

Millis High School Program of Studies 2016-2017

Dear Students and Parents:

This Program of Studies is intended to provide important information about Millis High School's curriculum and academic requirements. It is an essential tool in helping you make appropriate decisions, not only for next year's academic schedule, but also for long-term planning and goals. I urge you to read this booklet carefully and to familiarize yourself with Millis High School's educational offerings, policies, and expectations. Our goal is to provide all students with a comprehensive and challenging course of study.

The course selection process is an important step to achieving this goal.

Millis High School's guidance counselors, teachers, and staff are ready to work closely with you to create an academic program to address individual goals, strengths, and needs. We encourage students to use these resources to create an academic schedule that enables them to challenge themselves and reach their full potential.

Sincerely,

Robert Mullaney
Principal

ACCREDITATION STATEMENT

Millis High School is accredited by The New England Association of Schools and Colleges. NEASC is a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions.

Accreditation of an institution by NEASC indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one that has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future.

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MILLIS HIGH SCHOOL STATEMENT OF CORE VALUES AND BELIEFS

The Millis High School family fosters the intellectual, personal and social growth of all its learners. This is accomplished through a challenging program of experiences, both shared and personalized. Our respectful, safe, inclusive and caring school works collaboratively with parents and the community to best support the academic and personal growth of all our students. We challenge our students to develop increased understanding of themselves as citizens in a global society. Our scholastic program, enhanced by co-curricular activities, engages all learners in their pursuit of academic excellence. We strive to empower students as they become self-directed, respectful, responsible and civic-minded individuals.

Student Learning Expectations

Academic Competencies

- *Communicate effectively through writing, speech and other media
- *Read, observe, and listen for understanding and to develop a point of view
- *Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills
- *Access, utilize and gain confidence in using evolving technologies to enhance learning, understanding, and expression

Social Competencies

- *Maintain our school's culture of integrity, empathy and mutual respect

Civic Competencies

- *Exhibit active citizenship that embraces the values of our school and society

Required and Elective Subject Policy

The following constitutes minimum requirements: Each course of study is designed so that a student must successfully complete four years of English, three years of Social Studies (two of which must be U.S./American History), three years of Mathematics, three years of laboratory Science, and two years of Foreign Language. Many colleges require three years of a Foreign Language. Physical Education/Health is required for all students at Millis High School each year. Please note that the above requirements are considered minimal and students are urged to pursue each of the major subject areas for four years.

Credit Requirement

Each semester, six courses that meet each day for the equivalent of an entire school year, and total at least 30 credits (5 credits per course) must be selected. Seven classes may be taken if space is available. Partial credit is not awarded for a full year (5 credit) course unless completed in full.

Prerequisites

The administration and staff will determine those courses for which students must meet certain prerequisites. Moreover, they will establish both the criteria for selecting students and the procedure students must follow in order to obtain approval. Students who wish to change the level of a course for which they have been recommended must receive written approval from a parent/guardian, teacher, counselor and the principal. The administration reserves the right to limit level changes if a course enrollment is full.

Course Selection Procedure

Each student will receive a copy of the Program of Studies. The student will consult with his/her parents, stepparents or guardians and record his/her choices for next year using the online registering process.

Counselors and teachers are available to students and parents for assistance.

Guidance staff will meet with each student to review their course selections. Scheduled courses are based on availability and student enrollment. Guidance will select courses for any student who does not submit course selection choices.

Policy: Promotion/Graduation

The School Committee established the following minimum requirements for promotion to another grade level/graduation. Students shall be required to receive, through passing grades, 25 credits each year, therefore freshmen need 25 credits, sophomores 50 credits and juniors 75 credits to move into their consecutive year. Students must receive 110 credits in order to graduate from Millis High School.

Drop/Add Procedure for Courses

Careful thought and planning go into developing an appropriate schedule with each student. Changing a schedule is not a simple process. Students considering a course change need to take the following steps in order to drop and/or add a course:

1. The student should speak with the teacher and discuss the reasons for wanting to drop a class.
2. If, after speaking with the teacher, the student still wants to drop, he/she must make an appointment with a counselor to discuss the consequences and options for dropping. Dropping one course usually means adding another. In many cases, a consult should take place with the student, teacher, parent, and counselor.
3. If the student, counselor, parents, and teacher decide that a drop should occur, the student is given a Drop/Add form used to collect the signatures of the parent and teacher.
4. Once all parties have signed the Drop/Add form, the student must return it to the counselor for a final signature. Only then may a student stop going to the assigned class and attend a new one. The counselor will make the necessary change in the student's schedule on the computer. A copy of the completed Drop/Add form will be given to teachers of both the added and dropped courses.
5. Students may drop/add a course within the first two weeks of the course without penalty. If a student drops a course after the two-week period, he/she will receive a withdrawn passing (WP) or withdrawn fail (WF) on his/her transcript.

Course Levels: Weighted GPA

Courses are leveled according to the degree of difficulty. Advanced Placement courses are leveled at one (1). Honors classes are leveled at two (2). College Prep I classes are leveled at three (3). College Prep II classes are leveled at four (4). All courses, including electives, are weighted with the exception of pass/fail courses and Academic Skills.

The weighted score (rank index) would be the marks received, times the credits for the course, added together and divided by the total number of credits weighted, Equals Weighted GPA (Grade Points x Potential Credits divided by Potential Credits=Weighted GPA).

An unweighted GPA often requested by colleges is computed by utilizing actual percentages (unweighted) multiplied by potential credits and divided by the potential credits (Percent (actual grade) x Potential Credits = Unweighted GPA Total Potential Credits).

	GPA	A.P.	Honors	CP 1	CP 2
	Level	1	2	3	4
A+	98-100	5.8	4.8	4.3	3.8
A	93-97	5.5	4.5	4.0	3.5
A-	90-92	5.2	4.2	3.7	3.2
B+	88-89	4.8	3.8	3.3	2.8
B	83-87	4.5	3.5	3.0	2.5
B-	80-82	4.2	3.2	2.7	2.2
C+	78-79	3.8	2.8	2.3	1.8
C	73-77	3.5	2.5	2.0	1.5
C-	70-72	3.2	2.2	1.7	1.2
D+	68-69	2.8	1.8	1.3	0.8
D	63-67	2.5	1.5	1.0	0.5
D-	60-62	2.2	1.2	0.7	0.2
F	0-59	0	0	0	0

1= AP Course, 2= Honors Level, 3= College Prep I Level, 4= College Prep II, 5= Any pass/fail course, Academic Skills

Advanced Placement Courses

Several departments offer Advanced Placement (AP) classes. These classes constitute college level (not college preparatory) work. Many colleges and universities award college credit based on AP Exam scores. Any student enrolled in an AP course must take the AP examination at the conclusion of the course. The estimated cost for each AP exam is \$93. In a case of financial hardship, arrangements can be made through College Board.

Requirements for Graduation

Credit Requirements: Students must receive 110 credits in order to graduate from Millis High School.

All students must pass MCAS exams in English Language Arts (ELA), Mathematics, and Science in order to receive a diploma in the state of Massachusetts.

1. All courses specifically required for graduation (20 credits of English; 15 credits each of Mathematics*, Social Studies, Science; 10 credits of Foreign Language; Health/Physical Education each year) must be taken at an accredited high school. Students must have the equivalent of two years of the same foreign language at the high school level. Students who lose credits in the above areas for failure and/or reasons of absence or tardiness must make up these credits within the subject area in which they were lost.

*Please note, beginning with the class of 2016, the University of Massachusetts and the Massachusetts State University system will require applicants to pass four years of math.

2. No student will be assigned to a graduating class until minimum requirements as stated below have been satisfactorily completed. The principal has the option of reassigning a student to his/her graduation class at any time upon satisfactory completion of minimum requirements.
3. Failure of a course in the 55-59% range during the academic year may be made up with a grade of 70 or better in a thirty (30) hour night or summer course during the summer immediately following the failure. Failure below 55% must be repeated at Millis High School. Any make-up course requires prior written approval by the school principal. Parents and students are responsible for finding suitable course offerings and all costs relating to summer school
4. No courses taken during summer school and/or night school courses will be computed into the cumulative weighted GPA.
5. Elective courses, which make up the remainder of the credit requirements, may be taken at night or summer school with the principal's prior approval and according to stipulated guidelines. Courses taken outside Millis High School are not calculated into the student's GPA.

District Curriculum Accommodation Plan

Revised December, 2002

Massachusetts Special Education Laws require school districts to implement District Curriculum Accommodation Plans (DCAP) to help ensure all efforts have been made to meet students' needs in regular education.

The Millis District Curriculum Accommodation Plan details programs and supports already available and implemented within the Millis Public Schools. These programs and support services include the following:

Student Teacher Assistance Team

STAT (Student Teacher Assistance Team) is an on-going confidential team approach to assist students with an academic, social, and/or emotional need. It is not a disciplinary team, but one that functions as an assessment, prevention and intervention team. The team is comprised of the school nurse, a teacher, the school adjustment counselor, a guidance counselor and the principal. Although classroom teachers typically initiate referrals, parents and peers may make referrals to the STAT. Once STAT has formulated an instructional strategy, the strategy is reviewed on a regular basis.

Support Services Available Within the District Include:

- Academic support services (regular education)
- Behavioral support services (regular education)

- Peer tutoring
- Project Success (MCAS tutoring)
- Special Education or 504 accommodations
 - Academic support services
 - Behavioral support services
 - Occupational therapy
 - Speech-Language therapy
- Title I Program

Please contact the high school office for more complete information.

Community School/Service Program (CSS)

Community School/Service is a program whereby students in Grades 11 and 12, who have established themselves as responsible and trustworthy, may utilize their directed study hall time to do a school and/or community service. Juniors and seniors who qualify will be able to choose between a directed study and a service project. Juniors are eligible for CSS beginning term two after completing fifteen (15) service hours during term one of their junior year. Seniors must complete their 15 hours during term four of their junior year in order to be eligible for term one of senior year. Hours done over the summer by seniors must be approved by the principal in advance and will count toward CSS for term two. Students who meet the necessary criteria will be able to leave school during lunch and during a directed study to participate in a service project. The project will commence with a proposal the student makes to incorporate a minimum of 15 hours of school/community service in a safe and appropriate learning environment. The service must be approved by the principal and one other person be it a parent, staff member, guidance counselor, or community member. If the service is not completed within a term, or the proof is not submitted by the established deadline, one will lose the privilege of participating in this program. National Honor Society hours do not count toward the 15 CSS hours. Other eligibility requirements are listed in the Student Handbook.

School-to-Career Program

The School-to-Career Program provides an opportunity for seniors to continue their education and at the same time gain work experience under school supervision. Students participating in this program attend school for a portion of the day and are employed in a pre-approved situation for a minimum of ten (10) hours per week. Up to ten (10) credits a year may be earned by the student for this work experience. Selection of the student will be on the approval of the parents, the employer, the principal and the school counselor. Students in the program are expected to abide by the policies established for the program.

Students in the School-to-Career Program must fulfill all the requirements for graduation. School-to-Career grades will be recorded on the report cards in the same manner as any other course. No credits will be given if an employer reports that the student's work is unsatisfactory.

