

**Course Catalog
2014-2015**

**Pomperaug Regional
High School**



Serving the Communities of
Middlebury and Southbury, Connecticut

Course Catalog

2014 - 2015

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Pomperaug Pride

Core Values and Beliefs

Students, staff, parents and community members characterize the Pomperaug experience in one word more often than any other: pride. In our classrooms, on our campus and in our greater community, we take pride in our commitment to the following values:

- In our classrooms, we are committed to fostering academic excellence, independent and self-reflective thinking, and a curiosity to pursue lifelong learning in a 21st Century world.
- On our campus, we are committed to promoting respect, maximizing opportunities for personal expression, and facilitating a positive school culture.
- In our community, we are committed to developing responsible, active, and accountable citizens.

At Pomperaug High School, we believe that all students can grow as learners, build and enhance community, and conduct themselves with integrity.

Learning Expectations

The Pomperaug High School community expects that students will meet academic, social and civic requirements through the pursuit of our 21st Century expectations for student learning:

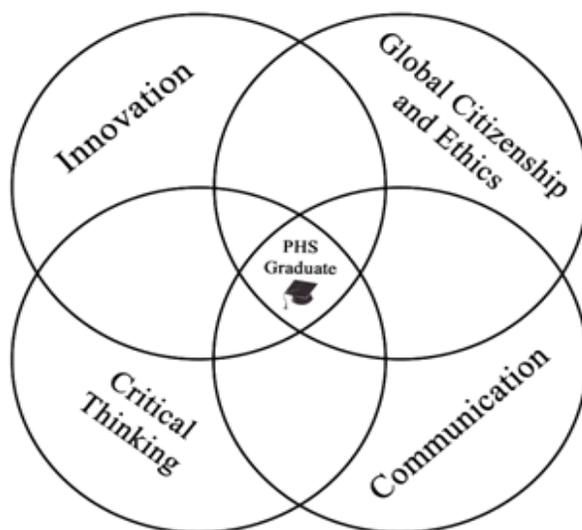
The PHS student demonstrates effective **communication** by interpreting language, revising ideas and positions relative to new understandings, and conveying facts, ideas, emotions, and concepts relevant to purpose and audience.

The PHS student demonstrates **critical thinking** by approaching topics with a healthy skepticism, pursuing solutions to challenging questions or problems, considering alternative perspectives, and conceptualizing, synthesizing, and evaluating information and experiences as a framework for belief and action.

The PHS student demonstrates **innovation** by exhibiting a sense of wonder and curiosity, an internal motivation to push boundaries and take risks, perseverance in the face of failure, and a capacity for producing novel ideas and products.

The PHS student demonstrates **global citizenship and ethics** by honoring the dignity and rights of all people, responding to the needs of the local community and beyond, showing an understanding of the social, cultural, political, environmental, and economic issues faced by citizens of the world, respecting the intellectual and physical property of others, making thoughtful decisions, and accepting responsibility for one's own actions.

PHS Expectations for Student Learning



Administration

Principal Dr. Lorrie Rodrigue
Assistant Principals: Mr. Michael Orefice
Mrs. Catherine Szerszen

Counseling Department

Director Ms. Stacey Zwick
Counselors: Mr. Jeff Blanchet
Mrs. Amy Cloutier
Mrs. Karen Kutzner
Mrs. Diane Miller
Mr. Martin Meyer
Mrs. Carol Reilly

Directors and Division Chairpeople

Humanities Mr. David Luhman
Mathematics/Science Mrs. Heidi Szymanski
World Languages Dr. Yolande Bosman
Career & Tech. Ed./FACS/Title IX Coordinator Mrs. Catherine Szerszen
Physical Education/Health & Athletics Mr. Joseph Velardi
Fine Arts Mrs. Jane Sarjeant
Student Services Ms. Maureen Honan

ACCREDITATION STATEMENT

Pomperaug High School is regionally accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction. Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution. Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the administrative staff of the school or college. Individuals may also contact the Association.

NOTICE OF NON-DISCRIMINATION

The Pomperaug Regional School District 15 does not discriminate on the basis of race, color, national origin, religious beliefs, handicap, sex, or age, in admission to, access to, treatment in, or employment in its programs and activities.

The Coordinator of the District's efforts to comply with Section 504 of the Rehabilitation act of 1973 and Title VI is Ms. Donna Popowski, Director of Student Services, P.O. Box 395, 286 Whittemore Road, Middlebury, Connecticut 06762, 203-758-1729. The Coordinator of the District's efforts to comply with Title IX of the Education Amendments of 1972 is Ms. Catherine Szerszen, Pomperaug High School, 234 Judd Road, Southbury, Connecticut 06488, 203-262-3244.

Any inquiries regarding the application of the District's non-discrimination policy may be referred to the Coordinator or to the Regional Director, U.S. Department of Education, Office for Civil Rights, J.W. McCormack Post Office and Courthouse, Room 222, Boston, Massachusetts 02109-4557.

SCHOOL CHOICE OPTIONS

Parents and students are encouraged to explore other educational opportunities that are offered in the school district locally and regionally. These options include magnet, charter, lighthouse and vocational-technical schools; Open Choice and inter-district programs; and vocational agriculture centers. Contact the Counseling Department for further information on these School Choice options.

ACADEMIC POLICIES & REGULATIONS

POMPERAUG HIGH SCHOOL GRADUATION REQUIREMENTS

A. Academic Requirements

The following courses must be taken and passed by each student as a prerequisite for his/her graduation from Pomperaug High School:

English	4 unit/credits*
Social Studies	3.5 unit/credits**
Mathematics	3 unit/credits***
Science	3 unit/credits****
Arts or Career & Technical Education (CTE)	1 credit+
P.E. /Health	1.5 credits
Electives	7 units/credit

Total credits required for graduation: 23 units/credits

*Students who fail a year of English will not be allowed to register for two English courses in one year, unless special permission is given by the English department chair. This does not apply to English electives.

**3.5 units in social studies must include World History I and II, U.S. History, and a civics course to be offered in the junior and/or senior year.

***This must include one course in algebra topics and one in geometric topics. A course in accounting may be applied to the three year mathematics requirement.

****This includes physical science (or physics and chemistry) and biology.

+The arts (theatre, arts, music) or CTE (business, family and consumer sciences, technology education) credit includes courses in the following programs: arts, business, family and consumer sciences, technology education, accounting, or CWE.

B. Basic Skill Requirements:

1. Is literate - demonstrates the ability to read and write proficiently when accessing, processing, and communicating knowledge:

a. by demonstrating proficiency on state standardized assessments.

or

b. demonstrating acceptable proficiency on the Basic Reading and Writing Skills portfolio.

AND

2. Is a math problem solver - shows that he/she can utilize differing sources of information and apply multiple strategies in solving a variety of types of problems:

a. by demonstrating proficiency on state standardized assessments.

or

b. by demonstrating acceptable proficiency of basic math operation procedures and application in algebra and geometry.

3. Is a science problem solver - shows that he/she can apply important scientific concepts to realistic problems:

a. by demonstrating proficiency on the state standardized assessments.

or

- b. by demonstrating acceptable performance on a science research project involving data collection and analysis.
- or
- c. by completing .5 credits in science in addition to the stated 3 credits.
- AND
4. **Is technologically competent** - can use technology to receive, access, organize, process and transmit information.

ADMINISTRATIVE REGULATIONS

1. Each year, all students are required to enroll in the equivalent of 5 academic credits per semester in addition to physical education. However, the Principal may allow exceptions to the 5 credit requirement under special circumstances and when a student's performance or medical condition warrants such an exception (included, but not limited to 5th year students, students whose total credits far exceed the number required for graduation, or special health circumstances that preclude attending school for a full day).

2. During the scheduling process, juniors shall be informed of the extent to which graduation requirements have been fulfilled. A final notification will be given to all seniors of their graduation year.

NOTIFICATION

APPEALS

Students who are unable to demonstrate proficiency as defined in Basic Skills Requirements (**Part B, Basic Skills Requirements**) may appeal to the principal within ten (10 days of receiving their score. The principal will then determine if the student is eligible to repeat the Basic Skill Requirement.

EARLY GRADUATION



There is a procedure for students considering graduating before they have spent four years at P.H.S. Early graduation is not recommended for most students. If early graduation is being contemplated, the student should discuss this option with a counselor by April of the sophomore year. A student graduating early must still complete all requirements for graduation as described in this catalog.

SUMMER SCHOOL CREDIT

To be eligible for a summer school course a PHS student must have attended at least 2/3 of the course meetings (120 school days) and earned at least an F+. Courses offered may vary. Please see your counselor for further information.

PROMOTION POLICY

Students are promoted from one grade level to another based on the number of credits they earn each year. To become a sophomore a student must earn a minimum of 5.5 credits. Eleven credits are needed to become a junior and seventeen to enter the senior year. Students who fail to receive enough credits to be promoted will remain in the same grade level for the next year. This does not necessarily mean a student will be unable to graduate in four years. By attending summer school and/or taking extra courses the following year, a student may be able to earn enough credits to rejoin his/her class.

POST-GRADUATE PREPARATION

EMPLOYMENT PREPARATION

Students should select a number of courses that will improve employment opportunities upon graduation. Students interested in specialized business skills should study the sequence of courses as outlined in the Business and Finance Technology section of this booklet. Students interested in a strong program in home economics and childcare may take a number of courses in that field. Students planning on entering industry may select a program strong in technology education and math.

COLLEGE PREPARATION

The following students should plan to take a college preparatory course through high school:

- Students who plan to take a four-year college program leading to a bachelor's degree, regardless of the field of specialization: liberal arts, teacher education, engineering, business administration, agriculture, nursing.
- Students who plan to enter a two-year technical institute, or a pre-liberal arts program in a junior or community college.
- Students who are as yet undecided as to their future educational and vocational plans, but who would unquestionably benefit from college preparatory curriculum.

A large number of college catalogs are available in the Career Center. These should be checked and referred to frequently as early as the freshman year to determine the types of colleges and schools available and their specific entrance requirements. Colleges are vitally concerned with the overall quality of your high school record. It should be borne in mind that the more competitive and selective the college, the stronger your academic record must be in terms of both quantity and quality. The quality of your overall scholastic record is reflected in your class rank.

It is vital that students confer with their counselors regarding college entry requirements, particularly those related to areas of specialization.

RECOMMENDATIONS:

- There is no substitute for strong English skills, with particular emphasis on writing skills.
- An increasing number of colleges are now requiring or recommending a fourth year of preparatory mathematics.
- Regarding foreign language study: Colleges do not recognize one year of study of language.
- Colleges prefer that a language be carried through the most advanced course offered by the high school.
- Colleges prefer that you take three or four years in one language as opposed to two years of two languages. (This may enable you to exempt the college's graduation requirement for world languages) Check catalogs carefully for each school's world languages requirements.
- If you are planning on entering a competitive four-year college it is important to take as much college preparatory science as possible, including Biology, Chemistry & Physics.
- If you are considering a technical career that requires a college degree, it is recommended that in addition to a strong academic program, you explore some technology courses while in high school.

RECOMMENDED COURSE OF STUDY FOR COLLEGE-BOUND STUDENTS

If one has the goal to continue education beyond high school, then one must pursue a more rigorous course of study. Following are recommendations to college-bound students. The selection will provide a thorough and adequate preparation for college. The student must select courses of appropriate level of difficulty.

COURSE	YEARS OF STUDY
English	4
Social Studies	3-4
Math	3-5**
Science	4*
World Languages (through French or Spanish)	3-5***
CTE/Art/Music	1

*A fourth year of science and/or social studies is recommended in preparation for certain post-high school education.

**Three of these math courses must be taken in grades 9-12.

***Passing French IA and IB or Spanish IA and IB in middle-school with a grade of at least C will count as one year towards the accumulation of years in language. However, middle-school world languages will not result in credit toward high school graduation.

TYPICAL ENTRANCE REQUIREMENTS AT COLLEGES

LIBERAL ARTS

HIGHLY COMPETITIVE COLLEGE

English	4
History	3-4
Mathematics	4
Science (lab)	3-4
World Lang.	3-4

TYPICAL LIBERAL ARTS COLLEGE

English	4
History	3-4
Mathematics	3-4
Science (lab)	2-3
World Lang.	2-3

2-YEAR TECHNICAL INSTITUTES & COLLEGES

English	4
History	3
Mathematics	3
Science	2

The more college preparatory mathematics and science, the better.

EVALUATION PROCEDURES

MARKING SYSTEM

A letter marking system is used in the high school.

MARK	NUMERICAL EQUIVALENT	PERFORMANCE
A+	(4.5)	95-100 Excellent
A	(4.0)	90-94
B+	(3.5)	85-89 Above Average
B	(3.0)	80-84
C+	(2.5)	75-79 Average
C	(2.0)	70-74
D	(1.0)	65-69 Below Average
F+	(0)	*50-64 Failing
F	(0)	below 50
I	(0)	Incomplete 0.00
WF	(0)	Withdraw/Fail
AUD		Audit
P		Pass
M		Medical Excuse

*Summer School eligibility

PROGRESS REPORTS

Progress Reports are available for on-line viewing midway through each academic quarter.

