in English 9 Regents or HONORS are, but not limited to: To Kill a Mockingbird, Romeo and Juliet, Animal Farm, Princess Bride, The Crucible, Flowers for Algernon, They Cage the Animals at Night, Looking for Alaska, Monster, The Things They Carried. Students will also be required to complete independent self-selected reading. Text: Patterns in Literature
**Students may contract with their teacher in English 9 and English 10 for Honors level work and credit/weighting. Credit is awarded only after successful completion of contract assignments.**

**ENGLISH 10 REGENTS 1 credit**  
*Prerequisite-English 9*  
English 10 is a one-year course which allows students to explore language for expressive, explanatory, critical, argumentative, and literary purposes. It fosters communication skills through writing in the form of journals, various personal and critical essays, and literary analysis. Verbal communication skills will be enhanced through class discussion, debate, and oral presentations. Students will be given the opportunity to identify with others from the study of literature: short stories, novels, plays and poetry.

Weekly assignments, stressing critical thinking and writing skills based on fiction and non-fiction selections are essential elements of the course.  
Titles that will be read in English 10 Regents include:  
Text: Literature and the Language Arts

**ENGLISH 11 REGENTS 1 credit**  
*Prerequisite-English 10*  
This course is a survey of American Literature that stresses literary and cultural themes. This course includes a variety of literary genres. A thematic approach is used. There is a strong emphasis on writing, speaking, and discussion. The final assessment of student achievement is based upon the Comprehensive Regents Examination given at the end of the year.  
Text: Literature: Reading Fiction, Poetry & Drama

**ENGLISH 12 1 credit**  
*Prerequisite-English 11*  
Students study an assortment of short stories, novels, and non-fiction literature. In addition, they will enrich their knowledge of the elements of theme, non-fiction, setting, plot, characterization, tone, mood, point of view and connecting issues in literature with the world today. These ideas are substantiated in the writing assignments and projects. In addition, students will participate in an extensive media unit designed to help them to deal effectively with our ever-changing society.

**AP ENGLISH LITERATURE (Grade 11) 1 credit**  
*Prerequisite-Teacher recommendation based on the AP/HONORS Recommendation Guide.*  
Students selected for this course will be involved in an extensive study of all literary genres with compositions following the MLA guidelines. One of the objectives is to prepare students to take the Advanced Placement examination offered by the College Board. Students are required to sit for the AP Examination in May.

**DCC ENGLISH 101/102 (Grade 12) 1 credit**  
*Prerequisite-Teacher recommendation based on the AP/Honors Recommendation Guide, 85 or better on English 11 Regents exam*  
This course will address the major principles of college writing, which are meant to serve students in all the disciplines across the curriculum. The course concentrates primarily on expository and argumentative writing; traditional rhetorical modes; and effective composing, revising, and editing strategies. This class covers MLA conventions, and a research paper is required. Critical thinking and reading skills are also stressed. Emphasis will be placed upon well-organized written composition, factually-supported conclusions, and awareness of language variety.
Effectiveness of expression and validity of judgment in the student's writing are stressed. Genre reading will include fiction, poetry, and drama. Students will earn English 101 and English 102 credits from DCC.

Text:  

**FAMILY & CONSUMER SCIENCE**

**CHILD DEVELOPMENT & PSYCHOLOGY .5 credit**
This course is designed to explore human development from the time of conception through adolescence. Students will explore developmental and psychological stages of individuals across the lifespan. This course will also discuss effective parenting theory and allow students to gain skills to relate and educate young people.

**SOCIAL PSYCHOLOGY .5 credit**
This introduction to psychology is designed to help the student appreciate the complexity of human behavior and personality development. The course focuses on supported learning and application and makes the connection between the scientific principles of psychology and the lives of today's student population. Topics include human development, personality theory, psychological disorders, states of consciousness, and current theoretical approaches to psychology. The focus of this course is to understand how and why our society functions the way it does.

**HOSPITALITY MANAGEMENT  1 credit**
The purpose of this course is to expose students to various aspects of starting and owning a small catering business. Students integrate knowledge, skills, and practices to evaluate potential career opportunities. Areas of focus include: Food Production and Service Industry, Safety and Sanitation, Equipment and Tools, Food Preparation, Event planning, Entrepreneurship and Business Plans. The course is 40% lab based. Required Prerequisite for Catering II

**MATHEMATICS**

**INTEGRATED ALGEBRA I CC  1 credit**
This course is the first senior high school course in mathematics. The scope and content of this course is algebra, problem solving, the rectangular coordinate system, basic geometry, basic trigonometry, basic statistics and probability. Scientific or graphing calculator required. All students will take the Integrated Algebra Regents exam at the end of the year.

**GEOMETRY CC  1 credit**
*Prerequisite- Integrated Algebra 1 CC*
This course is the second high school course in mathematics. The main focus of the course is geometry. The scope and content is geometry, analytic geometry, transformational geometry, and problem solving.

**GEOMETRY CONCEPTS AND SKILLS  1 credit**
*Prerequisite- Integrated Algebra 1 and a passing score on the algebra regents*
This is a second high school mathematics course that explores geometry topics through hands on manipulation and technology. The Integrated Geometry regents exam will not be taken at the end of this class. Geometry Concepts and Skills will cover topics such as lines, angles, polygons, circle geometry and coordinate geometry.
The use of technology; in the form of graphing calculators, GeoMeter’s Sketchpad, excel and various Java applets will be utilized in the course.

**ALGEBRA II CC 1 credit**  
*Prerequisite- Geometry CC*  
This is a course in advanced algebra. Integrated Algebra includes topics such as exponential and logarithmic functions, trigonometric functions, conic sections, sequences and series, matrices, probability and statistics. Integrated Algebra II/Trigonometry is designed for those students wishing to pursue mathematics and or science. The use of technology will be apparent in all aspects of this course and all students will be required to have a graphical calculator. This course will not have the Regents exam in Algebra II/Trigonometry as a requirement.

**PRE CALCULUS / MARIST COLLEGE CONNECTION COURSE 1 credit**  
Pre calculus is an introduction to the basic mathematical skills necessary for the study of calculus. The topics studied include rational expressions, analytic geometry, and the elementary properties of functions including exponential, logarithmic, and trigonometric functions. This course is intended for students who plan to enroll in MATH 241 but lack the necessary background. Appropriate technology will be selected by the instructor. This course is offered every fall. NOTE: This course may not be taken for credit by students who have completed MATH 241 or higher courses or their equivalents.  
Prerequisite: Two years of high school algebra or MATH 108

**MUSIC**

**BAND .5 credit**  
*Prerequisite- Students were to have been involved with the MCSD band program with passing grades, or another similar school program if they are entering our school district. If a student wants to enter the HS Band without the PREREQUISITE, they must get permission from the instructor after demonstrating a proficiency level appropriate for the HS Band.*  
The High School Band is a brass, wind and percussion ensemble that rehearses every other day in the school schedule. Students are also required to attend weekly sectional lessons which are set in a rotating class period schedule. Also, each student is required to practice at home. The HS Band performs at the Homecoming Football Game, school concerts, and the Spring Arts Festival, among other concert events. Students must attend the performances. Additionally, all band members will also perform at the Memorial Day Service and High School Graduation. The Band may also attend a music festival that may include an overnight stay. In addition, students will be given the opportunity to perform solos, in small ensembles and county and NYSSMA festivals. Students will be evaluated via performance ability, practice and participation.