Spanish Immersion Program

Millis offers two distinct Spanish language programs: a twelve-year Spanish immersion program which begins in first grade at the Clyde Brown Elementary School, as well as a non-immersion program which is based on a traditional approach to second language acquisition. Students eligible to take Spanish Immersion courses at Millis must have begun this program at the Clyde Brown Elementary School or have participated in a similar immersion program in another system. Students who do not participate in Spanish immersion begin to study Spanish in 6th grade and can choose to continue to build their skills and develop proficiency through grade 12.

Students who complete the twelve-year Spanish Immersion Program will receive a designation on their final transcript reflecting their achievement. In order to receive this recognition, students must successfully complete the four language courses at the high school and one of the elective offerings, which they may take at any time during their high school experience. Currently, elective courses are offered through online providers Virtual High School (VHS) and The Educational Cooperative (TEC) Online Academy.

Sequenced Spanish Courses:

Spanish Immersion 1 (Honors)

Spanish Immersion 2 (Honors)

Spanish Immersion 3: Advanced Composition, Conversation and Grammar (Honors)

AP Spanish Language

Immersion electives have included:

Spanish for Business, Spanish for Health Care, Spanish Literature, Spanish Film

Work Study

Work Study is an option open to students who wish to pursue an individual interest that is not offered in our course of study program under the supervision of an advisor who must be a faculty member. A guidance counselor and the high school principal must formally approve the program. Students must be enrolled in six major courses in order to be eligible for Work Study. Credit assignment may range from one (1) to five (5) credits, and shall be determined at time of approval. A written proposal must be submitted. Work Study can only be taken as a seventh course.

Each program shall:

1. Be graded Pass/Fail (level 5).
2. Not be limited to any specific subject area.
3. Be open to all grade levels.
4. Not be at the expense of the school, although school supplies and facilities may be used.
5. Have written an approved course outline explaining what will be covered and the

course expectations approved by the advisor and principal.

High School Enrichment

High school students eligible to be considered in a High School Enrichment Program at Dean College must be in their junior or senior year. If a student is interested, s/he should discuss this program with a guidance counselor regarding the Millis High School procedures for enrollment. Students applying for a fall course must apply the previous spring. Students applying for a spring course must apply by the previous fall. Once approved, it is the student's responsibility to go to Dean College to register for the course. Students enrolled in the High School Enrichment program are responsible for all course expenses and must provide their own transportation.

Commonwealth Dual Enrollment Program

The Commonwealth Dual Enrollment Program (CDEP) provides opportunities for Massachusetts high school students to take college-level courses and earn credit simultaneously toward high school completion and their future college degrees. CDEP eases the transition from high school to college, allows students to get a head start on their college careers, and provides meaningful and challenging academic experiences to qualified students who otherwise may not have access to an early college experience. The ultimate goal of CDEP is to increase the population of high school graduates who are college ready. Student participation in CDEP is at the discretion of the participating institution of higher education, subject to capacity constraints and state appropriation. Students enrolled in this program are responsible for all course expenses and must provide their own transportation.

ART AND NEW MEDIA

Primary Student Learning Expectations addressed:

- Communicate effectively through writing, speech, and other media
- Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

ART

All freshmen take Art, Design & New Media. Students in grades 10-12 may elect to take the full-year course *Fundamentals of Studio Art I*. It is strongly recommended that serious art students take Fundamental of Studio Art I in their sophomore year. Students who have successfully completed Fundamentals of Studio Art I may elect the advanced *Studio Art II* class. Seniors who are considering applying to a University or College Art Program should elect *Studio Art III* (Senior Art Portfolio and AP Studio Art). Students who have successfully completed the half-year Art, Design & New Media class may elect *Digital Photography/Advanced Computer Art*.

<u>Art, Design, and New Media</u>			Level 3
HS6153	All grades	Semester Each Day	2.5 Credits

In this course students will use and understand the ever-evolving computer in unique and innovative ways. The format is a blended learning environment, combining both online resources and in-class instruction. The students will create using Adobe Illustrator and Photoshop as art & design tools. Visual page design, basic rules of graphic design and the elements and principles of art will be explored. Students will present and reflect upon their work through digital portfolios.

<u>Fundamentals of Studio Art I</u>			Level 3
HS6103	Grades 10-12	Full Year Each Day	5 Credits

This studio art course offers a survey of methods and materials associated with student art creation. Focus will be on basic instruction in drawing, painting, printmaking, design, sculpture, pottery and contemporary crafts. Observational drawing and creative thinking will be stressed and new and unique materials will be explored. Students will present and reflect upon their work via digital portfolios and class critiques. A variety of artists and artistic styles will be considered.

<u>Studio Art II</u>			Level 3
HS6203	Grades 11, 12	Full Year Each Day	5 Credits

In this advanced class contemporary themes, subject matter and art techniques will form the foundation of art production. Traditional drawing, painting, design, printmaking, sculpture and craft methods and materials will be examined and used in ways relevant to a 21st century aesthetic. Students will explore realistic, abstract and non-objective composition and will learn to create the illusion of depth and form in their original two

dimensional art works. In three-dimensional production symbolism, simplification of form and surface texture will be explored. A variety of artists and artistic styles will be considered. Students will present and reflect upon their work via digital portfolios and class critiques.

<u>Studio Art III (Senior Art Portfolio and AP Studio Art)</u>			Level 3
HS6303	Grade 12	Full Year Each Day	5.0 Credits

Portfolio planning and production will be the focus of this class. In the planning stages, earlier work by the student will be considered for possible inclusion in their portfolio. Students will then research various post high school options for art majors. As they refine their lists of potential schools, the specific portfolio requirements of each will be noted. Students will then work in the art studio to produce both general and required portfolio pieces. Student work will be documented and reproduced in digital format for their final portfolio. After their portfolios are complete, seniors will continue to work in the studio to advance their art skills in an approved concentration of their choice. Students will present and reflect upon their work via digital portfolios and class critiques.

<u>Digital Photography & Advanced Computer Art</u>			Level 3
HS6233	All Grades	Full Year Each Day	5 Credits

One goal of this course is for students to look at the history of photography and photographic genres in relation to their own production of digital images. Adobe PhotoShop, Adobe Illustrator as well as online applications will be used. Visual composition will be explored through working with the elements and principles of design. Students will present and reflect upon their images via digital portfolios and class critiques. Students taking this course must have their own digital camera.

COMPUTER MEDIA

<u>Web Ventures I (Fall)</u>			Level 3
HS5013	Grades 10,11,12	Semester Each Day	2.5 Credits

This course is for students who wish to learn Web design and Web coding skills. Students will learn effective Web design techniques, HTML coding, scripting, and how to incorporate multimedia into a Web site. Through a series of projects students will learn and apply project management techniques, from project plan, to design mock up, to prototype, to acceptance testing, and to Web site delivery. Throughout the course, ethical and responsible use of technology is stressed.

<u>Web Ventures II (Spring)</u>			Level 3
HS5213	Grades 10,11,12	Semester Each Day	2.5 Credits

This course builds upon the development skills acquired in Web Ventures I. Students

will use Macromedia Dreamweaver, Fireworks and Flash to create professional interactive Web sites. Students will learn relational database design and will integrate Web and database technologies. Students will have an opportunity to apply these skills for school and community clients. Throughout the course, ethical and responsible use of technology is stressed.

*Web Ventures I and II, students enrolled in the fall semester will be expected to enroll in the subsequent spring semester course.

<u>Web 2.0 and 21st Century Skills (Fall)</u>			Level 3
HS5323	All Grades	Semester Each Day	2.5 Credits

The goal of this course is to learn Web 2.0 collaborative technologies and how to use them responsibly for learning. Students will learn how to communicate globally using blogs, wikis, and educational social networks and they will have an opportunity to contribute to those communities. Students will also examine social and economic changes wrought by technology innovations.

<u>Connections, Community, and Career (Spring)</u>			Level 3
HS5343	All Grades	Semester Each Day	2.5 Credits

The goal of this course is to apply Web 2.0 technologies to build digital resources for faculty and students, and to identify and use Web 2.0 tools for college, career, and life planning. Students will assess their career interests, explore career options, and create individual career development plans. Students will evaluate various planning tools and apply those best suited to their own aspirations.

Prerequisite: Web 2.0 and 21st Century Skills or instructor approval

<u>Introduction to Digital Animation (Fall)</u>			Level 3
HS5353	All Grades	Semester Each Day	2.5 Credits

This course is for students who wish to learn computer animation techniques, still and motion. Multi-media projects will be built that integrate sound, graphics, animation, and other interactive components. Projects will be built using a variety of software applications (e.g. Flash) and web-based tools. Principles of traditional animation, storyboarding and animation effects will be explored. The culminating project, such as an informational or instructional tutorial, will connect with other learning disciplines providing students with a rich, authentic learning experience.

<u>Advanced Digital Animation (Spring)</u>			Level 3
HS5363	All Grades	Semester Each Day	2.5 Credits

This course is for students who wish to advance their computer animation skills. In this advanced class, students will learn and apply computer programming techniques and/or

3D CAD applications. In this class students will be expected to work independently to create cross-curricula or community linked multi-media events. Students will have an opportunity to propose, design and build a project that applies advanced animation techniques as a solution to a problem, or as a method for 21st century communication.

Prerequisite: Students are required to have taken and passed Introduction to Digital Animation.

DIGITAL MEDIA PRODUCTION

<u>Digital Media Production I</u>				Level 3
HS8213	All Grades	Full Year	Each Day	5 Credits

Actual production skills will be geared towards developing programs for the school and community. Various formats, such as the "Talk Show" style, "News & Opinions" programs, and "Talent and Activities" around the school will be produced. Students who plan to enter either the communications or television field will get practical hands-on experience in the Television Studio. Remote videotaping will also be included. Switching, special effects, graphics, and sound mixing will be included in the course. Actual performances will be shown on home or school cable of the various products that the students create. Students will have the opportunity to work camera, make guest appearances, develop scripts and ideas for the programs, and handle many technical aspects of the productions. Independent student projects will be explored. Students will also be introduced to the concepts of media literacy. Media literacy is the ability to analyze, evaluate and produce media in a variety of forms. Students will study alcohol and tobacco advertising, news, and violence in the media.

Prerequisite: Students should have a desire to become involved in production or related activities. After school time will be devoted to completing projects on a weekly basis.

<u>Digital Media Production II</u>				Level 3
HS8253	All Grades	Full Year	Each Day	5 Credits

Production skills, editing, live and prerecorded productions will be part of the students' responsibilities in this course. Assignments will include interviews, news reporting, student producer roles, and other major production work. Students working at this level will be critiqued on their video and audio productions. The program will also include visits to area television facilities and exposure to requirements contained in the communications field. Concepts of multimedia will also be introduced. This includes working with various computer programs to assist in the development of graphics and multi-media presentations. Students in this course assist in developing programs designated for the town wide cable system and learn to operate and prepare scripts for the community access channel. Special educational programs to be used for the

purpose of better informing the community will be a prime project objective for TV Production II interns. Students will be expected to operate the entire studio operation for their final exam preparation. The intense course will require after school commitment in order to fulfill the course work.

<u>Digital Media Production III</u>			Level 3
HS8223	Grades 11,12	Full Year Each Day	5 Credits

The opportunity to continue in the field of Television Production is available for students serious about becoming communications majors. The instructor will assume that the student is willing to be part of the established production team involved with the Cable TV studio. Students will be expected to produce, direct, and work with services during the school year. The focus will primarily involve production experiences that are needed to expand programming for the educational and community channels. Opportunities to develop individual major video projects will be encouraged. The projects will be designed to offer the student a chance to optimize previous learning experiences acquired during levels I and II.