GRADE WEIGHTING PROCESS

At the end of the junior year a student's weighted and unweighted GPA are calculated for the purposes of college admissions only. The weighted average will be determined in the following manner. A cumulative, non-weighted average of all the student's courses will be computed. Those courses that are leveled (English, social studies, world languages, math and science) will have level factors assigned to them: 1=Core, 2=Academic, 3=Honors and 4=AP. A student's **average** level factor will be computed and then added to the non weighted-average of all courses. For instance, a student might have an unweighted average of 3.3, and be taking a mix of academic level and honors level courses with an average level factor of 2.8. The weighted average is then 6.1.

ACADEMIC HONORS

HONOR ROLL REQUIREMENTS

HIGH HONORS - This requires a grade point average (GPA) of 3.7 with a minimum grade of B.

HONORS - This requires a grade point average (GPA) of 3.2 with a minimum grade of C.

Please see Student and Parent Handbook for calculations.

NATIONAL HONOR SOCIETY

Membership is based on Scholarship, Service, Leadership and Character. Scholastic average of 3.7 in major subjects with no grades less than C+ are required for consideration for membership. See the Pomperaug High School's *Student Handbook* for further information.

FRENCH NATIONAL HONOR SOCIETY (Societe Honoraire De Francais)

In order to be inducted into the National French Honor Society, a student must meet the following criteria: an "A" average in French II or III at the end of the first semester, B in all other subjects or C+ in an honors course, continuing studies in French and a willingness to participate in activities.

The formal induction is held in May, after which officers for the following year are elected. A calendar of activities is planned by the officers, including tutoring, service activities, a fund-raiser and visits to French classes.

SPANISH NATIONAL HONOR SOCIETY (Sociedad Honoraria Hispanica)

Students who have an "A" average for three consecutive semesters at the high school, and no grade lower than a C+ in any other course in the 3rd semester, are invited to join the Carlos Fuentes Chapter of the Spanish Honor Society. Students must plan to continue the study of Spanish in order to participate in the Honor Society after meeting the initial criteria.

The formal induction ceremony is held in October. Student members participate in all community service activities, fund-raisers and tutoring.

COURSE SELECTION & REGISTRATION

REGISTRATION PROCEDURES

The *Course Catalog* will be distributed early in the second semester. Your school counselor and teachers will give the orientation to registration. During the second semester, the student, parents and counselor will review the courses selected. Courses with insufficient enrollment will be cancelled.

COURSE ADDITIONS & WITHDRAWALS

No student may withdraw from a scheduled course without an appropriate form signed by the classroom teacher, the department chairperson, the student's parents, and the counselor. These forms are available from the counselors. Withdrawals that occur before the end of the first marking period carry no academic penalty. After that period of time, the student receives a mark of Withdrawal Failure (W/F) which has the same effect as any other failure on class standing. If a withdrawal results in a student carrying less than five subjects plus physical education, the course is replaced by a supervised study hall assignment. Students are advised to plan their schedules 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 may occur.**

COURSE LOAD FOR STUDENTS

In order to meet the 23 credits required for graduation, students are encouraged to accumulate 5.75 credits per year.

Freshmen and sophomores are assigned to a study hall for all non-class time.

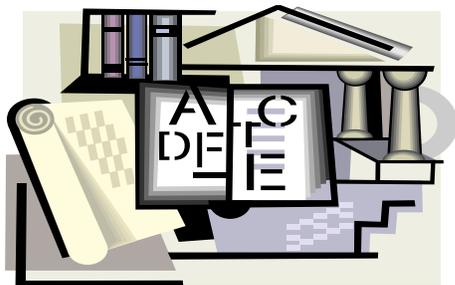
The academic performance and citizenship of juniors and seniors is monitored on an individual basis. A student earning low grades, low effort marks, or demonstrating poor citizenship may be assigned to study halls for all non-class periods.

COURSE LEVELS

Courses in math and science are grouped according to ability. The groups are: core, academic, honors and AP. The prime difference between "levels" is that of breadth and scope of coverage and the pace of the class. Where grouping is employed, placement will be determined by the student's record, teacher recommendation and testing data. The grade weighting system assigns more quality points for the more difficult levels. Students are moved from one level to another when evidence shows such a move to be in the student's best interests. Parents who object to a student's placement must follow proper procedures, including speaking with the recommending teacher and signing an override form.

PREREQUISITES AND SEQUENCING

1. English I must be passed before English II is taken. English II must be passed before English III is taken. Only English III and IV can be taken concurrently, and only with approval.



2. Successful completion of English I, II, or III is contingent upon submission of a complete and satisfactory portfolio that meets department standards.
3. Students enrolled in college preparatory math courses must earn a C or better to move to the next course in the sequence. A student who earns less than a C may attend summer school to raise his or her grade to a C, subject to summer school requirements.
4. The following subjects should be taken concurrently:
 - Physical Science and Algebra I
 - Chemistry and Algebra II
 - Physics and PreCalculus
 - Chemistry is recommended as a prerequisite for advanced biology courses.
5. Selection for AP courses is subject to stringent prerequisites and performance requirements. Please talk to your present teacher for their recommendation and discuss it with your counselor.

ELECTIVE COURSES

Electives are all courses other than those required. Examples of electives include the following: a fourth year of social studies, and math, a fourth year of science, a second credit in the arts or vocational education, a computer science, or world language course. To meet the minimum graduation requirements, a student must take 7 credits in the elective area. Some electives are taught for one semester and assigned a half credit while others are given for a full school year and awarded one credit. Careful planning of electives can result in a broad and balanced high school education.

SPECIAL STUDIES ARRANGEMENT

Special Studies provides the opportunity for Pomperaug High School students to earn credit in courses which they cannot attend because of a schedule conflict. For example, a student who desires to enroll in Drawing and Painting but cannot because it is scheduled at the same time as English IV, would be a candidate for *Special Studies*. In this case the student, with assistance of his/her counselor and the course teacher can arrange to complete all the course work necessary to earn credit for Drawing and Painting. The arrangement **must** duplicate the original course in every way, i.e. time, teacher, and course requirements, it can however occur during another period in the day. For example, the student can work on Drawing and Painting on a regular basis in another art class at another time of the day.

Special Studies can be counted towards satisfying the requirements for a student enrolling in 5 courses and Physical Education each semester. Students will receive a letter grade and will be used in honor roll calculation. The rules that govern course withdrawals apply to Special Studies, i.e. a WF **will be issued** if the Special Studies course is not dropped at the appropriate time. All Special Study contracts are subject to approval by the principal.

INDEPENDENT STUDY

Independent Study is a self-directed learning activity. Many educators believe that the central aim of education should be the development of self-directed learners with the emphasis on learning rather than teaching.

Subjects for Independent Study are those which are neither offered in the current Master Schedule nor listed in the *Course Catalog*.

Since Independent Study is an informal approach to learning, students must be highly motivated. They assume the responsibility for their learning, and must possess the initiative, persistence, energy, and curiosity to carry the task to completion.

An important aspect of the Independent Study Program is the one-to-one relationship that develops between the student and the advisor, who serves as a special resource for the project.

All Independent Study contracts are subject to approval by the principal. Independent Study does not count as one of 5 required credits. Grades are P/F and cannot be considered for honor roll calculation. The final grade and credit will be issued at the end of the successful completion of the Independent Study.

INTERNSHIP PROGRAM: PRACTICUM

Students who choose the practical internship will be evaluated on specific skill objectives as defined in the job description for each of the internships. Examples of practical internships include: science lab assistant, graphics production assistant, video production technician, first aide assistant, and academic tutor. A student may earn .25 credits or .50 credits toward graduation according to the number of hours logged in the internship. The practical internship is open to eligible students in grades 10-12. No student may earn more than .50 credits of internship.

REQUIREMENTS FOR ELIGIBILITY:

- The student has successfully completed foundation courses in the area of the internship.
- The internship is official when all parties have signed the internship agreement with specific terms and responsibilities listed.

REQUIREMENTS FOR CREDIT/GRADE:

- The student must demonstrate competency in fulfilling all responsibilities listed in the printed job description for the internship.
- The student must log 30 hours to earn .25 credits of internship and 60 or more hours to earn .50 credits of internship. **No student may earn more than .50 credits of internship toward graduation.**
- Students will be graded on a Pass/Fail basis and internship credit will not be included in the computation of class rank.
- Students who earn the maximum internship credit prior to the junior or senior year will be encouraged

to enter the Cooperative Work Experience program if additional credit in the skill area is desired.

PASS/FAIL COURSES

A student will receive a "pass" if his average is 65 percent or over, and a "fail" if it is under 65 percent. Such courses cannot be considered for rank-in-class averaging or for honor rolls (unless failing).

Students may elect to take two courses on a pass/fail basis as part of the twenty-three credits required for graduation. Required courses such as English cannot be taken on a pass/fail basis. Students in Grades 10-11-12 may elect the pass/fail option.

If a student wishes to take a course on a pass/fail basis, he/she must so indicate by November 1, or for a second semester course by April 1. A contract must be completed prior to approval.

If a student has signed up for a course on a pass/fail basis and wishes to change his status and receive a grade for the course, he must indicate this before the end of the first marking period, or third marking period for the second semester courses.

AUDIT OPTION

Audit status offers students a no-risk chance to learn for their own growth and pleasure. Although auditors receive no academic grade or quality points, they choose to participate in all course activities. An audited course is not included in the 23 credits required for graduation. For students who adhere to the attendance requirements as stated in the student handbook, the course will be added to his/her transcript as an AUD or audit.

VIRTUAL HIGH SCHOOL

Pomperaug High School is participating in a Virtual High School collaborative which offers over 130 on-line courses. These may be taken to enrich a student's educational experience and to complete a program of studies in courses that are not currently offered at PHS. VHS courses will not count as one of the five courses required for students to be full-time students, and limited spaces for these courses exist. However, students will receive a letter grade that will be used in honor roll calculations. Students who enroll in on-line courses must demonstrate independent learning skills and have an aptitude for technology. **Limited spaces for these courses exist.** Please see your counselor if you are interested. Site Coordinator is Charlie Vlahos of the Tech Department.

STUDY RESPONSIBILITIES OF STUDENTS

HOMEWORK

The ability to work successfully without supervision is one of the most important attributes a student can offer employers or college admission officers. Independent study, by means of both short-term and long-term assignments, becomes a valuable preparation for the more rigorous requirements of the curriculum at college.

Homework shall be viewed as an integral part of the school program. The classroom remains as the primary instructional center in the school system. Each student should seek to use the allotted classroom time and available school facilities to the fullest extent possible. Homework is a necessary and effective means of augmenting the classroom learning experience. Homework also provides an opportunity for independent study. The needs of the individual student or group should determine the type, frequency, and quantity of homework assigned. Homework should not require additional instruction beyond the classroom.

Daily assignments range from 20 to 50 minutes per academic subject, approximately one to three hours per night.

- Reading assignments
- Reviewing reading assignments
- Taking notes on reading assignments
- Reading class notes
- Reviewing and rewriting class notes
- Writing assignments
- Rewriting assignments after initial teacher correction
- Problem sets
- Projects
- Studying for exams
- Vocabulary improvement
- Extra reading and reading for pleasure
- Worksheets

NOTEBOOKS

Study skills are stressed at Pomperaug Regional High School. Each student is required to have a notebook for each class. This requirement can be met by having a separate notebook for each class or a section of a looseleaf notebook for each class. If the looseleaf method is chosen, the student must also have a pocket folder into which the notes for a class can be put and turned in to the teacher. The student must be able to turn in notes to one teacher and keep notes for all other classes.

TECHNOLOGY INTEGRATION



Pomperaug Regional High School believes strongly in the integration of computer and other related electronic applications into all levels of the academic program.

Each of the departments urges and in some cases requires students to use a variety of technology applications. English and social studies will use wordprocessing, spreadsheet and graphics applications. World language will combine computer applications with interactive video. Math uses demonstration software for geometry and relies heavily on the use of graphing calculators for all students at all levels. Science integrates the use of probeware, laser disc programs and Accu-Weather to help students examine natural phenomena. Physical education is exploring the use of computers to assess fitness data on all students. Students have access to computers in the media center, including an electronic card catalog, subscription services on CD-ROM, on-line services, and applications for project development.

Certain electives require students to use a variety of technology equipment and software applications. Descriptions of the use of Solidworks, accounting, graphics and television hardware and software are discussed in the course descriptions in the sections labeled Technology Education and Business and Finance Technology. In the next few years, the opportunities and expectations for the use of technology as a tool for learning will expand well beyond current access. With the establishment of a wiring infrastructure throughout the school, the opportunities to network electronic communications from every "nook and cranny" of the building will become a reality.

ACADEMIC HELP

AFTER-SCHOOL HELP

Teachers are available for extra help after school almost every day. Students who are having subject matter difficulty or who have work to make up after an absence are urged to take advantage of the opportunity. It is the responsibility of the student to make an appointment with his/her teacher to secure additional help.