**CHORUS .5 credit**  
*Prerequisite- Middle School Chorus or permission of instructor.*  
Chorus is a performing ensemble that meets as a class every other day. Other opportunities for select singers also exist on an individual basis. Students study, learn, and perform many different types of vocal literature, as well as rhythmic and melodic sight-reading. Attendance at all concerts is mandatory unless an excuse is provided to the instructor in advance. Each student is also required to attend vocal lessons which are set in a rotating class period schedule.
Students are evaluated through rehearsal participation, written class work, tests/quizzes, concert/lesson attendance, homework, and group/individual vocal tests. Students in the choral program are expected to demonstrate commitment and dedication to vocal/choral music through outstanding attitude, effort, and achievement.

**HEALTH & PHYSICAL EDUCATION**

**HEALTH EDUCATION** .5 credit
This course attempts to develop sensible and lasting attitudes and behavior regarding many areas of life impacting personal wellness. The three major components of health are physical, mental/emotional and social health. The units of study under these components include: drug, alcohol, tobacco, nutrition, fitness, stress management, reproduction, families and relationships, diseases and disorders as well as environmental health. Some of the skills acquired through these units are goal setting, decision making, and communication and refusal skills. Efforts to ensure competence in these areas of health should assist our young people in leading more well balanced and healthier lives. This course is usually offered to the 10th grade student and is a New York State mandated requirement for high school graduation.

**PHYSICAL EDUCATION (grades 9-12)** .5 credit
The purpose of the Senior High Physical Education is to lead healthier and more physically active adult lives. The activity-based program provides opportunities to attain concepts and learn skills in depth, for fitness, development, team, individual and dual lifetime sports, outdoor activities, and personal living by learning about the roles played in developing healthful behaviors. In addition, students will understand and be able to manage their personal and community resources so they can continue to be physically active beyond school. The goals of the program reflect the New York State learning standards for Physical Education, and the district mission.

**SCIENCE**

**EARTH SCIENCE REGENTS** 1 credit
Earth Science is a Regents course where students will study meteorology, astronomy, oceanography, and the geology of the Earth. It is a demanding course that requires the student to study a minimum of 30 minutes each night. Students are also required to complete a minimum of 20 laboratory hours as required by the New York State Board of Regents. Students completing the necessary lab hours will sit for the Earth Science Regents exam in June. Lab periods are scheduled every other day for 1 period where students will conduct investigations that are hands-on; a written lab report will be required for each investigation. Amsco’s Earth Science Review book is a required part of the course.

**LIVING ENVIRONMENT REGENTS** 1 credit
Regents Biology is a 40 week course that culminates in a state Regents Living Environment exam in June. The course requires a minimum of 20 minutes a night for study in order to be prepared for the end of the year assessment. There is also a minimum of 20 lab hours (1200 minutes) of laboratory activities or their equivalent required by the state. As part of the 20 lab hour requirement, this lab section must include the successful completion of 4 state required labs. Lab periods are scheduled every other day for 2 periods. Written documentation is required for all labs and many more lab activities are completed than required by the state. This course covers topics, which include; diversity, structure, and chemistry of living things, reproduction and development in plants and animals, genetics, homeostasis in organisms, evolution, and ecology.
The course gives students an understanding of their bodies and life processes as well as showing them that they are part of life and have a relationship with other living things in addition to their physical environment.

**CHEMISTRY REGENTS 1 credit**

*Prerequisite- Passing score on Living Env, and/or the Earth Science & Integrated Geometry Regents Exam*

Chemistry is an advanced Regents science course that requires each student in the course to complete a minimum of 1200 minutes of laboratory activities. The course includes the study of matter and its interactions. Units include Phases of Matter, Atomic Structure, Periodic Table, Formulas and Nomenclature, Bonding, Chemical Reactions, Energy and Kinetics, Equilibrium, Acids and Bases, Organic Chemistry, Electrochemistry, and Nuclear Chemistry. The Regents Examination will be given at the end of the year.

**AP CHEMISTRY 1 credit**

*Prerequisite- Algebra and Trigonometry 2, Regents or Honors Chemistry.*

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This course is taken with the idea in mind that students will take the AP Exam at the conclusion of the course. Topics included are; structure and matter, bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics and chemical equilibrium. A lab component with a focus on scientific inquiry is also required.

**PHYSICS REGENTS 1 credit**

*Prerequisite- Successful completion or co-enrollment in Algebra II*

Physics is an advanced Regents course that requires students to complete 1200 minutes of laboratory activities and sit for the Regents Examination at the end of the year. In this course we study the physical laws that govern how matter and energy interact. Students will develop problem solving skills to analyze physical situations and apply physical laws to make predictions. Units of study include: Kinematics, Forces and Newton's Laws, Momentum, Energy, Circular Motion and Gravitation, Waves and Sound, Light, Electrostatics, Electrical Circuits, and Modern Physics.

**FORENSICS 1 credit**

This course will provide students with an introduction to the theoretical understanding and practical application of forensic science techniques while learning basic concepts in Earth Science, Chemistry and Physics. Topics include: crime scene investigations, evidence collection and examination, interaction of physical conditions with evidence, careers in forensics, bloodstain pattern analysis, soil analysis, forensic toxicology, forensic anthropology, and ballistics.

**BIOLOGY / DCC COLLEGE CONNECTION 105 .5 credit**

*Prerequisite- Chemistry knowledge, Math Placement level 3 (Algebra 2 Trig)*

4 credit hours – An interdisciplinary study of basic biological concepts, including the nature of science, matter, the cell, characteristics of living matter, a brief survey of the living world, and ecology. **BIO 105** and **BIO 106** are recommended for students who wish to pursue studies in the Biological and Life Sciences.

**BIOLOGY / DCC COLLEGE CONNECTION 106 .5 credit**

*Prerequisite: BIO 105 with a grade C or better.*

4 credit hours – A continuation of **BIO 105**, including homeostasis in organisms, genetics, evolution and a consideration of the structure and function of tissues, organs and organ systems.
SECOND LANGUAGE

FRENCH II 1 credit
Prerequisite- Successful completion of the NYS Proficiency exam in French
This course is designed for advancement and broadening of the skills of listening, speaking, reading, and writing, as well as, essential grammatical structures. Further development of student understanding of the French way of life is pursued. French II is designed to fulfill one half of the NYS syllabus Checkpoint B requirements.

FRENCH III 1 credit
Prerequisite- French II and teacher recommendation
As the continuation of French II, extensive practice toward the mastery of the four skills of listening, speaking, reading, and writing is maintained. Class is predominantly conducted in the target language and emphasizes the vocabulary, grammar and cultural topics in accordance with Checkpoint B requirements. Students are expected to actively participate in class. At the end of the course, students will take a final assessment.

