Greg P. Shugrue, *Principal*
Elizabeth Curtis, *Assistant Principal*
Tracy-Ann Menzies, *Supervisor of Special Education*
Linda Scoralick, *Assistant Principal*
Kevin Best, *Assistant Principal*
Keith Lipinsky, *Athletic Director*

NMHS

2021-2022

Program of Studies

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New Milford High School
Program of Studies
2021-2022

High School Administration

Principal	Mr. Greg P. Shugrue
Assistant Principal	Mrs. Elizabeth Curtis
Assistant Principal	Ms. Linda Scoralick
Assistant Principal	Mr. Kevin Best
Supervisor, Special Ed	Mrs. Tracy-Ann Menzies
Athletic Director	Mr. Keith Lipinsky

School Counseling Department

Counselor	**9th Grade**
Erin Moriarty	A-Col
Mike Savo	Com-Go
Claudia DeMoura	Gr-Li Ell Students
Meg White	Ll-Per
Rob Nathan	Pet-Sp
Danette Lambiase	St-Z

Department Leaders

English, Mr. Jeff Bronn
Fine Arts, Ms. Linda Scoralick
Math, Mr. Kevin Best
Health, Mr. Jason Arnauckas
PE, Mr. Jason Arnauckas
Practical Arts, Mrs. Janice Perrone
School Counseling, Mrs. Danette Lambiase
Science, Mrs. Sara DelMastro
Social Studies, Mrs. Sue Andrews
World Languages, Mrs. Jessica Ward

The courses described in this Program of Studies booklet are offered subject to enrollment and scheduling restrictions.

Principal's Message

Dear Parents and Students:

The high school experience is about discovering yourself as a student and a person. This 2021-2022 Program of Studies provides vital information that will help you choose a path that best develops and challenges your skills as a learner. Course selection is a collaborative process; it is important that you and your parent(s)/guardian(s) thoroughly review this book and discuss the many options available that will enhance your high school experience. Also, speak with your school counselor as well as teachers that know you well. Students must take at least 6.5 credits per year and are encouraged to challenge themselves with our many offerings to better prepare them for life after high school.

The high school experience consists of much more than an accumulation of credits. High school should be fun and about discovery, so I encourage you to get involved in the many co-curricular activities that we offer at New Milford High School. There are numerous research studies to document that students who are more involved in their school are more fulfilled and perform better academically. I encourage you to join one of our many clubs and activities, take part in our award-winning and regionally recognized music program, or get involved in our comprehensive athletic program. Whatever your interests, we offer something that will make your high school experience a memorable one.

New Milford High School is a great school with truly committed and passionate teachers that are eager to help you in your discovery journey. It is my sincere hope that you take advantage of all that New Milford High School has to offer and you reap its rewards.

Sincerely

Greg P. Shugrue
Principal

NEW MILFORD HIGH SCHOOL:
Mission Statement, Core Values and Beliefs, and 21st Century Learning Expectations for Students

Mission Statement

The mission of the New Milford Public Schools, a collaborative partnership of students, educators, family and community, is to prepare each and every student to compete and excel in an ever-changing world, embrace challenges with vigor, respect and appreciate the worth of every human being, and contribute to society by providing effective instruction and dynamic curriculum, offering a wide range of valuable experiences, and inspiring students to pursue their dreams and aspirations.

Core Values and Beliefs

As a collective learning community, we at New Milford High School are grounded by our Core Values and Beliefs (WAVE):

WORK
Work to become lifelong learners and peer collaborators who meet challenging goals by applying 21st century skills.

ACHIEVE
Achieve through hard work, honest reflection, and self-advocacy through critical thinking and problem solving.

VALUE
Value civic responsibility and the diversity within our community and global society.

EMPOWER
Empower students and teachers to become curious, creative, innovative, and insightful.

21st Century Learning Expectations

As a collective learning community, we at New Milford High School want our students to meet the following **21st Century Learning Expectations:**

Communication:
Communicate information clearly and effectively in a meaningful way using a variety of methods.

Problem-Solving:
Analyze, synthesize, and evaluate to solve problems.
Independently and collaboratively set and accomplish goals.
Demonstrate innovation and adaptability in various environments.

Technology:
Students demonstrate technological literacy using relevant research tools to access and collect information to formulate new understanding.

Civic and Social
Students demonstrate personal, social, and civic responsibility within our community and global society**.**

NEW MILFORD HIGH SCHOOL
GRADUATION REQUIREMENTS

To graduate from the New Milford Public Schools, a student must earn a minimum number of credits, fulfill credit distribution requirements and meet district performance standards.

GRADUATION REQUIREMENTS

Pathways for the NMHS Graduate

Two Year College/Career Ready Pathway: Minimum requirement is a high school diploma and attainment of the distribution of credits as prescribed. It is recommended that the student take the most personally challenging course load during their high school tenure and integrate work in the field whenever possible (internships, job shadowing, work, etc.)

Four Year College Pathway: Minimum requirement is a high school diploma and attainment of the distribution of credits as prescribed. Most four-year colleges require that the graduate take four credits in English and math, three credits in science and social studies, and at least two credits in a world language.

Highly Competitive Colleges Pathway: Minimum requirement is a high school diploma and attainment of the distribution of credits as prescribed. Most highly competitive colleges require that the graduate take four credits in English, math, science and social studies, and at least three credits in a world language. It is also highly encouraged that the level of these courses be at the Advanced Placement level and at the very least honors level when available.

To graduate from the New Milford Public Schools, a student must earn a minimum number of credits, fulfill credit distribution requirements and meet district performance standards.

I. Academic credit distribution requirements

A. Students must complete the following credits:

Year of Graduation 2019-22	4.0 English 4.0 Mathematics 3.0 Social Studies (including 0.5 credit in civics and 1 credit for U.S. history) 3.0 Science 1.0 Physical Education 1.0 Arts (Fine or Practical) 0.5 Health 8.5 Electives (including 0.5 in humanities and 0.5 in Financial Literacy) ____ **25.0 TOTAL CREDITS**

Commencing with the Class of 2023:

Humanities Cluster: 9 Credits

- No less than 3 credits in English
  - English I, II, III/AP (3 Credits)
- No less than 3 credits in Social Studies
  - Must include 1.0 credit in US History and 0.5 credit in Civics)
  - 1.5 additional credits in Social Studies (See Program of Studies)
- 3 additional credits of student choice (additional English, Social Studies, Level 4 or above in World Language, Art History, History of Jazz, History of American Musical Theater etc.)

STEM Cluster: 9 Credits

- No less than 3 credits in Science
  - Integrated Science, Biology, Chemistry (3 Credits)
- No less than 3 credits in Math (See Program of Studies)
  - Maximum of 1 credit awarded for successful completion (B-/80) of Geometry taken at the middle school
- 3 additional credits of student choice (additional Science, Math, Tech. Ed., Intro to Business, Computer Literacy, Business Computer Applications, Website Design I&II, Intro to Computer Programming, AP Computer Science A, AP Computer Science Principles etc.)

Health & Wellness Cluster: 2 Credits

- 1 credit in Physical Education
- 1 credit in Health & Safety Education
  - Must include 0.5 credit in Health 1
- Additional 0.5 credit of student choice (*Health 2, Allied Health, Medical Technology, Emergency Medical Technician, Sports Medicine, Early Childhood ,Child Development etc.)

World Language Cluster: 1 Credit

- 1 credit of any World Language course at New Milford High School

  1 credit awarded for successful completion (B-/80) of Part A & Part B of the same World Language course from grades 7 & 8 (Not including Conversational World Language Courses)

Electives Cluster: 3 Credits

- 1 credit in Practical or Fine Arts (See Program of Studies)
- 0.5 credit in Personal Finance - Required by state law
- 1.5 additional credits of student choice

Mastery Based: 1 Credit

- 0.5 Credit in Assured Skills Experiences
- 0.5 Credit in Assured Content Experiences

25.0 TOTAL CREDITS

II. District's performance standards

These performance standards identify the basic skills that students are expected to achieve in order to graduate. A New Milford High School graduate must complete all academic requirements along with completing the Information Literacy standard.

III. Options if graduation requirements are not met

The Board of Education is dedicated to providing students who may have difficulty fulfilling these requirements with different options and multiple opportunities to meet the academic and performance standards for graduation.

Seniors who are not eligible for graduation with their class due to a failure to meet the district graduation requirements in one or more subjects may select one of the following options:

1. Successful completion of a summer course or summer courses comparable (as determined by the Principal) to the subject(s) in which the student was deficient.
2. Enroll in and complete an on-line course in accordance with Policy 6172.6 (Virtual/On-line Courses/College/University Courses).
3. Return to school in September as a fifth year senior.

IV. Exemptions, modifications, and accommodations

A. If a physician or advanced practice registered nurse certifies in writing that the physical education requirement is medically contraindicated because of the physical condition of the student, this requirement may be fulfilled by an elective.

B. Exemptions; modifications and accommodations of graduation requirements will be made for any student with a disability as determined by the planning and placement team or 504 team.

C. Only credits for courses taken in grades nine through twelve shall satisfy graduation requirements except that the Superintendent of Schools or designee may grant credit for certain courses identified in subsection (e) of Section 10-221a of the Connecticut General Statutes.

D. The Board may permit a student to graduate during a period of expulsion pursuant to Connecticut General Statutes 10-233d if the Board determines that the student has satisfactorily completed the necessary credits for graduation.

E. In accordance with state law, the Board of Education may award a high school diploma to a veteran of World War II, the Korean hostilities, or the Vietnam Era who left high school to serve in the armed forces and did not receive a diploma as a consequence of such service as well as any person who withdrew from high school prior to graduation to work in a job that assisted the war effort during World War II, did not receive a diploma as a consequence of such work and has resided in the state for at least fifty consecutive years.

INFORMATION LITERACY STANDARD

INFORMATION LITERACY

Every student must be able to plan and conduct focused research culminating in a final project in any curricular area. (Not applicable to class of 2023)

- Examples of these applications may be a thesis, literary criticism, report, art, music or industrial arts project or performance, or a scientific research project
- The Information Literacy rubric will be used in evaluating this standard
- All skill areas listed below must be satisfactorily used, and the final project will be evaluated according to a standard rubric:

    - Define task
    - Use strategy for information gathering
    - Locate sources using established guidelines
    - Extract relevant information and credit sources
    - Synthesize information into a final project
    - Present final product through chosen medium
    - Evaluate process and reflect on the project

NEW MILFORD HIGH SCHOOL GRADUATION REQUIREMENTS

ADMINISTRATIVE REGULATIONS

SPECIAL SITUATIONS

SPECIAL NEEDS

Graduation requirements for special needs students will be determined through the PPT process.

TRANSFER STUDENTS

All transfer students will have an appointment with their school counselor and administrator to review transcript, testing material and other data. Transfer students must meet all New Milford High School graduation requirements.

School Counseling

School Counseling Vision

The school counselor's role in realizing student potential for healthy growth is focused on the three broad areas of academic, career and personal/social development. This is the core of the content for the Connecticut Comprehensive School Counseling Program, K–12. Academic development includes acquiring skills, attitudes and knowledge that contribute to effective learning in school; employing strategies to achieve success in school; and understanding the relationship of academics to the world of work, and to life at home and in the community. Academic goals support the premise that all students should meet or exceed the local, state and national goals. Career development goals guide the school counseling program to provide the foundation for the acquisition of skills, attitudes and knowledge that enable students to make a successful transition from school to the world of work and from job to job across the lifespan. Career development goals and competencies ensure that students develop career goals as a result of their participation in a comprehensive plan of career awareness, exploration and preparation activities. Personal/social development goals guide the school counseling program to provide the foundation for personal and social growth as students progress through school and into adulthood. Personal/social development contributes to academic and career success by helping students understand and respect themselves and others, acquire effective interpersonal skills, understand safety and survival skills and develop into contributing members of society. (A Guide to Comprehensive School Counseling Program Development (State of CT 2008))

School Counseling Mission

New Milford High School's Comprehensive School Counseling Program mission is to provide leadership, advocacy and support for student achievement. The Comprehensive School Counseling Program is an integral part of our Core Values and Beliefs.

Components

- *The School Counseling Curriculum* is the means by which school counselors promote the healthy development and growth of all students. The curriculum provides developmental and sequential lessons and activities delivered through advisory classes that address student development in academic, career, and personal/social domains.

- *Student Success Plan (SSP)* consists of activities that focus on assisting each student to develop, analyze and evaluate his or her education, career and personal/social goals.

- *Responsive Services* consists of strategies and interventions that certified school counselors use to promote success in academic, career and personal/social development. School counselors will work with students and families through individual and group counseling, consultation, crisis intervention and make referrals as needed.

Scheduling Process

The entire scheduling process is a cooperative effort among students, parents, teachers, and counselors. Courses will be selected to support the individual student's post high school goals. A student's interests, academic abilities, motivation, and goals will be carefully considered as part of the course selection process.

Student meetings to finalize schedule requests:

- 8th grade - Counselors will meet with students in large groups to present course options and view Program of Studies.
- 9th and 10th grades – Counselors will meet individually with students through advisory to review and finalize their course requests.
- 11th grade - Individual student/parent meetings with counselors to review and finalize their course requests, review credits and graduation requirements and discuss post secondary plans.

Credit Requirements

Students are required to take at least the equivalent of 6.5 credits. Seniors should continue to take an academically challenging curriculum. Advanced courses taken in grade eight, such as world languages and algebra, will be counted toward the next sequential course.

Students arriving from Middle School will be considered grade 9 students.
To be promoted to grade 10, a student must have passed a minimum of 6.5 units/credits.
To be promoted to grade 11, a student must have passed a minimum of 13.0 units/credits.
To be promoted to grade 12, a student must have passed a minimum of 20.0 units/credits.

In addition to total credits required, students must fulfill the Information Literacy Standard.

Course offerings and staffing are carefully planned based on student course requests. The schedule is created based on this data. All course selections need to be carefully made and established deadlines need to be honored. The only changes that will be made will be for the following reasons and with the consent of teacher, school counselor, department chairperson, administration and parent.

Guidelines for course changes or drops:

Acceptable:

- Clear-cut computer entry error
- Summer school consequences
- Level changes substantiated by teacher recommendation
- Decision by Planning and Placement Team

Unacceptable:

- Teacher request
- To accommodate early dismissal or late arrival

Full Year Course Drop Deadlines

The deadline for dropping a course without penalty is by the end of the first marking period. Students dropping a course after the drop deadline will receive a grade of "WF" (Withdraw Fail). A grade of "F" will figure into the students GPA. Students may not drop classes if it will put them below the minimum requirement.