NATIONAL HONOR SOCIETY

Students who would like to arrange for one-on-one peer tutoring should speak to their counselor to make arrangements.

TUTORING

Students wishing to receive tutorial assistance in any subject must see their counselor. Two forms of assistance are available. Professional tutors through the Student Improvement Program (SIP) are available M-Th 7:30-3:00; and Friday 7:30-2:00. A second form is the peer tutoring program which is organized by the National Honor Society.



SPECIAL EDUCATION

The Special Education Department provides a continuum of services to meet the academic, social, emotional and physical needs of students requiring special education services. Through the Planning and Placement Team process, a student's Individualized Education Plan is developed which outlines the recommendations for special education courses, related service supports, and appropriate modifications and/or accommodations. For all student's receiving special education support, a special education teacher is assigned as a case manager who oversees the implementation of the student's IEP and serves as a liaison with the student, their parents and their teachers.

WORLD LANGUAGE

Foreign Language Support Lab is provided for students of Spanish (Tuesdays and Wednesdays) and French (Tuesdays) from 2:15-2:50 p.m. The intent of this intervention is to provide review, remediation, clarification, completion of make-up work, etc. in order to support students' needs. All language teachers will be assigned their duty on a rotating basis. National Honor Society students will also provide individual assistance during lab time.

SRBI

Pomperaug is committed to preparing all students for the 21st century and academic pursuits beyond high school. Teachers in the math department offer a SRBI (scientifically researched-based interventions) math lab devoted to assisting students in need of additional support. It is based upon interventions designed to target areas of weakness and to be better able to support student learning in this academic area. Interventions focus on computational skills, problem-solving skills, and comprehension of math on a conceptual level to strengthen and deepen mathematical understandings. Students assigned to the SRBI math lab will attend the lab on a regular basis as part of their scheduled day.

Name _____ Year of Graduation _____

Counselor _____ Career Goal _____

NOTE: All students are encouraged to carry a **minimum** of 5.75 credits plus physical education **every year** to meet the **23** credits required for graduation.

FOUR YEAR WORKSHEET
GRADES 9-12

GRADE 9

Required Courses	Credits	Electives	Credits
English I	1	_____	_____
World History I	1	_____	_____
Math	1	_____	_____
Science	1.25	_____	_____
P.E./Health "Foundations of Training"	.5	_____	_____
Electives	_____	_____	_____
Total Credits Grade 9	_____		
Credits Needed to Become a Sophomore			5.5

GRADE 10

Required Courses	Credits	Electives	Credits
English II	1	_____	_____
World History II	1	_____	_____
Math	1	_____	_____
Science	1.25	_____	_____
P.E. "Health Related Fitness"	.5	_____	_____
Electives	_____	_____	_____
Total Credits Grade 10	_____		
Credits Needed to Become a Junior			11.00

GRADE 11

Required Courses	Credits	Electives	Credits
English III	1	_____	_____
U.S. History	1	_____	_____
Math	1	_____	_____
Science	.5	_____	_____
P.E. Elective	.25	_____	_____
Electives	_____	_____	_____
Total Credits Grade 11	_____		
Credits Needed to Become a Senior			17.00

GRADE 12

Required Courses	Credits	Electives	Credits
English	1	_____	_____
P.E. Elective	.25	_____	_____
Electives	_____	_____	_____
Total Credits Grade 12	_____		
Credits Needed to Graduate			23.00*

1 Credit selected from Vocational Education (business, family and consumer sciences, technology education) or Fine Arts (drama, music, art) required for graduation.

*Included in the 23 credits, students must complete .5 credit in civics. This requirement can be satisfied by taking Civics, Practical Law or AP Government.

Course Offerings

The Humanities (English, American Studies, Social Studies)

ENGLISH

THE PURPOSES OF LANGUAGE ARTS

The Pomperaug High School Language Arts program is designed to foster students' skills and interest in the areas of reading, writing, listening, viewing and speaking. These expressive and receptive skills cross genres and require students to have control over their use and understanding of language.

Students will read fiction and non-fiction each year exploring classic as well as modern literature. They will practice the skills of literary analysis and reading for information while furthering their appreciation of literature and well-written text.

Throughout their four years of English, students will write clearly, effectively and confidently, for a variety of purposes and in many different forms. They will learn to write expository and persuasive essays, poetry, personal and fictional narratives and research reports. To support students in this process, all English teachers meet with students for individual writing conferences. Students set reading and writing goals and then work one-on-one with their teachers to achieve these goals. This individual attention is one of the greatest strengths of our Language Arts program.

To culminate each of the first three years of PHS English, students create reflective Literacy Portfolios which include samples of the student's writing along with the student's analysis of progress made towards personal literacy goals.

AMERICAN STUDIES

1 year, 2 credits (English III and US History)

Prerequisite: English II and World History II

This two-credit course will focus on providing an exciting, investigative lens through which American history and American literature are taught, including their relationship to the concepts of art, music, and social science. Team-taught by a history and English teacher, this interdisciplinary course provides Junior students with a unique instructional approach, reinforcing course content in history and literature and providing a personalized, humanistic study of the integral issues and themes prevalent in both disciplines. Throughout the course, students will be engaged in research, critical thinking and literacy skills, decision-making, writing, and group discussion.

ENGLISH I

1 year, 1 credit

Freshman year is naturally a year for discovery. Students face a new environment, new challenges and new expectations. Students in freshman English will focus on a wide range of genres and forms, both as readers and writers, for the purpose of exploring who they are as consumers and producers of text. Through an inductive approach based on detailed observation of shared mentor texts, students will discuss and write about our common human experiences and their own individual identities. Students will read several classic works of literature and also engage in extensive choice reading.

ENGLISH II

1 year, 1 credit

Prerequisite: English I

The literary emphasis of English II is a broad-based study of World Literature and authors. The required works cover a variety of genres including: novel, poetry, drama, short story and film, some of which are presented in English translation. These works range from classical epics to contemporary plays and are intended to encourage students to view the world from varied cultural perspectives. Many of the reading and writing assignments are designed to reflect important literacy skills. Expository, analytical and research-based writing assignments, such as the Independent Poetry Project, predominate, although some narrative and personal connection pieces are also included.

ENGLISH III

1 year, 1 credit

Prerequisite: English II

To examine the role of language in a democracy, instruction in this course will focus on the transformative power of American voices, specifically through studies of: "Voices from the American Edge," "Conflicting American Voices," "Opportunity and the American Voice," and "The Reliability of American Voices." Students will be taught to make meaning out of a variety of texts, both written and visual, from across the spectrum of American literature. The course includes an emphasis on developing students' research skills for success in the inquiry-based learning environment of the 21st century.

ENGLISH III - AP

1 year, 1 credit

Prerequisites: Recommendation of English II teacher and completion of summer reading task

LANGUAGE AND COMPOSITION

The goal of this course is to develop the students' awareness of language and to sharpen their skills in effective writing and critical reading. Students will develop individual styles adaptable to different occasions for writing in college. Students will hone writing and reading skills for critical analysis of a variety of prose.



English Senior Year

Students will complete their senior year requirements in English by enrolling in coursework that follows one of two pathways:

1) Students enroll in a full year course of AP Literature and Composition. Students MAY also enroll in electives depending on their interest and schedule. Priority will be given to seniors enrolled in English IV.

2) Students enroll in a half-year of Senior English and Composition. They must also enroll in at least one half-year elective during second semester. If a student has taken an English elective previous to senior year, the student must take a different elective during second semester of the senior year. While every effort will be made to offer students their preferred choice of elective, these electives will run based on enrollment and availability.

Every student needs to pass four years of English in order to graduate. If a senior fails the first semester of Senior English, there will be two potential options available for students to obtain credit for that course:

a.) If a student fails with a semester grade between 50% and 64%, that student may seek to obtain passing credit for the course by successfully completing an extensive, independent learning project supervised by the Chair of the Humanities Department. The quality of the work must demonstrate that the student has clearly fulfilled the learning expectations necessary for obtaining credit for English Composition.

b.) If a student fails with a semester grade of 49% or lower, that student must enroll in and pass an additional senior elective during second semester. While student input will be taken into consideration with regard to selecting this second course, enrollment and availability will be the primary factors used in determining the student's placement.

SENIOR ENGLISH AND COMPOSITION

1/2 year, 1/2 credit
Prerequisite: English III

Looking through the lenses of argument and media literacy, students in this course will examine what it means to be an engaged citizen in a global community. Students will learn how to be active participants in conversation—both written and spoken—with themselves, their peers, their critics, and their community, in the broadest sense of the word. Students will have the opportunity to identify a global issue about which they are passionate and explore that issue through an inquiry-based methodology.

ENGLISH IV - AP

1 year, 1 credit
Prerequisites: Recommendation of English III teacher and completion of summer reading task

LITERATURE AND COMPOSITION

This course is designed for students who want to earn college level credit while in high school and who have an interest in developing skills in literary criticism. The historical growth of literary genre, the refinement of analytical techniques, and the development of expository writing skills are stressed.

Students are required to complete challenging reading

assignments, participate in class discussions, and complete weekly written assignments. Close textual analysis and library research are the major format of the class.

ENGLISH: Electives

CREATIVE WRITING I

1/2 year, 1/2 credit
Open to students in grades 9-12.

This course is a writer's workshop in which students will create poetry, short stories, memoir and nonfiction. As authors, students apply their skills to real world opportunities such as publication in local newspapers, literary journals, internet magazines and poetry contests.

ADVANCED CREATIVE WRITING

1/2 year, 1/2 credit *Only offered Second semester.
Open to juniors and seniors who have already taken Creative Writing I. Students who have not taken Creative Writing I may enroll in the course with the permission of the Chair.

W. Somerset Maugham captured the writer's life well when he said "We do not write because we want to; we write because we have to." In this course, students with a strong commitment and talent for the craft of writing will learn to further hone their skills in the areas of poetry, fiction and creative non-fiction (memoir, narrative essay, etc.). While students will be asked to engage in writing exercises and analyze the work of master authors, a considerable amount of the course will be taught in a workshop format that focuses on developing the student's own self-selected creative writing projects. It is expected that students will participate in activities that require them to offer and be receptive to constructive criticism from both the teacher and their fellow writers in the class. Students will also explore various venues for sharing and publishing their work.

SCIENCE FICTION: THE HUMAN MIND & THE MODERN WORLD

1/2 year, 1/2 credit
Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

What is the role of science fiction in predicting and inspiring scientific and technological innovation and invention? Can science fiction accurately predict the future? In this course, students will read classic and contemporary works of science fiction and examine the accuracy and impact these works have had on technological advancements. Students will also produce original works of fiction that focus on a chosen scientific or technological development.

PHILOSOPHY AND FILM

1/2 year, 1/2 credit
Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

In this course, students will reflect critically on a number of diverse philosophical approaches for understanding the world around them. They will consider the role and nature of knowledge

in their own culture and in cultures around the world. Students will study a number of philosophical perspectives and then explore the different interpretations that can be formed when these perspectives are used as lenses for understanding the actions and decisions of characters portrayed in film and television.

CONTEMPORARY POETIC VOICES: TRANSLATIONS FROM THE GLOBAL EDGE

1/2 year, 1/2 credit

Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

This course explores the voices of twentieth and twenty-first century poets speaking from the cultural edges of the world. The selection of poetry for study is driven by student interest and includes poetry from the Middle East, South America, the Caribbean, Asia, Europe, and Africa. Instruction in poetic analysis and historical and biographical research will fine tune student abilities to listen to and make meaning of these contemporary poetic voices. The goal of the course is to stimulate conversation-both spoken and written-on global issues and awaken an understanding that we are part of an interdependent, multicultural world.

SHAKESPEARE ON STAGE AND SCREEN

1/2 year, 1/2 credit

Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

This course focuses on performing, viewing, reading, and evaluating the dramatic works of William Shakespeare. A wide variety of plays will be investigated as living drama. Students examine numerous plays as theatrical texts. In addition, they will review the performance aspects of the plays; character; historical context and culture; language; political context; and production methods of the past and present to bring the drama of England's greatest playwright to life. Much emphasis will be placed on seeing Shakespeare's works performed whether they be cinematic or live theatrical productions.

PUBLIC SPEAKING

1/2 year, 1/2 credit

Open to grades 9-12.

*See course description located under the section entitled "School of Media Communication and Technology".

HE SAID, SHE SAID

Contemporary Gender Studies: Issues & Problems

1/2 year, 1/2 credit

Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

In this course we will look at how cultural expectations have shaped the roles of men and women in society. We will look at how these roles have evolved over the course of time both in our own country and in others. Of particular importance will be our examination of how different aspects of popular culture-music, cinema, TV shows, advertising, sports, fashion, the internet, etc.-have played and are continuing to play a significant role in maintaining or changing the way we think about men and women in society.

CONTEMPORARY WORLD FICTION: VOICES FROM THE GLOBAL EDGE

1/2 year, 1/2 credit

Open to seniors. Juniors may enroll depending on availability and the permission of the Chair.