<u>Digital Media Production IV</u>			Level 3
HS8243	Grades 11,12	Full Year Each Day	5 Credits

The fourth year of participation in Television Production allows the student to prepare for leadership, advanced production skills and further development of abilities in preparation for broadcasting or communications. Technical skills in editing, voice over methods and a variety of advanced techniques are explored. The student is expected to produce programs for the school and educational community with other class members. Students will be encouraged to critique in-house video, as well as professional video to gain more insight into the creative and technical capabilities of current day media production.

<u>Digital Media Production Honors</u>			Level 2
HS8252	Grades 11,12	Full Year Each Day	5 Credits

We will cover extensive technical operations and work on production of portfolios for college. Students will have a series of challenging projects to produce each term. This class would be geared to the student who wishes to study communications in college. Students will also focus on editing with Final Cut Pro. Students will also read and discuss several texts about communication theory and media literacy.

Prerequisite: "A-" or better in TV Production I & II or teacher recommendation.

<u>Final Cut Pro Editing - Honors</u>			Level 2
HS8262	Grades 11,12	Full Year Each Day	5 Credits

Students will follow the Apple certification curriculum and will deconstruct and analyze

documentary anchor work. All students will produce their own documentary each semester. All students will take the Final Cut Pro level 1 certification exam.
Prerequisite: Must be recommended by course instructor.

<u>Digital Storytelling: Communicating in the 21st Century</u>				Level 3
HS8272	All grades	Half Year	Each Day	Credits 2.5

Visual storytelling is the basis for making animations and movies in this hands-on production oriented class. Themes will incorporate short PSA's or other visual narratives related to such topics as domestic abuse, drinking and driving and other issues affecting teenagers. Students will have the option to use either computer graphics animation or video production or both for most assignments. The assignments accumulate towards the production of a digital story that integrates and overlays animation and video artifacts by the end of the term. Digital music and sound are important components of the story. Selected culminating projects will be posted on the Millis School web site and the local education access channel. Students may vary thematic content with teacher approval.

ENGLISH

The sequential four year English curriculum is designed to present the students at Millis High School with the skills necessary to read, write, think and speak competently, and also with the understanding necessary to succeed in comprehending the best of human thought and endeavor. The department recognizes the need for students to express themselves clearly and distinctly in both writing and speech so students may articulate their own ideas and opinions. The department further hopes to inspire students to understand and appreciate the finest literature.

The English department seeks to accommodate the strengths and needs of all its students. Teacher recommendations for placement are made only after professional evaluation and assessment and should be seriously considered while making a final decision about such placement.

Summer reading is required of all English courses. The summer reading list and expectations are distributed in June and will also be posted on the Millis High School web site.

Primary Student Learning Expectations addressed:

- Communicate effectively through writing, speech and other media
- Read, observe, and listen for understanding and to develop a point of view
- Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

English I Honors

HS0112

Grade 9

Full Year Each Day

Level 2

5 Credits

Freshmen in this course will read, discuss and interpret sophisticated readings from the major literary genres of poetry, short story, the novel, the epic and drama. The level of reading and testing is challenging; student responsibility is intense. Students will gain a realization of the importance of critical thinking and assessment through analysis of reading assignments. Freshman grammar curriculum includes parts of speech and the sentence, punctuation and other areas in need of improvement. Freshmen will write weekly essays, many on literary topics and reading assignments, and a major research paper. The curriculum also includes extensive vocabulary work and numerous oral presentations. Supplementing the daily classroom reading and writing assignments will be assigned reading from classical and contemporary works.

Prerequisite: B or better in Grade 8 English or recommendation of Grade 8 English teacher.

<u>English I CP1</u>			Level 3
HS0113	Grade 9	Full Year Each Day	5 Credits

English I CP1 concentrates on the development of reading, writing and speaking skills. Students will read and assess materials from contemporary and classical authors from major literary genres: short story, epic, novel, poetry and drama. In addition to reading and evaluating literary works, students will perform extensive grammar and vocabulary work. Students are expected to demonstrate grammar proficiency in composition work on a regular basis and in one extensive research project. Students will also be assigned supplementary reading on a regular basis.

<u>English I CP2</u>			Level 4
HS0114	Grade 9	Full Year Each Day	5 Credits

In this course, freshmen students will read, discuss and evaluate major classical and contemporary writers as well as the characteristics of major forms of writing: poetry, drama, epic, short story and the novel. This course also places great emphasis on grammar, composition and oral presentations. Students' composition work is expected to display careful organization and grammatical correctness. A major writing assignment that includes research and proper documentation will be required.

<u>American Literature Honors</u>			Level 2
HS0122	Grade 10	Full Year Each Day	5 Credits

The purpose of this course is to challenge students in the areas of reading, writing, literary analysis but primarily thinking. After introductory units on Puritanism, Classicism, Romanticism and Transcendentalism, the focus will be the literature of the late nineteenth century through the twentieth century commencing with Realism and proceeding to contemporary dramatists, essayists, novelists and poets as recommended by the Massachusetts Language Arts Frameworks. Great emphasis will be placed on independent reading, writing and critical analysis. Grammar focuses on usage and punctuation with particular attention to usage as it applies to writing. Prerequisite: B or better in English I Honors or teacher recommendation.

<u>American Literature CP1</u>			Level 3
HS0123	Grade 10	Full Year Each Day	5 Credits

The purpose of this course is to challenge students in the areas of reading, writing, literary analysis but primarily thinking. After introductory units on Puritanism, Classicism, Romanticism and Transcendentalism, the focus will be the literature of the late nineteenth century through the twentieth century commencing with Realism and proceeding to contemporary dramatists, essayists, novelists and poets as recommended by the Massachusetts Language Arts Frameworks. Grammar focuses on usage and punctuation with particular attention to usage as it applies to writing.

Students will be required to submit compositions that stress content development and grammar mechanics.

<u>American Literature CP2</u>			Level 4
HS0124	Grade 10	Full Year Each Day	5 Credits

This course is designed to convey to the student an appreciation, knowledge and enjoyment of American literature. Using a chronological format, students will be required to read, write, analyze and think about the various literary genres and styles of the great American authors. Following the Massachusetts Language Arts Frameworks the course will concentrate on the development of language arts skills including reading, writing, listening and speaking.

<u>AP English Language & Composition</u>			Level 1
HS0131	Grade 11	Full Year Each Day	5 Credits

The English Language course provides an entertaining but demanding spectrum of prose selections, whose authors are equally divided between male and female, contemporary and classic, while focusing primarily on British writers. The students will develop skills in analyzing the reasoning and expression of ideas in prose as well as developing the student's own skillful writing. Students are required to take the AP exam (estimated cost: \$93).

Prerequisite: A- or better in Honors American Literature or teacher recommendation, in addition to a passing an entrance exam.

<u>British Literature & Composition Honors</u>			Level 2
HS0132	Grade 11	Full Year Each Day	5 Credits

The purpose of this course is to challenge students in the areas of reading, writing, and literary analysis but primarily thinking. The core curriculum is the in-depth study of British Literature from the beginnings of the British tradition to modern drama, prose and poetry. Great emphasis will be placed on independent reading, writing and critical analysis. SAT Prep will form the basis for the study of vocabulary incorporating etymological roots. Grammar focuses on usage and punctuation with particular attention to the usage as it applies to writing. Each student will be required to submit an original 10-15-page thesis paper on a particular British author. This grade will form a major portion of the student's grade for third term.

Prerequisite: B or better in American Literature Honors or teacher recommendation.

<u>British Literature & Composition CP1</u>			Level 3
HS0133	Grade 11	Full Year Each Day	5 Credits

The purpose of this course is to challenge students in the areas of reading, writing, literary analysis but primarily thinking. The core curriculum is the chronological study of British Literature from the beginnings of the British tradition to modern drama, prose and

poetry. SAT Prep will form the basis for the study of vocabulary incorporating etymological roots. Grammar focuses on usage and punctuation with particular attention to the usage as it applies to writing. Each student will be required to submit an original 8-10 page thesis paper on a particular British author. This grade will form a major portion of the student's grade for third term.

<u>British Literature & Composition CP2</u>			Level 4
HS0134	Grade 11	Full Year Each Day	5 Credits

This course is designed to convey to the student an appreciation, knowledge and enjoyment of British Literature. Students will be required to read, write, and analyze but primarily to think about the various literary genres, themes and styles of the great British authors. Throughout the course the elements of the language arts will be stressed. Emphasis will be placed on the development and improvement of study skills.

<u>AP English Literature & Composition</u>			Level 1
HS0141	Grade 12	Full Year Each Day	5 Credits

World Literature is presented as a reflection of the lives of the people. The students will develop the ability to analyze in depth and appreciate literary and cultural heritage. Research of literary movements, literary terms and individual projects will also be emphasized. Students improve their vocabulary and writing skills through essays, analytical papers and research papers. A senior project including visual, auditory and tactile skills will culminate at the end of the year with an exhibition and product. Students have the opportunity to explore a subject of their choice, find a mentor, job shadow and write a research paper. Students must take the AP exam.

(Estimated cost: \$93).

Prerequisite: A- or better in A.P. Language and Composition/Honors British Literature or teacher recommendation.

<u>World Literature & Composition Honors</u>			Level 2
HS0152	Grade 12	Full Year Each Day	5 Credits

Focusing on writers from Africa, the Middle East, Greece, Rome, India, China, Japan and European countries, this study of world literature will emphasize literary analysis, discussion and essay writing. Students also study vocabulary and grammar. Writing assignments focus on assessment of literary and critical analysis material, as well as, logical structure. A senior project including visual, auditory and tactile skills will culminate at the end of the year with an exhibition and product. Students have the opportunity to explore a subject of their choice, find a mentor, job shadow and write a research paper.

Prerequisite: B or better in Honors British Literature or teacher recommendation.

World Literature & Composition CP1 Level 3
HS0153 Grade 12 Full Year Each Day 5 Credits

This study of world literature focuses on literary analysis, discussion and essay writing. The main thrust will be writers from Africa, the Middle East, Greece, Rome, India, China, Japan and European countries. The study of literature will begin with the Middle Ages, continue through the Renaissance, Romanticism, Realism and end with modern literature. Students also study vocabulary and grammar. Writing assignments focus on assessment of literary and critical analysis material, as well as, logical structure. A senior project including visual, auditory and tactile skills will culminate at the end of the year with an exhibition and product. Students have the opportunity to explore a subject of their choice, find a mentor, job shadow and write a research paper.

World Literature & Composition CP2 Level 4
HS0154 Grade 12 Full Year Each Day 5 Credits

Focusing on a thematic study of literature, this course introduces students to world literature. Students will gain knowledge and an appreciation of literature. Emphasizing vocabulary, grammar, and writing, the course will allow the students to develop and improve their study skills. A senior project including visual, auditory and tactile skills will culminate at the end of the year with an exhibition and product. Students will be given the opportunity to explore a subject of their choice, find a mentor, job shadow and write a research paper.

ENGLISH ELECTIVES

These electives may not be substituted for English 9, 10, 11 or 12 as graduation requirements. They may be taken in addition to another English course.