Semester Course Drop Deadlines

The deadline for dropping a course without penalty is within the first 20 school days of the semester. Students dropping a course after the drop deadline will receive a grade of "WF" (Withdraw Fail). A grade of "F" will figure into the students GPA.

Level Change Procedure

1. No level changes will be made after the beginning of third quarter.
2. Discuss the concern with the teacher of the course, counselor and parents.
3. Initiate formal level change request with the counselor.
4. Continue to attend class until all transfer paperwork is complete and counselor and student have met for a new schedule.
5. A ten-point differential can be **added to a student's** grade when dropping a level, at the teacher's discretion, based on student performance in the new class.

Grading

A ten-point differential can be added or subtracted to/from a student's grade in the new level at the teacher's discretion based on student performance in the new class.

Students are advised to plan their schedules carefully to avoid the necessity of requesting course withdrawals. A student going through the process of dropping or adding a course may not stop going to class and/or start going to another class until the appropriate form is signed by all parties and the counselor personally informs the student that the change has occurred.

AP Course Expectations:

Taking an AP course and exam is a collaborative effort between you, your parent/guardian, and the school. Students enrolled in AP courses must sign the AP Course Agreement form (see Appendix 1).

- Students electing to enroll in an AP class must meet all prerequisite requirements.
- All AP classes have summer work prior to the class beginning in the fall. It is the expectation that all students enrolled in an AP class will complete the work by the designated due dates.
- The Board of Education through the budgetary process subsidizes the cost of the test by half. All registration for AP tests is done online through APTS (Advanced Placement Testing Service). There is no paper registration. The website is http://aptestservice.com/newmilford. **Payment for exams will be due in October** and may be done via credit or debit card, or by mailing in a check or money order. Directions for payment can be found at the end of the online registration form and in your email confirmation. There are no refunds. More information regarding payments, test day information, and College Board policies can be found on the website.
- Special accommodations for students with 504's or IEPs must be applied for and approved by College Board. Check with your case manager or school counselor to review your status. If you do not have approval from College Board, you will not be provided accommodations.
- Grading policy regarding AP testing: Students enrolled in an AP course must take the AP exam if they wish to get AP credit/weight and have the course listed as "AP" on the transcript; otherwise the course will be considered Honors level and labeled as such on the transcript.

For additional information relative to College Board and Advanced Placement courses feel free to visit the web sites at: http://apcentral.collegeboard.com/home?affiliateId=cbhomeblk&bannerId=apc or at https://apstudent.collegeboard.org/home?navid=gh-aps

Student Success Plan

The Student Success Plan (SSP) is an individualized student driven process designed to help every student stay connected in school and achieve postsecondary educational and career goals. The Student Success Plan at New Milford High School consists of three core components: Academic, Social Emotional, and Career. The Student Success Plan and supporting structures such as student portfolios and academic/personal records are electronically processed using the Naviance program. The Student Success Plan (SSP) also provides students with on-going support to set and monitor goals for personal and academic growth and serves as an individualized, student-driven plan.

Internships

Internships are offered at the high school. These are mentored by professionals in the field and occur after school and/or on the weekend. Students must apply, submit recommendations, and be interviewed for these positions. Entrance is based on interest and a history of strong employability skills, including punctuality, good attendance, and problem solving/team work ability. Students are required to work a minimum of 100 hours at these jobs, usually for no salary, but receive credit and a grade through an independent study contract.

Examples of past internships include working with/at: art gallery, craft school, Web designer, accounting office, veterinarian, museum, and a nursing home. The Internship Coordinator tries to match student interest and ability with mentors, both in New Milford and in surrounding communities, who want to work with student interns. Marking period grades are based on evaluations by mentors done each marking period. Internships start at the beginning of each semester. Interns show evidence of their accomplishments in a public forum at the end of each semester. The final presentation and report are the student's final exam grade.

Independent Study

The Independent Study course is classified as an elective and will not count towards the calculation of GPA unless a waiver is granted by the principal. A completed approval form must be signed off by all parties by the end of the second week of the semester or year. Independent study grades are due on the same deadlines as grades in other courses. Once an Independent Study contract has all approvals and is entered in the computer, it becomes binding. After that time any withdrawal from the Independent Study contract must be by approval of all original parties and the grade posted on the report card and transcript will be a WF, or Withdrawal Failure. A maximum of two independent study credits may be earned.

Career/Counseling Center

All students are encouraged to use the Career Center. This is a resource that has information about occupations, vocational/technical schools, colleges and other related subjects. The Career Center is equipped with desk tops and chrome books that allow students to electronically access information regarding occupations, military careers, colleges, professional schools and scholarships.

College admission representatives will be available in the Career Center during the fall semester to meet with juniors and seniors in small groups. They must sign up for the visit using Naviance.

College and Other Post-Secondary Institutions

All students are encouraged to pursue further study after graduation from New Milford High School. Colleges differ in what they require of students. Therefore, students should check the special requirements of the institutions which interest them. School counselors and the Career Center coordinator will help students with their search. In general, requirements are as follows:

A. **Two-Year Colleges:**
Minimum requirement is a high school diploma. However, it is recommended that students take the most challenging courses in high school for success at the post-secondary level.

B. **Four-Year Colleges:**
Four credits in English; at least two credits of one World Language; four of Math, algebra and above; three or more of Social Studies; and at least three of Science, two of which must be a Laboratory Science.

C. **Highly Competitive Colleges:**
Four credits in English, four in College Preparatory Math, three or more in one World Language, three in Social Studies, and three in Laboratory Science. For engineering schools, you must have four credits in both Science and Math.

Division **I** & **II** College Athletics

Initial Eligibility Requirements — Background

NCAA initial-eligibility standards were developed in response to a concerning number of college athletes who were not succeeding academically in college. Therefore, if students have any reasonable desire to participate in Division I or II Athletics in college, they need to pay attention to eligibility requirements when selecting courses.

NCAA Core Courses: 2021-2022

English	**Social Science**
Advanced Creative Writing American Studies (Eng) AP Language & Composition AP Literature & Composition Childrens Literature Creating Writing & Reading Diverse Voices English 1 English 2 English 3 Humanities 1 Humanities 2 Journalism 1 Journalism 2 Modern & Contemp Poetry Public Speaking Science Fiction Short Fiction Theater Workshop World Literature & Culture Honors Writing and Research Workshop Writing Workshop/Adv	American Studies (Social Science) AP Government AP Human Geography AP Microeconomics AP Psychology AP World History Chinese Studies Civics Dev. West Civilization Economics Global Studies Intellectual History Intro to Psychology Middle East Studies Honors Modern America Russian Studies Sociology US History AP US History World History Honors
Mathematics	**Natural/Physical Science**
ADV Algebra/Trig Algebra 1 Algebra 2 Algebra 3 AP Calculus AB AP Calculus BC AP Statistics Calculus Geometry Pre Calculus Statistics	Anatomy/Physiology AP Physics 1 AP Physics 2 Astronomy Biology AP Biology Biology/H (BSCS) Chemistry AP Chemistry Digital Electronics Engineering Design & Development Fall Ecology Forensic Science Integrated Science Physics Principals of Engineering Spring Ecology
Additional Core Courses	
French 1, 2, 3,4 AP French German 1,2,3,4 AP German Spanish 1,2,3,4 AP Spanish	

For more detailed information regarding academic requirements, NCAA Eligibility, please go to www.NCAAstudent.org.
***Or* visit the Eligibility Center Website at www.ncaaclearinghouse.net.**
The toll free number for the NCAA Eligibility Center is 877-262-1492.

Special Education

To meet the individual needs of a diverse population of students, the Special Education Department provides a continuum of services for identified students. An Individual Education Program (IEP) is designed at a Planning & Placement Team Meeting (PPT) for each student based on the student's needs, diagnosed disability, and current level of functioning. Special Education teachers serve as Case Managers and work collaboratively with regular education teachers to monitor students' progress. Credit is available to any of our students who are successfully employed in a part-time job, maintain academic eligibility, and participate in the Work Study Program.

- Most identified students are successfully included in regular classes with instructional accommodations modifications, and consultation between regular and special education teachers. Some students are placed in collaboratively taught classes, which bring together the expertise of the content-area teacher and the special education teacher to the benefit of all students. Paraeducators and student care workers may assist students in the general curriculum and in learning strategies class, a structured study/tutorial. Direct special education instruction is offered in small-group settings in Multi-Sensory English, Reading, and in Study Skills classes.

- In keeping with state and federal mandates, students in the Life Skills and Community Based Secondary Programs are increasing their time and participation in regular education classes with staff support and curricular modifications as needed. High school peers work with students with disabilities in Independent Living Skills class, which focuses on practical arts and social skills, as well as in some regular classes. Special education students develop vocational skills in a supervised Work Exploratory Program initially within the school setting and, as upperclassmen, at worksites in the community. A two-hour per week after-school Community-Based Program is available to students who require leisure and recreational activities and opportunities to develop independent living and social skills. Through our Unified Buddies program, students work with students with special needs in various settings, i.e. in school clubs and activities and in the cafeteria during school lunch.

- The Behavior Intervention Program offers self-contained classes for students with emotional and behavioral needs requiring small-group instruction in a structured, supervised setting.

"Great teachers empathize with kids, respect them, and believe that each one has something special that can be built upon." ~ Ann Lieberman

English

The English Department offers a four-year program that supports and nurtures the development of our students' communication skills, including reading, writing, speaking, listening, and media literacy. All courses align with Common Core Standards and NMHS 21st-century learning expectations. Freshmen, sophomores, and juniors take full-year courses, while seniors choose from full-year courses and/or electives. All students maintain a digital "My Writing Portfolio" which is a collection of their best work written for their English classes and a reflection on their writing process. Each year, students will review their written work and reflect on their strengths and areas for improvement.

Students should choose courses carefully, keeping in mind their intellectual goals and teacher recommendation. Juniors may take semester courses as electives beyond their full-year English III, American Studies or AP English courses. Prerequisites can be waived with teacher approval. All students may also participate in the NMHS Summer Reading Program.

Course Name	#	Credits	Grades	Prerequisites
English I CP	103	1.0	9	
English I Honors	105	1.0	9	TR
English II CP	113	1.0	10	Eng I
English II Honors	115	1.0	10	Eng I
English III CP	123	1.0	11	Eng I & II
English III Honors	125	1.0	11	Eng I & II

Elective Courses

Course Name	#	Credits	Grades	Prerequisites
Advanced Creative Writing H	150	0.5	11&12	Eng I, II, TR
Advanced Video Production CP	134	1.0	11&12	Eng I, Eng II,TR, Intro. to VP
AP Language & Composition	132	1.0	11&12	Eng I, II, TR
AP Literature & Composition	133	1.0	11&12	Eng I, II, TR
Children's Literature CP/H	161	0.5	11&12	Eng I, II, III
Creative Writing & Reading CP	168	0.5	12	Eng. I, II, III
Diverse Voices CP/H	144	0.5	11&12	Eng I, II, III
English SAT Preparation	901	0.5	11&12	
Intro. to Video Production CP	124	0.5	10-12	Eng I
Journalism I CP	178	0.5	10-12	Eng I
Journalism II CP	177	0.5	11-12	Eng I, Journalism I
Literature & Media Studies H	122	1.0	12	Eng I, II, III
Modern & Contemporary Poetry CP/H	108	0.5	11&12	Eng I, II
Public Speaking CP	147	0.5	11&12	Eng I, II, III
Science Fiction CP	166	0.5	11&12	Eng I, II, III
Theater Workshop & Performance CP	140	0.5	11&12	Eng I, II
World Literature & Culture H	114	1.0	12	Eng I, II, III
Writing & Research Workshop CP	112	0.5	11&12	Eng I, II, III

CP = College Prep H = Honors TR = Teacher Recommendation

English Sequence

English I

English I is a required, full-year course offered to ninth-grade students at the college-prep and honors levels. This course is aligned with Common Core Standards and NMHS 21st-century learning expectations. Students read classical and contemporary literature, including nonfiction, and they write routinely for a range of tasks, purposes, and audiences. Through the ninth-grade language arts theme of "Journey of Discovery," students read at least one core text per semester and develop research, interpretative, and evaluative skills. Students are challenged by tasks of increasing complexity but appropriate to their level and relevant to their learning. Skills incorporated into unit goals also prepare students for sophomore year and the standardized assessment taken in their junior year. Students may also choose to participate in the summer reading activity for extra credit.

English II

English II is a required, full-year course offered to tenth-grade students at the college-prep and honors levels. This course is aligned with Common Core Standards and NMHS 21st-century learning expectations. Students read classical and contemporary literature, including nonfiction, and they write routinely for a range of tasks, purposes, and audiences. Through the tenth-grade language arts theme of "Search for Identity Across Cultures," students read at least one core text per semester and develop research, interpretative, and evaluative skills. Students are challenged by tasks of increasing complexity but appropriate to their level and relevant to their learning. Skills incorporated into unit goals also prepare students for the standardized assessment taken in their junior year. Students may also choose to participate in the summer reading activity for extra credit.

English III/American Literature

English III is a required, full-year course offered to eleventh grade students at the College Prep and Honors levels. This course is typically presented as a survey of the development or evolution of American literature. The texts we will read present the viewpoints of both European-Americans and Native Americans. Students will be encouraged and expected to think deeply about the complex cultural dynamics of identity in our country that have evolved as a result of conquest and colonization. Further units explore the development of American storytelling traditions as they arise from key historical and cultural moments, including the American Revolution, the institution and abolition of American slavery, the American Renaissance, the modernization of America, and contemporary America. Students read major works of fiction and nonfiction, including historical documents, articles, journals, novels, poetry, and drama. Students will develop research, interpretive, evaluative, and argumentative skills while they connect learning with their lives. Students are challenged to meet standards of increasing complexity.

About Elective English Courses

Electives can be full-year or one-semester courses that earn one or a half credit. Seniors can select two elective English courses to satisfy the English requirement unless they select a full-year elective. Although one credit of electives is required, a student may choose to take more than one credit in order to satisfy overall credit requirements. All senior and junior electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment.

The senior program is both prescriptive and elective, allowing students to choose areas of strength and/or weakness to reinforce specific language arts skills. Students are given guidance by English teachers and school counselors in developing a tailor-made schedule to suit individual requirements.

The purpose of the elective program is to give students choices of areas in which they wish to advance or develop skills as they prepare for college and work. All courses align with Common Core Standards, and students must demonstrate mastery of standards to attain credit. Students are expected to read, write, and make presentations in each course.