FRENCH IV/V HONORS 1 credit
Prerequisite- A grade of 80 or better on the French III final assessment or successful completion with a B or better of the previous level of French, and a teacher recommendation based on the AP/HONORS Recommendation Guide.
This is a combined course for French IV and V students to develop a greater degree of mastery of the French language and culture. Through French literature (short stories, plays and poetry), film, music, journal writing, internet research projects and class presentations, students will increase vocabulary, refine grammatical structures and verbs, and practice the four skills of listening, speaking, reading and writing. Thematic units from the text book, Discovering French, Rouge will also enhance students' knowledge of real-world vocabulary and increase opportunities for communication in the classroom. This class is for motivated students who wish to actively participate in the target language. Instruction for the two levels will be differentiated to meet the needs of all students in the class.
PREREQUISITE:

SPANISH II 1 credit
Prerequisite- Successful completion of the local exam in Spanish
In this course students will advance and broaden the skills of listening, speaking, reading, and writing, blending essential grammatical structures. Further development of student understanding of the Spanish way of life is pursued. Spanish II is designed to fulfill one half of the NYS Syllabus Checkpoint B requirements.

SPANISH III 1 credit
Prerequisite- Spanish II
As the continuation of Spanish II, extensive practice toward the mastery of the four skills of listening, speaking, reading, and writing is maintained.
Class is conducted in the target language emphasizing cultural and grammatical topics in accordance with Checkpoint B requirements. Students will take a final assessment at the end of this course.

SPANISH IV HONORS 1 credit
Prerequisite- Recommendation is contingent upon successful completion of timed assessment at the end of Spanish III and teacher recommendation based on the AP/HONORS Recommendation Guide
Spanish IV Honors provides advanced students the opportunity to review all grammatical concepts, improve speaking skills and pronunciation, expand reading comprehension, enhance writing ability and refine listening comprehension. This course is preparation for AP Spanish.

The objectives for the course are as follows:
- Students will comprehend formal and informal spoken Spanish.
- Students will acquire sufficient vocabulary and knowledge of structure to allow easy, accurate reading of news and magazine articles as well as Spanish literature.
- Students will compose persuasive and expository passages.
- Students will express ideas orally with reasonable accuracy and fluency.

Select readings of Spanish authors, history, geography, art, music, life, and people, taken from a variety of online sources, texts, magazines, and newspapers are used to enhance vocabulary and perfect major grammatical structures.

**SPANISH IV HONORS (INTERMEDIATE SPANISH I & II / DCC COLLEGE CONNECTION COURSE) 1 credit**

This course will expand on improving the listening, reading, writing and speaking skills, as well as culture in the Spanish-speaking world. It provides an overall grammar review with the introduction of more advanced structures which will include an introduction to the subjunctive tense. Ninety-percent of this class will be conducted in Spanish.

**SOCIAL STUDIES**

**GLOBAL HISTORY & GEOGRAPHY I (Grade 9) 1 credit**

This course begins a two-year program in global history with a chronological approach to the study of Africa, The Middle East, South Asia, East Asia, Southeast Asia, Latin America and Europe. It is designed to cultivate in students the knowledge, skills, and attitudes needed to function within a global perspective marked by cultural diversity and diffusion. Students will start with the Early Civilizations of the World and end this year with The Age of Exploration.

Within these areas the students will study geography, history, political science, economics, the fine arts and issues that illustrate the dynamics of change. Each student is required to maintain a well-organized notebook and to complete all assigned work.

**GLOBAL HISTORY & GEOGRAPHY II (Grade 10) 1 credit**

*Prerequisite- Global History & Geography I*

Global History II includes the study of Africa, the Middle East, South Asia, East Asia, Southeast Asia, Latin America and Europe from 1800 to present. It is designed to cultivate in students the knowledge, skills, and attitudes needed to function within a global perspective marked by cultural diversity.

Students will study geography, history, political science, economics, the fine arts, and contemporary issues that illustrate the dynamics of change. Each student is required to maintain a well-organized notebook and to complete all assigned work.

Topics to be covered include geography, history, dynamics of change, economic developments and contemporary issues.

Requirements include textbook and selected reading materials, outside research, oral reports and examinations. All students must successfully pass the Regents examination in order to graduate.

**AP EUROPEAN HISTORY 1 credit**

*Prerequisite- Global History I and Teacher recommendation based on the AP/HONORS Recommendation Guide*

The study of European history since 1450 introduces students to cultural, economic, political, and social
developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. In June, students will also take the New York State Regents exam in Global History and Geography. The course is for students in the 10th grade and fulfills the Global History II requirement. A limited number of spots may be open for junior and senior students at teacher discretion. Students are required to sit for the AP examination in May.

UNITED STATES HISTORY & GOVERNMENT 1 credit
Prerequisite- Global History I & II
The history of the United States is the history of a great experiment in democracy. Knowledge and function of American government, learning about the basic principles and cultural heritage upon which our nation is founded, plus a core program of Thirteen Enduring Constitutional issues are highlights in this course. At the completion of the 11th grade course, all students take the Regents Examination in United States Government.

ECONOMICS & PARTICIPATION IN GOVERNMENT 1 credit
Prerequisite- Global History I & II and US History and Government
The ECONOMICS section focuses on the study of the distribution of resources, economic theory and the American Economic System. Assessments and assignments stress analysis and writing skills. In addition, each student completes a long-term project and a research paper. GOVERNMENT surveys how our government works. In PARTICIPATION IN GOVERNMENT students will study the various functions and types of government. Students will also explore several national issues. Assessments and assignments stress analysis and writing skills. In addition, each student completes a long-term project and a research paper.

AP GOVERNMENT / DCC COLLEGE CONNECTION COURSE 1 credit
Prerequisite- Teacher recommendation based on the AP/HONORS Recommendation Guide
In this course, students will understand some of the world’s diverse political structures and practices. Six countries are studied in detail: Great Britain, China, Russia, Iran, Nigeria and Mexico. US: This course gives students an analytical perspective on government and politics in the US. It includes study of the general concepts and analysis of specific examples. It also studies institutions, groups, beliefs and ideas that constitute US politics. Students will earn 3 credits in Gov 121. ECONOMICS: The Economics Section focuses on the study of the distribution of resources, economic theory and the American Economic System. Assessments and assignments stress analysis and writing skills. In addition, each student completes a long-term project and a research paper. Students are required to sit for the AP exam in May.

AP UNITED STATES HISTORY 1 credit
Prerequisite- Global I, Global II/AP Euro & teacher recommendation based on the AP/HONORS Recommendation Guide.
AP US History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and challenges in US history. The course prepares students for advanced college courses in history by making demands upon them equivalent to those made by full-year introductory courses. Students learn to assess historical materials – their relevance to a given problem, reliability, and importance - and to weigh the evidence and interpretations presented in historical scholarship.

Students will prepare to take the AP exam in May by reviewing objective questions as well as writing free response and document based essays. In June, students will also take the New York State Regents exam in US History and Government. Students are required to sit for the AP examination in May.
PROJECT LEAD THE WAY

INTRODUCTION TO ENGINEERING AND DESIGN / DESIGN AND DRAWING FOR PRODUCTION  RIT COLLEGE CONNECTION COURSE  1 credit

Prerequisite- Recommendation from the 8th grade team
This is a one-unit course which emphasizes creative problem, designing, and computer-aided drawing. The course reflects the approach used in business and industry to develop new products. Students will develop solutions to various design or product problems and proposed solutions are researched, sketched, refined, and rendered as drawings. Basic elements of design and technical drawings are covered. This course may be used to satisfy the art requirement.
Students must take and pass a required examination from RIT to receive 3 college credits. Please see page 11 for specific registration procedures to receive credit from RIT.