Introduction to Creative Writing CP1 Level 3
HS0253 All Grades Semester Each Day 2.5 Credits

Fall semester only: This is a course where students explore the rudiments of desktop publishing and creative writing. Designed to give students the opportunity to write in a variety of creative means and to offer students a better understanding of the differences between each literary genre, this class will give special attention to the study of prose (in memoir and short story), poetry, and drama. This course follows a “flipped classroom” model wherein the student must be self-motivated as well as willing and able to work independently.

Creative Writing Workshop CP1 Level 3
HS0263 All Grades Semester Each Day 2.5 Credits

Spring semester only: In this course, students who have satisfactorily completed Introduction to Creative Writing will refine and perfect writing through practicing

techniques focusing on stylistic, literary, poetic, and rhetorical devices including tone, imagery, audience, and voice. Students will write four to six pieces--some assigned and some independently chosen--to submit to the class workshop. The majority of class time will be dedicated to rigorous critiques of classmates' work.

<u>Creative Writing Portfolio CP1</u>			Level 3
HS0273	All Grades	Semester Each Day	2.5 Credits

Fall semester only: This class is designed to give students the opportunity to write extensively in one particular creative writing genre, as well as assemble a writing portfolio. This is a rigorous course wherein the student must be extremely self-motivated as well as willing and able to work independently. In this course, students will submit proposals for independent projects. These may include, but are not limited to, the writing of short stories, poems, plays, memoirs, essays, or articles.

Prerequisites: Successful completion of Introduction to Creative Writing and Creative Writing Workshop and permission of the Creative Writing teacher.

<u>Creative Writing: Editing and Publishing CP1</u>			Level 3
HS0283	All Grades	Semester Each Day	2.5 Credits

Spring semester only: In this course, students will explore ways to publish their work while continuing to edit and revise their collected creative writing works. In addition, students will edit, design, and publish an issue of *The Plain Street Review*, Millis High School's student literary journal.

Prerequisites: Successful completion of Creative Writing Portfolio and permission of the Creative Writing teacher.

<u>SAT English Review (Fall)</u>			Level 3
HS0163	Grades 10, 11	Semester Each Day	2.5 Credits

This half-year course is a comprehensive review of vocabulary, grammar and composition skills useful in taking SAT Reasoning Test. Students taking this course must be prepared for extensive and rigorous study of vocabulary words and their usages and the principles of advanced grammar. SAT practice exams will be given to familiarize students to the test, its length, and the various styles and types of questions.

<u>Shakespeare Unplugged CP1 (Spring)</u>			Level 3
HS0383	All Grades	Semester Each Day	2.5 Credits

This introductory course is designed to interest students in Shakespearean biography and drama. Through group reading and viewing modern films, students will acquaint themselves with plays that explore a wide range of themes including ambition, domination, deception, disguise, forgiveness and redemption. Students will experience how exciting and engaging Shakespearean plays can be, and how the dramas within the plays parallel everyday life.

Speech (Fall) CP1 Level 3
 HS0313 All Grades Semester Each Day 2.5 Credits

This course will introduce the student to a variety of forms, including persuasive speeches, public speeches, debate, group discussions, interviewing techniques, and public readings. In addition, students will have to research topics, learn how to outline material, create specific speech formats and overcome nervousness. Dramatic presentations and improvisations will be expected by all members of the class.

Introduction to Theatre I CP1 (Fall) Level 3
 HS0443 All Grades Semester Each Day 2.5 Credits

This course is a survey of the development of drama from the Classical Period to the Renaissance. Students will become familiar with significant playwrights and plays from the Greek, Roman, Medieval, and Renaissance time periods. The course will explore important movements such as morality plays and Elizabethan tragedies. The course will include analysis and performance of drama.

Introduction to Theatre II (Spring) CP1 Level 3
 HS0453 All Grades Semester Each Day 2.5 Credits

This course is a survey of drama from the Neoclassic to Modern periods. Students will become familiar with significant playwrights and plays of the 1800s to present. This course will explore a number of important movements and trends such as realism, "Theatre of the Absurd" and melodramas. Assessment will include drama analysis and performance. Introduction to Theatre I is not a prerequisite, but is recommended.

Drama (Spring) CP1 Level 3
 HS0413 All Grades Semester Each Day 2.5 Credits

Students who are interested in production and drama should take this class. Students will be taught basic acting principles. Students will be required to produce and act in a series of dramatic productions. Students will learn some basic film and video analysis.

Humanities CP1 Level 3
 HS0433 All Grades Full Year Each Day 5 Credits

This course introduces students to traditional humanistic values reflected in arts and ideas. Music, art, literature, drama, and history of classical and Renaissance eras are explored. The impact of the humanities on modern culture is examined.

Journalism CP1 Level 3
 HS0483 All Grades Full Year 3/7 period cycle 1.125 Credits

This course offers students an introduction into Journalism, with the culminating activity being the production of the Millis High School newspaper, "The Mohawk Post". Students will learn the basic writing and production of a newspaper, including: news

reporting, press releases, blogs, editorials, obituaries, reviews, interviews, photo-journalism, op ed pieces and feature/column writing. Google Docs will allow peer-editing, and, with the content presented in an online platform, students will be responsible for the layout, design, and publishing format. Course may be repeated with permission of instructor.

FOREIGN LANGUAGE

The Department of Foreign Language affords students the opportunity to gain communicative competency in Spanish while fostering cross-cultural awareness and appreciation. These are very practical skills that will help to prepare students to live, travel and work in a culturally diverse environment and to be successful in today's highly competitive job market. All courses emphasize development of the five language learning skills: listening, speaking, reading, writing and the socio-linguistic aspects of second language acquisition.

Millis offers two distinct Spanish language programs: a twelve-year Spanish immersion program which begins in first grade at the Clyde Brown Elementary School, as well as a non-immersion program which is based on a traditional approach to second language acquisition. Students eligible to take Spanish Immersion courses at Millis must have begun this program at the Clyde Brown Elementary School, or have participated in a similar immersion program in another system. Students who do not participate in Spanish immersion begin to study Spanish in sixth grade and can choose to continue to build their skills and develop proficiency through grade 12.

Students must successfully complete two consecutive years of the same foreign language at the high school level.

Primary Student Learning Expectations addressed:

- Communicate effectively through writing, speech and other media
- Read, observe, and listen for understanding and to develop a point of view

Course of Study: Spanish Program

Note that after Spanish 1, most levels of Spanish offer a College Prep 1 (CP1) and an Honors (H) option. Although the course content is similar, the Honors courses at each level are more intensive. They cover more material than the College counterpart, go at a faster rate and are more challenging. Students eligible for Honors courses must receive a grade of B+ or higher in their previous year of language study.

Spanish IA CP2
HS4314 Grade 9

Full Year Each Day

Level 4
5 Credits

An introductory course to the study of Spanish language and Hispanic culture. This is an interactive course that promotes the development of aural comprehension and oral expression through the study of grammar, the development of a solid base of high frequency vocabulary and an introduction into the rich and diverse Spanish-speaking world.

This course is for students who have had no prior study of Spanish or who have not

successfully completed Spanish in the eighth grade.

<u>Spanish II Honors</u> HS4322 Grade 9	Full Year Each Day	Level 2 5 Credits
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A communicative course that advances students' study of basic grammar and vocabulary acquisition. Emphasis is on the development of aural comprehension and oral skills while practicing reading and writing as well. Students are provided with high frequency vocabulary as well as cultural information that will help them work towards the goal of negotiating real life Spanish-speaking situations.

Prerequisite: B+ or higher in their previous year and/or teacher recommendation.

<u>Spanish II CP1</u> HS4323 Grade 9, 10	Full Year Each Day	Level 3 5 Credits
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A communicative course that advances students' study of basic grammar and vocabulary acquisition. Emphasis is on the development of aural comprehension and oral skills while practicing reading and writing as well. Students are provided with high frequency vocabulary as well as cultural information that will help them work towards the goal of negotiating real life Spanish-speaking situations.

Prerequisite: C or higher in Spanish Grade 8, and/or teacher recommendation.

<u>Spanish IB CP2</u> HS4324 Grade 10	Full Year Each Day	Level 4 5 Credits
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This course is offered to students who have successfully completed Spanish IA. It will continue to promote the development of aural comprehension and oral expression through the study of grammar, vocabulary, and the diverse culture of the Spanish-speaking world.

<u>Spanish III Honors</u> HS4332 Grade 10	Full Year Each Day	Level 2 5 Credits
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An in-depth review and extensive practice of previously learned grammar structures and lexicon with a continued stress on developing the five language learning skills. Students are introduced to higher-level grammar structures to enable them to speak naturally with multi-clause sentences and to narrate in the past, present and future. Students have ample opportunities to communicate in the target language through conversations, debates, discussions, role-play, oral presentations and written assignments. A broad and extensive cultural component is integrated into all aspects of this course via the textbook, video and audio segments, realia, guest speakers and field trips.

Prerequisite: B+ or higher in Spanish II Honors, and/or teacher recommendation.

Spanish III CP1

HS4333 Grade 10, 11

Full Year Each Day

Level 3

5 Credits

An in-depth review and extensive practice of previously learned grammar structures and lexicon with a continued stress on developing the five language learning skills. Students are introduced to higher-level grammar structures to enable them to speak naturally with multi-clause sentences and to narrate in the past, present and future. Students have ample opportunities to communicate in the target language through conversations, debates, discussions, role-play, oral presentations and written assignments. A broad and extensive cultural component is integrated into all aspects of this course via the textbook, video and audio segments, realia, guest speakers and field trips.

Prerequisite: C or higher in Spanish II, and/or teacher recommendation.

Spanish IV Honors

HS4442 Grade 11, 12

Full Year Each Day

Level 2

5 Credits

Emphasis on strengthening students' communicative skills and refining oral and written expression. Students continue to expand their knowledge base of the culture and civilization of the Hispanic world through authentic topical, literary and historical selections. Students continue to practice higher order grammar structures and to acquire more sophisticated and specialized vocabulary. Students communicate in the target language through conversations, debates, discussions, role-play, oral presentations and written assignments.

Prerequisite: B+ or higher in Spanish III Honors, and/or teacher recommendation.

Spanish IV CP1

HS4443 Grade 11

Full Year Each Day

Level 3

5 Credits

Emphasis on strengthening students' communicative skills and refining oral and written expression. Students continue to expand their knowledge base of the culture and civilization of the Hispanic world through authentic topical, literary and historical selections. Students continue to practice higher order grammar structures and to acquire more sophisticated and specialized vocabulary. Students communicate in the target language through conversations, debates, discussions, role-play, oral presentations and written assignments.

Prerequisite: C or higher in Spanish III College, and/or teacher recommendation.

Spanish V CP1

HS4463 Grade 12

Full Year Each Day

Level 3

5 Credits

For students who wish to continue their study of Spanish language and Hispanic culture and civilization but do not want to pursue the challenge of the AP Spanish language course. Students strive towards accuracy of oral and written expression while they sample authentic literary and cultural readings by major Latino authors.

AP Spanish Language
HS4451 Grade 12

Full Year Each Day

Level 1
5 Credits

This challenging year long college-level course prepares students to take the Advanced Placement Exam in Spanish Language in May, for which they may receive college credit, fulfillment of their foreign language requirement and/or course credits. This is a rigorous course that practices all five language-learning skills at an intensive pace and level. Topical themes for discussions include literary, social, historical and political issues relating to the Hispanic world.

Prerequisite: A- or higher in Spanish V Honors, and/or teacher recommendation.