Advanced Creative Writing

Advanced Creative Writing is a semester course. Students electing this course should enjoy writing and participating in a supportive workshop environment where they share and critique each other's writing. Successful completion of the course requires a student's demonstration of proficiency through writing in various forms, including fiction, nonfiction, and poetry. Students write, revise, and publish their work. Students learn how developing their writing skills will empower them in reaching their own personal, academic, and career goals. Students are expected to complete a final portfolio project that highlights their work. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Advanced Video Production

Advanced Video Production is a full-year English course open to students in eleventh and twelfth grade. This course builds upon the knowledge and skills of the technical aspects of video production. The emphasis of this course is on the responsibility and production of video media for a variety of purposes and a range of audiences. This course involves analyzing, writing, and creating content and gives students experience working in many different roles and phases of production. Students also study diverse genres of film and apply the learned techniques to their own work. Students in this class develop original video projects both individually and collaboratively. As an advanced course, this class requires students to produce videos and manage Green Wave TV. In addition, students are expected to film school and community related events outside of class time. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Advanced Placement English Language and Composition

The AP English Language and Composition course aligns to introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytical and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in nonfiction and fiction texts from many disciplines and historical periods. Student work is evaluated using the College Board's AP scoring criteria. All students who choose to take the class are required to complete the fall semester writing the personal narrative/ college essay assignment. In preparation for the course, students will complete an AP Language and Composition summer assignment, which will be the make-up of their first test in September. All students enrolling in an AP class are expected to take the Advanced Placement exam in the spring.

Advanced Placement English Literature and Composition

The Advanced Placement English Literature and Composition course is a college-level literary analysis course offered in grades 11 and 12. Students will engage in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. Students study structure, style, and themes and literary works, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Student work is evaluated using the College Board's AP scoring criteria. In preparation for the course, students will complete an AP English Literature and Composition summer assignment, which will make up their first test in September. All AP students are required to take the AP exam in May, which tests their ability to analyze a given poem, to analyze a given passage of prose fiction, and to analyze a specific concept or element in a work of literary merit selected by the student. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Children's Literature

Children's Literature is a semester class in which students explore various authors and illustrators in genres including oral tradition, fairy tales, realism, historical fiction, poetry, and picture books. Students read several classics in children's literature as well as a number of contemporary books. Students also explore various ideas conveyed in the texts, the historical development and context of children's fiction, and the intersections among language, theory, politics, ideology, and children's fiction. Most importantly, students examine the ideologies embedded in the texts as well as the ideologies that guide our culture, particularly in terms of children and the literature they read. The culminating project for this course requires students to write their own children's book along with a lesson plan to be taught on a field trip to a local elementary school. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Creative Writing and Reading

Creative Writing is a semester course for students who enjoy writing in a variety of forms and aspire to improve their ability to create poetry, short stories, and creative nonfiction. Units on developing the writer's voice, understanding poetic forms, creating dialogue, using the elements of fiction, and writing creative nonfiction help students develop a mature writing style and display their writing in creative ways. The course includes reading model texts and stresses revision, using the basic elements of good writing while introducing students to the writers' workshop experience. In addition to analyzing published pieces, the students learn the craft of writing and have the opportunity to explore and create a wide variety of genres. Students are expected to complete a final portfolio project that highlights their work. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Diverse Voices

Diverse Voices is a semester course for seniors focused on exploring diversity through literature, including fiction, nonfiction, and other media. Students explore how a variety of factors including race, ethnicity, class, gender, politics, and religion -- influence a writer's voice. To explore these varied voices found in literature, as well as their own, students write analytical, narrative, argumentative, and synthesis compositions and they also convey information and ideas using technology. Through this course, students better understand and appreciate the various voices they will encounter through their personal and professional experiences. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

English SAT Preparation

This one-quarter course is designed to assist students in their preparation and practice for the SAT. Topics addressed include test structure, grading, reasoning skills, and SAT essay, are addressed. Students practice reading and writing questions and have opportunities to track their progress as they improve their understanding of how test passages are constructed. Students also practice skills on the Khan Academy and SAT Foundation websites. Students should register for the SAT upon completion of this course. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Introduction to Video Production

Introduction to Video Production is a semester course open to students tenth, eleventh, and twelfth grade who enjoy film, television, and internet videos and want to learn how to create their own video projects. This course is a prerequisite for Advanced Video Production. This course is designed to introduce students to the artistic and technical terms, techniques, and skills inherent in the visual medium of film. Students will study elements of composition and cinematic language, and apply these concepts effectively and purposefully to their own work. Introduction to Video Production heavily focuses on student-centered projects; active participation is vital to the successful completion of this course. Students will be expected to engage in the production process to write, plan, film, and edit short film projects so as to apply what they have learned. Students in this course will learn basic camera, audio, and lighting equipment terminology, and functions and will be expected to act responsibly when using said equipment. Writing assignments include reflections and screenplays. In addition, students will gain valuable experience using professional video editing software. Students that successfully complete this course and show great interest, enthusiasm, and skill in creating video content may take Advanced Video Production to further develop their knowledge and skills.

Journalism I

Journalism I is a semester course for students interested in learning about the importance of journalism and the media today. Students will practice journalistic writing for a variety of areas including news, editorials, profiles, sports, and feature writing. Emphasis is placed on editing, format and accurate content. Students practice interviewing and research including fact checking, ethics, copyright and journalism law. Additionally, students discuss current changes brought about through social media. Students are expected to read books and articles written by journalists as well as contribute articles to the Wave Review and other public media outlets.

Journalism II

Journalism II is a semester course for students who wish to continue their studies in journalism. The course looks at journalism through different lenses (personal, global, and local) and offers students a chance to practice a variety of journalistic styles. Emphasis is on literary journalism in print, audio and visual media, investigative journalism around the world, and community journalism at home. Students will have the opportunity to contribute to the production of the school paper The Wave Review. Students work with InDesign and journalistic style guides and learn to proofread and edit. Students continue to critically examine electronic news media for topical concerns.

Literature and Media Studies

Literature and Media Studies is a rigorous, full-year, honors-level course. In this senior elective, students consider the role of narrative in literature and 21st-century digital media as they hone their interpretive and analytic abilities. Instruction will be provided in learning to read and communicate in the languages of sequential art, film, video, music, photography, digital storytelling, and documentary film in order to 1) improve critical understanding of the ways in which visual and aural texts create narrative meaning and 2) become skilled readers and creators of 21st-century multimedia culture. Students will interpret literary works and narratives in multiple types of media through reading, writing, viewing, and discussing. The hands-on creation and production of students' own stories in multiple media formats is a central component of this course: students will observe and practice essential techniques for constructing narratives in visual media and collaborate to adapt a work of short literary fiction into multiple media forms. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Modern and Contemporary Poetry

Modern and Contemporary Poetry is a semester course for students who may enjoy an immersive experience in poetry. The course explores modern and contemporary poets and their work through listening and close reading. Students will grapple with the various purposes of poetry and seek to define and shape the genre through engaging with a variety of forms, themes, and approaches to poetry. Students will read, watch, hear and analyze poetry. Students will also find their own voice and make their own contributions to the genre. Students will experiment with diverse forms and themes and write, perform and publish their original poetry. Students are expected to complete a final portfolio project that highlights their work. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Public Speaking

Public Speaking is a semester course. Students practice and improve their communication skills, including speaking and listening, through individual and group presentations. Students study the characteristics of various speeches and also craft, write, practice and deliver their own speeches. Students prepare and present informative, persuasive, and argumentative speeches that include audio and visual aids. Students read and analyze a variety of speeches and write about rhetorical structure and composition. Students also develop critical listening skills by critiquing other speakers. Through study and practice, students learn to appreciate how effective communication skills empower them in reaching their own personal, academic, and career goals. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Science Fiction

Science Fiction is a one semester course that introduces students to a world of fantastic possibilities. Students will analyze and respond to a variety of authors interpretations of futuristic societies, post-apocalyptic worlds, alien life, time travel, space exploration, the morality of genetic modifications, the relationship between man and machine, and the anxieties of artificial intelligence. The authors will range from H.G. Wells, Isaac Asimov, Philip K. Dick, Margaret Atwood, Aldous Huxley, Arthur C. Clarke, and George Orwell. Types of texts range from short story, novel, articles, essays, reviews, and criticism in order to develop a meaningful understanding and appreciation of the complex themes in Science Fiction. In addition to reading fiction and nonfiction texts, students will view several theme based films with accompanying class discussions, writing prompts, and analytical/comparative essays between what we have read and seen in class. Students will also engage in research projects, presentations, and creative writing. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Theater Workshop and Performance

Theater Workshop and Performance is a semester course in which students learn about the artistic and technical aspects of theater with a concentration in acting and design. In this course, students will read and analyze famous theatrical works ranging from comedy to tragedy and use them to make artistic and technical choices. Students will perform excerpts from these established works as well as create and perform original dramatic works. Students will gain a foundation in the basics of theater etiquette, history, and elements, as well as experience in script analysis, acting, directing, pantomime, improvisation, design, writing for a variety of purposes, and more. Active participation in all aspects of this course— including theater exercises, acting performances, theatrical reviews, research, and presentations—is necessary for success. Students will attend at least one live theatrical performance during the semester. By the end of the course, students will gain performance skills, confidence, and a greater appreciation for the performing arts. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

World Literature and Culture

This full-year, interdisciplinary course is for seniors who want to broaden their literary experiences and gain a deeper understanding of how human expressions evolved. Students study timeless and universal works that preserve and continue the conversations of humanity. The works studied range in translations, genres, time periods, and geography. Students develop critical and analytical skills while expanding their global perspective of how literature reflects culture and how it has shaped our literary heritage. Students are expected to participate in varied assignments, projects and presentations that require application of close reading skills, argument and critical writing, digital and interdisciplinary research. Throughout the course, students have choices of reading materials and are expected to make the important connections between literature and culture. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Writing and Research Workshop

Writing and Research Workshop is a semester course in which students practice principles and techniques of effective writing. The course emphasizes the development of writing skills through a variety of authentic writing assignments in narrative, expository, persuasive, argumentative, and creative forms. Students plan, write, and revise their writing to show purpose and audience awareness. In addition, the workshop course includes peer-editing, conferencing, and self-analysis of writing skills. Students also complete an authentic research project that includes primary researching, report writing, and presenting. All electives include the core text reading requirement and, in the fall semester, the personal narrative/college essay assignment. Students may also choose to participate in the summer reading activity for extra credit.

Mathematics

The purpose of this program is to carry each student as far in his/her mathematical development as he/she is capable of going, or needs to go, in order to reach his/her career objectives. The program is a very flexible one, which allows a student to take courses depending upon his/her ability and interests. Four credits in mathematics are required for graduation.

Course Name	#	Credits	Grades	Prerequisites
Introductory Algebra I	404	1.0	9-12	Math 8
Algebra 1 CP	405	1.0	9-12	Math 8
Algebra 1 Honors	409	1.0	9	Math 8
Introductory Geometry	414	1.0	10-12	Intro Alg. 1
Geometry CP	415	1.0	9-12	Alg. 1 CP
Geometry Honors	419	1.0	9-10	Alg. 1 H
Introductory Algebra 2	424	1.0	10-12	Intro Alg. 1
Algebra 2 CP	425	1.0	10-12	Alg. 1CP or Intro Alg. 2
Algebra 2 Honors	429	1.0	9-11	Alg. 1 H
Algebra 3	430	1.0	11-12	Alg. 2 CP
Adv. Algebra & Trigonometry College Prep	435	1.0	11-12	Alg. 2 CP
Pre-Calculus Honors	439	1.0	10-12	Alg. 2 H
Calculus Honors	447	1.0	11-12	PCH
AP Calculus AB	443	1.0	11-12	PCH
AP Calculus BC	444	1.0	11-12	AP Calc. AB
Practical Math: Applications of Percent	406	0.5	11-12	
Practical Math: Applications of Measurement	407	0.5	11-12	
Practical Math: Applications of Probability	408	0.5	11-12	
Practical Math: Applications of Statistics	410	0.5	11-12	
Statistics CP	480	1.0	11-12	Alg. 2 CP
AP Statistics	482	1.0	11-12	Alg. 2 H
Math SAT Prep	901	0.25	11-12	

Placement in all classes is based mainly on teacher recommendation in consultation with the student and parents.

“Pure mathematics is, in its way,
the poetry of logical ideas.” ~Albert Einstein

Introductory Algebra 1

This course is designed for students who have demonstrated competency of basic skills. Students should have the desire and need to take a general level algebra course. Topics include: algebraic notation and terminology, evaluating expressions, operations with real numbers, linear equations, operations with polynomials, relations, functions, graphs, systems of equations and word problems associated with the previous topics. A scientific calculator is required of all students in this course.

Algebra 1

Topics in this course include algebraic notation and terminology, evaluating expressions, operations with real numbers, linear equations, operations with polynomials, factoring, systems of equations, relations, functions, graphs, radicals, quadratic equations, and appropriate word problems. Calculators and/or computers will be used. A scientific calculator is required of all students in this course. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework may be required.

Introductory Geometry

This course is designed to utilize discovery type lessons with a hands-on approach for students who have successfully completed Introductory Algebra. Topics include geometric terminology, concepts of similarity, parallelism, area, volume and the study of polygons and circles. Algebraic concepts will be stressed and calculators and computers will be used. A scientific calculator is required of all students in this course.

Geometry

Topics in this course include geometric terminology, concept of a logical deductive proof, transformations, constructions, concept of congruence, similarity, parallelism, the study of polygons and circles, and appropriate word problems. Algebraic concepts will be stressed. Calculators and/or computers will be used. A scientific calculator is required of all students in this course. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework may be required.

Introductory Algebra 2

After a review of core Algebra I concepts, students will study selected topics from Algebra II including quadratic equations and functions, fractional and radical equations, complex numbers, and appropriate word problems. Calculators and/or computers will be used. A scientific calculator is required for all students in this course.

Algebra 2

Algebra 2 is an extension of Algebra 1 and includes the study of complex numbers, some elementary functions, polynomials, inequalities, logarithms, graphing techniques, parabolas, an introduction to trigonometry, and appropriate word problems. A graphing calculator (TI-83+, TI-84+) is required for this course.