In this course, we will go on a trip around the globe to explore the voices of Twentieth and Twenty-First Century novelists and short story writers speaking from the cultural edges of the world. What are these writers passionate about? What do their voices sound like? What can we learn from listening to them? The selection of short stories and novels will be driven by student interest and may include books from the Middle East, South America, Asia, Europe, and Africa. Instruction in historical and biographical research will fine tune students' understanding of narrative voices from around the world. The goal of the course is to stimulate conversation-both spoken and written-on global issues and awaken an understanding that we are part of an interdependent, multicultural world.

SOCIAL STUDIES

In social studies, students learn about themselves and the world in which they live. The world today has been determined by past events and tomorrow's world will be the result of what we are doing today. Therefore, the knowledge, skills and concepts acquired in the social studies help students understand how they can direct their lives by understanding why things are the way they are. A major emphasis of social studies today is recognition that the world is becoming increasingly interdependent economically, politically and socially. Another characteristic of the social studies program is skill development in decision-making and problem-solving. Students will analyze and form opinions about events and issues, use acquired knowledge and concepts, and hypothesize about new situations. As part of the three and one-half social studies credits required for graduation, students must pass both years of the World History sequence, United States History and minimally a half year course related to civic education. World History I is a prerequisite for World History II. Any student wishing to change a level or take a course in a different grade level must first speak to his or her counselor. Approval is also needed by the department chairperson.

WORLD HISTORY I

1 year, 1 credit

This course will build on the concepts and skills learned in the middle schools and listed as the K-12 Social Studies Program main ideas. The evolution of western civilization and selected non-western cultures will be examined from early civilizations through World War I. Special focus will be placed on the topics of geography, religion, government and economics. Using this information to understand and respect the many cultures in the world today will be the main emphasis of this course.

WORLD HISTORY II

1 year, 1 credit

Prerequisite: Successful completion of World History I or permission of the Chair.

This course will continue to focus on the important concepts taught in World History I. Students will study the evolution of western civilization and selected non-western cultures from the beginning of the 20th century through the present day. The last

portion of the year will deal with the modern, post-Cold War world with an emphasis on the issues of development, globalization, and conflict. Understanding and respecting the many cultures in the world today will be the main emphasis of this course.

UNITED STATES HISTORY

1 year, 1 credit

Prerequisite: Successful completion of World History I and II or permission of the Chair.

The course will build on the concepts taught in the required two-year World History sequence. Students will study the United States from our colonial beginnings to the present. Economic, geographic, political and social factors in our history will be covered. The development of what, why, and how the United States has become what we are today will be emphasized. This includes the study of our national beliefs, goals, values and cultural heritage.



AMERICAN STUDIES

1 year, 2 credits (English III and US History)

Prerequisite: English II and World History II

This two-credit course will focus on providing an exciting, investigative lens through which American history and American literature are taught, including their relationship to the concepts of art, music, and social science. Team-taught by a history and English teacher, this interdisciplinary course provides Junior students with a unique instructional approach, reinforcing course content in history and literature and providing a personalized, humanistic study of the integral issues and themes prevalent in both disciplines. Throughout the course, students will be engaged in research, critical thinking and literacy skills, decision-making, writing, and group discussion.

UNITED STATES HISTORY - AP

1 year, 1 credit

Prerequisite: Successful completion of World History I and II or permission of the Chair.

This course is designed for students who want to earn college level credit while in high school and who have an interest in developing both college-level history knowledge and skills. The content will be much the same as that in United States History but more emphasis will be placed on analysis, expository writing, and primary source readings. Students will be required to complete such activities at a college pace. This course is open to students who have completed the first two years of the social studies program and who have received the approval of the social studies department chair.

PRACTICAL LAW

1/2 year, 1/2 credit

Open to seniors, juniors and *sophomores.

*Sophomore pre-requisite: B+ average or better in World I Honors and teacher recommendation.

This course is an introduction to law and the American legal system, criminal and juvenile justice, and individual rights and liberties. The course will utilize case studies, problems, role playing, clarification strategies, and legal documents to develop law-related skills. The basic materials for this course were developed by the National Street Law Institute of the Georgetown

University Law Center. This course meets the requirement for a 1/2 credit in civic education.

PARTICIPATORY CIVICS

1/2 year, 1/2 credit

Open to seniors, juniors and *sophomores.

*Sophomore pre-requisite: B+ average or better in World I Honors and teacher recommendation.

This half year course is required by the State of Connecticut. It will discuss the current issues in national and local governments, review the basic framework of American government, and allow opportunity for hands on activities which will prepare students for active participation in their roles as citizens.

SOCIAL STUDIES: Electives

U.S. GOVERNMENT AND POLITICS- AP

1 year, 1 credit

Prerequisite: Open to juniors and seniors. Students must have been enrolled in an honors level course in social studies the previous year, however academic level students may also enroll with the recommendation of their current social studies teacher.

This course covers politics and government in the United States and other nations, as well as general concepts used to interpret American and international politics. The primary focus is upon topics including the Constitution, Political Behavior, Political Institutions, Public Policy and Civil Rights and Liberties. It requires familiarity with the various institutions, beliefs, and ideas that define American and international politics. Current and historical events are woven into this framework. Students may be given optional summer or pre-course readings. This course meets the American Government graduation requirement. It is recommended that students in this course take the AP Exam when it is offered in May. This course is open to students who have completed AP United States History and who have the approval of the Social Studies department chairperson.

INTRODUCTION TO PSYCHOLOGY I

1/2 year, 1/2 credit

Prerequisite: Open to juniors and seniors

This course introduces some of the major principles and concepts of psychology as applicable to today's society. Topics will include states of consciousness, personality development, adolescent psychology, abnormal psychology, theories of counseling and careers in psychology. Students are expected to actively participate in class discussions and do research on chosen topics. An attempt will be made to respond to the issues presented by the class.

PSYCHOLOGY II

1/2 year, 1/2 credit

Prerequisite: Successful completion of Psychology I or permission of the instructor and junior or senior status

This course continues to introduce some of the major principles and concepts of psychology as applicable in today's

society. Additional topics will be introduced including personality theory, emotions, motivation, psychological testing, learning, social, cognitive and trait theories, health and psychology and treatment/therapy for psychological problems. Students are expected to actively participate in class discussions and do research on chosen topics. An attempt will be made to respond to the issues presented by the class.

PSYCHOLOGY - AP

1 year, 1 credit

Prerequisite: Open to juniors and seniors. Students must have been enrolled in an honors level course in social studies the previous year, however academic level students may also enroll with the recommendation of their current social studies teacher.

While similar in content to Psychology I & II, this course includes the additional work to prepare students for the Advanced Placement exam. Entry to this course is subject to approval of the social studies department chairperson.

EUROPEAN HISTORY - AP

1 year, 1 credit

Prerequisite: Open to juniors and seniors. Students must have been enrolled in an honors level course in social studies the previous year, however academic level students may also enroll with the recommendation of their current social studies teacher.

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of the AP Program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical interpretation, and (c) an ability to express historical understanding in writing.

School of World Language and Global Partnerships (World languages and cultural studies)

WORLD LANGUAGES

The study of world languages is the link that connects man to a living present and an historical past. The immersion into another culture through language is a tool not only in better understanding oneself but is geared towards cultivating insight and tolerance of differences and commonalities shared with the citizens of our global community. Language and communication significantly shape and bring meaning to the human experience. Through the study of language students can become active participants in our interconnected world. Foreign language acquisition is an essential component of a quality education and at the core of becoming an "educated" individual. The personal enrichment students gain from learning another language or languages helps

cultivate individuals who can better appreciate and integrate with our diverse world, as we compete in the 21st century.

Colleges and universities recommend 2-3 years of language study. Highly competitive schools of higher education recommend 3- 5 years.

The prerequisite for foreign language courses is the successful completion of the previous courses or recommendation of the instructor, with approval of the Director.

For World Language tutoring and support please see "Academic Help" on page X, prior to the 4 year worksheet.

FRENCH I - Academic

1 year, 1 credit

Any student attaining a C+ or higher in middle school is not eligible to enroll in level I.

This course is intended for beginners, as well as students who have taken French but have not mastered the basic skills.

Each unit revolves around a theme, such as school, family, preferences and interests, which is fundamental to basic conversation. The behaviors, values and beliefs of the people in the Francophone countries are an integral part of the language experience.

FRENCH II - Academic

1 year, 1 credit

Prerequisite: Successful completion of 7th grade (IA) & 8th grade (IB) language study or French I at high school. A minimum grade of C+ is recommended for success.

This course continues the basic study of French, including the study of elementary grammatical structures and the cultures of the French speaking world. The focus continues to be on developing proficiency in aural comprehension, speaking, reading and writing.

FRENCH II - Honors

1 year, 1 credit

Prerequisite: Students must have attained an A average in the previous level course, demonstrated a strong work ethic and exhibited a strong oral competency.

In addition to complying with the objectives of the regular curriculum, honors level students will be expected to complete the following:

- Oral recording (minimum of one) in the language lab per chapter
- Supplemental readings and writing assignments in the target language
- Alternative assessments as assigned by the teacher.

FRENCH III - Academic

1 year, 1 credit

Prerequisite: A minimum grade of C in French I or teacher recommendation.

This course continues to develop the language skills of listening, speaking, reading and writing in the context of everyday life in the French-speaking world. Video and auditory materials enhance the basic text. Oral proficiency is developed through oral presentations and the use of the target language. Previously learned structures are reviewed and reinforced; new grammatical concepts and tenses are presented in context.

FRENCH III - Honors

1 year, 1 credit

Prerequisite: For honors level eligibility, students must have attained an A average in the previous level course, demonstrated a strong work ethic and exhibited a strong oral competency.

In addition to complying with the objectives of the regular curriculum, honors level students will be expected to complete the following:

- Increased Oral communication, one oral assessment (minimum) per quarter
- Supplemental readings and original writing assignments in the target language
- Alternative assessments as assigned by the teacher.

FRENCH IV - Honors

1 year, 1 credit

This course focuses on developing and refining oral and written proficiency. A variety of contemporary and historical short stories, articles, music and poetry serve as a vehicle to examine literary, artistic and political figures of the francophone world. Thinking and reacting in the French language are an important objective of the course. Emphasis is on verbal expression, although much work is done in application of original writing.

Second semester focuses on reading an original novel which focuses on discussion and analysis along with a continued review of grammar.

FRENCH V - AP

1 year, 1 credit

Prerequisite: Teacher recommendation.

This course prepares the student to take the Advanced Placement French language examination in May.

The main objective of the program is to develop students' communication skills in French. This course is comparable to a third-year university course with emphasis on grammar study, conversation, and composition. Students may receive college credit for this program.

SPANISH I - Academic

1 year, 1 credit

Text: Exprésate I

This course is intended for beginners, as well as students who have taken Spanish but have not mastered the basic skills.

This level presents and practices the language typical of the novice level; greetings, expressions of courtesy, numbers, dates, descriptions, likes and dislikes and narration in the present and past. The cultural aspect will be integrated in every unit with the intention of bringing the language to life. Students are expected to perform in a written and oral manner. Listening exercises will also be introduced. Special projects and assignments may be part of the curriculum.

SPANISH II - Academic

1 year, 1 credit

Prerequisite: Successful completion of 7th grade and 8th grade Spanish I. A minimum grade of C+ is recommended for success.
Text: Exprésate II

This course concentrates on the development of oral and written proficiency through presentations and compositions. A

variety of topics from every day life link the vast vocabulary and grammar to the Spanish speaking world. Grammar will include a review and use of Present, Present Progressive, Preterit and further study of grammar will include Imperfect. A variety of customs and traditions of the Spanish world are presented with the intention to sensitize the student to cultural differences.

SPANISH II - Honors

1 year, 1 credit

Text: Exprésate II

Prerequisite:

- middle school or high school teacher recommendation based on having attained a final grade of 90% or higher
- oral and writing performance on the 8th grade Performance Based Learning Assessments
- maturity, work ethic, and attendance

Honors level is the same as Spanish II academic but includes authentic readings beyond the textbook, such as El Cid and children's fairytales. Vocabulary and grammar is more extensive; more rigorous, performance based activities are incorporated to maximize the opportunity for the varied application of language.

SPANISH III - Academic

1 year, 1 credit

Recommendation: A minimum grade of C in Level II is recommended for success.

Text: Exprésate III

Spanish III continues the book series with Exprésate III. The book and course are based upon students' knowledge of all verb tenses and grammatical structures learned in Spanish I and II. Exprésate III builds and stresses vocabulary and verb usage using Cultural, Conversational and Literary Readings. Oral Proficiency is developed through oral presentations and consistent use of the target language. Students are expected to answer and speak in complete Spanish sentences. There are four major writings throughout the year.

SPANISH III - Honors

1 year, 1 credit

Prerequisite: Spanish II honors students must achieve a minimum final grade of B+ and have teacher recommendation for continued study in the honors sequence. Students in the Spanish II academic program must achieve a final grade of A and have teacher recommendation to enter into the honors program.