Course of Study: Spanish Immersion Program

Immersion students complete a challenging and intensive four-year sequenced study of Spanish language, an introduction to the works of major Hispanic authors as well as to literary analysis, and a broad overview of the people, customs and traditions of the Hispanic world. The curriculum devotes ample time to sharpening students' reading comprehension skills as they read relevant selections on cultural and historical topics of high-interest. There is an emphasis on the development of written expression, as students are provided with a systematic approach to the process of writing at the beginning stages. Step-by-step strategies help students plan effectively, activate the process, think imaginatively, organize carefully and communicate correctly. Each of these strategies can be applied successfully to organizing, writing, studying and creating in most other disciplines. Students receive their instruction exclusively in Spanish as they continue to work towards obtaining fluency and accuracy.

Students who complete the twelve-year Spanish Immersion program will receive a designation on their final transcript reflecting their achievement. In order to receive this recognition students must successfully complete the four language courses at the high school, as well as one of the elective offerings.

Spanish Immersion I Honors
HS4012 Grade 9

Full Year Each Day

Level 2
5 Credits

A highly communicative course in which students continue to develop all five language-learning skills. A review of previously learned Spanish grammar is presented while expanding students' knowledge base with higher order grammar and an introduction to the literary works of major Hispanic authors. Students continue to study the culture and traditions of various regions of the Hispanic world. Students participate in various interactive activities through field trips to immersion classrooms at Clyde Brown, as well as to Latino communities in the greater Boston and Metro West areas. In this way students will practice their language skills in authentic Spanish speaking settings.

Spanish Immersion II

HS4112 Grade 10

Full Year Each Day

Level 2

5 Credits

Students continue to develop all five language-learning skills while they study the history, literature, politics, and culture of Spain during the first semester, and Puerto Rico in the spring. This interdisciplinary course provides students with the upper level grammar structures and lexicon that they need to discuss sophisticated topics related to the target regions presented. Students have ample opportunities to practice their oral and written expression through class discussions, debates, presentations, and communication with Spanish-speakers throughout the Hispanic world.

Spanish Immersion III Honors

HS4212 Grade 11, 12

Full Year Each Day

Level 2

5 Credits

This rigorous communicative course will provide students with the opportunity to study Spanish and Hispanic culture and civilization through advanced composition, conversation, and grammar. The course is designed to increase each student's ability to listen for meaning, write, read and speak in Spanish, and to express their ideas and beliefs with improved accuracy and fluency. The main components of the course are refinement of oral skills, in depth study of complex grammar, vocabulary expansion, and continued cultural studies.

AP Spanish Language

HS4451 Grade 12

Full Year Each Day

Level 1

5 Credits

This challenging year long college-level course prepares students to take the Advanced Placement Exam in Spanish Language in May, for which they may receive college credit, fulfillment of their foreign language requirement and/or course credits. This is a rigorous course that practices all five language-learning skills at an intensive pace and level. Topical themes for discussions include literary, social, historical and political issues relating to the Hispanic world.

Immersion electives may include:

Spanish Culture, Spanish for Business (online), Spanish for Health Care (online),
Approved online offerings

We strongly recommend that Spanish immersion students, as well as students who are in upper level Spanish courses (4H-5H) take the SAT II Spanish Exam in the spring of their junior year or the fall of their senior year. It is also advised the Spanish Immersion students choose the SAT II Spanish Exam that has a listening component.

MATHEMATICS

All students should have a firm knowledge of mathematical concepts, skills and reasoning for use in scientific and everyday contexts.

The Mathematics Department offers a four-year sequence of college preparatory mathematics and it is advised that four years of math be taken for all post-secondary endeavors. A student must successfully complete fifteen (15) credits (over and above MCAS math) in order to graduate from Millis High School. As the new SAT now encompasses Algebra II, it is advised that all students take at least Algebra I, Geometry and Algebra II. These courses have been developed to provide each student with the background appropriate to his or her needs.

Primary Student Learning Expectations addressed:

- Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills
- Access, utilize and gain confidence in using evolving technologies to enhance learning, understanding, and expression

<u>MCAS Math CP2</u>		Level 4
HS2254 All Grades	Full Year Each Day	5 Credits

This course will help prepare students to take the MCAS exam by focusing on individual needs.

<u>Algebra CP2</u>		Level 4
HS2114 Grade 9	Full Year Each Day	5 Credits

This course is designed to continue the study of Algebra I from eighth grade. It will review and extend concepts previously introduced allowing students to continue developing their skills with algebraic operations applying those skills in the solution of linear equations. Functions, their graphs and applications to problem solving are also studied.

<u>Geometry Honors</u>		Level 2
HS2122 Grade 9	Full Year Each Day	5 Credits

This course covers the concepts of congruence and similarity of triangles, parallelism, the study of polygons, circles, probability, coordinate and solid geometry and an introduction to trigonometry. Emphasis is placed on deductive reasoning, inductive reasoning and proof. This course is intended for students who will take Calculus as seniors.

Prerequisite: A composite of "85" or above average on the qualifying criteria.

Geometry CP1 Level 3
HS2123 Grade 9, 10 Full Year Each Day 5 Credits

This course covers the concepts of parallelism, congruence and similarity of triangles, the study of polygons, circles, coordinate and solid geometry, and an introduction to trigonometry. Emphasis is placed on deductive reasoning, inductive reasoning and proof.

Prerequisite: "B" or better in Algebra and/or teacher recommendation.

Geometry CP2 Level 4
HS2124 Grade 9,10 Full Year Each Day 5 Credits

This course covers the basic concepts of geometry. Topics include congruence and similarity of triangles, parallelism, the study of polygons, circles and some coordinate and solid geometry, and an introduction to trigonometry. Emphasis is placed on applications involving inductive and deductive reasoning.

Prerequisite: Successful completion of Algebra I.

Algebra II Honors Level 2
HS2132 Grade 10 Full Year Each Day 5 Credits

This course is designed to prepare students for Pre-Calculus and Calculus. Topics include solutions of equations and inequalities and their applications; linear, quadratic, exponential and logarithmic functions and their applications; the development of the complex number system; an introduction to conic sections; and function theory.

Prerequisite: "B+" or better in Geometry Honors or teacher recommendation.

Algebra II CP1 Level 3
HS2133 Grade 10,11 Full Year Each Day 5 Credits

This course presents a review, extension and applications of the concepts developed in Algebra. Topics include the solution of linear and quadratic equations, quadratic functions, solution of systems of equations and inequalities, a development of the complex number system and an introduction to conic sections.

Prerequisite: "B-" or better in Geometry CP1 or teacher recommendation.

Algebra II CP2 Level 4
HS2134 Grade 10,11 Full Year Each Day 5 Credits

This course reviews and extends the concepts developed in Algebra IB and emphasizes skill rather than theory. This course develops skills with algebraic operations, the solutions of linear and quadratic equations. Functions, their graphs and applications to problem solving are also studied. The pace and depth of this course prepares students

for required course work in college mathematics and college entrance exams.
Prerequisite: Successful completion of Geometry CP2.

<u>Pre-Calculus CP1</u>			Level 3
HS2163	Grades 11, 12	Full Year Each Day	5 Credits

This course is designed to follow Algebra II CP1. It is designed to take students from Algebra II into Calculus. It will help students develop a solid foundation in algebra and trigonometry, show them how algebra and trigonometry can model real world problems and develop their problem solving skills. Topics covered include: function theory with applications to linear, quadratic, polynomial, exponential and logarithmic functions; theoretical and applied trigonometry.

Prerequisite: "B-" or better in Algebra II CP1 or teacher recommendation.

<u>Algebra and Trigonometry CP2</u>			Level 4
HS2144	Grade 11, 12	Full Year Each Day	5 Credits

This course is designed to follow Algebra II B. It will include a review, extension and application of concepts learned in earlier courses. Topics covered will include linear, quadratic, exponential, logarithmic and trigonometric functions as well as sequences, counting methods and probability.

Prerequisite: Successful completion of Algebra II CP2.

<u>Pre-Calculus Honors</u>			Level 2
HS2142	Grade 11	Full Year Each Day	5 Credits

This course is intended to prepare a student for calculus. Topics which are covered include: function theory with applications to linear, quadratic, polynomial, exponential and logarithmic functions; analytic geometry; theoretical and applied trigonometry; and various introductory calculus topics.

Prerequisite: "B+" or better in Algebra II Honors or teacher recommendation.

<u>Introduction to Calculus and Statistics CP1</u>			Level 3
HS2173	Grade 12	Full Year Each Day	5 Credits

This course is designed to follow Pre-Calculus. It is designed to take students from Pre-Calculus into Calculus, by further exploring essential topics and developing problem-solving skills. Topics covered include: linear systems and matrices; sequences; series; probability; statistics; analytic geometry in two and three dimensions; and an introduction to limits and Calculus.

Prerequisite: "B-" or better in Pre-Calculus or teacher recommendation.

Calculus Honors Level 2
HS2152 Grade 12 Full Year Each Day 5 Credits

This course is designed to prepare students for calculus courses in colleges and universities. Topics will include limits, differential calculus and the basis of integral calculus. The course will also explore some of the many applications calculus has to the worlds of economics, manufacturing and science. The pace of the course and the depth of material are challenging and demanding.

Prerequisite: "C-" or better in Honors Pre-Calculus or teacher recommendation.

AP Calculus Level I
HS2141 Grade 12 Full Year Each Day 5 Credits

This Advanced Placement (AP) course in calculus consists of a full high school academic year of work that is comparable to calculus courses in college and universities. It is expected that students who take calculus will seek college credit, college placement, or both, from institutions of higher learning. This course is challenging and demanding. Students must take the AP Exam (estimated cost: \$93)

Prerequisite: "B" or better in Pre-Calculus or teacher recommendation.

Exploring Math Applications in the 21st Century CP1 Level 3
HS2253 Grade 11, 12 Full Year Each Day 5 Credits

This course is designed to teach students authentic use of mathematics and mathematical reasoning as applied to a variety of careers, and also to one's making sound decisions in the management of personal finances. Mathematical concepts/skills will be reviewed, as needed, in relation to demonstrating their usefulness in real-life situations. Some of the topics will include logic, personal financial management, probability, statistics, and exponential applications. In addition, applications of mathematics in the arts, politics and in business will be covered.

Prerequisite: Completion of Algebra and Geometry CP1 or teacher recommendation.

Essential Topics in Math with Real World Applications CP2 Level 4
HS364 Grade 11, 12 Full Year Each Day 5 Credits

This course is designed to teach students the authentic use of mathematics as applied to a variety of careers and real world situations. Mathematical concepts/skills will be reviewed as needed. Some topics will include personal banking issues, credit cards, probability and statistics and data analysis and logic.

Prerequisite: Successful completion of Algebra II CP2 or teacher recommendation.

MUSIC

All students will have an understanding of the basic fundamentals of music. This includes music history, music theory, sight reading/singing, and performing. Musical opportunities outside of school, such as Southeast District, festivals, and private lessons are available.

Primary Student Learning Expectations addressed:

- Communicate effectively through writing, speech and other media
- Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

<u>Band</u>			Level 3
HS7253 All Grades	Full Year	Each Day	5 Credits

Senior High Band is an elective for grades 9-12. Students are required to show improvement on their instrument throughout the term in areas such as tone, technique, breathing, intonation, and rhythm. Evaluation is a two part process: 1) Performance alone or with a group on skills such as scales, and excerpts from group pieces and 2) specific knowledge of materials presented in class such as musical vocabulary, music history, and music theory. Home practice is required for improvement; 1/2 hour a day is the required minimum. Performance juries are given twice a year in January and May. Attendance is mandatory at all High School concert events. All band students are required to participate in the Millis High School pep band.