Algebra 2 Honors

This course is designed for students who have demonstrated high achievement in both Algebra 1 Honors and Geometry Honors and briefly reviews and then extends the principles of Algebra 1. The topics include the complex number system, linear and quadratic functions, trigonometric functions and polynomial, rational, exponential, and logarithmic functions. The approach is rigorous and abstract. A student completing this course with a high degree of competency will be prepared for the SAT II Math Level 1C subject test. Students in this course are required to have a graphing calculator (TI-83+, TI-84+).

Algebra 3

After a review of the more challenging topics of second year algebra (factoring, quadratic equations, equations of lines, rational expression simplification, logarithms, etc.), this course will cover topics in rational functions, trigonometry, and the unit circle in preparation for college placement tests. A graphing calculator will be used in this course and is used extensively throughout the year.

Advanced Algebra and Trigonometry

Advanced Algebra and Trigonometry is a study of polynomial, trigonometric, exponential and logarithmic functions, graphing techniques, complex numbers, and topics in analytic geometry. A student completing this course with a high degree of competency will be prepared for the SAT II, Level 1C subject test and college level mathematics. A graphing calculator (TI-83+, TI-84+) is required for this course and is used extensively throughout the year.

Pre-Calculus Honors

This course is designed for students who have demonstrated high achievement in both Geometry Honors and Algebra 2 Honors. It is a preparation for studying calculus that includes the study of polynomial and transcendental functions, polar coordinates, conic sections, limits, trigonometry and vectors, matrices and linear programming. The approach is rigorous, abstract, and demanding. A student completing this course with a high degree of competency will be prepared for the SAT II Math Level 2C subject test. Students will need a graphing calculator (TI-83+, TI-84+).

Calculus Honors

This course is a study of both differential and integral calculus and some of its applications. This course is for the mathematics student who was not recommended for AP Calculus but wants to prepare for mathematics at highly competitive colleges through a rigorous and supportive calculus course. Topics include limits, finding derivatives, applications of derivatives, and an introduction to antiderivatives and definite integrals. A graphing calculator (TI-83+, TI-84+) is required for the course and is used extensively throughout the year.

Advanced Placement Calculus AB

This course includes a study of both differential and integral calculus that is normally found in two semesters of calculus at most colleges and universities. It is recommended for students who have met a high level of achievement in Pre-Calculus. Topics include: limits, finding derivative, applications of derivatives, evaluating antiderivatives, the Fundamental Theorem of Calculus, definite integrals, the Mean Value Theorem, applications of integrals including area, volumes, and methods of integration. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. A graphing calculator (TI-83+, TI-84+) is required for the course and is used extensively throughout the year.

Advanced Placement Calculus BC

This course includes a study of both differential and integral calculus that is normally found in two semesters of calculus at most colleges and universities. It is recommended for students who have met a high level of achievement in AP Calculus AB. Topics include those covered in the AP Calculus AB course as well as additional topics in differentiation and integration from parametric and polar curves, sequences and series, and transcendental functions. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. A graphing calculator (TI-83+, TI-84+) is required for the course and is used extensively throughout the year.

Practical Math: Applications of Percent

The goal of this ½ year course is to provide a review of foundational skills and concepts related to percent while exploring how the concept is used in a variety of fields. Skills to be reviewed will include, but are not limited to; solving single variable equations including fractions, proportions and converting percent to decimal and vice versa. Applications that will be discussed include but are not limited to developing a working budget, payroll/insurance/taxes, discounts/markups, interest (auto/home loans, banking, etc.).

Practical Math: Applications of Measurement

The goal of this ½ year course is to provide a review of foundational skills and concepts related to measurement; including direct and indirect measurement, while exploring how the concept is used in a variety of fields. Skills to be reviewed will include but are not limited to measuring using rulers, protractors, and other devices; arithmetic, with fractions and decimals, solving equations; using formulas to find area, volume. Applications that will be discussed include, but are not limited to, surveying and construction, how indirect measurement can be used to measure items that are very large (ex. height of the flag pole), and how math is used in the culinary field.

Practical Math: Applications of Probability

The goal of this ½ year course is to provide a review of foundational skills and concepts related to probability before exploring how the concept relates to everyday life. Skills to be reviewed will include but are not limited to working with fractions, expressing numbers in equivalent forms and using ratios. These skills will lead to a review of probability including simple compound events, counting principles, geometric and normal probabilities. Applications will be used through the course. Graphing calculators and computers will be an integral part of the course and will be provided for class use, but not needed outside the classroom.

Practical Math: Applications of Statistics

The goal of this ½ year course is to provide a review of foundational skills and concepts related to statistics before exploring how the concept is used in a variety of fields. Skills to be reviewed will include but are not limited to solving equations, using formulas, and evaluating by the rules for order of operations. These skills will lead to a review of statistics including vocabulary, frequency tables and graphs, measures of central tendency and work with usual values and outliers. Applications projects will involve students in a series of real world investigations and projects surrounding topics such as: price of gas, cost of homes, and careers and salaries. Graphing calculators and computers will be an integral part of the course and will be provided for class use, but not needed outside the classroom.

Statistics CP

This is a full year course designed for students who have passed Algebra 2 CP. Topics include: probability, vocabulary, frequency tables and graphs, measures of central tendency, work with usual values and outliers, normal and binomial distributions and hypothesis testing, as well as word problems associated with these topics and the use of computers and graphing calculators. A graphing calculator (TI-83+/TI84+) is required for the class.

Advanced Placement Statistics

AP Statistics is a full year course that offers the student the equivalent of a college statistics course. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course is organized around four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. The curriculum will be an activity-based approach which will encourage hands-on activities that students will pursue individually or in small groups. The course will require the daily use of the TI-83+ or TI-84+ graphing calculator. The prerequisite for AP Statistics is the successful completion of Algebra 2 and teacher recommendation.

Math SAT Preparation

This one semester course is designed to assist juniors in their preparation for the SAT Reasoning Test. Topics include the structure of the SAT and how it is graded. The students review pertinent topics from first year algebra, geometry, and second year algebra that are often included on the test. Additionally, strategies for picking numbers and essential concepts of the SAT are included, as are helpful hints that could be useful to know in order to have success on the test. The math portion of this course meets daily for one marking period. Students are encouraged to register for the SAT Reasoning Test upon finishing this course. A scientific calculator is required, but a graphing calculator is encouraged. Students taking this course for one marking period are required to take the verbal section of the course during the other marking period of the semester. This two marking period course is worth .5 credit.

Social Studies

A society without a sense of history is like a person without a memory; neither can function well, for it has no understanding of itself and how it arrived where it is. The Social Studies Department offers courses to help students develop an understanding of the past, so that they might better understand themselves and the society in which they live. In grade nine, Western Civilization is emphasized. In grade ten, non-Western cultural regions are studied in Global Studies, and in grade eleven, students study American History. Senior year offers students electives in the humanities and social sciences to allow them to understand more fully the present and to work toward solutions to problems inherent to living with others. The central goal of the program is to help students develop into knowledgeable, responsible citizens, possessing the critical judgment necessary for thoughtful participation in a free society.

Course Name	#	Credits	Grades	Prerequisites
Dev Western Civilization CP	212	1.0	9	
Dev Western Civilization Honors	214	1.0	9	TR
World History Honors	216	1.0	9	TR
AP Human Geography	207	1.0	9-12	TR
AP World History	215	1.0	10	TR
Global Studies CP	222	1.0	10	
Global Studies Honors	223	1.0	10	TR
US History CP	231	1.0	11	
US History Honors	234	1.0	11	TR
AP US History	235	1.0	11	TR
Chinese Studies Honors	226	0.5	11-12	TR
Russian Studies Honors	284	0.5	11-12	TR
Forensic Psychology CP	200	0.5	11-12	#
Sociology CP	242	0.5	11-12	#
Civics CP	236	0.5	11-12	#, C
Economics CP	244	0.5	11-12	#
AP Microeconomics	240	1.0	11-12	TR
Introduction to Psychology CP	246	0.5	11-12	#
AP Government	202	1.0	11-12	TR, C
AP Psychology	283	1.0	11-12	TR
Intellectual History Honors	249	0.5	12	TR
Modern America CP	258	0.5	11-12	#, C
History Through Film CP	288	0.5	11-12	#
Middle East Studies Honors	204	0.5	11-12	TR

TR = Teacher Recommendation C = Meets Civics requirement
# = Students may enroll for Honors credit with instructor's permission

Development of Western Civilization

Students explore the development of Western society through a survey of the history of Western Civilization. Topics explored include classical Greece and Rome; the emergence of nation-states from the Middle Ages; the flowering of the Renaissance; the age of absolute monarchy and the Enlightenment; the French Revolution and the origins of modern revolutions; liberalism, nationalism, and imperialism in the nineteenth century; World War I; disillusionment with the post-WWI and pre-WWII political and social landscapes; World War II; and the Cold War and post-Cold War division of Europe. There is an emphasis on critical reading, writing, and documentation skills. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework may be required.

World History Honors

This intensive, full year course is intended to prepare students to take Advanced Placement World History in the 10th grade. The text for the course is written at a college level. Students will be expected to analyze historical documents and various historical interpretations in an attempt to understand the nature of historical change and its causes and consequences. Students will compare the social, political, intellectual, cultural, religious, and economic aspects of major world civilizations. Prerequisites include strength in the following areas - work ethic, critical thinking and reasoning, reading and writing, and an 8th grade teacher recommendation.

Advanced Placement Human Geography

AP Human Geography is the study of interaction between humans and the environment throughout the world. Students will examine how the landscape has affected human development. Topics of study include the consequences of population growth, economic growth throughout regions, cultural change, and the struggle over political power and control of territory. AP Human Geography allows students to learn about origins of language, border disputes, and international conflicts. Throughout the course, students will discover how humans organize space, how the landscape affects society, and how individuals and societies interact with each other. Analysis of various topics begins with the fundamental study of geography. This course is a full year course and is open to students in grades 9-12. Students are expected to take the AP exam in May

Advanced Placement World History

The AP World History course is an intensive, full year, college-level course designed to prepare students to take the Advanced Placement test offered by the College Board in May. Students obtaining a passing grade on the AP test may receive college credit for the course. The course utilizes regular and sustained supplemental readings. Students will be expected to analyze historical documents and various historical interpretations in an attempt to understand the nature of historical change and its causes and consequences. Students will compare the social, political, intellectual, cultural, religious, and economic aspects of major world civilizations. Students are expected to take the AP exam in May of the sophomore year. Prerequisites include strong critical thinking, reading, writing skills, a strong work ethic, an ability to learn independently at times, and a teacher recommendation. Successful completion of Honors World History is also strongly recommended. Those that were not enrolled in World History Honors are responsible for making up content and developing writing skills.

Global Studies

This is a full-year course designed to help students develop organizational, reading, researching, writing, cooperative, and analytical skills through the study of four of the following regions: the Middle East, Sub-Saharan Africa, South and Southeast Asia, East Asia, and Latin America. Each region of study incorporates an emphasis on the following themes: geography and culture, historical highlights, and contemporary challenges. Students will have ample opportunities to examine unique cultural characteristics and reflect learning through a variety of media. The selection of contemporary challenges will be determined by current events and often incorporates multiple case studies. Particular attention will be paid to the manner in which globalization has brought various regions of the world closer. The course is also intended to provide a hands-on opportunity for students to practice problem resolution skills and assess the manner in which nations have related toward one another in the past and present. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework will be required.

US History

This course is designed to give students a working knowledge, appreciation and understanding of our heritage through the study of American history, culture, geography, economics, and politics. Topics of study will begin at colonization all the way through, but not limited to, World War II. Emphasis is placed on building and expanding upon various skills such as critical thinking, writing, and reading comprehension. Students are expected to complete regular reading and writing assignments, and actively participate in independently designed projects. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework will be required.

Advanced Placement US History

Students in this intensive, college-level course interpret primary source writings, analyze differing interpretations of American history, and debate major issues that have shaped our common experience as Americans. The course begins with Pre-Columbian Civilizations and continues through to the end of the 20th century and requires a heavy load of reading and essay writing. It is required that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. Students will be assigned summer work prior to the start of the new school year.

Chinese Studies Honors

Chinese Studies is a one semester elective for juniors and seniors that seeks to deepen student understanding of Chinese culture, society and geopolitical interests. It delves deeper into the philosophy, arts, literature and national search for an identity in the modern era. Students will be expected to independently read selections from several memoirs and works of non-fiction and craft research projects into presentations. Students will also gain exposure to the spoken and written Mandarin Chinese language.

Russian Studies Honors

Russian Studies is an in-depth introduction to Russian history and culture with a brief introduction to the Russian language. This course will include a comprehensive history of the Russian State interlaced with period literature, art, music, economics, religion, folklore, geography, and political science. This course will also pay particular attention to the diversity of the former Soviet republics**,** ethnic groups, and the special problems involved in living in present day Russia.

Forensic Psychology

This semester course examines the intersection of psychology and the law. It will introduce students to the roles that psychologists play in the courtroom and the justice system. Topics covered include: lie detection, eyewitness testimony, criminal profiling, jury selection, the insanity defense, offender treatment, juvenile justice and the death penalty. We will also examine case studies, trials, and psychological research to better understand the psychological aspects of crime, the people who commit crimes and the mental disorders that may contribute to crime causation. Students may opt for honors credit by special arrangement with the instructor and teacher recommendation.

Sociology

This semester course is an introduction to the science and art of human relations, where the student gains knowledge of many different social problems and scientific ways of studying them. Among the topics covered are cultural diversity, group behavior, deviance, and personality development. Student may opt for honors credit by special arrangement with the instructor and teacher recommendation.

Civics

Faced with the challenge of diminishing participation in government by the young people of the state, the Connecticut State Legislature has decreed that as of June 2004, each graduating senior must pass a semester of civics in order to be eligible for a diploma. This course is designed to acquaint students with the judicial, legislative, and democratic process. Using active learning strategies, students explore contemporary problems, current challenges, and historic precedents of democracy. Because of the historic nature of both American History and the Development of Western Civilization, this course fills a need for a study of democracy involving the wider spectrum of social science disciplines. Civics is offered to students in their junior and senior year with the expectation that their impending eligibility to vote will provide immediacy and relevance to their work. Students may opt for honors level credit by special arrangement with the instructor and teacher recommendation. Honors credit requires ten hours of community service and at least one paper and/or other assignment.

Economics

This semester course will change the way you think about the world in which you live. Our goal is to examine how, why, and what causes economic phenomena that influence everyday events and choices. What makes prices go up and down? Why is unemployment so high? How is international trade and foreign policy connected? Key concepts will include supply and demand, scarcity, uncertainty, inflation, and unemployment. In addition to learning the theoretical meaning of these concepts, they will be studied with real world application. Students will be exposed to the many variables of living in a global economy. With a teacher's recommendation and approval, students can request the honors option.