This course is a continuation of Spanish II Honors. Students will review previously learned verb tenses and grammatical structures as well as develop more complex reading, writing, listening and speaking skills. More advanced verb tenses and grammatical structures will be introduced.

Students are expected to summarize and communicate main ideas and supporting details from a variety of authentic materials in the target language. Individual, paired, small group and class activities may include; Power Point presentations, skits, projects (written or oral reports), dialogues (spontaneous or prepared). Vocabulary, grammar and culture will be reviewed, studied and enhanced through a variety of authentic sources, such as; art, music, literature, audio-visual, internet and other media



sources. The reading of short stories and a novel may be part of the curriculum. This course prepares the students for Spanish IV Honors.

SPANISH IV - Academic

1 year, 1 credit

Prerequisite: Enrollment in this course requires a minimum grade of B in Spanish III or a C+ with a teacher recommendation.

This course reviews the grammar topics and verb tenses already learned in previous courses. It also continues the study of the subjunctive mood. In addition, more complex readings are introduced along with more extensive writings and analysis of literary works. The class is conducted entirely in Spanish and all students are expected to communicate in the target language.

SPANISH IV - Honors (Pre AP)

1 year, 1 credit

Prerequisite: Teacher recommendation
Summer work is required.

This honors course deals with the development of more complex reading, writing, listening and speaking skills. Students are introduced to literary works of famous Spanish writers. The vocabulary and grammar will be reviewed and enhanced through the reading and analysis of literature. The reading of a novel will be part of the curriculum.

This course begins to prepare the students for the Advanced Placement Spanish Language exam taken in May of their senior year.

SPANISH V - Honors/ECE

1 year, 1 credit

Prerequisite: Teacher recommendation

This course continues the grammar study very intensively. Famous Spanish writers are introduced, and their works are analyzed. Oral and written skills are expected to reach a high level of proficiency status by the end of the year. Special projects and assignments are part of the curriculum. Part of the curriculum includes reading several novels.

Early College Experience (ECE)

Students who receive a minimum grade of 70% and satisfy the written requirements for the University of Connecticut curriculum course equivalency are eligible for 6 UConn college credits. Some universities across the nation may not accept these credits.

SPANISH V - AP

1 year, 1 credit

Prerequisite: Teacher recommendation
(This course also fulfills the requirements of the University of Connecticut cooperative program for 6 credits).

This course continues to prepare the students to take the Advanced Placement Spanish Language examination in May. The main objective of the program is to develop the students communication skills in Spanish. This course is comparable to a third year university course with emphasis on conversation and composition. The reading of a novel will be part of the curriculum. Students who take this course may receive college credit.

School of Math, Science and Engineering (Math, science, and engineering)

MATHEMATICS MATH CORE GRADUATION REQUIREMENTS

All students must pass three mathematics courses which must include an algebra course (1 year total) and a geometry course (1 year total). Students who struggle in math may be recommended to attend SRBI math lab. Teachers within the mathematics department will work with math lab students using scientifically researched-based interventions (SRBI) to target areas of weakness and move students forward in their learning of key mathematical skills, concepts, and understandings. Student entry into the lab is based upon teacher referral and the approval of the math academic chair.

Since mathematics is a skill based discipline, a year end grade of C or better is recommended prior to enrolling in a subsequent math course. Students earning less than a C should consider repeating the course or taking the course in summer school. Additional support from home will most likely be necessary if a student registers for a course without a solid foundation in the required prerequisite.

Academic and honors level mathematics courses require the use of a graphing calculator. The Texas Instrument graphing calculator TI-84 or TI-84+ are recommended. Many upper level science courses also utilize graphing calculators.

ACCOUNTING

See Business and Finance Technology section for descriptions.

Students must have earned 1 credit in algebra and 1 credit in geometry in order to receive math credit for accounting.

ALGEBRA I Sequence I - Part 1 - Core

1/2 year, 1/2 credit

Prerequisite: Recommendation from eighth grade teacher

Algebra I Sequence I - Part 1 is designed to aid students in making the transition from middle school mathematics to algebra. This course includes connections to algebra such as variables, exponents and powers, order of operations, problem solving, operations with signed numbers, ratios and percents, probability, properties of algebra, and solving equations and inequalities. An effort is made to review and present new topics focusing on skills and in depth understanding of the concepts and problem solving needed to be successful in algebra.

ALGEBRA I Sequence I - Part 2 - Core

1/2 year, 1/2 credit

Prerequisite: A passing grade in Algebra I Sequence I Part I. Students who struggle to meet the prerequisite course expectations will be provided with additional math support through SRBI math lab.

Algebra I Sequence I - Part II reviews and expands on the concepts taught in Algebra I Sequence I - Part I. Topics will include: solving equations and inequalities, the coordinate plane and graphing linear equations, scatterplots, and writing linear equations. CAPT preparation and review is integrated into regular classroom instruction. An effort is made to review and present new topics focusing on skills and in depth understanding of the concepts and problem solving needed to be successful in algebra.

ALGEBRA I - Academic

1 year, 1 credit

Prerequisite: Teacher recommendation and minimum grade of C in 8th grade math.

Students analyze and explain the process of solving an equation. Students develop fluency writing, interpreting, and translating between various forms of linear equations and inequalities, and using them to solve problems. Students will learn function notation and develop the concepts of domain and range. They explore many examples of functions, including sequences; they interpret functions given graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations. Students consider exponential functions and quadratic functions, comparing the key characteristics. They use these functions to model phenomena.

ALGEBRA21 - Academic

1 year, 1 credit

Prerequisite: Teacher recommendation and minimum grade of C in 8th grade math.

Algebra21 is a rich, context-based study of patterns, equations, and functions. The major focus of the course is on linear functions, including writing, solving, graphing, and applying linear equations and systems of linear equations. Students finish with studies of exponential and quadratic functions. In Algebra 21, students are expected to work collaboratively and individually on hands-on, computerbased, and paper-and-pencil investigations. The emphasis throughout the course is on applying algebraic thinking to solve meaningful, relevant, authentic problems.

The Algebra21 curriculum is adapted with permission from the Connecticut State Department of Education's Model Algebra 1 Curriculum (2011) and is aligned with CT State Standards. (Academy students receive priority enrollment.)

ALGEBRA I - Honors

1 year, 1 credit

Prerequisite: Final grade of "A-" or better in Grade 8 Math or a grade of C or C+ in eighth grade Algebra I

This course introduces the concept of functions early on. Properties of real numbers and properties of equality will be stressed. Additional topics include; literal equations, application of ratio and percent, graphing linear functions, slope and rate of change, solving systems of equations, graphing inequalities and systems of inequalities, lines of best fit, operations with polynomials, laws of exponents, quadratic and exponential functions, and an introduction to probability and statistics. Students will become proficient with the use of graphing calculators.

ALGEBRA I SEQUENCE II - Core

1 year, 1 credit

Prerequisite: A passing grade in Applied Geometry (Part 2). Students who struggle to meet the prerequisite course expectations will be provided with additional math support through SRBI math lab.

This course is designed to cover many of the topics that are taught in the second semester of Algebra I. Units of study will include analyzing linear functions, systems of equations, inequalities, polynomials, and radicals.

INTRO TO ALGEBRA II - Academic

1 year, 1 credit

Prerequisite: A passing grade in Algebra I and a geometry class or a passing grade in Algebra 1 Sequence 1, Algebra 1 Sequence 2, and a Geometry class.

Introduction to Algebra II reviews and expands on the concepts taught in Algebra I, including linear functions and inequalities, systems of equations, data analysis, quadratics, and others. An effort is made to present these topics from a "hands-on" perspective with frequent use of graphing calculators and an emphasis on real world problems and performance activities. Certain topics are covered in less detail than in the conventional Algebra II course. This course is not intended for the student who will pursue a college major or career in a math-intensive area. A graphing calculator is required for this course.

ALGEBRA II - Academic

1 year, 1 credit

Prerequisite: A minimum grade of C in Algebra I and a minimum grade of C in Academic Geometry.

Algebra II expands upon skills introduced in Algebra I. This course includes a serious study of functions and graphs—linear, quadratic, polynomial, exponential, logarithmic. A concerted effort is made to review topics and present new topics by applying them in mathematical modeling problems and performance activities. Graphing calculators are used frequently in this effort. This course, as a result, is appropriate for a student planning to pursue a college major or a career in an area dependent on mathematics. A graphing calculator is required for this course.

ALGEBRA II - Honors

1 year, 1 credit

Prerequisite: A minimum grade of C in Honors Geometry

This course involves an intense study of important algebraic topics and techniques with special emphasis on functions, graphs and their properties. Linear, quadratic, higher degree polynomial, rational, algebraic, exponential and logarithmic functions receive serious study as do matrices and determinants. Concepts are introduced and studied through real world problems with frequent use of mathematical models. Graphing calculators are integrated into most units of study. The pace of study and the depth to which topics are covered require students to have a good understanding of Algebra I topics as a prerequisite for success in this class. A graphing calculator is required for this course.

APPLIED GEOMETRY – Part 1 - Core

½ year, ½ credit

Prerequisite: Recommendation from 8th grade teacher

Students develop the language of plane geometry and then

study the properties of angles, triangles, quadrilaterals, polygons, polyhedrons, and parallel lines. Transformations are studied and then applied in a project that requires the students to create unique geometric designs that reflect specific transformations and symmetries. The students also explore geometric properties with the Geometer's Sketchpad interactive software.

APPLIED GEOMETRY – Part 2 - Core

½ year, ½ credit

Prerequisite: A passing grade in Applied Geometry - (Part 1) - Core. Students who struggle to meet the prerequisite course expectations will be provided with additional math support through SRBI math lab.

The emphasis of this semester course is on perimeter, area, volume and the Pythagorean Theorem. Formulas are developed and then applied so there is an emphasis on computation and algebra. The properties of circles and congruent and similar triangles are also investigated. CAPT preparation and review is integrated into regular classroom instruction.

CALCULUS - Honors

1 year, 1 credit

Prerequisite: A minimum grade of "C" in Academic Precalculus or a passing grade in Honors Precalculus. A good working knowledge of the graphing calculator is required.

A strong understanding of algebra, geometry, functional analysis, and trigonometry is necessary for the study of calculus. The honors level course is designed to provide students with a semester of exposure to college level calculus. The focus of the course is the study of functions, limits, derivatives and antiderivatives. There is an emphasis on applications to business, physics, and medicine. A graphing calculator is required for this course.

CALCULUS - AP

1 year, 1 credit

Prerequisite: A minimum grade of "B" in Honors Precalculus or teacher recommendation. A good working knowledge of the following background areas is expected: algebra, geometry, functional analysis, trigonometry and use of the graphing calculators.

AP is a high level accelerated course designed to give students about 1.5 semesters of exposure to college level calculus. The course is designed to prepare the students for the AB level AP Calculus exam. The subject matter includes work in analytic geometry, limits, derivatives, integrals and functions. A graphing calculator is required for this course.

PERSONAL FINANCE - Academic

1 year, 1 credit

Prerequisite: Successful completion of an Algebra and a Geometry course.

This course is designed to show students how to use mathematics in their everyday lives as consumers. Students have the opportunity to become proficient, confident problem solvers and informed consumers. Consumer Mathematics covers a number of topics including: informed money management, consumer decisions, estimation, personal bank accounts, loans, credit, taxes, insurance, etc.

GEOMETRY - Academic

1 year, 1 credit

Prerequisite: A minimum grade of "C" in Algebra I.

Students establish triangle congruence criteria, based on analyses of rigid motions and formal constructions. They use triangle congruence as a familiar foundation for the development of formal proof. Students prove theorems using a variety of formats and solve problems about triangles, quadrilaterals, and other polygons. Students apply their earlier experience with dilations and proportional reasoning to build a formal understanding of similarity. Students use a rectangular coordinate system to verify geometric relationships.

GEOMETRY21 - Academic

1 year, 1 credit

Prerequisite: A minimum grade of "C" in Algebra I.

Geometry21 is an inquiry-based course that explores geometry in the context of fields as diverse as architecture, history, and graphic design. Students investigate the relationships between two dimensional objects in the plane and three dimensional objects in space, in both independent and collaborative lessons. The major concepts of congruence and similarity are developed from a study of transformations, linking geometry and algebra in a meaningful way. Explorations, constructions, and proofs are completed through activities using paper and pencil, compass and straightedge, hands-on materials, computer software, and web-based applets.

The emphasis in Geometry21 is on relevant and interesting applications of important geometric concepts, and the curriculum is aligned with CT State Standards. (Academy students receive priority enrollment.)

GEOMETRY - Honors

1 year, 1 credit

Prerequisite: Final grade of "A" or better in Algebra 1 or a grade of B+ and teacher recommendation.

In this course, students learn the concepts of geometry through inductive and deductive reasoning. Topics include parallel lines, triangle congruence and similarity, the Pythagorean Theorem, quadrilaterals, polygons, area, volume, transformations and circles. There is an emphasis on proofs and constructions.