<u>Honors Band</u>			Level 2
HS7252 Grades 11, 12	Full Year	Each Day	5 Credits

In addition to High School Band requirements, students will practice and perform songs, approved by the teacher, in a small ensemble, e.g. duet, trio and quartet.
Prerequisite: Two years of band and approval of the band teacher.

<u>Chorus</u>			Level 3
HS7353 All Grades	Full Year	Each Day	5 Credits

Senior High Chorus is an elective for grades 9-12, and offers full academic credit. Students are required to show vocal skill and improvement throughout the term in areas such as tone, ability to sing harmonies, articulation, diction, working well within a group or alone, memorization and reading. Singers are evaluated by singing their part alone or with a group, by overall class participation, and by documented home practice. Performance juries are given twice a year in January and May. Attendance is mandatory at all High School concert events.

Select Choir

HS7352 Grades 11, 12 Full Year Each Day

Level 2

5 Credits

In addition to High School Chorus requirements, students will practice and perform songs approved by the teacher, in a small ensemble, e.g. duet, trio and quartet.

Prerequisite: Two years of chorus and by audition.

Music and Technology CP1

HS7435 All Grades Full Year 3/7 period cycle 1.125 Credits

Level 3

The goal of this course is to examine many facets of music technology including composition, recording, theory, and performance. In this course, students will learn how to perform and record published compositions, and write and record original material. Pianos and guitars will be used to teach concepts, but all instruments are welcome. Course may be repeated with permission of instructor.

PHYSICAL EDUCATION/WELLNESS

The Physical Education/Wellness curriculum is composed of a semester course in health (9th grade), a semester course in Fitness for Life (10th grade), and a choice of Physical Education electives including a full-year course in Leadership/Outdoor Pursuits or a term course in Fitness for Life II (11th and 12th grade).

Primary Student Learning Expectations addressed:

-Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

-Access, utilize and gain confidence in using evolving technologies to enhance learning, understanding, and expression

Health (Fall/Spring)

HS9215 Grade 9

Semester Each Day

Level 3

2.5 Credits

This course is designed to investigate the many facets of health/wellness and provide students with information to promote healthy decision-making. Topics typically include: current events in health and wellness, healthy and unhealthy relationships, mental health and mental illness (stress, depression, suicide prevention), new media literacy, drug and alcohol use and abuse, nutrition theories and issues, all aspects of human sexuality, consumer health, making healthy choices and surviving adolescence.

Fitness for Life/Introduction to Physical Education (Fall/Spring)

HS9115 Grade 10

Semester Each Day

Level 3

2.5 Credits

Fitness for Life is designed to teach students to self-assess their own personal fitness, and how to take the steps necessary to improve their own health and well-being. The course will cover the essential content and skills that students need to know and be able to do to empower them to effectively change their personal fitness. The course content will include the epidemiology of obesity, the essential components of fitness (how to assess them and apply them effectively), nutrition, personalized goal-setting (based on individual needs), the importance of physical activity, and the learning and academic benefits of physical activity. In addition, it will also teach students how to effectively design a personalized cardiovascular fitness and weight training program, how to use the latest technology to assess, monitor, and evaluate their performance progress, as well as the summative results. The course will also include the essential skills and guidelines that are fundamental in cardiovascular fitness training, strength training, and endurance training.

Leadership/Outdoor Pursuits

HS9125 Grades 10-12

Full Year Each Day

Level 3

5 Credits

Leadership/Outdoor Pursuits is designed to teach and challenge students through a variety of cooperative, teambuilding, leadership, and outdoor activities. Ultimately, the goal of the course is to promote a connection with the outdoors, while providing the opportunity for self-awareness and personal growth through individual and group experiences. Some of content and activities include cooperative and teambuilding activities, leadership development activities, high ropes/elements course activities, fire building, debris hut shelter construction, orienteering and land navigation, cold-weather acclimation, ice-rink planning and construction, archery and bow construction, hiking, rock-climbing, camping, and white water rafting.

Fitness for Life II

HS9155 Grades 10-12

Term Each Day

Level 3

1.25 Credits

Fit for Life II is designed to build on the fundamental knowledge and skills that students acquired in Fit for Life. The course content will cover more specialized fitness related knowledge in depth and breadth, as well as more advanced techniques and skills. Ultimately, the course will provide students will a deeper understanding of their own personal fitness needs and how to address them. The course content will include more advanced knowledge in cardiovascular fitness (e.g., Karvonen Method, indicators of heart health, heart rate recovery, cardiac output) as well how to analyze and assess personal performance using the latest heart rate monitor technology. It will also include more advanced weight training knowledge and skills (e.g., advanced program design, sport-specific techniques, and personalized nutrition). If students choose to take more than one term of Fit for Life II, the course content expands into a more personalized approach to nutrition, where students assess, analyze, plan, and create a personalized portfolio to address their nutritional needs, based on their personal goals.

Global Movement I and II (Fall/Spring)

HS9135 Grades 9-12

Semester Each Day

Level 3

2.5 Credits

Global movement is a course that will explore how movement is used throughout the world. The main focus of this course will revolve around dance, however we will also be studying how movements such as yoga, Pilates, and power-walking can lead to a reduction of stress.

As a class, we will examine how dance has evolved in different cultures and what dance means to these particular cultures. We will learn how to dance the many forms that we are investigating. Some dance forms to be studied include Latino dance (salsa, bachata, merengue), African dance, ballet, hip-hop, break dancing, modern dance, and many more.

Sports Psychology

HS9175 Grades 10-12

Semester Each Day

Level 3

2.5 Credits

This course will expose students to the correlation of sport participation and exercise and the affect of persons' psychological health, development and well-being. Students will also learn how psychological factors affect an individual's physical performance. The course is designed to provide the student with the theory basis of human behavior in sport settings with an emphasis on the mental aspects of behavior. Areas to be discussed are: sport personology (including personality, motivation, achievement and attributions), anxiety/arousal, attention focus and social/cultural manifestations of sport including humanism, youth sport, aggression, cooperation/cohesion and leadership.

Stress Management

HS9175 Grades 10-12

Semester Each Day

Level 3

2.5 Credits

This course will help students identify the stressors in their lives and teach them to implement stress reduction techniques such as mindfulness and deep breathing exercises. Students will also develop habits of mind to manage stress in their lives. Participation in a variety of lab experiences will guide self-reflection and understanding. Lab experiences could include such opportunities as yoga, time-management, meditating, etc.

SCIENCE

Millis High School students learn to view their world with knowledge, reason and concern. Students must take and pass three years of laboratory science (including one full year of a life science and one full year of a physical science). The science courses require that students learn to observe, record and analyze data, and draw conclusions based upon their findings. Students are encouraged to apply scientific concepts and principles to the immediate, as well as the global environment. In addition to the three required courses mentioned above, the Science Department also offers a variety of elective courses for students of all abilities. Homework is an important part of the curriculum and is factored into grades each term. (LS=Life Science, PS=Physical Science)

Primary Student Learning Expectations addressed:

-Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

-Access, utilize and gain confidence in using evolving technologies to enhance learning, understanding, and expression

Biology Honors(LS)

HS3112 Grade 9

Full Year Each Day

Level 2

5 Credits

This comprehensive laboratory course in biology progresses at an accelerated pace. Honors Biology is designed to teach students the basics of biology while tying the course to real-world topics in their lives such as global warming and stem cell research. Some specific topics covered include cell biology, classification, ecology and genetics. There is a great deal of laboratory work stressing the inquiry approach to science. All freshman biology students are required to take the Biology MCAS exam.

Prerequisite: Recommendation of Grade 8 science teacher and successful completion of Grade 8 Algebra.

Biology CP1(LS)

HS3113 Grade 9

Full Year Each Day

Level 3

5 Credits

This is a comprehensive laboratory course in biology. It is a study of living things at many different levels. The course is designed to teach students the basics of biology while tying the course to real-world topics in their lives such as global warming and stem cell research. Some specific topics covered include cell biology, classification, ecology and genetics. All freshman biology students are required to take the Biology MCAS exam.

Biology CP2(LS) Level 4
HS3114 Grade 9 Full Year Each Day 5 Credits

Biology CP2 is a comprehensive laboratory course designed to develop in students a solid background in biological principles along with scientific questioning. The main approach is to involve students directly in laboratory activities that are particularly interesting and relevant to them. Skills necessary to pass the Biology MCAS exam will be emphasized. Some examples of topics covered include cell biology, ecology, genetics and evolution. All freshman biology students are required to take the Biology MCAS exam.

Chemistry Honors(PS) Level 2
HS3122 Grade 10, 11, 12 Full Year Each Day 5 Credits

This laboratory course is designed for the self-motivated student who wishes to develop a clear understanding of the fundamental principles of chemistry. Topics will be presented in a contextual manner with a focus on the synthesis and the application of acquired knowledge. Contexts include, but are not limited to, a study in the removal of oil from beach ecosystems, the synthesis of human respiratory gases, and the concentration of electrolytes in sports drinks. This skills based course has a strong base in applied mathematics.

Prerequisite: "B+" or better in Geometry Honors and teacher recommendation as well as completion of or concurrent enrollment in Algebra II Honors.

Chemistry CP1(PS) Level 3
HS3123 Grade 10, 11, 12 Full Year Each Day 5 Credits

This laboratory course is designed for the college bound student who wishes to develop an understanding of the fundamental principles of chemistry. Topics will be presented in a contextual manner with a focus on the synthesis of acquired knowledge. Contexts include, but are not limited to, a study in the removal of oil from beach ecosystems, a study in the concentration of electrolytes in common sports drinks, and the impact of cooking on the Vitamin C concentration. Mathematical concepts are introduced and continually reinforced throughout the year.

Prerequisite: Completion of Geometry CP1 or Honors with a "C" or better and teacher recommendation; concurrent enrollment in Algebra II CP1 or higher level math course.

Chemistry CP2(PS) Level 4
HS3124 Grade 10, 11, 12 Full Year Each Day 5 Credits

This laboratory course is designed for the student who is looking to develop an understanding of the chemistry of everyday experiences. The many ways in which chemistry impacts the world around us will be examined. Ultimately, students will gain a

solid understanding of introductory chemical concepts. Mathematical concepts are introduced and continually reinforced throughout the year.

Environmental Science CP2 (PS/LS) Level 4
HS3144 Grade 10, 11, 12 Full Year Each Day 5 Credits

This laboratory course is designed for the student who is looking to develop an understanding of the science of the environment. The course, through hands on laboratory experiences and independent analysis of current issues and mathematical models, will merge studies in biology, chemistry, and earth science as well as delve into the politics and economics of the environment. Students will leave the course with a solid understanding of the relationships between the biotic and abiotic components of the environment. This course is recommended for sophomores who are looking to build their science and math skills.

Physics Honors(PS) Level 2
HS3132 Grade 10, 11, 12 Full Year Each Day 5 Credits

The fundamental laws of the universe are studied through laboratory work, conceptual activities, reading and problem solving. Topics studied in this laboratory course include gravitation, electric and magnetic forces, Newton's laws of motion, momentum, energy, heat and light, and some atomic physics as time permits. Students preparing for careers in engineering, mathematics or any science should take this course.