Advanced Placement Microeconomics

The AP Microeconomics is a full year elective for juniors and seniors and is intended to prepare students to succeed on the AP exam offered in May. In this course students will undertake a comprehensive study of how and why markets, consumers, and producers make decisions. Specific topics will include scarcity, different types of economies, supply and demand, short and long run equilibrium, consumer choice, production and cost analysis, economies of scale, market structures (pure competition, pure monopoly, oligopoly, and monopolistic competition), factor markets (labor, capital and land), market failure, and the role of government. As time allows, students will make connections to and comparisons between economic models and actual economic situations.

Introduction to Psychology

Topics in this semester course include human development from birth through old age; the complexities of human behavior, including the theories of Freud, Skinner, etc.; communication skills; mental health and mental illness, including normal and abnormal psychology, as well as a discussion of love, anger, fear, humor, life stresses and crises. All topics are considered as they relate to real-life experiences. Students may opt for honors credit by special arrangement with the instructor and teacher recommendation.

Advanced Placement Government

This is an elective for juniors and seniors and may be used to fulfill the graduation requirement for Civics. It is intended to prepare students to succeed on two AP exams in May, one in US Government & Politics and one in Comparative Government & Politics.

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. Students will also engage in disciplinary practices that require reading and interpreting data, making comparisons and explaining implications of political decisions, and developing evidence-based arguments. In addition, students will complete a political science research or applied civics project.

AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. Students will also engage in disciplinary practices that require reading and interpreting data, making comparisons and explaining implications of political decisions, and developing evidence-based arguments.

Advanced Placement Psychology

This year long, 1.0 credit, college-level course introduces students to the systematic and scientific study of the behavioral and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with such subfields of psychology as the biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, personality and abnormal psychology. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring.

Intellectual History

Intellectual History of the Western World is the history of important ideas as they have evolved throughout time under different political, economic, and social conditions. Philosophy is a quest for knowledge. Questions central to this semester course include: “What should I do?”, “Why should I obey?”, “What can I believe?”, “What can I know?”, “What is there?” Fields of study include ethics, logic, epistemology, and metaphysics. Along with studying the ideas of the great philosophers, this honors level discussion course enables students to clarify and understand their own ideas and beliefs.

Modern America

This semester course examines the United States since the ending of World War II in 1945. Some of the topics included are the Cold War, postwar changes in American society, popular culture of the period, the Fifties, the Baby Boom, the Sixties, teenagers, the Vietnam War, the Civil Rights movement, the changes in the lives of American women, and the Seventies through today. Special emphasis will be placed on the changing role of the federal government, presidential powers, campaigns and elections, Supreme Court decisions, and the evolution of people's rights. Students may use this course to meet the Civics graduation requirement. Honors credit will require ten hours of approved community service along with paper. Honors credit may also require other assignments. Students may opt for honors credit by special arrangement with the instructor and teacher recommendation.

History Through Film

This semester course offers juniors and seniors the opportunity to examine history through the camera lens. Students will learn to analyze films critically in an attempt to understand the filmmaking process and to evaluate film as a cultural and historical artifact. Course requirements include film screenings, assigned readings, positions papers, and a final exam. As critical film viewing is integral to the curriculum, regular attendance to the class is mandatory. Students may opt for honors credit by special arrangement with the instructor and teacher recommendation.

Middle East Studies

Middle East Studies is a one semester elective for juniors and seniors that seeks to deepen student analysis of the many Middle Eastern ethnic groups and cultures. It delves deeper into society and geopolitical interests while also giving students an opportunity to participate in simulations in order to resolve recent and ongoing conflicts of particular American interest. Students will explore the social dynamics of the contemporary Middle East through film and literature. Students will be expected to independently read selections from several memoirs and works of non-fiction and craft research projects into presentations. Students will also gain exposure to the spoken and written Arabic language.

Science

The high school science program emphasizes that students should learn "how to learn" by being exposed to a curriculum that will enable them to apply prior knowledge to old and new problems and to create new approaches to solve the issues of today and the future. Thus, the major goal of the Science department is to develop scientifically literate and personally concerned individuals with a high competency for rational thought and action. Science curriculum and instruction is structured to include the three dimensions of the Next Generation Science Standards (NGSS), – Disciplinary Core Ideas (DCIs), Science and Engineering Practices (SEP), and Cross-Cutting Concepts (CCCs) – to meet the personal, academic, and learning needs for students of all abilities.

Course Name	#	Credits	Grades	Prerequisites
Integrated Science CP	314	1.0	9	
Integrated Science Honors	315	1.0	9	TR
Biology CP	311	1.0	10	
Biology Honors	312	1.0	10	TR
AP Biology	313	1.0	10-12	TR and concurrent enrollment Alg. II
Experimental Chemistry CP	322	1.0	11-12	Successful completion of Alg. I
Chemistry CP	323	1.0	11-12	Concurrent enrollment in Alg. II
Chemistry Honors	324	1.0	11-12	Completion or concurrent enrollment Honors Alg. II, TR
AP Chemistry	325	1.0	11-12	Enrolled in Pre-Calc., Successful completion of Chem., TR
Physics CP	333	1.0	11-12	Enrolled in Alg. II
Physics Honors	335	1.0	11-12	Successful completion of Alg. II, TR
AP Physics I	337	1.0	11-12	Enrolled in or completion of Alg. II
AP Physics II	339	1.0	11-12	Successful completion of Alg. II, AP Phys I
Astronomy CP	340	0.5	11-12	Successful completion of Integrated Sci. or Bio
Anatomy & Physiology I Honors	343	0.5	11-12	Enrolled or completion of Chem.
Anatomy & Physiology II Honors	346	0.5	11-12	Successful completion of Anatomy & Physiology I
Ecology I CP	357	0.5	11-12	Successful completion of Bio and Integrated Sci.
Ecology II CP	359	0.5	11-12	
AP Environmental Science	316	1.0	11-12	Integrated Sci., Bio, Chem. or concurrent enrollment in Chem., Alg. 1, TR
Plant Science I	364	0.5	11-12	Successful completion of Bio & Integrated Sci.
Plant Science II	365	0.5	11-12	Successful completion of Bio & Integrated Sci.
Forensic Science College Prep	342	0.5	11-12	Successful completion of Bio & Integrated Sci.
Introduction to Engineering Design (Project Lead the Way)	372	1.0	9-12	Completed/Concurrent Alg. 1, at least 75 in 8th gr math, TR
Principles of Engineering (Project Lead the Way)	374	1.0	9-12	Completed Alg. 1, TR Completion of IED suggested
Digital Electronics (Project Lead the Way)	366	1.0	11-12	Enrolled in Alg. II, POE suggested, TR Completion of IED suggested
Civil Engineering and Architecture (CEA) (Project Lead the Way)	367	1.0	11-12	Completed/Concurrent Alg. 2 IED/POE suggested, TR
Engineering Design and Development (EDD)	375	1.0	11-12	Successful completion of IED or POE and one other PLTW course

TR = Teacher Recommendation

Integrated Science

The Integrated Science course involves the study of major earth science concepts with an emphasis on the environment. Areas of study include astronomy, cycling of matter, tectonic process and earth history, atmospheric pollution, climate and resource management. Science process skills and inquiry are stressed throughout. Students are encouraged to consider the real-world application of earth science concepts. Study skills and organizational ability are stressed by means of reading assignments, homework and lab reports. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework may be required.

Biology

Biology is a lab-oriented course. Major concepts include general and biochemistry, ecology, cell structure and function, genetics, biotechnology and evolution. Students are encouraged to see the connections between concepts, their real-world applications, and the challenges they present. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework may be required. Students taking honors biology are encouraged to take the SAT Biology subject test.

Advanced Placement Biology

Advanced Placement Biology is a course designed to be equivalent to a first-year course in college biology. It consists of a survey of the biological sciences—Biological Chemistry, Cells, Energy Transformations, Genetics and Evolution, Heredity, Organisms and Populations, and Ecology. Several laboratory experiments and independent research are required. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. Because of the amount of material that needs to be covered, this course is for the serious student, and certain characteristics are essential, such as the ability to work independently by reading, working on projects, and/or labs.

Experimental Chemistry

This is a laboratory-oriented course in which students learn the fundamentals of chemistry. Basic math skills are necessary. Lab experiments are geared toward everyday chemistry encountered in the home and environment. The student must be self-disciplined and able to work well in the lab environment.

Chemistry

Chemistry includes the study of the structure and properties of matter, chemical behavior, and energy relationships. There is strong emphasis on science process, quantitative and laboratory skills. At the honors level, this course is more rigorous, and moves at a faster pace. Additional homework and increased mathematical analysis may be required. In addition, Chemistry Honors students must identify an unknown substance at the end of the year using lab skills gained throughout the course.

Advanced Placement Chemistry

Advanced Placement Chemistry is a first-year, college chemistry course. Stoichiometry, kinetic molecular theory of gas, liquid and solid phases, equilibrium, acid-base chemistry, oxidation-reduction, kinetics, thermodynamics, descriptive chemistry of various families of elements, bonding theory and atomic theory, are dealt with by the middle of May in preparation for the Advanced Placement exam.

It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. Computer interfacing occurs in certain laboratory experiments. The last month consists of Qualitative Unknown Analysis and Seminar Topics. Six hours/week outside of class is the minimum time needed for successful completion of this course. Students must have successfully completed Chemistry CP or Honors prior to enrolling.

Physics

This course covers the topics of motion, forces, energy, sound, light, electricity, and magnetism. A significant portion of the work involves laboratory and project work. A good mathematical background is required, including an understanding of Algebra principles and some geometry and trigonometry. At the honors level, this course is more rigorous, moves at a faster pace, and involves more in-depth mathematical analysis and critical thinking. Additional homework is also required.

Advanced Placement Physics I

Advanced Placement Physics I is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course includes basic use of trigonometric functions. Through inquiry-based learning, students will develop scientific critical and reasoning skills. Approximately 25% of class time is spent in hands-on laboratory work. Students should have completed geometry and be concurrently taking Algebra II. Students taking AP Physics I are required to take the AP Physics I national exam, which is administered in the spring.

Advanced Placement Physics II

AP Physics II is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. This course requires that 25% of the instructional time be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices. Students taking AP Physics II must have completed AP Physics I and are required to take the national exam.

Astronomy

In this semester course, students will explore the universe and discover unseen worlds. Major topics of this course include constellations and the celestial sphere, motion in space, the solar system, stars, black holes, galaxies, and the search for extraterrestrial life. There is also involvement with the John J. McCarthy Observatory outside the scope of the school day. Prerequisites include the successful completion of Biology or Integrated Science.

Anatomy & Physiology I & II

It is recommended that students taking this elective semester course(s) have or have taken Chemistry. A student may take Anatomy & Physiology I alone, or both Anatomy & Physiology I & II. Anatomy & Physiology II cannot be taken without Anatomy & Physiology I. Preserved pigs and various organs are dissected by all students. In Anatomy & Physiology I, some review of basic biology begins the course, followed by a study of tissues. Organs and organ systems are then covered, starting with the skin, skeletal, and muscular systems. In Anatomy & Physiology II, the circulatory, digestive, respiratory, excretory, endocrine and reproductive systems are covered. Laboratory exercises that emphasize physiology are also carried out throughout the year such as microscopic tissue studies, circulatory and nervous system labs, and dissections.

Ecology I

In Ecology I, emphasis is placed on ecosystems, their structure and their dynamics. Students study energy flow, feeding relationships, predator-prey, symbiosis, and other interactions within ecosystems, as well as the major biomes of the world. Students will relate many of the concepts learned to Connecticut's own ecology. There is an emphasis on hands-on activities and project work.

Ecology II

In Ecology II, emphasis is placed on the major environmental problems in the world today. Many of the concepts from Ecology I are applied; therefore, it is recommended that students take Ecology I prior to Ecology II. Students learn about their role in the environment and how it can be both positive and negative. Major environmental issues, such as water and air pollution, global warming, waste management and energy sources, are studied. Emphasis is placed on project work.

Advanced Placement Environmental Science

Advanced Placement Environmental Science is designed to be the equivalent of a one semester introductory college course. Environmental science is interdisciplinary in nature; it embraces a wide variety of topics from different areas of study. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. Because of the amount of material that needs to be covered, this course is for the serious student, and certain characteristics are essential, such as the ability to work independently and collaboratively by reading, working on projects, and/or labs.

Plant Science I & II

Plant Science I and II are introductory courses to plant care in the home, business, greenhouse, and garden. The courses are designed to provide the opportunity to apply science in a realistic and practical way, as well as acquire science skills and knowledge in these important fields. Students should be prepared to work in the greenhouse. Plant Science I will include study and hands-on experience in the areas of plant structure and propagation, plant maintenance, and seasonal crops. Plant Science II will include study and hands-on experience in the areas of landscaping, gardening, and composting. Students must have taken Biology and Integrated Science.

Forensic Science

Forensic Science is an integrated course in which students weave the various core sciences together to problem solve using crime scene scenarios. Students use open-ended inquiry, logic, and analytical thought to make sense of various types of evidence. Technology and laboratory techniques such as gel electrophoresis, fingerprinting analysis, blood typing, hair and fiber analysis, and microscopy are used. This is a rigorous semester course for academic level credit. Students may contract for honors level credit with teacher recommendation.

PROJECT LEAD THE WAY

Project Lead the Way (PLTW) is a national program that prepares students for entering science, math, computer design and engineering fields. Students apply their math and science skills to real-world problems, and learn about possible career opportunities in engineering and related fields. The program is project-oriented and encourages problem-solving skills in a team-centered approach.
College Credit Opportunity: After taking the PLTW final assessments, students may apply for college credit at a variety of colleges.

Introduction to Engineering Design (IED)

Introduction to Engineering Design is one of two foundational courses in the PLTW Pathway to Engineering Program. It develops students' problem-solving skills through fun, hands-on use of design processes. Students will use these design processes as well as their own imaginations to conceptualize, design, create and improve various products using solid modeling computer design software prototype building and 3-D printing. The main focus of the IED course is to expose students to the design process, research and analysis, as well as the importance of teamwork, communication and documentation. For students who wish to continue exploring engineering and related careers, knowledge and skills attained in this course will be used in subsequent PLTW courses. This course is open to grades 9-12. Students must be concurrently enrolled in academic or honors level science and math courses, and must have a science or math teacher recommendation. Must have completed or be concurrently enrolled in Algebra 1.