PRECALCULUS - Academic

1 year, 1 credit

Prerequisite: A minimum grade of "C" in Algebra II. A good working knowledge of a graphing calculator is required. Note: Introduction to Algebra II is NOT a prerequisite for this course.

Trigonometry, and functions are the two major aspects of mathematics covered in this course. The study of vectors is incorporated to support students taking physics. Elementary functions such as polynomial, exponential, logarithmic and circular are emphasized. A graphing calculator is required for this course.

PRECALCULUS - Honors

1 year, 1 credit

Prerequisite: A minimum grade of "C" in Algebra II-Honors. A good working knowledge of a graphing calculator is required.

The major units of study in Honors Precalculus are trigonometry and its applications, sequences and series, functions and conic sections. Other topics include vectors, limits and polar coordinates. A graphing calculator is required for this course.

PROBABILITY AND STATISTICS -

Academic

1 year, 1 credit

Prerequisite or Corequisite: Algebra II. A good working knowledge of a graphing calculator is recommended.

This course is intended for the students who will need knowledge of the basic concepts and applications of probability and statistics. The student will study means of analyzing and presenting data. Topics covered include rules of probability, binomial functions, the normal distribution, linear correlation and linear regression. The objective of this course is to prepare students to be successful in a college statistics course. A graphing calculator is required for this course.

STATISTICS - AP

Prerequisite: Completion of Precalculus with a grade of C or better.

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference.

Students who enroll in this course will be expected to take the AP Exam in statistics. Students who successfully complete this examination may receive college credit and/or advance standing for a one semester, introductory statistics course. A graphing calculator is required for this course.

*SRBI

Information about SRBI math lab may be found in the **Academic Help** section of this course catalog on page X.

SCIENCE



The years of science must reflect exposure to the foundational science offerings consisting of: Biology, Chemistry, and Physics. Physical Science, both core and academic, meet the chemistry and physics foundational requirements. All introductory Biology courses (Honors, Academic, and Core) meet the above described Biology exposure. In order to meet minimal foundational requirements, students enrolled in the **Honors sequence must take one year each of Biology, Chemistry and Physics.** (If you have any questions, consult your guidance counselor and/or your science teacher.) Level changes at Pomperaug High School are based on teacher recommendation.

THE HIGH HONORS PROGRAM IN SCIENCE

The purpose of the High Honors Program is to stimulate and reward students who commit themselves to four years of effort and achievement in a prescribed sequence of science courses. Each student's commitment shall be recognized by appropriate transcript notations, certificates of accomplishment, and honors weighting. The sequence will also prepare the participant to take

all of the Advanced Placement Science Exams offered by the College Entrance Examination Board. The potential of earning college credit for three years of science is an additional motivating force for participants.

REQUIREMENTS FOR THE HIGH HONORS SEQUENCE IN SCIENCE

Science high honors students are required to complete the following course work:

YEAR	COURSE TITLE
Freshman	Honors Biology
Sophomore	Honors Chemistry
Junior	Honors Physics and AP Chemistry
Senior	AP Physics and AP Biology

In addition to the program of study listed above, the student will be required to maintain an 80 or better average in order to qualify for the high honors sequence designation.

Although the courses listed previously are included in the Honors Program, they are not the exclusive domain of honors participants, i.e., students who have the appropriate prerequisites may sample these and other science courses, but they will not receive high honors sequence recognition.

ANATOMY & PHYSIOLOGY - Honors

1 year, lab science - 1.25 credit

Prerequisite: Successful completion of one year of Biology. One year of Chemistry is highly recommended

Anatomy & Physiology is an **Honors** elective course open to juniors and seniors. The areas of study include: organization of the human body, biochemistry, cytology, histology, systems of the body (skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive) and genetics. The interrelationship of the body's systems is stressed. Course study will also include some medical aspects of the human body. An exposure to health-related fields will be included.

BIOLOGY - Academic

1 year, lab science - 1.25 credits

Prerequisite: Successful completion of Physical Science

A course offered to college-bound students designed to explore in-depth principles of biology in areas such as biochemistry, cytology, genetics, zoology, and human anatomy. The course will also offer exposure to current research and developments in the field of biology. Preparation for the CAPT is an important part of this course.

BIO21 - Academic

1 year, lab science - 1.25 credits

Prerequisite: Successful completion of Physical Science or E3

Bio21 covers the most exciting fundamentals of life science, including cell biology, genetics, biotechnology, evolution, and ecology. Students develop understandings of essential scientific concepts as well as biological literacy for making informed personal and social decisions. Inquiry and critical thinking tasks are incorporated throughout the course. In addition, through participation in the course-long challenge, students engage in the engineering design process, as they become part of a research team that designs a biologically inspired product or technology. (Academy students receive priority enrollment.)

BIOLOGY - Honors

1 year, lab science - 1.25 credits

Prerequisite: Final grade of A-, A or A+ in Algebra (Middle School), or grade of A or better in Physical Science (High School).

A course offered to college-bound students designed to explore in-depth principles of biology in areas such as biochemistry, cytology, genetics, zoology, and human anatomy. The course will also offer exposure to current research and developments in the field of biology. Preparation for the CAPT is an important part of this course, therefore, any 9th Grade student moving from Honors Biology to Academic Biology must take Physical Science in 10th grade.

BIOLOGY - AP

1 year, lab science - 1.25 credit

Prerequisite: Successful completion of Biology, Chemistry, and teacher recommendation.

The AP Biology course was revised in 2012 by the College Board. As stated by the College Board, "The AP Biology redesigned course reduces breadth, shifts the instructional emphasis from content to skills, and promotes the complex thinking and reasoning skills essential for in-depth study at the college level." The AP Biology course is designed to give students an experience equivalent to any college level introductory biology course for biology majors. The content covers all major branches of biology and gives students a complete foundation to build on within upper level courses in college. The course is structured around the four big ideas in biology as stated by the College Board and the enduring understandings identified in the AP Biology Curriculum Framework. Coursework centers on evolution, and the study of biological systems focusing upon life processes, interactions, homeostasis, and inheritance. A summer assignment is a required component of the course.

CHEMISTRY - Academic

1 year, lab science - 1.25 credit

Prerequisite: A minimum grade of C or better in Algebra I and successful completion of Physical Science and state required CAPT activities and labs. Prerequisite or Corequisite: Algebra II

Chemistry is a course offered to college-bound students in their junior year. The course is designed to cover topics such as atomic and molecular structure, the periodic table, formula-writing and chemical equation-writing, physical and chemical changes, mass and volume relationships, acids and bases, solutions, and gases. There is a strong focus on problem solving, laboratory work and writing of laboratory reports.

CHEM21- Academic

1 year, lab science - 1.25 credits

Prerequisite: A minimum grade of C or better in Algebra I and successful completion of Biology or Biology21. Prerequisite or Corequisite: Algebra II

The Chem21 lab-intensive science curriculum involves upper grade level students with cutting-edge technologies, current issues, and future applications. Students gain techniques and knowledge that will prepare them for success in high school, college, and the 21st century workforce. The Chem21 curriculum meets all state-established standards for high school chemistry as defined by the Connecticut Science Frameworks in the context of 21st century applications, including nanotechnology, materials science, and natural resource use. (Academy students receive priority enrollment.)

CHEMISTRY - Honors

1 year, lab science - 1.25 credit

Prerequisite: A minimum grade of "B" or better in Algebra I and a minimum grade of "B" in Honors Biology, or permission of the instructor.

Corequisite: Algebra II or permission of the instructor

This course is offered to students who wish to continue the High Honors Sequence in science. It involves the study of: atomic structure and the periodic table, bonding, properties and changes in matter, the mole and molar relationships in chemical reactions, the characteristics of solids, liquids and gases, solution chemistry, acids and bases, reaction rates equilibrium, organic chemistry and nuclear chemistry. Emphasis is placed on problem solving, laboratory work, and writing of lab reports.

CHEMISTRY - AP

1 year, lab science - 1.25 credit

Prerequisite: A minimum grade of "B" or better in first year of Chemistry

Corequisite: Precalculus and permission of the instructor.

The AP Chemistry Course at PHS is designed to be an excellent alignment to a first year college chemistry course. This course is structured around six enduring understandings inspired by the AP Chemistry framework provided by the College Board. The six enduring understandings are matter and its interactions, chemical and physical properties, reactions, kinetics, thermodynamics, and equilibrium. Through a conceptual model, the emphasis of learning is placed on the depth of understanding larger ideas, their interconnections, and applications from the view point of an engineer. Students explore these connections through activities, problem solving, and laboratory exercises throughout the course. A summer assignment is a required part of this course.

Students who wish to receive college credits may qualify by taking the AP Chemistry examination in May. Students enrolled in this course are expected to take the AP exam.

EARTH SCIENCE I - Academic

Fall Semester, 1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

Geology

This semester course focuses primarily on the geology of the earth. The areas of study include rocks and minerals, map skills, topographic maps, plate tectonics, earthquakes and the earth's interior, volcanoes, geologic time, and earth's history, including an emphasis of those geologic processes that have shaped the Middlebury/Southbury area.

EARTH SCIENCE II - Academic

Spring Semester, 1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

Physical Geology and Astronomy

In this semester course students will investigate those earth processes that impact the earth and its inhabitants. Physical Geology topics will include glaciation, stream mechanics, mountain building and the earth beneath the sea. Astronomy topics will include the origin of our universe and the distribution of stars into galaxies and star clusters, stellar classification and evolution, and characteristics of the planets.

ENVIRONMENTAL SCIENCE I - Academic

Fall Semester, 1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

Students will investigate how human society has impacted plants and animals around them. Students are expected to recall past knowledge from previous science courses to solve open ended problems. Semester topics include: human population and growth, studying the interaction of plants and animals in various ecosystems, land use management, biodiversity, nutrient cycles and an organism's role in an ecosystem.

ENVIRONMENTAL SCIENCE II- Academic

Spring Semester, 1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

This semester course is designed for students who are highly motivated and have an interest in studying how human factors influence our environment. Topics include global interdependence, the importance of water, the causes and effects of human pollution, waste management, and the positive and negative effects of existing forms of energy.

FIELD BIOLOGY - Academic

1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

This course gives students an opportunity to learn about the natural world through outdoor field studies and classroom activities. Emphasis will be on identifying and studying local plants and animals. Students will have the chance to become amateur field biologists and will receive training in wildlife censusing, animal identification, winter botany, identifying birds by sound and sight, insect identification, wildflower and forestry surveying. Assignments involve collecting and analyzing data from field studies. Several writing assignments will require data analysis of field work, graph interpretation, and biological observations. This course involves walking, hiking and outdoor field work in all kinds of weather. This course broadens student's knowledge in the biological sciences by presenting topics not covered in their first year of biology.

FORENSIC SCIENCE I - Academic

1/2 year, 1/2 credit

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

Forensic Science I involves the application of scientific principles to the investigation of crime. This class presents many real world applications of scientific principles. Principles of biology, chemistry and physics are integrated into the study of evidence. Analytical methods will be applied to the study of sample evidence including fingerprints, hair, fibers, and blood. Other areas of study include chromatography, DNA, skeletal evidence, firearms, glass, and handwriting. This is a hands-on, lab based course involving class instruction, group work, and a final student presentation of a landmark case that changed the field of Forensic Science.

FORENSIC SCIENCE II - Academic

1/2 year, 1/2 credit

Prerequisite: Successful completion of Forensic Science I

Forensic Science II builds on the skills and knowledge from Forensic Science I. This course has greater breadth and depth than Forensics I. New topics are added such as time of death, poisoning, odontology, arson, soil and tool marks. Some topics from Forensics I are revisited in greater depth. These topics include DNA analysis, glass fractures, document analysis, blood splatter analysis, casts and impressions and skeletal evidence. This is a hands-on, lab based course involving class instruction, group work, and advanced independent research of topics. The final exam is a lab practical involving solving a case as a team.

MARINE BIOLOGY - Academic

1/2 year, 1/2 credit*

Prerequisite: Successful completion of fundamental science requirements (Physical Science and Biology)

This course is designed for academic level students who are motivated and have an interest in studying marine biology. The field of marine biology studies marine organisms, their behavior and their interaction with the environment. This introductory course will cover the basic chemical and physical properties of seawater, the impacts of humans on the world's ocean and the general categories of marine life. The different marine biological focus groups include: phytoplankton, zooplankton, phylum mollusca (clams, snails, octopi), phylum crustacean (crabs, shrimp, lobster), phylum echinodermata (starfish, sea urchins), and phylum chordata (sharks, stingrays, fish, marine mammals). Possible field trips to the Long Island Sound may be required.

METEOROLOGY - Academic

1/2 year, 1/2 credit

Prerequisite: Successful completion of PHS fundamental science requirements (Physical Science and Biology)

This course will give students an in-depth study of the nature of weather forces and climate. The course will cover topics such as weather observation, temperature, the water cycle, weather forecasting, atmospheric pressure, humidity, wind, air masses, severe weather, and global warming.