PRINCIPLES OF ENGINEERING/ RIT COLLEGE CONNECTION COURSE  1 credit

Prerequisite- Design & Draw and teacher recommendation based on the AP/HONORS Recommendation Guide
This course provides an overview of engineering and engineering technology. It explores the different specialties of engineering, the design process, and the principles of different engineering systems including: mechanisms; thermodynamics; fluid systems; electrical systems and control systems; the strength of materials and how they relate to the manufacturing process, engineering for reliability, and kinematics.
Students must take and pass a required examination from PLTW to receive 3 college credits.

CIVIL ENGINEERING/ARCHITECTURE
RIT COLLEGE CONNECTION COURSE  1 credit

The major focus of the Civil Engineering and Architecture (CEA) course is a long-term project that involves the development of a local property site. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of this property. The CEA course is intended to serve as a specialization course within the Project Lead The Way sequence. The course is structured to enable all students to have a variety of experiences that will provide an overview of both fields; civil engineering and architecture. Students work in teams, exploring hands-on projects and activities to learn the characteristics of these two fields.

In addition, students use Rivet, which is a state of the art computer-aided design software package from AutoDesk, to help them design solutions to solve their major course project. Students learn about documenting their project, solving problems, and communicating their solutions.
The course of study includes: the roles of civil engineers and architects; project planning; site planning; building design; project documentation and presentation.
Students must take and pass a required examination from PLTW to receive 3 college credits.

DIGITAL ELECTRONICS  1 credit

Prerequisite- Principles of Engineering, Design and Draw, Civil Engineering
This course is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3
players, laptop computers, digital cameras, and high-definition televisions. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

**STUDENT SUPPORT CLASSES**

**ENGLISH AS A SECOND LANGUAGE** 1 credit
Courses in English as a Second Language provide speakers of other languages instruction in listening, speaking, reading, and writing with the purpose of developing cognitive academic language proficiency. The ESL program endeavors to prepare students for academic coursework in English in all content areas. Additionally, the ESL program provides students opportunities to access scholastic and extracurricular programs at the Millbrook High School in an effort to maintain students’ native cultural identity and to encourage their participation in a range of academic and social experiences. The ESL program seeks to create a safe, nurturing environment for English language learners (ELLs) throughout their high school career. In order to help build connections between ELLs and their new community, the ESL program provides structured opportunities for ELLs to interact with other high school students, faculty, social workers, and counselors during and after the school day.

**LEARNING CENTER**
The Learning Center supports students who are struggling with the core curriculum. Students may be assigned to the Learning Center based on their academic needs as determined by members of the Response to Intervention Committee. Students receive individualized or small group instruction designed to maximize their learning. Individual learning styles and differentiation are taken in to consideration when planning intervention strategies for students.

**STUDY SKILLS** - The Study Skills Class is designed to assist students in achieving success in academic classes. Instruction involves re-teaching and reviewing of content area curriculum. Students work in small groups or receive differentiated instruction one to one.

**SPECIAL EDUCATION SERVICES**

**RESOURCE ROOM**
Resource Room is designed to support students in successfully achieving individualized goals. Instruction is targeted to meet the specific needs of each student and can be administered one to one or in a small group setting.

**INTERNATIONAL BACCALAUREATE COURSE OFFERINGS**

**YEAR 1 CLASSES WILL NOT BE OFFERED DURING THE**
20-21 SCHOOL YEAR

GROUP 1: STUDIES IN LANGUAGE & LITERATURE (LANGUAGE A)

Language & Literature ~ HL ~ (2 year sequence)
The Language A: Language and Literature course introduces the critical study and interpretation of written
and spoken texts from a wide range of literary and non-literary genres. The course is organized into four
parts, each focused on the study of either literary or non-literary texts. Together, the four parts of the course
allow the student to explore the Language A (native tongue) of study through its cultural development and
use, its media forms and functions, and its literature. Students develop skills of literary and textual
analysis, and also the ability to present their ideas effectively. The aim of the course is the development of
critical literacy. This course is offered Junior year, as students are also preparing for the NYS Regents
Examination in English Language Arts.

GROUP 2: LANGUAGE ACQUISITION (LANGUAGE B)

IB French Year 2
This is the second course in a two-year program of advanced French studies. Students will develop a greater
degree of mastery of the French language and culture. The curriculum prepares students for the French IB
assessments. Students should have an excellent command of structural patterns and considerable competence
in listening, speaking, reading and writing.
Prerequisite: IB French Year 1

IB Spanish Year 2
This is the second course in a two-year program of advanced French studies. Students will develop a greater
degree of mastery of the Spanish language and culture. The curriculum prepares students for the Spanish IB
assessments. Students should have an excellent command of structural patterns and considerable competence
in listening, speaking, reading and writing.
Prerequisite: IB Spanish Year 1

GROUP 3: INDIVIDUALS AND SOCIETIES

Aspects of History of the Americas ~ HL ~ (2 year sequence)
This class is a 2-year sequence in IB History. For Diploma candidates, the course meets the Group 3
requirement, and provides one of the three HL courses needed to graduate.

Year 2 – Seniors
We will cover IB Prescribed Topic: The Move the Global War, with an emphasis on Japanese expansion in
East Asia, 1931-41, and German and Italian expansion, 1933-41. Two additional topics include
Authoritarian States and Cold War: Superpower tensions and rivalries. In May of Senior year, students
will take the External Assessments:
Paper 1 - a source based question set on the “Move to Global War” (20%)
Paper 2 - an essay based on the Senior Year topics (25%)
Paper 3 - an essay based on the Junior Year topics (35%)

IB Geography SL/HL (2 year)
This course focuses on the interactions between individuals, societies, and physical processes in both time
and space. We will identify trends and patterns in these interactions, while investigating the way people
adapt and respond to change. Evaluation is a vital part of IB Geography, as we assess actual and theoretical management strategies associated with human adaptation. Students will develop an understanding of the dynamic interrelationships between people, places, spaces, and the environment. Critical awareness is an additional skill that IB Geography students will develop, as they consider complexities in geographic issues. Students will also evaluate the need for planning and sustainable development through resource management. SL students will study two geographic themes; HL students will study 3 geographic themes as well as 3 geographic perspectives. Both groups will engage in Geography Fieldwork as part of their Internal Assessment. In addition, both groups will study Global Change (population distribution, global climate, and resource consumption and security.) SL students will take 2 external assessment; HL students will take 3 external assessments.

GROUP 4: SCIENCES

**Biology ~ SL ~ (2nd year only)**
IB SL Biology is a 2 year course that provides coursework and laboratory experiences that will prepare them for the IB SL Biology Exam at the end of year two. The core principle of SL Biology is to develop a broad understanding of the concepts while enhancing the students' critical thinking skills. There are four basic biological themes that run throughout the 2 year course: structure and function, universality versus diversity, equilibrium within systems, and evolution. A variety of topics are covered: cells, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology. Along with the theoretical aspects of these topics, students also complete 40 hours of lab practical investigations to further develop their application of the concepts. This component includes a Group 4 project which is an interdisciplinary project with the other IB sciences in year 1 and an individual investigation with a formal lab write-up at the end of year 2. This course also requires sitting for the IB Exam in May of year 2.