Principles of Engineering (POE)

Principles of Engineering is one of two foundational courses in the PLTW Pathway to Engineering program. This survey course exposes students to major concepts they would encounter in a post-secondary engineering course of study. Topics include machine components and mechanisms, energy sources and conversions, materials properties and testing, as well as motion (kinematics) and states of equilibrium (statics). These topics are studied in the context of engineering design decisions. Through fun, hands-on activities, using 3D modeling software, robotics kits and interactive computer software, students identify and design solutions to various challenges. They develop problem-solving skills, apply their knowledge of research and design, and document and communicate their findings. For students who wish to continue exploring engineering and related careers, knowledge and skills attained in this course will be used in subsequent PLTW courses. This course is open to grades 9-12. Students must be concurrently enrolled in academic or honors level science and math courses, and must have a science or math teacher recommendation. Must have completed Algebra 1.

Digital Electronics (DE)

Digital Electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras and high-definition televisions. The major focus of the DE course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. This course is open to 11th and 12th grade students who are enrolled in or have completed Algebra 2. It is recommended, but not required, that students take POE before taking DE. **Taught in alternate years.*

Civil Engineering and Architecture (CEA)

Civil Engineering and Architecture is a course in which students learn about various aspects of civil engineering and architecture, and then apply their knowledge to the design and development of residential and commercial properties and structures. In developing their designs for various course projects, students use 3D design software and then bring their designs to life with 3D printing. They then document their design solutions. Students communicate and present solutions to their peers. This course is designed for 11th or 12th grade students who are currently enrolled in or have completed Algebra II. Completion of Introduction to Engineering Design and Principles of Engineering is suggested, but not required. **Taught in alternate years*.

Engineering Design and Development (EDD)

The knowledge and skills students acquired throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed throughout the PLTW course sequence to document a design process to standards completing EDD ready to take on any post-secondary program or career. Students must have IED or POE and one additional PLTW course.

World Languages

World Languages, as a whole, support the school's expectation of demonstrating effective communication skills in reading, writing, speaking, listening, and viewing. The World Languages department teaches students the diversity of cultures found within each of the target languages while supporting and promoting tolerance and respect for all cultures.

Completion of a sequential program of modern language study is recommended for admission to most colleges and universities. The World Languages department offers level one of French, German, and Spanish at the College Prep level, and subsequent levels at College Prep and Honors levels, finishing with Advanced Placement in German, French, and Spanish. In the modern world languages of French, German, and Spanish, the student will work to develop the language skill areas of reading, writing, speaking and listening.

Placement of the middle school student in the correct world language course and level for the ninth grade depends primarily on the recommendation of the middle school world language teacher. Honors courses are generally for those students who begin their world language study at the middle school and achieve a high level of accomplishment. College Prep level courses are generally for those students who complete the middle school program successfully or those students electing to begin study of world languages at the high school. Some adjustments in course level may be necessary for the student based on his/her performance during the first weeks of school. A placement test may be administered for Honors level courses.

To achieve success in world language study, the student must make a commitment to perform the study necessary to attain a high level of proficiency. A great deal of memorization is involved in learning the concepts of language and their manipulation. Preparation for the classroom must be regular and thorough.

French

Course Name	#	Credits	Grades	Prerequisites
French I CP	500	1.0	9-12	
French II CP	502	1.0	9-12	Fr I College Prep or TR
French II Honors	503	1.0	9-12	TR
French III CP	504	1.0	9-12	Fr II College Prep, TR
French III Honors	505	1.0	9-12	Fr II Honors, TR
French IV CP	506	1.0	10-12	Fr III College Prep, TR
French IV Honors	507	1.0	10-12	Fr III Honors, TR
AP French	509	1.0	11-12	Fr IV Honors, TR

TR = Teacher Recommendation

German

Course Name	#	Credits	Grades	Prerequisites
German I CP	510	1.0	9-12	
German II CP	511	1.0	9-12	German I College Prep or TR
German II Honors	512	1.0	9-12	TR
German III CP	513	1.0	9-12	German II College Prep, TR
German III Honors	514	1.0	9-12	German II Honors, TR
German IV CP	515	1.0	10-12	German III College Prep, TR
German IV Honors	516	1.0	10-12	German III Honors, TR
AP German	518	1.0	11-12	German IV Honors, TR

TR = Teacher Recommendation

Spanish

Course Name	#	Credits	Grades	Prerequisites
Spanish I CP	530	1.0	9-12	
Spanish II CP	531	1.0	9-12	Spanish I College Prep, TR
Spanish II Honors	532	1.0	9-12	TR or placement test score >80
Spanish III CP	534	1.0	9-12	Spanish II College Prep, TR
Spanish III Honors	535	1.0	9-12	Spanish II Honors, TR
Spanish IV CP	537	1.0	10-12	Spanish III College Prep, TR
Spanish IV Honors	538	1.0	10-12	Spanish III Honors, TR
AP Spanish	540	1.0	11-12	Spanish IV Honors, TR

TR = Teacher Recommendation

French I College Prep

French I is a progressive and systematic introduction to the study of French. The four language skills of listening, speaking, reading, and writing are developed while attention is directed to correct pronunciation, conjugation of verbs, learning vocabulary and short dialogues, and mastery of fundamentals of grammar. Memorization is essential to ensure student success.

French II

This course reinforces the skills developed in the first year at the high school or in the two-year sequence at the middle school. It also introduces some new structures and verb forms. Everyday topics and articles describing French civilization are studied. The narratives read are longer and more complicated than the first year. Writing skills will incorporate more structures, and speaking will involve more individual practice. Short, guided compositions are required from the student. The amount of French used for instruction will increase.

The honors level offers systematic review of patterns learned in French I and an introduction of many new structural forms. Vocabulary is greatly expanded. Skill in listening to greater amounts of material is developed, and individual response in oral and written French is emphasized. Supplementary materials will be used for reading and increasing vocabulary. Class will be conducted mostly in French.

French III

This course is a continuation of French II. Students will continue grammar study, vocabulary building, and development of listening and speaking skills. Simple short stories may be used to reinforce all four language skills. The amount of French used in this class will be 90%.

The honors level continues with the study of the four language skills. Supplementary materials may include magazines, newspapers, and short stories. Some study of French art, history and literature up through the middle ages is included at this level. Development and refinement of oral skills are emphasized. The student will be required to write compositions in French. The amount of French used in class will be 90^{+}%.

French IV

This course follows successful completion of French III. It is conducted primarily in French. Topics related to student interest in areas of art, history and literature are included in the course work.

French IV honors should be taken by those students who are planning to take the Advanced Placement exam in French Language and culture or SAT II in French during their senior year. The nature of the materials used facilitates the continued study of grammar and composition. The course also follows directly from French III honors and includes the study of some French art, history and literature from the Renaissance to the early 20th century. Readings include short stories and plays. Conversational preparation and practice are expanded. The class is conducted primarily in French.

Advanced Placement French

It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. This course will also give preparation and practice to those students planning to take the SAT II exam in French. Reading development is continued with study and discussion of drama and fiction by well-known French authors. This course includes extensive expansion and review of French vocabulary. The depth of compositional work is greater. The class is conducted in French.

German I College Prep

German I is a progressive and systematic introduction to the study of German. The four language skills of listening, speaking, reading, and writing are developed, while attention is directed to correct pronunciation, conjugation of verbs, learning of vocabulary and short dialogues, and mastery of fundamentals of grammar. Memorization is essential to ensure student success.

German II

This course reinforces the skills developed in the first year at the high school or in the two-year sequence at the middle school. It also introduces many new structures and verb forms. Everyday topics and articles describing German civilization are studied. The narratives read are longer and more complicated than the first year. Writing skills will incorporate more structures, and speaking will involve more individual practice. Short, guided compositions are required from the student. The amount of German used for instruction will increase.

The honors level course offers systematic review of patterns learned in German I and an introduction of many new structural forms. Vocabulary is greatly expanded. Skill in listening to greater amounts of material is developed, and individual response in oral and written German is emphasized. Supplementary materials will be used for reading and increasing vocabulary. Class will be conducted mostly in German.

German III

This course is a continuation of German II College Prep. Students will continue grammar study, vocabulary building, and development of aural-oral skills. Simple short stories may be used to reinforce all four language skills. The amount of German used in class will be 90%.

The honors level is sequential to German II Honors and continues the study of the four language skills. Supplementary materials may include magazines, newspapers, and short stories. Development and refinement of oral skills are emphasized. The student will be required to write compositions of some length in German. The amount of German used in class will be 90^{+} %.

German IV

This course follows successful completion of German III College Prep. Topics related to student interest in areas of art and literature are included in course work. The course will be conducted primarily in German.

German IV Honors continues work begun in German III Honors. It should be taken by those students who are planning to take the Advanced Placement exam in German Language or SAT II in German during their senior year. The nature of the materials used facilitates the continued study of grammar and composition. Reading includes the short story and novel. Conversational preparation and practice are expanded. The class will be conducted primarily in German.

Advanced Placement German

It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. This course will also give preparation and practice to those students planning to take the SAT II exam in German. Reading development is continued with study and discussion of drama and fiction by well-known German authors. The depth of compositional work is greater. The class will be conducted in German.

Spanish I

Spanish I is a progressive and systematic introduction to the study of Spanish. The four language skills of listening, speaking, reading, and writing are developed, while attention is directed to correct pronunciation, conjugation of verbs, learning vocabulary and short dialogues, and mastery of fundamentals of grammar. Memorization is essential to ensure student success.

Spanish II

This course reinforces the skills developed in the first year at the high school or the two-year sequence at middle school. Students will continue study in the now familiar format, expanding their four basic language skills of listening, speaking, reading, and writing, and their knowledge of culture and grammar. The amount of Spanish used for instruction will increase.

Students must have the recommendation of their previous Spanish teacher for placement in the honors level. This course offers systematic review of patterns learned in Spanish I and an introduction of many new structural forms. Vocabulary is greatly expanded. Skill in listening to greater amounts of material is developed, and individual response in oral and written Spanish is emphasized. Supplementary materials will be used for reading and increasing vocabulary. Class will be conducted mostly in Spanish.

Spanish III

This course is a continuation of Spanish II College Prep. Students continue grammar study, vocabulary building, and development of aural-oral skills. Simple short stories may be used to reinforce all four language skills. The amount of Spanish used in class will be 90%.

The Spanish III Honors course is sequential to Spanish II Honors and continues the study of the four language skills. Supplementary materials will include magazines, newspapers, and short stories. Development and refinement of oral skills are emphasized. The student will be required to write compositions of some length in Spanish. The amount of Spanish used in class will be 90^{+} %.

Spanish IV

This course follows successful completion of Spanish III College Prep. It is conducted primarily in Spanish. Topics related to student interest in areas of art and literature are included in course work.

The honors level course continues work begun in Spanish III Honors. It should be taken by those students who are planning to take the Advanced Placement exam in Spanish Language or the SAT II in Spanish during their senior year. The nature of the materials used facilitates the continued study of grammar and composition. Reading includes the short story and novel. Conversational preparation and practice are expanded. The class is conducted primarily in Spanish.

Advanced Placement Spanish

It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. This course will also give preparation and practice to those students planning to take the SAT II exam in Spanish. Reading development is continued with study and discussion of drama and fiction by well-known Hispanic authors. The depth of composition work is greater. The class is conducted in Spanish.

The Fine Arts
Art

The Visual Art program is designed to meet the needs of both the student who intends to use visual art in a career and the student who is interested in visual art for professional or personal enrichment. The Visual Art Department expects and supports the development of vocational skills, artistic talents, creative thinking, basic techniques, and use of materials.

Each student is evaluated individually, with emphasis placed on skills and craftsmanship, knowledge and appreciation of historical content, personal expression, originality and ambition of assigned projects. Grades reflect all of the above and are in the form of progress, completed projects and reflections, reports, critiques, quizzes and tests. The curriculum includes art shows and sales to provide students with the opportunity to share their accomplishments, experience authentic assessment, to appreciate the talents of fellow students and to give back to the school and community. All Visual Art classes are one semester long, with the exception of AP and Honors Art History, Studio Art Honors, AP Studio Art, and Graphic Design, which are full year courses.

Course Name	#	Credits	Grades	Prerequisites
Design Foundations 1	756	0.5	9-12	
Design Foundations 2	757	0.5	9-12	DF 1
Portfolio	789	0.5	10-12	DF 1 & 2
Studio Art Honors	741	1.0	11-12	DF 1, DF 2 & Portfolio, TR
AP Studio Art	740	1.0	11-12	DF 1, DF 2 & Portfolio, TR
Art History Honors	708	1.0	10-12	
AP Art History	707	1.0	10-12	
Ceramics 1	710	0.5	9-12	
Ceramics 2	711	0.5	9-12	Ceramics 1
Advertising Art & Design	780	0.5	10-12	
Graphic Design	784	1.0	11-12	Advertising Art & Design, TR
Crafts	730	0.5	9-12	
Sculpture	785	0.5	10-12	
Digital Photography	754	0.5	9-12	

TR = Teacher Recommendation

Design Foundations 1

The elements of design are emphasized. A variety of drawing and painting materials and techniques are used, which may include; pencil, charcoal, pastels, collage, printmaking, pen and ink, scratchboard, and watercolor paint, as well as acrylic paint. Students will complete a major project every five days and are expected to complete two homework assignments per week. Projects include portraits, landscapes, still life drawings, and abstract collages. The style of artists from various periods in history will be studied.

Design Foundations 2

The emphasis of the course is on the conceptual aspect of drawing and painting. Students are expected to employ techniques and materials used in Design Foundations 1 in more advanced projects. Historical and cultural references are incorporated into hands-on projects. One major project will be completed every ten days. Homework is assigned twice per week.

Portfolio

This class is for dedicated, advanced art students directed towards art careers or occupations that use art and design skills. Emphasis will be on building technical skill and personal expression. Projects will include portraiture and still life, among others from observation, which are often required in college application portfolios. This course is best taken as a Junior preparing to take Studio Art.

Studio Art Honors

Studio Art is a capstone course for advanced art students. Prior to this course, it is necessary for the student to have extensive experience in the arts. Strong design skills and self-motivation are necessary. Students will explore Drawing, 2D Design, and 3D Design, and then focus on one area for a sustained investigation. There is work required outside of the classroom. In May, seniors as well as juniors are expected to participate in the Senior Art Show in some capacity. In preparation for this course, it is suggested that students complete a summer assignment.