PHYSICAL SCIENCE - Core

1 year, lab science - 1.25 credits

This is a course that surveys the major topics of Chemistry and Physics. The course is structured to accommodate students who have experienced difficulty with mathematics and science. Physical Science is targeted at a population of students who wish to meet the minimal requirements needed in order to qualify for graduation from high school. Emphasis is placed on the mechanics of learning, e.g., note-taking, review and reinforcement, study skills, "hands on" activities, homework, and test-taking.

PHYSICAL SCIENCE - Academic

1 year, lab science - 1.25 credits

Corequisite: Algebra I

Physical Science is an introductory course that explores core topics in Chemistry and Physics. It is designed to give academic

students first-hand exposure and experience in the physical sciences that builds upon the middle school programming and prepares students to take more advanced level courses in biology, chemistry, and physics. The major units of study include: measurement, atomic theory, the periodic table, bonding, acids, bases, salts, kinematics, dynamics, work and energy, electricity, magnetism, and light.

Physical Science meets the needs of both science students seeking minimum science credit for graduation; as well as students planning to participate in higher level science course-work.

This course is not open to students who have passed chemistry or physics.

PHYSICS - Academic

1 year, lab science - 1.25 credits

Prerequisite: Algebra II

Physics is an exploration of the nature of matter and energy. Topics that will be taught include; potential and kinetic energy, measurement, problem solving, velocity, acceleration, Newton's Laws of Motion, two dimensional and periodic motion, waves, sound, light and electricity. The conservation laws of momentum, energy and charge serve as unifying concepts when the phenomenon of electricity and magnetism are examined.

PHYSICS21 - Academic

1 year, lab science - 1.25 credits

Prerequisite: Algebra II

Physics21 provides upper grade level students with a basis for understanding the fundamental laws of nature as well as the role of physics in important technological innovations for the future. Central concepts and applications of physics are studied through real world contexts using inquiry and laboratory-based investigations. Students participate on research teams and apply artistic design and science research skills to develop simulations and visualizations of physics applications. (Academy students receive priority enrollment.)

PHYSICS - Honors

1 year, lab science - 1.25 credits

Prerequisite: Grade of B or better in Algebra II and Chemistry

Corequisite: Precalculus

This course is offered to students who wish to continue the Honors Sequence in science. Physics is the fundamental science whose principles underlie all other sciences e.g., chemistry, biology, electronics, etc. This laboratory-oriented course provides an introduction to the investigative and analytical methods of science, with emphasis on mathematical methods.

The topics developed are mathematical descriptions of motion, Newton's laws of motion and gravitation, the conservation laws of momentum and energy, thermodynamics and molecular motion, electric and magnetic fields, electric circuit analysis and the production of electromagnetic waves and atomic structure.

This course provides a solid foundation in physics, for students planning to take the advanced placement physics course and/or enter any area of science or engineering.

PHYSICS - AP

1 year, lab science - 1.25 credits

Prerequisite: 1 year of Physics

Corequisite: Calculus and permission of the AP teacher

The classical aspects of mechanics, electricity and magnetism. Fifty percent of this course is devoted to the development of kinematics and dynamics of translation and rotation; Newtonian dynamics, conservation laws of work, energy, power and momentum.

The second half of the course is devoted to the study of electrostatics, potential difference, electric current in DC circuits, capacitors and capacitive circuits, magnetism, production of magnetic fields and electromagnetic induction.

Calculus is used throughout the course and is developed as needed.

Students who wish to receive college credits for Physics may qualify by taking the standardized AP Physics examination in May. Qualifying participants may also receive college credit for this course via the University of Connecticut's Cooperative Extension Program. Requirements, applications, and other descriptive material will be furnished by the instructor and/or school counselor.

***School of Business, Entrepreneurship, and Consumer Sciences (Marketing, accounting, culinary, woodshop, architecture, printing)* Career & Technical Education**

The Career & Technical Education program combines three disciplines, Business and Finance Technology, Family and Consumer Sciences and Technology Education. Each maintains its own identity, specific aims and programs.

NVCC PROGRAM

This program is offered in conjunction with Naugatuck Valley Community College and takes place at their facilities in Waterbury. Students are given both high school and college credit for successful completion of course work done through this program. A maximum of four NVCC courses can be counted as credit toward PHS graduation requirements and the first four courses successfully taken will be used. See your counselor for details.

In the past, students have taken classes in Art, Automotive, Chinese, Computer-Aided Drafting, Computer Science, Criminal Justice, Early Childhood Education, Engineering Technology, Hospitality Management, and Multi-Media Technology.

COOPERATIVE WORK EDUCATION-CWE

(1-2 credits over one year)

Prerequisites: Junior or senior status. Students are selected by the CWE coordinator based upon need and personal benefit to the student. Teacher and guidance recommendations are also considered.

CWE is a student-centered pre-apprenticeship providing for a school to work transition. It is a cooperative effort among the school, the student, and employers in the surrounding communities. The program includes both academic and work oriented instruction in the classroom and on the job. The Cooperative Work Education course should be selected as an integral part of a planned academic program. The classroom phase meets daily to prepare students in the areas of career education, decision making, goal setting, (work preparation, communication and technical skills). Students can take the classroom portion alone and receive one credit. However, they are encouraged to become involved in the actual work experience as well.

The community serves as a laboratory where carefully planned practical experiences can be applied concurrently with the classroom learning. Therefore, they have to be available for work daily after school and be able to provide their own transportation. The work experience credit earned will be based upon the actual number of successful hours worked and work evaluations. They can earn 1/4 credit up to one credit for their work experience (with successful completion of the classroom phase each quarter). Students also have to pass the classroom portion for the year to receive each quarter's credit. The average number of working hours encouraged is 10-15 hours (but no more than 20) per week.

BUSINESS AND FINANCE TECHNOLOGY

SEQUENCE OF COURSES

All courses are semester electives, unless otherwise noted. This is a guideline for a specific sequence to follow.

ACCOUNTING/MANAGEMENT

Accounting I: Proprietorship Accounting
 Accounting II: Partnership Accounting
 Accounting III: Corporate Accounting
 Accounting IV: Advanced Corporate Accounting
 Marketing
 Economics
 Cooperative Work Education (1-2 years)

GENERAL OFFICE SEQUENCE ELECTIVES

Accounting I: Proprietorship Accounting
 Accounting II: Partnership Accounting
 Accounting III: Corporate Accounting
 Accounting IV: Advanced Corporate Accounting

LIFE SKILLS

Cooperative Work Education

ACCOUNTING:

In order to be an informed citizen capable of handling their own personal business matters, students should know how businesses operate and have a basic understanding of its language and principles. Accounting provides the student with the knowledge needed for present and future use. The accounting curriculum is divided into four semesters. The use of computers will be integrated into all four levels.

- Accounting I: Proprietorship Accounting
- Accounting II: Partnership Accounting
- Accounting III: Corporate Accounting
- Accounting IV: Advanced Corporate

ACCOUNTING I: PROPRIETORSHIP

1/2 year, 1/2 credit

This course presents the introductory phase of accounting. It is beneficial to all students. It provides a beginning foundation for students interested in business after high school or in college. The accounting cycle as it applies to personal use and a proprietorship service business is stressed. Current events and ethics in business will be included in class discussions. Preparation and interpretation of journals, ledgers, and statements are presented. Students will also learn how to prepare their own income tax returns. Advances in technology and the use of computers in business for accounting purposes will be introduced.

Students may receive one math credit when they successfully complete this course and the Partnership Accounting course. See your counselor for details.

ACCOUNTING II: PARTNERSHIP

1/2 year, 1/2 credit

Prerequisite: Accounting I: Proprietorship

This course builds upon the introductory course of proprietorship accounting. Students will learn how to keep the financial records of a merchandising business that has two or more partners. The use of special journals, handling payroll, taxes, and completing the end of the fiscal period adjustments and procedures will be presented. Current business events will be stressed. Students will continue to see how computers help accountants in the business field.

Students may receive one math credit when they successfully complete this course and the Proprietorship Accounting course. See your counselor for details.

ACCOUNTING III CORPORATE

1/2 year, 1/2 credit

Prerequisite: Accounting II: Partnership

This course is a continuation of partnership accounting. It is for students planning a career in the accounting field or in business. Managing the financial records for a corporation will be stressed. Students will learn how to handle uncollectible accounts, depreciation, notes, inventory, accruals, taxes, and voucher systems for a corporation. Current events in business will be stressed. Computerized information for handling the financial records of a corporation will be presented.

ACCOUNTING IV: ADVANCED CORPORATE

1/2 year, 1/2 credit

Prerequisite: Accounting III: Corporate

This course is a continuation into special applications of accounting at the corporate level. The use of computers will be

a major part of this course. Managerial accounting, cost accounting, not-for-profit organizations, cash flow, forecasting, taxes, and decision making are areas to be covered as well as software applications including the use of spreadsheets.

E-COMMERCE ENTREPRENEURSHIP (ECE)

1 year, 1 credit

The E-Commerce Entrepreneurship (ECE) course develops students academic and 21st century skills through participation in a project-based challenge that engages and reinforces the concept of learning by doing. Students gain individual knowledge of business topics while establishing the foundation needed to be a valuable team member. Students do extensive research on business ideas and take on roles of business professionals. Student-managed teams present viable and feasible business ideas to a panel of judges as the culminating program event (Academy students receive priority enrollment.)

ECONOMICS

1/2 year, 1/2 credit

This course helps the student to better understand the role of the producer and consumer in the economy. How economists make the important decisions required to utilize the limited resources to satisfy the unlimited wants to answer the lifelong problem of scarcity is analyzed. The course also examines the concepts of supply and demand as well as analyzing the different types of economic systems in use in the world today and its impact on real life issues. This course is especially beneficial to the student planning a career in business.

MARKETING

1/2 year, 1/2 credit

In this course the student will utilize technology-based instruction to learn the basic principles of marketing and develop an understanding of the career opportunities in the areas of advertising, merchandising and marketing. Topics will include product development, market planning, promotion, design and packaging, and sales promotion. Students will interact with a variety of on-line sites that supplement each lesson.

FAMILY AND CONSUMER SCIENCES

The major concern of Family and Consumer Sciences education in the high school is for the total well-being of the individual and his/her relationship to the home and society. The program builds a foundation of knowledge and skills necessary to live in today's world.

This program contributes to the development of the students' self awareness and ability to function successfully in society.

CULINARY ARTS I

1/2 year, 1/2 credit

An elective course designed to introduce students to culinary skills, nutritional information, safety and sanitation protocol and

menu planning skills. Students plan, cost, prepare, cook and evaluate nutritious food in collaborative team settings.

CULINARY ARTS II

1/2 year, 1/2 credit

Prerequisite: Culinary Arts I

An elective course designed to introduce students to a culinary career path and the specific demands of meeting public health safety and sanitation standards in cooking. Students plan, cost, prepare, cook and evaluate quantity food in collaborative team settings. Students cater luncheons and conferences and learn skills that can be applied to future careers.

EXPLORING CHILDHOOD I

1/2 year, 1/2 credit

Students will explore the physical, emotional, social and intellectual development of children from conception to pre-school ages. They will have the opportunity to work with our Infant Simulators in the classroom and the option to take part in a 65 hour weekend experience with these sophisticated, computer-babies. Students will analyze and evaluate roles and responsibilities of parenting and the principles of human growth and development. They will also have the experience of teaching in our two-day playschool experience with children ages 2-4.

EXPLORING CHILDHOOD II

1/2 year, 1/2 credit

Prerequisite: Exploring Childhood I

Students will explore the physical, emotional, social and intellectual development of children from pre-school age through adolescence. This course builds on the principles of human growth and development from Exploring Childhood I and is popular with students who are interested in a career in education or child care. They will have an opportunity to learn about child care and early education, teaching and assessment strategies and careers in these fields. The students plan and implement the two-day playschool experience for children ages 2-4. They develop lesson plans and activity centers for the playschool. In addition, students may have the experience of working in an elementary school classroom.

INTERIOR DESIGN

1/2 year, 1/2 credit

Course will run based on enrollment and every other year

This course open to all students is designed to aid young men and women in planning, caring for and decorating their own room, apartment, or home. Other areas covered are decisions to buy or rent, careers in interior design, and buying or refinishing furniture. This is a good course for art students to add to their portfolio.

INTERNATIONAL CULTURES AND CUISINE

1/2 year, 1/2 credit

Prerequisite: Culinary Arts I

Course will run based on enrollment and every other year

Students will develop an understanding and appreciation of the cultural diversity and unique cuisines in nations around the

world. Students plan, prepare, cook and evaluate polycultural, global recipes. They will explore the rich food heritage of the United States, as well as the food preferences and eating habits from other countries and cultures. Students also select a country and do an independent, in-depth research project for a class presentation.

TECHNOLOGY EDUCATION

The high school's Technology Education program offers courses that provide general or specialized opportunities in the area of technology. Emphasis is placed on the students discovering and developing individual talents, aptitudes, interests, and potential as related to industry and technology.