**Environmental Systems and Societies ~ SL ~ (1 year)**
Environmental systems and societies is an interdisciplinary course that explores the world’s natural environmental systems. These systems are approached from different cultural, economic, ethical, political and social lenses so that students can engage with different topics from multiple perspectives. Students will become equipped to recognize the impact of humans in the complex systems of the natural world. Students will gain a better understanding on how their own lives fit into the ever growing global world in relationship to our environment. ESS is an IB SL 1 year course that can fulfill either the Group 3 or Group 4 requirement. ~ see Group 3 ~

**Physics HL (2 year sequence)**
IB HL Physics is a 2 year course that seeks to help students gain a grounding in the theory of the subject as well as provide students with opportunities to develop observational skills, design investigation, collect data, analyze results and evaluate and communicate their findings. Some topics covered include: Mechanics, Thermal Physics, Waves, Electricity and Magnetism, Atomic Physics, and Quantum Mechanics. A portion of Year 2 is spent on coverage of an additional topic (Relativity, Engineering Physics, Imaging, or Astrophysics). Approximately 60 hours of course time is to be spent on lab work, including 10 hours on an individual investigation and 10 hours on the Group 4 Project (an interdisciplinary project with other IB Sciences). Students take the IB exam in May of Year 2.

GROUP 5: MATHEMATICS

**IB Applications and Interpretation SL (2 year sequence)**
The IB Mathematics Applications and Interpretation (SL) course is designed for students exploring careers in the humanities, statistics, business, psychology and design. It includes 60 hours of common content between all the IB Mathematics courses, with an added focus on reflection and collaboration. This class is appropriate for students who are interested in developing their mathematic skills for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. 30 hours of the class will be devoted for inquiry and the Internal Assessment. At the end of Year 2 students will take 2 external assessments (Papers 1 and 2).

**IB Applications and Interpretation HL (2 year sequence)**
The IB mathematics Applications and Interpretation (HL) course centers on problem-solving in order for students to acquire skills and concepts in a wide range of situations, including non-routine, open-ended, and real-world problems. It differs from the SL course in that it consists of 240 hours of teaching, with more time devoted to numbers and algebra, functions, geometry and trigonometry, statistics and probability and calculus. Math App HL also includes the shared 30 hours of development of investigational, problem-solving and modeling skills. 15 hours is devoted to the Internal Exploration assessment. 3 Papers will be taken in May of senior year.

**IB Calculus Analysis and Approaches SL (2 year sequence)**
The IB Mathematics Calculus Analysis and Approaches SL is appropriate for students who enjoy developing their mathematical skills to become fluent in the construction of arguments and develop strong skills in mathematical thinking. They will be intrigued by exploring real and abstract applications of these ideas, with and without the use of technology. All students will complete 120 hours of SL content and 30 hours of investigation, inquiry and problem-solving activities including the completion of the internal assessment. At the end of Year 2, students will take 2 external assessments. (Papers 1 and 2).

**IB Calculus Analysis and Approaches HL (2 year sequence)**
The IB Mathematics Calculus Analysis and Approaches HL is appropriate for students planning on exploring careers in pure mathematics, engineering, physical sciences, economics and all who are interested in analytic methods. There is an emphasis on calculus, with additional units covering functions, algebra, statistics and probability, geometry and trigonometry. Students will write an internal assessment based on investigation, problem solving and modeling skills in a written exploration. At the end of Year 2, students will take 3 external assessments (Papers 1 2 and 3).

**GROUP 6: THE ARTS**

**Visual Arts SL or HL (2nd year)**
IB Visual Arts is a 2 year studio based course for innovative, independent learners and artists. This class is different from other art courses because of its emphasis on inquiry, the creative process, documentation, exhibition and communication through the arts. Research will be conducted across cultures, time periods and disciplines. Students must be independently motivated, making decisions that involve materials, techniques and concepts. Students will be assessed based on three core components: comparative study, process portfolio and exhibition of a final body of art.
Previous high school art classes are recommended, but not required. IB Visual Arts fulfills the category 6 requirement. Students may opt to take the SL or HL exam.

**IB DIPLOMA CANDIDATES**

**THE DIPLOMA PROGRAMME CORE**
Creativity, Activity and Service
CAS is one of the components of the IB Diploma Program Core. The aim of CAS is to enable students to enhance their personal knowledge and develop interpersonal skills through experiential learning. It is a unique journey of self-discovery beginning in junior year and culminating by March of senior year. In addition, students are required to undertake at least one collaborative project with other students. The various activities are consistently performed and documented over 18 months.
- Real purposeful activities with significant outcomes
- Personal challenge- must extend student and be achievable
- Thoughtful in planning and review process
- Reflection on outcomes and personal learning
- CAS allows students a counterbalance to the rigor of academic coursework. It is enjoyable and fun!

Students are required to meet with their CAS Coordinator for three formal interviews. Students are required to establish an account on Managebac, a system used to record experiences and reflections throughout their CAS portion of the diploma program.

Extended Essay
The Extended Essay is an independent, self-directed piece of research, finishing with a 4,000-word paper. It is a required component of the Diploma Programme. The Extended Essay will provide students with practical preparation for undergraduate research. It will also provide students with an opportunity to investigate a topic of special interest related to one of the IB subjects. Students will develop skills in formulating an appropriate research question, communicating ideas, and developing an argument.

Theory of Knowledge
IB Theory of Knowledge is a two-year course designed to promote higher level thinking and inquiry-based learners. Instead of only being focused on what we know, the primary purpose of TOK is to examine how we know it. With this aim in mind, TOK is structured as an exploratory course that digs deeply into numerous topics stemming from two intertwined categories: ways of knowing (i.e. sense perception, language, reason, emotion) and areas of knowing (i.e. arts, history, natural sciences, mathematics, human sciences, and ethics). Special consideration will be given to how knowledge can be constructed, questioned, examined, evaluated, revised, and justified. Theory of Knowledge will include an internal assessment that consists of a student presentation on an issue of their choice that will allow them to evaluate knowledge issues, their relevance, and their connections to areas of knowledge and ways of knowing. Students will also write a paper on a prescribed title provided by the International Baccalaureate Organization. Each of these assessments will contribute to the student’s IB grade and will count towards the earning of an IB Diploma.

DUTCHESS BOCES CAREER & TECHNICAL INSTITUTE
2020-2021 COURSE OFFERINGS

Please note that CTI Courses are not currently National Collegiate Athletic Association (NCAA) approved.
Career Exploration Program - This course is geared for students in 10th and/or 11th grade who are classified with disabilities. Students will be given a foundation in career skills and will explore a number of career options. Additional services include career counseling and career research. Upon successful completion, students may enter CTE programming.

Agriculture

Small Engine Technology I & II - This program offers students entry level skills in small engine operation, maintenance, and repair. Second year students will focus on the operation, maintenance, and repair of lawn/garden equipment and recreational vehicles. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

Careers in Animal & Plant Sciences I & II - Students will develop an understanding of the diverse and profitable fields of Agriculture. A variety of topics are covered including plant and animal biology and technology, food science and safety, wildlife management and environmental conservation, agricultural research, college and career exploration. This program emphasizes hands-on experiences with on-site projects, guest visitors, work placements and related field trips to businesses, organizations, colleges and industry events. Students have the option of choosing the animal or plant track in their second year. Students who successfully complete courses I and II will be eligible for one unit of Math credit and two units of Science credit.