Prerequisite: "B" or better in Honors Geometry and Honors Algebra II. Concurrent enrollment in Pre-Calculus is highly recommended.

Physics CP1(PS) Level 3
HS3133 Grade 10, 11, 12 Full Year Each Day 5 Credits

The fundamental laws of the universe are studied through laboratory work, conceptual activities, reading and problem solving. Topics studied in this laboratory course include gravitational, electric and magnetic forces, Newton's laws of motion, momentum, energy, heat and light. This course for college bound students covers most of the topics treated in Honors Physics but is less mathematically demanding. Algebraic problem solving is required.

Prerequisite: Completion of Algebra II CP1 with a "C" or better and concurrent enrollment in an upper level CP1 math course.

Conceptual Physics CP2(PS) Level 4
HS3134 grade 10, 11, 12 Full Year Each Day 5 Credits

The principles of physics are taught through laboratory and everyday experiences, reading and discussion. Topics covered in this laboratory course include motion, force, gravity, electricity, magnetism, momentum, energy, heat, sound and light.

AP Biology(LS) Level 1
HS3241 Grade 11, 12 Full Year Each Day 5 Credits

Advanced Placement Biology is a post secondary laboratory course designed to meet the needs of those students who are planning on possible careers in medicine, dentistry, zoology, botany and other related fields. A.P. Biology is a college freshman course designed to help the serious student to: gain knowledge of facts, principles and processes of biology; understand the means by which biological information is collected and interpreted; understand how one formulates hypotheses from available data and makes predictions; and understand that science is a human endeavor with social consequences. Topics covered in detail include: cell biology, classification, zoological phylogeny, botanical phylogeny, comparative anatomy, lower life forms, genetics, evolution, population dynamics, communities, ecosystems and physiology. Students are required to take the AP Exam (Estimated cost: \$93).

Prerequisite: "A-" or better in Honors Biology and Honors Chemistry or consent of the instructor.

AP Chemistry(PS) Level 1
HS3251 Grades 11, 12 Full Year Each Day 5 Credits

This is a post-secondary level chemistry course. It is intended for students who have demonstrated strong interest and achievement in chemistry. This course builds on those topics learned in Honors Chemistry, including Thermodynamics, Equilibrium, Electro-Chemistry, Organic and Nuclear Chemistry. This course is equivalent to a college freshman course in Chemistry. Students are required to take the AP Exam (Estimated cost: \$93).

Prerequisite: "B" or better in both Honors Chemistry and Algebra II and successful performance in Pre-Calculus. The latter may be taken during the same semester. (Not offered School Year 2016-2017)

AP Physics(PS) Level 1
HS3261 Grade 12 Full Year Each Day 5 Credits

This is a post-secondary course in mechanics, electricity and magnetism and is designed to prepare the student for the Physics C level examination in May. As such the course content is the equivalent of a first year college physics course. Emphasis will be placed on achieving a sound theoretical understanding of the topics studied through laboratory work, conceptual activities, reading and intensive problem solving. Students must take the AP Exam (Estimated cost: \$93).

Prerequisite: "B" or better in Honors Physics or consent of the instructor. Concurrent enrollment in Calculus is required.

(Not offered School Year 2016-2017)

SCIENCE ELECTIVES

<u>Anatomy/Physiology CP1(LS)</u>	Level 3
HS3273 Grades 11, 12 Full year Each Day	5 Credits

This second year biology program is a laboratory course that examines the human anatomy and physiology that make up the highly complex human body. Through an emphasis on lab work that includes organ dissections, body organ systems are studied with an emphasis on how each of the systems function as well as how human systems compare to those of other vertebrates.

Prerequisites: "C" or better in both Biology CP1 and Chemistry CP1

<u>Anatomy/Physiology Honors (LS)</u>	Level 2
HS3173 Grades 11, 12 Full year Each Day	5 Credits

This second year biology program is a laboratory course that examines the human anatomy and physiology that make up the highly complex human body. This course is designed for the highly autonomous and motivated learner with plans to pursue post secondary science education. Through an emphasis on independent study and lab work that includes organ dissections, body organ systems are studied with an emphasis on how each of the systems function as well as how human systems compare to those of other vertebrates.

Prerequisite: "B" or better in both Honors Biology and Honors Chemistry.

<u>Current Topics in Science CP2 (PS/LS)</u>	Level 4
HS3164 Grades 11, 12 Full Year Each Day	5 Credits

Using current events, case studies, simulations, and hands on learning experiences this laboratory class will explore the science of now. We will build a skill set that allows us to understand what is going on in the scientific community and how it affects our daily lives with a focus on critical interpretation of science in the media.

<u>Pox, Plagues and Pestilence CP1(LS)</u>	Level 3
HS3283 Grades 10, 11,12 Semester Each Day	2.5 Credits

The invention of agriculture was the most important event in the history of civilization, yet it was a disaster for human health. Humans, who were previously nomadic, now settled, living cheek to jowl with not only each other but also a myriad of animals, pathogens, and accumulated waste. In this course students will use a case study approach to explore how humans have created situations that have allowed diseases to flourish. Students will be expected to apply skills garnered in the humanities along with newly developed skills in statistics, epidemiology to analyze, understand and make predications about a variety of scenarios. Ultimately, students will leave this course with a clear sense of how personal decisions can impact the spread of disease on a local level and how societal decisions can impact the spread of disease on a world wide level.

Pre-requisite: Completion of an introductory biology course

Health, Nutrition and Fitness CP1(LS)

HS3293 Grade 10, 11, 12 Semester Each Day

Level 3

2.5 credits

Every wonder why you get food craving? How about why some people recommend you eat a banana if you are getting muscle cramps? Is it really important to follow the directions on an over the counter medicine? Are low-carb, high-protein diets a good idea? Can you really get sick from drinking too much water? These are all questions people ask themselves, and maybe you are one of them. This course is designed to help students further expand their understand of their bodies and how they can get their body to function at its best. Simultaneously students will have the opportunity to remediate content they may not have been so successful with in Biology thereby preparing themselves for high stakes tests or even a successful transit into chemistry.

Pre-requisite: Completion of an introductory biology course

Astronomy CP1(PS)

HS3313 Grades 11, 12 Semester Each Day

Level 3

2.5 Credits

Through a combination of hands-on work, media presentations and models as well as night sky viewing sessions, students will become familiar with the astronomical objects in the day and night sky. The nature and evolution of these astronomical objects will be examined, and students will gain an understanding of the tools, methods and scientific theories used to comprehend the physical structure of the Universe.

Astronomy Honors(PS)

HS3303 Grades 11, 12 Semester Each Day

Level 2

2.5 Credits

Through a combination of independent explorations, hands on work, media presentations and models as well as a night sky viewing sessions students will become familiar with the astronomical objects in the day and night sky. The nature and evolution of these astronomical objects will be examined, and students will gain an understanding of the tools, methods and scientific theories used to comprehend the physical structure of the Universe.

Concurrent enrollment or completion of Algebra II is required.

The Evolution of Physical Science CP1(PS)

HS3323 Semester Each Day

Level 3

2.5 Credits

This course will trace the development of experimentation, theory, and invention in physical science and introduce students to important scientific milestones such as the rise of the mechanical interpretation of nature, the development of atomic theory and the theory of heat, the experimental development of electricity and magnetism, the transition to field theory including the theory of relativity, and the development of quantum theory.

The laboratory component of the course will consist of classic experiments in physical science.

<u>Chemistry II CP1 (PS)</u>				Level 3
HS3153	Grades 11, 12	Full Year	Each Day	5 Credits

This laboratory course will pick up where Chemistry I left off. We will explore the nature of acids and followed by an in depth look at thermo-chemistry and reaction kinetics. We will revisit the actual landmark works of the contributors to the modern atomic theory, including Bohr, Rutherford, Chadwick, Mietner and Curie. Finally, we will round out the experience by looking at the role of petroleum products in the global market and why these hydrocarbons have such impact on the world economy. Upon completion of this course students will be prepared to sit for the SAT II in Chemistry. While the course is not an AP course students are eligible to sit for the AP Chemistry exam and should let the instructor know if this is their intent.

Prerequisite: "C" or better in Chemistry CP1 and Algebra II CP1; recommendation of instructor.

<u>Exploring Computer Science CP1</u>				Level 3
HS3163	All Grades	Full Year	Each Day	5 Credits

The objective of this course is to introduce students to the breadth of the field of computer science. Students will learn computer programming techniques (e.g. HTML, Java Scripting, App Development) with emphasis on computational thinking and computational practices such as algorithm development, problem solving and programming within the context of problems that are important to the lives of students. Application of the Engineering Design Process and the inclusion of STEM practices are integral to the course.

<u>Exploring Computer Science II CP1</u>				Level 3
HS3183	Grades All grades	Full Year	Each Day	5 Credits

Exploring Computer Science II exposes students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. The course focuses on human/computer interaction, innovations in other fields that computing has made possible, and examines how technology innovations may effect privacy and individual freedoms. Students will also apply computer programming techniques to explore problems of interest to them.

SOCIAL STUDIES

The aim of Social Studies Department is to promote a variety of knowledge, values and skills objectives. Through the course offerings, students will develop an awareness and understanding of the following:

1. Recognizes geographical influences on historical events.
2. Applies basic economic principles to analyze past and present world events.
3. Explains the democratic principles and practices that are embodied in the Declaration of Independence and the United States Constitution.
4. Understands the chronology, causes and effects, and the impact of individual/groups on historical events.
5. Utilizes historical evidence to formulate positions.

Primary Student Learning Expectations addressed:

- Communicate effectively through writing, speech and other media
- Read, observe, and listen for understanding and to develop a point of view
- Enhance problem-solving strategies through collaboration, creativity, and critical thinking skills

<u>American History 1763-1865 Honors</u>	Level 2
HS1112 Grade 9 Full Year Each Day	5 Credits

This course is designed to study the historical and intellectual origins of the United States. Students will learn about the Revolutionary era, basic concepts of American government, westward expansion, the establishment of political parties, growth of sectional conflict and general patterns of economic and social change. Students will engage in the use of both primary and secondary source materials. A three-ring notebook (2" or 2 1/2") will be required for this course. This course will give students a more in-depth study of US History.

Prerequisite: "B+" or better in Grade 8 Social Studies or recommendation of Grade 8 Social Studies teacher.

<u>American History 1763-1865 CP1</u>	Level 3
HS1113 Grade 9 Full Year Each Day	5 Credits

This course is designed to study the historical and intellectual origins of the United States. Students will learn about the Revolutionary era, basic concepts of American government, westward expansion, the establishment of political parties, growth of sectional conflict and general patterns of economic and social change. Students will engage in the use of both primary and secondary source materials. A three-ring notebook (2" or 2 1/2") will be required for this course.

American History 1763-1865 CP2 Level 4
HS1114 Grade 9 Full Year Each Day 5 Credits

This course is designed to study the historical and intellectual origins of the United States. Students will learn about the Revolutionary era, basic concepts of American government, westward expansion, the establishment of political parties, growth of sectional conflict and general patterns of economic and social change. Text and supplementary materials are appropriate for students whose basic academic skills require a more concrete approach to instruction.