Advanced Placement Studio Art

AP Studio Art is for highly motivated advanced art students ready to take on the rigors of a college-level course and complete the Collegeboard portfolio requirements. Students who wish to attempt this challenge will complete a summer assignment which will be reviewed for entrance to the AP level and will count as the first project grade in September. During the school year, there is extensive work required outside of class, including regular private consultations with the teacher. There is no written AP examination; instead, students submit digital portfolios for evaluation by the Collegeboard in May. Each student must choose to focus his/her sustained investigation in one of three areas: 1. Drawing (pen & ink, scratchboard, drawing, painting) 2. 2D Design (photography, graphics, painting, or mixed media) 3. 3D Design (ceramics, sculpture, and/or stage and architectural design)
Students are expected to participate in the Senior Art Show. A student who has successfully completed Studio Art as a junior may apply for AP Studio Art as a senior.

Honors Art History

This is a study of the development of art from prehistoric times to modern. Selected examples of outstanding painting, sculpture and architecture are introduced and discussed. Slides and videos as well as lectures and group assignments are used to develop artistic appreciation. This is a course for diligent students interested in a rigorous study of the history of art. Course work includes research papers, essays and class presentations. Honors students will participate fully in class level appropriate assignments and a textbook designed for the high school student.

Advanced Placement Art History

This is a study of the development of art from prehistoric times to modern. Selected examples of outstanding paintings, sculpture and architecture are introduced and discussed. Slides and videos as well as lectures and group assignments are used to develop artistic appreciation. This is a course for diligent students using a college text. It is expected that all students enrolled in an AP class will take the advanced placement exam that is administered in May. Course work includes research papers, practice AP exam essays and class presentations. Four hours per week outside of class is the minimum time needed for successful completion of this course. Students wishing to enroll in this AP course should have a B or better in their present Honors English and Social Studies courses. Students will complete a summer assignment which will count as the first test grade in September.

Ceramics 1

This course is an introduction to basic hand-building techniques. It uses historical and ethnic pottery as study examples. Students discover the properties of ceramic materials as they learn to prepare clay, practice and building techniques, and glaze completed pieces. Group and individual critiques are included. The student is introduced to the potter's wheel and will participate in ceramic shows and sales. In order to excel, students are invited to Open Studio each Wednesday after school, when a ceramics instructor is on duty. Students are encouraged to enroll in Design Foundations 1 prior to enrolling in Ceramics 1.

Ceramics 2

Ceramics 2 develops skills learned in Ceramics 1. The student is expected to show imagination in his/her designs while meeting rigorous construction standards. Projects include concentration on the pottery wheel, set and/or series, lidded containers, colored clay or slip, and sculpture. Students will explore advanced glazing techniques. In order to excel, students are invited to Open Studio each Wednesday after school, when a ceramics instructor is on duty. The student takes part in critiques and will participate in several ceramics shows and sales. Students wishing to enroll in Ceramics 2 should have earned a B or better in Ceramics 1.

Advertising Art & Design

This is a fast paced course that exposes students to the techniques of advertising and commercial art. It encompasses advertising techniques, layout, lettering styles, logo development, color and design theories, and packaging. Adobe creative software will be used. Group critiques help prepare for a final oral presentation. Homework is an integral part of the curriculum. This class is especially beneficial when taken with Marketing.

Graphic Design

Students use computers and Adobe applications including Photoshop, Illustrator, and InDesign on a daily basis. Projects include flyers, posters, brochures, business cards, and logo designs. This course teaches graphic art knowledge and reinforces employability skills through work with graphic design, advertising, and publishing professionals in the community. Critiques as well as written and oral reports are required.

Crafts

Students will learn to make usable and decorative art. Projects may include jewelry, calligraphy, mosaics, and embroidered samplers. Excellent craftsmanship will be stressed and students will take part in Art Department shows and sales. Projects are based on traditional craft from a variety of cultures.

Sculpture

Sculpture is an introduction to three-dimensional design. Additive and subtractive methods will be taught. Materials may include clay, cardboard, wood, plaster, and wire. Students will study traditional and contemporary sculptors. Homework is assigned weekly.

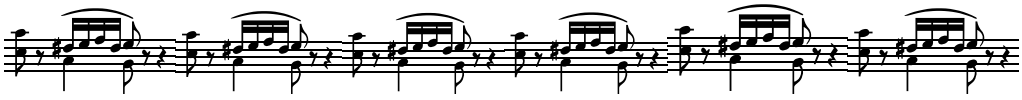
Digital Photography

Students will learn the fundamental terms, techniques and practices of photography. Smart phones and/or digital cameras will be used to take weekly homework photographs and students will learn to manipulate these photos using Adobe Photoshop. Photography students will learn skills that will open the new Digital Media and Design career path to them. They will utilize their fine art skills while combining them with 21st century workplace skills. Sample units include: Composition, Framing, Portraiture, Motion, and Photo Editing. All students must have a working digital camera or a smart phone with a working camera.

Music

All students should have the opportunity to be involved in music. To be involved with music is to discover the world of understanding not only one's self but all people, through participation in a performing group or through the study of music itself, in order to become aware of the impact of human response and emotions.

The major purpose of this curriculum is to help the student develop into an intelligent consumer of music as well as to develop musical awareness, initiative, and musical discrimination and skills through participation in the music program.



Course Name	#	Credits	Grades	Prerequisites
Band	775	1.25	9-12	Play instrument
Orchestra	796	1.0	9-12	
Wind Ensemble-Honors	763	1.0	10-12	Audition
Chorus	793	0.5	9-12	Sing
Advanced Chorus	760	1.0	9-12	Audition
Music Appreciation	794	0.5	10-12	
Music Theory	795	0.5	10-12	Basic music fundamentals
Electronic Music Technology	797	0.5	9-12	
History of Jazz	798	0.5	9-12	
History of Amer. Musical Theater	799	0.5	9-12	

Band

The band is an organized group, which provides students who are instrumentally oriented the opportunity to become part of a unit that performs for many school functions, outside groups, and other schools at concerts and assembly programs. Some of the types of programs for which the band provides music are football games, pep rallies, assemblies, and concerts. This organization allows the individual to increase his/her own musical technique in a group effort that benefits not only the whole band but also the school. Participation in Marching Band is mandatory.

Orchestra

Orchestra is an instrumental ensemble that will give experience to string players. This includes several performance experiences as well as continuing improvement in personal ability as a musician. Students generally should have prior experience as a performer. Exceptions will be made for anyone who shows a genuine interest as a beginner.

Wind Ensemble

Admission to Wind Ensemble is by audition only. Auditions will take place in January. This group will perform throughout the year and will work on advanced level band literature. Participation in Marching Band is mandatory.

Chorus

The chorus is a performing organization, which gives students the opportunity to sing and increase their musical abilities. The chorus performs at school concerts and at outside functions. There is no need to be an accomplished musician, but some basic aptitude is required as well as a willingness to learn about and enjoy singing. Attendance at concerts is a requirement. Students are required to sing by themselves for the director as a midterm and final exam.

Advanced Chorus

Admission to Advanced Chorus is by audition only. Auditions will be held in January for the following school year. The group will be limited in size to 40 people. The group will work on the same music as the regular chorus but will also have its own repertoire and will perform more advanced music on its own.

Music Appreciation

The purpose of this course is to provide a general understanding of music. Although it is not a truly in-depth study, the course will provide a survey of various types of music. Areas covered are instruments of the orchestra, style in relation to historical era, musical plays from opera to Broadway, rock, and classical music.

Music Theory

This course begins with the rudiments of music. It involves the study of music from a purely structural viewpoint such as harmony, ear training and sight singing. The aim is to increase the overall musical ability of the student. Areas covered are intervals, triads and chords, harmonization of melodies, scale structures, cadences, and some ventures in composing melodies with harmonic backgrounds. This is a vital course for a student interested in majoring in music in college. Students with no previous music experience should not take this course.

Electronic Music Technology

This course offers an introduction and survey of the world of music as it applies to the various technological advances that are taking place. This class will include the use of computer and synthesizer programs available known as “MIDI” technology. Students should have some musical background and will have to play the keyboard.

History of Jazz

History of Jazz offers an introduction and understanding of a truly American art form known as Jazz. It includes the history of Jazz, dating back to the days of slavery and its African influence, as well as European and Middle Eastern influences. This study will take this route up to and including current trends in Jazz.

History of American Musical Theater

This course is an introduction to the Broadway musical. Students will learn of the unique American contribution to musical theater by studying the history and development of the art form and the people and processes that go into making a Broadway show. Students will watch shows and listen to music, react, analyze, compare, contrast and discuss.

The Practical Arts

Business

The business curriculum encompasses a threefold program:

1. *A general education program to help prepare all students for efficient participation in those business activities common to all;*
2. *A pre-professional program to provide background instruction for those students who wish to prepare themselves for professional careers requiring advanced study in business; and*
3. *A vocational program to provide adequate skills and business techniques necessary for students who wish to prepare themselves for entry-level business and office occupations immediately following high school.*

Course Name	#	Credits	Grades	Prerequisites
Intro to Business CP	646	0.5	9-12	
Computer Literacy	600	0.5	9-12	
Business Computer Applications	620	0.5	9-12	
Accounting I	605	1.0	10-12	
Accounting II	607	1.0	11-12	TR
Business Law	630	0.5	11-12	
Marketing I	610	1.0	10-12	Intro to Business
Marketing II	612	1.0	11-12	TR
Marketing Work Program	615	1.0	11-12	Enrolled in Marketing II
Sports and Entertainment Marketing	643	0.5	11-12	Marketing I
Personal Finance I	636	0.5	10-12	
Personal Finance II	637	0.5	11-12	Personal Finance I
Website Design I	625	0.5	10-12	
Website Design II	617	0.5	10-12	Website Design I, TR
Intro to Computer Programming	626	0.5	9-12	
AP Computer Science A	640	1.0	11-12	Intro to Comp Prog., TR
AP Computer Science Principles	627	1.0	10-12	Intro to Comp Prog., TR

TR = Teacher Recommendation

Introduction to Business

This introductory business course involves students in a broad survey of fundamental business concepts. Students explore and prepare for advanced business study in the fields of Accounting, Marketing, Business Law, Information Technology and Finance. The relationships and functions of business, and the consumer in a free enterprise system are examined. Emphasis is placed on discussion of business related current events and their effects in a global world. Current periodicals, media, and technology are used to focus on modern business practices and issues. This course is open to freshmen and sophomores.

Computer Literacy

This introductory course will involve students in understanding computers and their role in the modern world. Topics covered in this course include: keyboarding (touch typing)Google Suite productivity skills, computer terminology, hardware/software as well as basic web design and coding skills. This course will incorporate 21st Century Skills as well as ITSE standards to engage students in electronic communication, creativity and collaboration.

Business Computer Applications

This one semester course is designed for students to learn skills associated with a variety of computer applications. Focus will be directed toward presenting an overview of the capabilities of a variety of Microsoft applications, Word (word processing), Excel (spreadsheets), Database, and PowerPoint (presentations). This overview provides students the skills needed to succeed in a variety of school and work situations. Previous keyboarding experience/training is recommended but not required. The Internet will be used to introduce and demonstrate new technologies to the students.

Accounting I

In this comprehensive course, students are introduced to the world of business. The course provides an understanding of the types of on-the-job activities that are required of entry level accounting workers, introduces basic accounting principles, encourages an appreciation of the importance of ethics in business, and provides hands on experience with accounting software and electronic spreadsheets.

Accounting II

This advanced accounting course expands upon basic accounting principles and focuses on preparing students for college and possibly a major in business. Topics covered will include accounting for proprietorships and corporations, service and merchandising businesses, business controls and ethical decision making. Financial reporting, analysis and interpretation are emphasized throughout the course. A hand on experience with electronic spreadsheets and accounting software is integrated throughout the course. A teacher recommendation or the completion of Accounting I is required.

Business Law

Business Law is a one semester course designed for juniors and seniors who are interested in expanding their knowledge of business and personal law. Topics such as the creation of laws, corporate scandals, ethics, criminal law, negligence, and contracts will be discussed. The class includes a trip to a local courthouse and a mock trial (time permitting).

Marketing I

This course is designed to provide an understanding of the business world and development of the student's knowledge and ability in the marketing field. The course's main focus is on analyzing the marketing mix, their interrelationships, and how they are used in the marketing process. Students will recognize the customer-oriented nature of marketing and analyze the impact of marketing activities on the individual, business, and society. This course is open to juniors, seniors, and sophomores that successfully completed the Introduction to Business course as a freshmen.

Marketing II

Marketing II presents an advanced program of study in marketing, merchandising and management, Marketing research projects involving independent work are conducted in a wide variety of areas by students in this program. Topics covered will include global marketing, entrepreneurial concepts, business and society, management and product planning. Students are also taught: types of business ownership, starting a business, and how to organize a business plan. The Distributive Education Clubs of America (DECA) is an integral part of this course. A teacher recommendation and the completion of Marketing I is required.

Marketing Work Program

Marketing Work Program is open to Marketing II students. Students are placed at training stations where they receive on-the-job training in their chosen area of retailing and business. Marketing Work students can receive 1 credit for completing 200 hours (average 10 hours per week), or 0.5 credit for completing 100 hours (average 5 hours per week) during the school year outside the classroom, in a business or retail position.

Sports and Entertainment Marketing

The purpose of this course is to integrate the basic principles of marketing with sports and entertainment industries. Topics will include promotions, endorsements, public relations and countless other sports and entertainment related topics in marketing. The course is designed to pique the interest of students who would like to pursue a career in these fields. This is an elective ½ year course**.** Marketing I is a prerequisite for Sports and Entertainment Marketing.

Personal Finance I

This semester course provides a foundation for studying and using personal financial planning techniques in the 21st century. Students learn applicable skills necessary to manage personal finances, become smart consumers, and learn how personal choices can affect goals and one's earning potential. A variety of instructional practices and assessments will be used to cover topics such as money management, income, spending and credit, saving and investing. Group work, discussions, projects and simulation video games will be used to authenticate the learning process.

Personal Finance II

This semester course expands on the concepts presented in Personal Finance I by taking an in-depth look at consumer spending, credit lending practices, taxes, fraud, and insurance. Group work, discussion and project based authentic assessments will be a part of the learning process. This course is open to juniors and seniors. Personal Finance 1 is a prerequisite.