Architecture & Construction

Construction Trades I & II - This program includes coursework in building construction, finish carpentry, masonry, plumbing and basic electricity. Students will be introduced to the tools, methods, and skills needed to gain entry level employment in the construction industry. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

Trade Electricity I & II - This program provides students entry level skills in construction electricity. Courses emphasize job safety, electrical theory, electrical calculations, work ethic, proper tool use and exposure to professional opportunities within the trade. First year focus is on residential installations, followed by second year directed at commercial and industrial installations. Students who successfully complete courses I & II are eligible for one unit of Math and one unit of Science credit. Students must provide hand tools and code book.

Welding & Fabrication I & II – This program will introduce students to entry level skills needed for careers in the welding and steel fabrication industry. Students who successfully complete courses I and II will be eligible for one unit of Science Credit.

Arts, Technology & Communication

Graphic Design I & II - Students will be given the opportunity to explore the exciting world of Graphic Arts, Graphic Design, and Multi-Media Arts. Students enrolled in this program will develop skills and workplace competencies while exploring the many facets of communication careers. Students use a hands-on learning approach where the emphasis is placed on problem solving skills and communication techniques and processes.

TV/Video Production I & II - This course is an introduction to the field of TV and video production. It familiarizes students with the basic principles, theories and techniques in video production. Students will construct storyboards, write scripts, direct shoots, and edit their own projects.

Education

Early Childhood Education I & II - This program provides students with an understanding of the physical, social and mental development of children ages birth to eight. It prepares students to work under the general supervision of a licensed Teacher. Students will cover a range of topics related to pedagogy. Second year students will participate in off-site classroom internships. Students who successfully complete courses I and II will be eligible for one unit of Math credit.
Health Sciences

**Introduction to Health Occupations** – This one-year course is recommended during the student’s junior year and includes core competencies specific to the Health Occupations. Students will be given an opportunity to explore various health care fields. This course prepares students for second (senior) year Nursing Assistant. Introduction to Health Occupations is strongly recommended before taking the Nursing Assistant course.

**Nursing Assistant** - This one-year course (for seniors) introduces the student to the foundation skills necessary for the study of Nursing. Successful students qualify to take the CNA exam. Successful completion satisfies health requirement for high school graduation. No academic pullouts available for this course. Important Notes: Introduction to Health Occupations is strongly recommended before taking Nursing Assistant. Work maturity skills and good attendance are essential to success in the Nursing Assistant program. Students successfully completing this program are eligible for one unit of Science credit.

Hospitality & Tourism

**Culinary Arts /Restaurant Management I & II** - This program introduces the student to skills in food preparation, baking and pastry arts, safety and sanitation, and culinary hospitality. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

Human Services

**Cosmetology I & II** - Students learn the care of hair, nails and skin. Good attendance is essential. Students MUST take both courses I and II to successfully complete the program, with at least 1000 hours, to be eligible to take the New York State cosmetology license exam. No academic pullouts are available for this class. Successful completion of this program will require students to complete off-site internships. Students who successfully complete courses I and II are eligible for one unit of science credit.

Information Technology

**Computer Hardware Technology** - This one-year course is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology career field. Students who successfully complete Computer Hardware Technology will be eligible for one half unit of Math credit.

**Computer Networking** – This one-year course is designed to provide the student with the technical knowledge required to obtain an entry level job in the field of computer network installation and maintenance. While Computer Hardware Technology is not required as a prerequisite, it is highly recommended. Having basic knowledge of the workings of computers will make this class more accessible. Students who successfully complete Computer Networking will be eligible for one half unit of Math credit.

Law and Public Safety

**Security & Law Enforcement I & II** - This program introduces the student to the basic concepts of security and public safety and the theory and practical applications of law enforcement and criminal justice. Students who successfully complete courses I and II will be eligible for one unit of PE credit and one unit of Science credit.

Transportation

**Auto Mech & Tech Training I & II** - This is an exploration of various segments of the automotive field, including in the second year, electronics, on-board computers, OBD I & II, transmissions, drive line and clutches, and engine service. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Autobody Collision & Refinishing I & II** - This course covers the auto body field, collision theories and repairs, as well as auto refinishing. Students who successfully complete courses I and II will be eligible for one unit of Math credit.
Auto Service Bay Technician  This program will introduce the basics of auto maintenance to the student with the focus on undercarriage maintenance, oil changes, tires and brakes.

Related Academics

Career Literacy (CTE English) - All programs offer .5 credit per year in high school English, with the exception of Career Exploratory.
MST - This pullout Math-Science-Technology Program fulfills the requirement for a third unit of Math or Science credit.
Integrated/Specialized Science and Math - as indicated.

For more details on our programs, please visit our website www.dcboces.org/CTI or call Kirstin Litwin or Megan Amendola at 845.486.8001

HIGH SCHOOL CURRICULA

Millbrook High School strives to meet the general and individual needs of its students and of the community which it serves. It offers preparation for those who expect to further their education beyond high school. Through its curricula, its extracurricular activities, and its special services, our school assists each student to become a better person and citizen.

A most important decision for a high school student is the choice of curriculum and the pattern or subjects the student follows in that area each year. School counselors, teachers, and parents will assist each individual in selecting those subjects which best fit the student's capacities, needs and interests. Each student must choose specific subjects with great care and must complete a four-year plan for his or her high school years. Students are required to take a minimum of five and one-half credits each year.

DEFINITION OF TERMS USED IN THIS COURSE GUIDE
INSTRUCTIONAL LEVELS

Millbrook High School offers a diversified curriculum for students who are distinguished by wide individual differences in ability, achievement, effort and interest. The goal is to enable students to achieve and to realize their highest potential. Teacher and counselor recommendations for placement are based on the following criteria:

A. Standardized test data
B. Academic achievements
C. Observations of a student's work habits, interest, attitude, and motivation

The school staff considers the recommendation of instructional level a major professional responsibility. Should a parent or guardian have a question or concern about the placements, they are invited to schedule an appointment with the counselor and teacher to review it.

COLLEGE PREPARATION

Every student should be concerned not only with meeting graduation requirements, but with meeting college and other post-secondary education requirements as well. Students need to consult college catalogs and to keep up-to-date on admissions. The School Counseling Office maintains a current collection of catalogs as well as SAT, ACT, FAFSA, PSAT applications, and other information needed by students contemplating post-secondary studies. In addition, regular visitations from college representatives are scheduled. The School Counseling Office is a valuable asset for students to utilize as they begin planning what they'll do after graduation. Students should visit the Naviance program accessed by MCSD.

It is never too early to begin this planning. Students are encouraged to utilize these services early in their high school careers and on a regular basis during their career at Millbrook High School.