American History 1865-present Honors Level 2
HS1122 Grade 10 Full Year Each Day 5 Credits

The purpose of this course is to study the historical and intellectual development of the United States since the Civil War. The curriculum for this course will focus on major developments in American history including the Reconstruction Era, the emergence of the United States as a global power, the Progressive Era and the 1920s, the Depression, World War II, the 1950s, the Cold War, the Vietnam War and social upheavals of the 1960s and the rise of conservatism in the 1980s and beyond. Students in this class will read, write, think, discuss, and create projects centered on the principal themes of US history. This course will give students a more in-depth study of US History.

Prerequisite: "A-" or better in US History I and/or teacher recommendation

American History 1865-present CP1 Level 3
HS1123 Grade 10 Full Year Each Day 5 Credits

The goal of this course is to present the student with the conceptual framework underlying the growth and development of the United States of America after the Civil War. This course will focus on many subjects including: the development of U.S. culture from 1865 to the present, emphasizing the development of economic, political and social systems; analyzing the causes and effects of conflicts, wars and U.S. domestic and foreign policy and most importantly the study of American historical events in reference to contemporary society. Various teaching methods and projects will be used. A three-ring notebook (3") will be required for this course.

American History 1865-present CP2 Level 4
HS1124 Grade 10 Full Year Each Day 5 Credits

This course surveys United States History from 1865 to the present. Text and supplementary materials are appropriate for students whose basic academic skills require a more concrete, rather than abstract, approach to instruction. Assignments supplementary to those that are performed in class are oriented to the text and independent study projects result from individual contracts with the teacher.

SOCIAL STUDIES ELECTIVES

AP US History

HS1131 Grades 11, 12

Full Year Each Day

Level 1

5 Credits

A post secondary elective course open to juniors and seniors, this is a survey of United States History that follows the content guidelines of the AP Program, from the era of the Age of Discovery to contemporary America. Learning activities include: in depth investigations, supplementary readings, video clips, oral presentations, and collaborative and independent study projects all include unique material. Students will have summer reading assignments in preparation for this course. It is possible for students to receive college credit for this course with a successful score on a nationally administered AP Exam. Students are required to take the AP Exam (Estimated cost: \$93)

Prerequisite: "A" in American History course or teacher recommendation.

Contemporary World History CP1

HS1133 Grades 11, 12

Full Year Each Day

Level 3

5 Credits

The course will survey the rise of the nation state in Europe, the French Revolution, and the economic and political roots of the modern world. Students will study the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe, and imperialism in Africa, Asia and South America. Primary concentration will be on the causes and consequences of the great military and economic events of the past century, including World War I, the Great Depression, World War II, the Cold War and the Russian and Chinese revolutions. Students will study the rise of nationalism and the continuing persistence of political, ethnic and religious conflict in many parts of the world.

AP Human Geography

HS1141 Grades 11, 12

Full Year Each Day

Level 1

5 Credits

AP Human Geography is a yearlong course that focuses on the effects of human populations on the planet. The course provides a systematic study of human geography and introduces students to the study of patterns and practices that have shaped human understanding, use, and alteration of Earth's surface. Other topics examined will include: population migration, cultural patterns, political organization, agriculture and food production, industrialism and economic development, etc. Students will learn to see geography as a discipline relevant to the world in which they live, as a source of ideas for identifying, clarifying, and solving problems, and as a key component in building global citizenship, and environmental stewardship. Students are required to take the AP Exam (Estimated cost: \$93)

Introduction to Sociology CP1

HS1424 Grades 11, 12 Full Year Each Day

Level 3

5 credits

The purpose of this course is to improve and develop the student's ability to analyze the complex subjects of human behavior and social interaction. The course introduces many basic concepts and research methods used by sociologists along with the historical and contemporary individuals who have built the field of Sociology. Students will then examine culture, social change, social institutions, the process of socialization, and life stages by identifying the various social groups within societies and their characteristics. Students will also evaluate social stratification by examining social class, race, ethnicity, gender, education, etc. Current areas of study include modernization, globalization, along with controversial issues such as death, crime, sexism, racism, medical advancements, technological innovations, and teenage suicides. Students will use materials found in the text along with practicing online research, academic journal analysis, field observations, social experiments, paper writing, and journal reflection. This course is blended which requires the students to access assignments given online along with actively participating in classroom activities.

Introduction to Psychology CP1 (Fall)

HS1513 Grade 12 Semester Each Day

Level 3

2.5 Credits

This course will begin with an introduction to the terminology and major concepts of the field. This will be followed by a brief history of psychology and the various schools that have emerged. After exploring various aspects of experimental psychology and learning theory, the course will proceed to explore various theories of personality development. Freud's psychosexual theory and Erik Erikson's Theory of Identity Formation will be emphasized. With this framework established, the final section of the course will attempt to research issues, using case studies and supplementary materials, of disturbance and breakdown. Throughout the course the impact and influence of neurophysiology upon the individual's cognitive, emotional and behavioral processes will be examined.

Social Psychology CP1 (Spring)

HS1523 Grade 12 Semester Each Day

Level 3

2.5 Credits

The major emphasis of this course is to introduce the students to an understanding of the dynamics of small groups. Included in this course as a brief history of Socialpsyche is a discussion of how the individual grows and develops in relationship to the group-- family, peers, and school. During the last twelve weeks of the semester the class will be divided into two groups, with the group itself being used as a lab for gaining a better understanding of the dynamics of small groups. Throughout this period students will be given fieldwork by which they can observe and evaluate the group processes in various environments.

Prerequisite: Introduction to Psychology and teacher recommendation.

The Individual and the Law CP1
HS1613 Grades 10, 11, 12 Full Year Each Day

Level 3
5 Credits

Many students leave high school with little or no knowledge or skills in practical dealing with the American legal system. This course aims to provide students with practical information and problem-solving opportunities that will help them to develop the knowledge and skills necessary to cope successfully with our law-saturated society. Students will participate in mock trials, role-plays, small group activities, and case studies. Community resources include police, courts, attorneys, correctional institutions, Norfolk County District Attorney's office and social service agencies. Major units will focus upon an introduction to law and the legal system, criminal law, juvenile law, torts, consumer law, family law, housing law and individual rights and liberties.

Modern History of The Middle East CP1
HS1713 Grades 11, 12 Full Year Each Day

Level 3
5 Credits

- What issues does the United States face with the Middle East in the 21st Century?
- Why are the Middle East and the United States so interdependent?
- What are the true sources of conflict in the Middle East and when did they originate?

Each of the above questions could be answered in different ways depending upon your historical point of view. This course focuses on issues surrounding recent crises in the Middle East and Central Asia including but not limited to Israel, Iraq and Afghanistan and their place in the larger context of Western and European engagement with the Islamic world. A balance will be struck between a study of the current aspects of this region and the historical conditions that set the stage. Learning activities include readings, discussion, newspapers, individual and group research, debates, movies, and guest speakers.

Introduction to Politics CP1 (Fall)
HS1813 Grades 11, 12 Semester Each Day

Level 3
2.5 Credits

This course is designed to provide an introduction to politics. Its goal is to lead students to an understanding of the importance of political associations for human beings and the quality of their lives. Study will include: investigating the political influence of the Greeks and Romans; examining concepts used by political scientists in understanding world events such as power, authority and quality; exploring the variety of political systems in the world; and dealing with topics such as political participation, legislatures, and International law that help us understand and interpret daily events observed in the world. The purpose of this course is to prepare students for lifelong political participation and observation. Students will be encouraged during the semester to follow real-world political events through regular reading of daily newspapers. The various instructions

include: video clips, supplementary readings as well as collaborative and independent study projects.

Hitler's Germany CP1 (Spring)

HS1823 Grades 11, 12

Semester Each Day

Level 3

2.5 Credits

This course is designed to study the historical developments from Germany's defeat in World War I to the end of World War II. Topics include the failure of the Weimer democracy; Weimar culture; the rise of power of Hitler and National Socialism; Nazi culture and racial wars against alleged "degenerates"; the roles of party leaders, business and cultural elites, and ordinary Germans in supporting and legitimizing the Nazi dictatorship.

Introduction to Philosophy CP1

HS1913 Grades 10, 11, 12

Full Year Each Day

Level 3

5 Credits

This course is a thematic approach to Philosophy. Themes include: What is the nature of reality? What is consciousness? Does life exist after death? What is "God?" Do parallel universes exist? Does knowledge come from reason or experience? Why is there evil? Is there intelligent life in the universe? What are morals? Are they relative or absolute? Along with deep, ancient questions such as these, there will be specific concepts philosophers have used to articulate their experience in the world like: Being, Substance, Justice, Essence, Ethereality, and Consciousness. Weaved into the concepts will be the philosophers from ancient times to modern and their perspectives on these deep questions.

SPECIAL EDUCATION

Academic Support Center

The resource program is open to all students diagnosed with special needs via an Individualized Educational Plan. Goals and objectives are tailored to meet the specific needs of individual students. Students' work on skills and concepts covered in all major academic areas. The learning specialist assists students with learning styles and strategies, study skills and compensatory skills, as well as support in the content areas. Parental involvement is important to success. The resource room personnel provide consultation to staff regarding class and student accommodations, modifications and methodology.

Academic Skills

HS 90051	All grades	Full Year	2.5 Credits
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The course is designed to assist students with an IEP develop strategies needed to successfully meet the challenges inherent in an academically rigorous high school program of study so that they may meet all graduation requirements with greater confidence. The course will also promote the independent learning styles needed to succeed in transitioning to post secondary educational opportunities. Students will be taught to recognize their own learning styles and exposed to various methods of studying so that they may find methods suitable to meet their individual needs. Setting goals and following the steps necessary to achieve them will be an integral part of the course curriculum along with time management techniques. Students are expected to take an active role in developing their study skills and will be required to use reflection and data collection to assist them in determining which methods work best with their individual learning profiles.

VIRTUAL HIGH SCHOOL

Millis High School participates in the distance-learning program, Virtual High School (VHS). This program allows students to take any of a wide variety of courses that are not offered at Millis High School. VHS encourages teachers to use the Internet to reach students across the country and the globe. Students learn from teachers in other districts via the Internet. VHS has great potential for servicing students, especially those from small school districts.

VHS Course (Fall and Spring) Level 1, 2 and 3

HS9801 Grades 11, 12 Full Year Each Day 5 Credits

HS9802 Grades 11, 12 Half Each Day 2.5 Credits

HS9803 Grades 11, 12 Half Each Day 2.5 Credits

Students may apply for a VHS course and may be accepted based on a variety of criteria. A student who wishes to enroll must demonstrate a sense of responsibility as a “good citizen” at Millis High School including, but not limited to:

1. Ability to work independently
2. Record of punctuality
3. Respect for faculty and peers
4. Record of responsible use of technology.

Students may not enroll in a VHS course that is taught as part of the Millis High School curriculum. Further, no student may enroll in a VHS course as a seventh class unless recommended by the VHS coordinator and/or guidance counselor. Students may drop courses, without consequences, up to the end of week two. After this period students who withdraw will receive a Withdrawn-Passing (WP) or a Withdraw-Failing (WF). Once enrolled, a student and his/her parent will sign a contract that explains the responsibilities of taking a distance-learning course. Students are expected to enroll in both fall and spring classes at the time of registration. Students may view course offerings on-line at www.govhs.org, and see the VHS Site Coordinator to enroll.

TEC Online Academy

A variety of blended learning classes are offered through The Education Cooperative (TEC), a collaboration of area school districts. Please see your guidance counselor for a list of classes and registration procedures.