Website Design I

Students will be introduced to text editing software, the mark-up language html, and the style sheet language CSS. Websites will be designed and constructed throughout the course. Web based and open source software such as GIMP and Sumopaint.com will be used to create and manipulate graphics necessary for the design and layout of a website. Students will be introduced to new technologies throughout the course. It is recommended that students complete Business Computer Applications before taking this course.

Website Design II

This course is open to students who have successfully completed Website Design I. Students will continue their work with html and CSS to strengthen and broaden their coding knowledge. Students will become acquainted with JavaScript and how it integrates with CSS and html to create interactivity with the site. Opportunities will be presented to explore professional, web based and open source web editors as well as photo editing and creating software. Individual and collaborative work will be completed to create dynamic, interactive websites. Instruction will be delivered through tutorials, videos and demonstrations.

Introduction to Computer Programming

Students will author graphically-based programs and games while learning and using object programming concepts. Students will learn the fundamental programming structures (sequence, selection, repetition) by writing programs in Python, an object-oriented programming language. The curriculum used is Carnegie Mellon's CS Academy, which facilitates collaboration, inquiry learning and problem solving through its interactive and feedback-based interface.

Advanced Placement Computer Science A

Advanced Placement Computer Science A is a full year course intended for students who wish to further their abilities in the Java programming language. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and is meant to be the equivalent of a first semester college-level course in computer science. It also includes the study of data structures, design, and abstraction. It is expected that all students enrolling in an AP class will take the advanced placement exam that is administered in the spring. Students should have successfully completed the Intro to Programming course or have been given permission by the Business Department. Successful completion of Algebra II is highly recommended.

Advanced Placement Computer Science Principles

The intent of this course is to engage everyday students in all aspects of computing relevant to today's society. In this course, students will learn computer science by building socially useful mobile apps for the Android platform using MIT's AppInventor tool. In addition to programming and computer science principles, the course is project based and emphasizes writing, communication, collaboration, and creativity. AP Computer Science Principles follows the outline of the College Board's Advanced Placement Program and utilizes the Mobile-csp curriculum. The AP exam for this course consists of a short multiple choice section and a student created performance task. The performance task grading is based on rubrics developed by the College Board. Prerequisite for this course is successful completion of Introduction to Programming, Computer Literacy or teacher recommendation. Successful completion of Algebra I is highly recommended.

Tech Ed

Tech Ed is the study of the machines, materials, and processes of industry as found in our highly technological society. The Tech Ed curriculum is based on a problem-solving and learning-of-concept approach. This is accomplished through experiencing mass production (line production) and realistic study of industry and its methods. Emphasis is placed on the study of the technology of our society with less emphasis on the crafts. A student may study a single industry or a variety of technologies during the four years of high school.

Course Name	#	Credits	Grades		Prerequisites
Basic AutoCAD	663	0.5	9-12		
Advanced AutoCAD	664	0.5	9-12		Basic AutoCAD
Architectural Drafting I	654	1.0	9-12		
Architectural Drafting II	655	1.0	10-12		Architectural Drafting I
Machine Drafting	660	1.0	9-12		
Introductory Woodworking	670	0.5	9-12		
General Woodworking	672	1.0	10-12		Introductory Woodworking
Projects Unlimited	675	1.0	11-12		Intro. & Gen. Woodworking

Basic AutoCAD

This course is an introductory course that provides students with experience in the use of the AutoCAD computer software program. The project-oriented approach used in this course provides a sequence of carefully designed projects which move from a simple title block to complicated 2D CAD drawings in a series of easily mastered steps. The student spends time studying the communication of ideas through orthographic and pictorial drawings, geometric construction, sections and blueprints. This course is designed for students who are interested in learning the AutoCAD software by using a wide variety of applications and operational skills developed across a variety of technical areas with emphasis on machine and architectural drafting. Students will use computers as they apply to the fields of architecture and engineering.

Advanced AutoCAD

This in an advanced course, a continuation of Basic AutoCAD, that will give the student information and skills by conveying all ideas and illustrations graphically through computer-aided design software (AutoCAD). This course is intended to cover the more complex components and concepts in the AutoCAD software. Students continue to receive hands-on training working with drafting equipment, computers, and plotters. This class will apply advanced practical applications of the basic skills acquired in Basic AutoCAD.

Architectural Drafting I

This is a beginning course in drafting as it relates to residential architecture. Basic principles of drafting will be studied including the proper use of instruments, templates, lines, lettering, and dimensions. The construction of residential buildings is studied in detail from excavations to finishing materials. Principles of good house design are included. Each student will plan and draw a set of blueprints for a house, complete with specifications. Introduction to the basic functions of CAD, Computer-Aided Drafting, will also be explored.

Architectural Drafting II

This course id directed toward the drafting student who has shown a great deal of interest in Architectural Drafting I which is a prerequisite. Emphasis is placed on applying information, skills and techniques of architecture related to the individual planning of an originally designed residential building. Students will be required through the use of Computer Aided Design (CAD) to complete a set of house plans. Class members review many basics covered in Architectural Drafting I, devoting class time to a more detailed and in-depth study of many of these basics.

Machine Drafting

Machine Drafting is a beginning course in mechanical drawing designed to teach basic fundamentals of the drafting industry. Students learn to draw and interpret blueprints related to machine industries. Included will be the study of proper drafting techniques and skills. Emphasis is placed on proper use of equipment, knowledge of related theories, proper lettering, drafting geometry, size description, and related machine shop processes. This course will also allow the student to have his/her own assigned computer station, thus allowing him/her to work on pre-assigned handouts and drawings at his/her own rate. Introduction to basic functions of CAD, Computer-Aided Drafting, will also be explored.

Introductory Woodworking

This is a beginning course for students without previous experience in woodworking. The students will become acquainted with woodworking and the woodworking industries through the study of technical nomenclature and the study of raw materials—their growth, acquisition, production, refinement, and conservation. The student will also become proficient in identifying, using, and maintaining all hand tools used in woodworking. Students will acquire an insight to the woodworking industry through the study of appropriate machining processes and employment opportunities available. Shop safety, proper and safe use of hand tools, and the proper use and identification of quality craftsmanship with wood as the construction material, are also emphasized. Project design and planning, stressing the different styles of furniture design, are also introduced.

General Woodworking

After an in-depth review of tools, project design, and planning, the General Woodworking student will be exposed to the safe and proper use of all the various woodworking machines, i.e., table saw, surface planer, radial arm saw. The student will also experience work on both individual projects and line production of a project. Emphasis will be placed on development of craftsmanship, pride in workmanship, and an understanding of the consumer—what their needs are and what they expect in a product. Students will also be introduced to the building construction industry with an emphasis on the home building segment, introducing conventional building techniques. Students receive an introduction to current technology in the woodworking field.

Projects Unlimited

Projects Unlimited is a hands-on, full year, 1.0 credit course offered to juniors and seniors. Students contract within the school and community for construction projects to make repairs or do renovations. Technical skills with hand and power tools are refined as students design, plan, and complete a wide variety of projects. There are also behavior and attendance contracts that must be signed by both students and their parents/guardians. Accountability is a primary emphasis along with goal-setting and task completion.

Health

The Health Education and Medical Careers pathway progresses in three stages:

1. *A required Health course for 9th graders that provides accurate information about and skills practice in health issues of concern to adolescents.*
2. *A pre-professional program that exposes students to the knowledge necessary for a career in the early childhood education or medical fields. The skills gained are integral to entrance into future courses in the medical careers pathway or into post-secondary education programs.*
3. *Vocational programs that provide State certification in skills necessary for entry-level medical careers or preparation for future post-secondary education in allied health careers.*

Course Name	#	Credits	Grades	Prerequisites
Health I	060	0.5	9	
Health II	062	0.5	10	Health I
Allied Health Careers	065	1.0	10-12	
Sports Medicine	044	0.5	11-12	TR
Early Childhood	078	0.5	10-12	
Child Development	080	1.0	11-12	Early Childhood, TR
Medical Technology	070	1.0	11-12	Application required
Emergency Medical Technician H	071	1.0	11-12	Application required

Health I

The course provides accurate information about health issues of concern to adolescents including: conflict management, decision making skills, stress management, sexuality and healthy relationships, drugs, alcohol, and disease prevention. In addition, students have the opportunity to become certified in the American Red Cross CPR course. There is a fee if students wish to obtain the optional Red Cross Certificate.

Health II

This class will satisfy the graduation Health requirement for students in grades 10 - 12 who have passed Health I. The course covers Health I topics more in-depth and focuses on skill-based learning. The following units are covered: mental health, communication with a focus on digital communication, professional wellness with a focus on goal setting and decision making, illicit drugs and substance safety, and sexual health. A culminating project is required at the end of the semester.

Allied Health Careers

This full-year elective course will allow students in grades 10-12 to explore medical career opportunities. Coursework includes the study of health care providers, diagnostic process, medical terminology, health insurance, medical ethics, communication and interpersonal job skills, personal health maintenance, diseases and disorders, emergency care and career decision-making. A job shadowing experience, required in the second semester, allows students to observe professionals in selected health careers. Students must be in good standing. All substance use internship rules and consequences apply.

Sports Medicine

This junior/senior elective course is designed to introduce students to the fields of sports medicine, athletic training, and physical therapy. The student will study the mechanism, treatment, and prevention of athletic injuries. The course will include classroom (lecture) and guest speakers. Students must be in good standing. All substance use internship rules and consequences apply.

Child Development

This one semester course is offered to sophomore, junior and senior students who want to learn about the development of children or who may want to work with children in a future career. Child Development is a **prerequisite** for students interested in taking the Early Childhood course. The course content will include information about children's growth and development from prenatal to age three. In addition, the course will cover past and current theories on child growth and development.

Early Childhood

This junior/senior elective course will provide a foundation in understanding the ways that children develop. It is designed for students interested in becoming child care professionals in such fields as nursing, teaching, psychology or child care. Students will be introduced to the basic philosophies concerning child development including language, motor, social, cognitive and perceptual skills. Students will have hands-on teaching experience in a twelve-week preschool program. They will observe and interact with children and prepare and present lessons. Outside shadowing of preschool and daycare facilities is required as part of this course. Students must be in good standing. All substance use internship rules and consequences apply. **All students must have successfully completed the Child Development course with an 85 or above and have had no more than 4 unexcused absences.**

Medical Technology

This junior/senior elective course enables students interested in the health field to learn entry-level skills for nurse assistants and gain experience providing patient care. **All interested students must submit an application to the instructor.** The coursework includes classroom instruction, basic nursing skills, medical terminology and basic anatomy and physiology. Students complete mandatory thirty hours of practical training in a local nursing home during after-school hours. This experience, in addition to classroom skills training, affords students an opportunity to take the State Certified Nursing Assistant test. In order to be eligible for the State examination in June, a student must have fewer than 10 absences for the year. Students must be in good standing. All substance use internship rules and consequences apply. There is a fee to take the licensure exam.

Emergency Medical Technician Honors

This junior/senior elective course is for students who have an interest in community service, medicine, or emergency services. **Interested students must submit an application to the instructor.** Students will learn the skills necessary to help members of the community in emergency situations, assessment skills for emergency situations, and application of these skills in medical emergencies. In addition, all students must have ten patient contacts while riding with New Milford Ambulance. Upon completing the course in June, students will be eligible to take the EMT written and practical exams to become an EMT-B (EMT Basic). Eligibility for the exam includes a limit of 5 absences for the year. Students must be in good standing. All substance use internship rules and consequences apply. Students who want to become a certified EMT at the end of the course take the certification exam at an outside approved facility of their choosing.

Physical Education

Physical education is a program of structured, sequential learning experiences, which provides students with the opportunity to master the necessary movement skills to participate confidently in many different forms of physical activity, to value physical fitness, and to understand that both are related to health and well-being. Physical education addresses the fundamental need for regular activity to remain healthy and promotes many of the attitudes and behaviors that reduce health risks, including development of an understanding of the need for appropriate nutrition and exercise.

Course Name	#	Credits	Grades
PE 1	005	0.5	9
PE 2	025	0.5	10
PE 3 & 4	036	0.5	11-12
PE Leader*	046	0.5	12

*PE Leader requires application

At NMHS, Physical Education will provide students an opportunity to participate in a variety of lifetime activities, recreational activities and team sport activities that will be offered throughout the semester. Students will have an opportunity to choose an activity in each unit of instruction that will best fit their interest level. A wide range of units will be offered. Students can engage in activities that will enhance their learning experience in an educational setting, and allows students to reach their level of success. Students will collaborate with peers, setting personal goals and standards, and reaching team goals. Students will have an opportunity to develop a wide range of skills while participating in a variety of individual/partner and team activities. Students will be provided many opportunities to develop their skills of throwing, catching, striking, and hitting with an implement in addition to improving overall fitness levels through warm ups, lead up activities and application of skills through game play. In addition to skill development, students will learn about strategies, etiquette, sportsmanship, and rules of the game while developing an appreciation of individual differences.
Units of Instruction that may be offered are broken down into three main categories: Lifetime Activities, Recreational Activities and Team Sport Activities.

Units may include but are not limited to:

Lifetime Activities:
Aerobics, Archery, Circuit Training, Cycling, Dance, Fitness, Golf, Tennis, Walking, Yoga

Recreational Activities:
Archery, Backyard Games, Badminton, Flag Frenzy, Indoor Games, Outdoor Games, Pickleball, Table Tennis, Ulti-mania, Wiffle Ball, Nitro Ball

Team Sport Activities:
Basketball, Flag Football, Floor Hockey, Soccer, Softball, Speedball, Tchoukball, Team Handball, Volleyball, Ultimate Frisbee

PE Leader

The PE Leader course is an elective course designed for the student interested in pursuing a career in physical education, recreation, and/or coaching. This course is open to seniors who have successfully completed the physical education requirement, a formal application and interview process is required. The PE leader will assist one of the PE teachers in conducting a physical education class throughout the course of one semester. Along with aiding the teacher, the student leader will be required to aid in the development of student motor skills and assist in leading a complete unit. This course currently earns 0.5 credit in physical education and can be applied for after the PE requirement has been met. This course is available on a semester basis and enrollment will be limited. Please see the PE department for the required application.

DISCRIMINATION: It is the policy of the New Milford Board of Education not to discriminate on the basis of race, color, national origin (in accordance with Title VI of the Civil Rights Act of 1964), sex (in accordance with Title IX of the Education Amendments of 1972), or handicap (in accordance with Section 504 of the Rehabilitation Act of 1972). Inquiries regarding compliance with the above may be directed to the Superintendent of Schools or Assistant Superintendent at 50 East Street, New Milford, CT 06776.