CRITERIA FOR CLASS STANDARDS

Education is a progressive experience and is measured in terms of progress toward a goal. Students are classified according to the number of credits which they have earned toward graduation:

<table>
<thead>
<tr>
<th>Class</th>
<th>Credits and Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOPHOMORE</td>
<td>5.5 credits, one unit of each English and Social Studies</td>
</tr>
<tr>
<td>JUNIOR</td>
<td>11 credits, two units of each English and Social Studies</td>
</tr>
<tr>
<td>SENIOR</td>
<td>16.5 credits, three units of each English and Social Studies or can be enrolled in sufficient courses to be eligible for graduation</td>
</tr>
</tbody>
</table>

Although a student will not be denied senior status for a deficiency in Physical Education, no student may graduate in the state of New York unless he/she has at least 2 credits in Physical Education.

**SCHEDULE CHANGES**

Schedule changes and drops will be made only when needs are clearly indicated. The deadline for such schedule changes must be made a week after progress reports are available (the end of the 6th week of school). After this date all requests to drop/change courses may require a parent conference with the teacher, counselor, student and principal. Requests for such changes must be in writing on the appropriate form available in the School Counseling Office. The request will not receive final approval until the appropriate form is returned.

**GRADING AND RANKING**

Report cards are issued four times a year: mid-November, early February, mid-April, and late June. Parents should be aware of these dates for the purpose of reviewing academic progress, and should direct all questions concerning grades to the teacher responsible for issuing them. The passing mark is 65%. The final grade is based on 80% class work, 10% mid-term exam, and 10% Regents or final exam grade. Rank and averages are based on six semesters, grades 9-11. In February of their senior year, official class rank is determined, taking into account grades from 1st semester.

Final ranking is completed at the end of the second quarter. Rank in class is determined by weighted average. Grades on a transcript are not weighted. Weighting is used to calculate rank in class only. Alpha conversion of grades is as follows:

- A+= 97-100
- A = 93-96
- A- = 90-92
- B+=87-89
- B = 83-86
- B- = 80-82
- C+=77-79
- C = 73-76
- C- = 70-72
- D+=67-69
- D = 65-66
- F=64 and below

**Association of Secondary School Principal’s Recommended Formula**

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Average</th>
</tr>
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<tbody>
<tr>
<td>AP/College</td>
<td>X</td>
</tr>
<tr>
<td>IB SL</td>
<td>X</td>
</tr>
<tr>
<td>IB HL</td>
<td>X</td>
</tr>
<tr>
<td>Honors</td>
<td>X</td>
</tr>
<tr>
<td>Regents</td>
<td>X</td>
</tr>
<tr>
<td>School</td>
<td>X</td>
</tr>
</tbody>
</table>

Effective July 1, 2011, transfer students who enter Millbrook High School after the completion of one or more years at another institution may participate in a transcript review. The principal will be able to weight transfer classes based on curricular expectations and difficulty level. It is the responsibility of the student to provide information requested by the principal deemed necessary to complete this process within 70 calendar days from the date of enrollment. If a student fails to provide the requested
materials, the principal will weight the courses by using the Regents or School formula. No transfer student’s courses in a given year will be permitted to exceed the maximum weight any given Millbrook High School student in the same grade may achieve based on the Millbrook High School course offerings. In the instance where a transfer student’s grades are based on a letter system, the highest numeric value will be selected from the appropriate numeric range to determine the student’s ranking.

**COMPUTATION OF FINAL GRADE**

**FULL YEAR COURSE**

<table>
<thead>
<tr>
<th>Marking Period</th>
<th>Mid Exam</th>
<th>Final Exam</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Percent Example</td>
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<tr>
<td>80</td>
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**SEMESTER COURSE**

<table>
<thead>
<tr>
<th>Marking Period</th>
<th>Final Exam</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>(3)</td>
</tr>
<tr>
<td>Percent Example</td>
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<td>40%</td>
</tr>
<tr>
<td>90</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

All quarter averages are weighted (based on the type of class i.e. regents level, IB level, etc.) but the final average is unweighted. Both weighted and unweighted GPA’s will appear on the final transcript.

Students receiving grades of INC (Incomplete) are to complete all missing work. Failure of a student to complete missing work, without a legal excuse and special arrangements being made, will lead to a grade of zero (0) for the incomplete work. The zero (0) will be incorporated into the grade to determine the reported grade for the marking period. There are to be no grades of INC for any marking period without special permission from the principal.

Progress reports are issued during the fifth week of each marking period. Their purpose is to alert you and your parents concerning unsatisfactory progress, or commend you for exemplary effort and achievement. The intent of the formal type of progress report is to offer specific suggestions for improvement of your work. The maximum benefit from these reports comes only when (1) parents contact the teacher to arrange a conference, and (2) students confer with the subject teacher for specific suggestions for work improvement. Both steps should be taken immediately. Parents may view students’ grades through the Parent Portal System. Parents must first register in the High School office for access.

**ACADEMIC COMPETENCY**
All students will be required to take the corresponding Regents examination, or a more challenging examination approved by the Commissioner of Education in order to be granted a high school diploma.

**GRADUATION REQUIREMENTS**
Awarding of diplomas and local certificates and participation in graduation ceremony:
In order to participate in the graduation ceremony, the principal must certify that the student has met one of the following requirements:

<table>
<thead>
<tr>
<th>Required (&quot;Core&quot;) Subjects</th>
<th>Regents Requirements</th>
<th>Advance Regents Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second Language</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Health Education</td>
<td>½</td>
<td>½</td>
</tr>
<tr>
<td>Art and/or Music</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3 ½</td>
<td>1 ½</td>
</tr>
</tbody>
</table>

Total 22 22

Regent Exam Requirements (5)

<table>
<thead>
<tr>
<th>Regent Exam Requirements</th>
<th>Advanced Regents (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>U.S. Hist/Govt.</td>
<td>U.S. Hist./Govt</td>
</tr>
<tr>
<td>Global History</td>
<td>Global History</td>
</tr>
<tr>
<td>1 Science</td>
<td>2 Science (life &amp; physical)</td>
</tr>
<tr>
<td>Integrated Algebra</td>
<td>Integrated Algebra</td>
</tr>
<tr>
<td>or see 4+1 pathway</td>
<td>Integrated Geometry</td>
</tr>
<tr>
<td></td>
<td>Integrated Alg II/Trig</td>
</tr>
</tbody>
</table>

# Students must complete at least one unit of study in a second language. If students pass the Local examination in a second language at the completion of 8th grade, this will fulfill this requirement. A student identified as having a disability may be exempt from these requirements if the student's IEP states that such requirements are not appropriate.

### Students who complete a 5 unit sequence in Career & Technical Education or the Arts are not required to complete the two additional units of credit in Foreign Language in order to earn an advanced regents diploma.

In addition to the above, the Board establishes a minimum course enrollment of 5.5 credits per year for each student. Exception to this requirement may be made by the principal for students with disabilities whose IEP states that less credits are appropriate, seniors who can complete all graduation requirements with less than 5.5 credits in their senior year, and those students without a disability but whose educational program and special circumstances may require less than 5.5 credits per year. Failure to maintain full time status as a “bonafied student” may affect participation in sports.
Students with disabilities will be required to take each Regents course and examination as required for their entering class.

An official school diploma will only be issued based upon the completion of the Regents, local diploma, or Skills and Achievement Commencement Credential.

A high school diploma will represent termination of the district’s responsibility to provide additional educational training opportunities as part of the regular day program. Any student earning a Certificate of Attained Skills & Experience will be informed in writing of his or her right to attend the public schools of the district until one of the following occurs:

1. The student earns a high school diploma; or
2. The student attains the age of 21 prior to September first of a school year.

DIPLOMA TYPES

Awarding of diplomas and participation in graduation ceremony

There are six types of diplomas or certificates:

1. International Baccalaureate Diploma (Class of 2019 and beyond)
2. Advanced Regents diploma
3. Regents diploma (5 Regents exams passed or 4 + 1 Pathway)
4. State high school equivalency diploma (GED)
5. Career Development and Occupational Studies Credential
6. Local diploma for students with disabilities.

EARNING A REGENTS DIPLOMA

Students shall meet the commencement level New York State learning standards by successfully completing twenty-two units of credit and a minimum of five New York State assessments distributed as specified in (a) through (k) below. After passing the required New York State assessment or approved alternative in Mathematics, Science, and English Language Arts, the remaining units of credit required in that discipline may be in specialized courses. A specialized course is a course that meets the requirements of a unit of credit as defined in section 100.1 (a) of the Commissioner’s Regulations and the New York State commencement learning standards as establish by the commissioner. A specialized course develops the subject in greater depth and/or breadth and/or may be interdisciplinary. Successful completion of one unit of study in an interdisciplinary specialized course may be awarded only one unit of credit but may be used to meet the distribution requirements in more than one subject. In a public high school, an interdisciplinary specialized course shall be taught by a teacher certified in at least one of the subjects.

a. English, four units of credit and the Regents comprehensive examination in English or an approved alternative pursuant to section 100.2 (f) of the Commissioner’s Regulations.

b. Social Studies, four units of credit including one unit of credit in American History, the Regents examination in United States History and Government or an approved alternative pursuant to section 100.2 (f), the Regents examination in Global History and Geography or an approved alternative pursuant to section 100.2 (f)**, and a half unit of credit in Economics and a half unit of credit in Participation in Government or their equivalent as approved by the local public school superintendent or his or her designee.

** For further information on Pathway Assessment options, please refer to: NYSED website @ p12nysed.gov
c. Mathematics, three units of credit and the Regents examinations in mathematics designated by the commissioner or an approved alternative pursuant to section 100.2 (f). Students must pass either the examination titled Algebra I Common Core, Geometry Common Core or Algebra II Common Core.

d. Science, three units of credit and one of the Regents examinations in science or an approved alternative pursuant to section 100.2 (f). In order to qualify to take a Regents examination in any of the sciences a student must complete 1200 minutes of actual hands-on (not simulated) laboratory experience with satisfactory documented laboratory reports. The 1200 minutes of laboratory experience must be in addition to the required classroom instruction associated with earning a unit of credit. There may, in some cases, be required New York State labs that must be completed.

e. The Arts (including visual arts, music, dance and theatre), one unit of credit, which may be a specialized course that meets the arts standards at the commencement level as established by the commissioner. Any arts course for which credit will be awarded to meet the one unit of credit requirement for graduation must be taught by a certified teacher and must follow a State-developed or State-adopted syllabus or a locally-developed or locally-adopted syllabus approved by the commissioner.

f. Health, one half unit of credit which may be a specialized course which meets the health standards at the commencement level as established by the commissioner. Any health course for which credit will be awarded to meet the one half unit of credit requirement for graduation must be taught by a certified teacher and must follow a State-developed or State-adopted syllabus or a locally-developed or locally-adopted syllabus approved by the commissioner.

g. Languages other than English, one unit of commencement-level credit which can be earned by passing the local second language examination or an approved alternative pursuant to section 100.2 (d). A student identified as having a disability which adversely affects the ability to learn a language may be excused from the language other than English requirement set forth in this subparagraph if such student’s individualized education program indicates that such requirement is not appropriate to the student’s special education needs. Such a student need not have a sequence in a language other than English but must meet the requirements for the total number of credits required for a diploma.

h. Physical Education, two units of credit, except that a student who has completed the diploma requirements in fewer than eight semesters shall not be required to continue enrollment in high school for the sole purpose of completing the physical education requirements.

i. Additional units in English language arts, mathematics, social studies, science, the arts, languages other than English, career and technical education, or any other subject area approved by the commissioner to a total of twenty-two units of credit.

j. The State learning standards in technology may be met either through a course in technology education or through an integrated course combining technology with mathematics and/or science. A commencement-level course in technology education may be used as the third unit of credit in science or mathematics but not both.

k. The learning standards for parenting may be met either through a separate course in parenting or through integration in a course in health or family and consumer sciences.

l. Special educational needs. Such a student need not have a sequence in a language other than English but must meet the requirements for the total number of credits required for a diploma. Students completing a five-unit sequence in career and technical education or the arts (visual arts, music, dance, and theatre) are not required to complete the additional two units of the language other than English requirement for the Regents diploma with advanced
designation but must still meet the requirements for the total number of units of credit.

Earning a Regents or local high school diploma shall be deemed to be equivalent to receipt of a high school diploma pursuant to Education Law section 3202 (1) and shall terminate a student’s entitlement to a free public education pursuant to such statute. Earning a high school equivalency diploma shall not be deemed to be equivalent to receipt of a high school diploma pursuant to Education Law section 3202(1) and shall not terminate a student’s entitlement to a free public education pursuant to such statute.

COLLEGE CONNECTION COURSES / ADVANCED PLACEMENT (AP)

Students who are in an advance placement course are required to sit for the AP test in May. The cost per test is approximately $94.00, subject to change by College Board. Students are required to submit this payment in March. Students having difficulty securing funding for their AP examination(s) should see their school counselor.

Marist college connection courses are taught at MHS by our faculty and have a per credit fee associated with them. The estimated fee for 2020-2021 is $100 per credit (this is subject to adjustment by the college in the summer). All classes are three to six credits depending on the subject area. Students who are enrolled in the Marist college connection classes have the OPTION OF NOT enrolling in Marist. All students in these classes will be required to take the AP Examination in May. The administration process for enrolling in Marist and paying for the credits will take place at MHS in September. Students, who enroll in Marist, pay the credit fee and pass the course, will be awarded the appropriate number of credits on a Marist college transcript. Marist also may institute a credit limit per student of 6 per semester. This decision is subject to change by the university.

Rochester Institute of Technology college connection course through Project Lead the Way are taught at MHS by our faculty. Upon successful completion of the end of the year exam, students have the option to pay a $200 tuition fee (subject to change by the University) to receive 3 undergraduate non-quality credits on a RIT college transcript. These credits ARE transferable to many other post-secondary institutions. Students are responsible for requesting transcripts.

DUTCHESS COMMUNITY AND MARIST COLLEGE BRIDGE PROGRAMS

During their senior year, students have the option of completing all or some of their final courses at Dutchess Community College in Poughkeepsie, NY and/or Marist College in Poughkeepsie, NY. *Students interested in exploring these options should speak to their guidance counselor. Students are responsible for the financial costs associated with this option. * Students doing a total Bridge to DCC must have a minimum GPA of 85%.

Request for High School Credit for College Courses Outside of DCC/Marist/RIT

Students who enroll in college programs that offer credit must have these classes pre-approved by the school principal in order for them to count towards graduation requirements. Only pre-approved classes that count towards graduation requirements will be placed on official MHS transcripts.