The Technology Education program focuses on providing students with an opportunity to develop basic skills in the proper use of common industrial tools, materials and processes.

CONSTRUCTION TECHNOLOGY I

1/2 year, 1/2 credit

An elective course designed to initiate and develop the student's ability to intelligently evaluate, design and construct useful products. Students will create or use a set of drawings and formulate a bill of materials to construct their projects. Construction principles, procedures, machines, materials and hand tools will be covered. Units of student will include safety, simple machines, planning and design, fasteners, joinery, and other related topics. Safe working procedures, proper design and pride in craftsmanship will be emphasized.

CONSTRUCTION TECHNOLOGY II

1/2 year, 1/2 credit

Prerequisite: Construction Technology I

An elective course designed to provide a more in-depth study of construction principles and procedures related to home, industrial and commercial building. The units of study will include: welding, mass production, home wiring, plumbing, home maintenance and other construction related topics. Safe working procedures, proper design and pride in craftsmanship will be emphasized.

TECHNOLOGICAL ENTERPRISE

½ year, ½ credit

Entrepreneurs Welcome! In Technological Enterprise students have an opportunity to think big and make it become a reality. This course provides an opportunity for the students to design a product based on customer needs based upon characteristics of available materials, tools and equipment. Students will create a company, develop a brand and calculate the cost to produce the manufactured product. Student emphasis will then be to develop a marketing plan and successfully market the finished product to the public.

TRANSPORTATION TECHNOLOGY I

1/2 year, 1/2 credit

Transportation Technology deals with fundamentals of land, air, sea and space transportation. Students will have the opportunity to disassemble, rebuild and reassemble a small gas 2 or 4 cycle engine with the understanding of how these engines function in lawn mowers, motorcycles, chain saws, cars and

boats etc. Other topics covered include alternative energy sources, robotics, simple machines and related math, history, and physics.

TRANSPORTATION TECHNOLOGY II

1/2 year, 1/2 credit

Prerequisite: Transportation Technology I

This course will provide a more in-depth study of the topics of alternate energy sources, robotics, simple machines and related math, history and physics. The course will culminate with the construction of radio control planes that students will fly based on previous learning from Transportation Technology I and Transportation Technology II.

School of Media Communication and Technology

*(Technology, video production,
drama, and library media)*

ANIMATION

1/2 year, 1/2 credit

Students will learn the traditional principles of animation made famous by Walt Disney animators, and then apply those principles on the same state of the art 3d animation software used in making films such as Ice Age and Avatar. Projects involve animating human characteristics on inanimate objects, lip sync, and bipedal character development. Career opportunities using animation are discussed throughout the semester and samples of such work are presented and demonstrated.

ARCHITECTURAL DESIGN

1/2 year, 1/2 credit

In Architectural Design students will learn that it is the architectural drafter's responsibility to convert sketches and ideas into formal drawings. The course will show students how to prepare proper formal drawings by providing them with the basic guidelines for architectural drafting and minimum design and code requirements. Students will transfer their design into 3D software and develop detailed drawings from their designs. Career opportunities are discussed and explored and an electronic portfolio of all student work will be submitted and evaluated at the conclusion of the course.

COMPUTER DESIGN I

1/2 year, 1/2 credit

Computer Design I brings students up to speed on 2D and 3D design using computer design software. The goal is to get students past the point of knowing keystrokes all the way to the point of thinking about how we use 2D and 3D shapes, and then articulating these shapes into the computer applications. After students gain the ability to design on the computer, students learn about rapid prototyping techniques using a 3D printer and manufacturing techniques that allow their ideas to be articulated into physical embodiments. Career opportunities are explored and discussed within these topics also throughout the semester.

COMPUTER DESIGN II

1/2 year, 1/2 credit

Prerequisite: Computer Design I

Computer Design II prepares students for solving the problems of tomorrow and learn more about the future of design. By building on the skills learned in Computer Design I, students are introduced to more advanced techniques that help students design a better world. The course is designed to assist students entering the field of engineering or design and introduces students to concepts aimed to better prepare them for future learning opportunities. Multiple techniques in 3D design are explored and discussed and all student work is collected into a digital portfolio to display student work.

RESEARCH, DESIGN, AND DEVELOPMENT (RD2)

1 year, 1 credit

The Research, Design, and Development course (RD2) develops academic skills, communication skills, creative thinking, brainstorming, and problem solving through the completion of a comprehensive creative design project. Students become part of a design team and utilize a variety of communication technologies and multimedia software to research, design, develop, and present a viable solution to a comprehensive challenge. Students form a company and assume roles in the company to complete activities needed to develop a solution. Patent research and intellectual property management are integral components of the creative design project (Academy students receive priority enrollment.)

DIGITAL MEDIA & MOVIE MAKING (DM3)

1 year, 1 credit

Prerequisite: Teacher approval

How can digital media and movie making be used to educate and entertain, in a way comparable to, or better than, the traditional media formats of the past? The DM3 course develops skills in creativity, storytelling and digital media literacy while establishing student knowledge of the ever-expanding digital media and movie making industry (Academy students receive priority enrollment.)

GRAPHIC COMMUNICATION

1/2 year, 1/2 credit

This introductory course is designed to give students a truly unique and eclectic adventure into the world of digital imaging. The use of photography, computer design and printing equipment will be explored. Projects will include screen printed t-shirts, magazine covers, blu-ray package designs, and motion graphic commercials. Throughout the semester, students will be taught real-world production techniques and challenged to develop concepts, designs, and effective technical solutions for computer graphics.

ADVANCED GRAPHICS

1/2 year, 1/2 credit

Prerequisite: Graphic Communication

Students will push the boundaries of digital media, embrace the technology, concepts, techniques, and professional software applications to an exciting new level. Through a series of real-

world examples in the form of skill exercises and project-based work, the students will develop a strong understanding of advanced software features and how to meet specific challenges set forth by the instructor. Projects will spotlight full color screen printed t-shirts, 2d motion graphics, and 3d broadcast design.

INFORMATION SYSTEMS

1/2 year, 1/2 credit

Prerequisite: Student portfolio presented to instructor

Information Systems (Info_Sys) is a hands-on survey course focusing on the role of IT in an organization. The IT department supports the organization in many specific, mission-critical ways. Info_Sys will explore the role of IT at Pomperaug High School. Specific areas explored will include planning for enhancement of the program at PHS, troubleshooting hardware and software issues, administrating the Local Area Network (LAN), and helping users with applications.

PUBLIC SPEAKING

1/2 year, 1/2 credit

Open to grades 9-12. *This course may be used to satisfy second semester English elective requirement.

Public Speaking is a course that focuses on the elements and processes of oral communication: the connection between listening and speaking; the use and techniques of the voice; standard spoken English; forms of oral interpretation and presentation; and varieties of speech acts, group or individual. The control of one's speech is a valuable skill in modern American society. Among the goals and objectives of this course is that the students will gain some measure of vocal control, leading to increased verbal self-confidence and the ability to express themselves and their ideas clearly in a public speaking venue. Special features of the syllabus may include constructing and delivering a speech, group presentations, listening, parliamentary procedure and terms, persuasive speaking, choral speaking, making a proposal, preliminary debate, and the art of constructive criticism.

VIDEO PRODUCTION I

Visual Literacy

1/2 year, 1/2 credit

Utilizing the high school's video studio and post production facility, Video Production I is primarily an introductory course in studio production and programming for educational access television. Video Production I will provide students with visual literacy skills to make informed and critical decisions as they create several video productions. Students will be instructed from concept to creation on an introductory level in all phases of video production including: scriptwriting, storyboarding, camera operation, audio production, lighting techniques, character generation, non-linear editing, and compositing. The course will also promote the following skills: critical thinking, collaboration, problem-solving, research and time management. This course addresses the needs of not only technologically oriented students, but also of artistic and theatrically oriented students.

VIDEO PRODUCTION II (continued on page 21)

Media Literacy, Electronic News Gathering,

News Broadcasting

1/2 year, 1/2 credit

Prerequisite: Video Production I

Academy of Digital Arts and Sciences

The Academy is a sequence of connected courses that incorporates project-based learning in a blended environment. Courses include science, math, and technology. All science and math courses meet current Connecticut curriculum standards and prepare students for the CAPT exam. Technology courses address important skills and emerging media in the digital arts. Each year students complete an extended challenge component culminating with a presentation at the CT Student Innovation Exposition and have the opportunity to participate in the CT Student Film Festival. Students in the Academy will develop and maintain a digital portfolio throughout their time at Pomperaug and are encouraged to share their site with peers, parents, prospective employers, and college admissions officers.

Academy courses use a blended learning model to ensure the integration of Internet communication tools and the World Wide Web (WWW) resources. Blended learning utilizes a teacher facilitated, student centered environment that includes online and experiential components to strengthen classroom learning. Experiential learning takes students and teachers beyond the classroom to experience the application of learning in a professional environment. Students and teachers meet at Connecticut colleges and corporate campuses to learn from business professionals and attend workshops held by experts in the field. Throughout the year, students use tools such as SKYPE, for VoIP and video chatting, and IVCS, a virtual online environment, to collaborate across districts with other students and professional mentors.

A cohort of approximately 24 students will complete the sequence of courses in the Academy beginning in the 9th grade. This includes the completion of Skills21, a required 9th grade technology course, a mandatory science sequence, a math sequence, and two additional technology electives. While the Academy science courses and technology courses are required, traditional PHS course options remain in other academic disciplines and students may opt to take Academy math courses or traditional PHS math courses.

If interested in joining the Academy, please see a guidance counselor for specific details on the Academy course offerings and to discuss the program in depth. The table below illustrates the sequence of courses, electives, and pathways available to Academy students. The numeral "21" indicates courses that meet state curriculum standards but are taught in a 21st century context.

Information above was provided courtesy of The Center for 21st Century Skills at Education Connection. The Academy of Digital Arts and Science is funded by the Investing in Innovation grant from the U.S. Department of Education.

	<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
Academy Science Courses	Earth & Energy Essentials(E3)	Biology21*	Chemistry21*	Physics21*
Academy Math Course Options	<u>Academy:</u> Algebra21* Geometry21*	<u>Academy:</u> Geometry21*	<u>Traditional:</u> Math 11 Options	<u>Traditional:</u> Math 12 Options
(Students may choose to take traditional or academy math courses)	<u>Traditional:</u> Academic Algebra I Academic Geometry (Prerequisite for either geometry: 8th grade Alg. I)	<u>Traditional:</u> Academic Geometry Academic Algebra II (Prerequisite: Academic Geometry)		
Academy Technology Courses	Skills21	Digital Media Movie Making* or Research and Design Development*	3D Modeling and Animation* or E-Commerce Entrepreneurship*	
Academy Traditional PHS Courses	English 9 History 9 World Language	English 10 History 10 World Language	English 11 History 11 World Language	Capstone Experience* English 12 History 12 World Language

*Students not enrolled in the Academy may register for these courses with guidance approval and space permitting.

Academy Courses - Academic

Skills 21: 1 year, 1 credit

What impact does digital technology have on the 21st century? How do we live, learn, and play in a digital world? The 9th grade Skills 21 course develops a foundation in 21st Century Skills while using digital media to explore 9th grade science topics.

Earth and Energy Science Essentials (E3): 1 year, 1.25 credits

The Earth and Energy Science Essentials (E3) curriculum is a 9th grade course, aligned to the CT Science Standards, explores the concepts in physical and chemical sciences in the context of critical environmental topics. While maintaining focus on making the connections between the impact of science and technology on the quality of our lives, E3 uses multiple pathways of scientific reasoning to develop global citizens of the future capable of making informed decisions and developing a model for a healthy, sustainable society.

Algebra21: 1 year, 1 credit

Algebra21 is a rich, context-based study of patterns, equations, and functions. The major focus of the course is on linear functions, including writing, solving, graphing, and applying linear equations and systems of linear equations. Students finish with studies of exponential and quadratic functions. In Algebra21, students are expected to work collaboratively and individually on hands-on, computer-based, and paper-and-pencil investigations. The emphasis throughout the course is on applying algebraic thinking to solve meaningful, relevant, authentic problems.

The Algebra21 curriculum is adapted with permission from the Connecticut State Department of Education's Model Algebra 1 Curriculum (2011) and is aligned with CT State Standards.

Bio21: 1 year, 1.25 credits

Bio21 covers the most exciting fundamentals of life science, including cell biology, genetics, biotechnology, evolution, and ecology. Students develop understandings of essential scientific concepts as well as biological literacy for making informed personal and social decisions. Inquiry and critical thinking tasks are incorporated throughout the course. In addition, through participation in the course-long challenge, students engage in the engineering design process, as they become part of a research team that designs a biologically inspired product or technology.

Chem21: 1 year, lab science - 1.25 credits, Prerequisite: A minimum grade of C or better in Algebra I and successful completion of E3 or Physical Science. Prerequisite or corequisite: Algebra II

The Chem21 lab-intensive science curriculum involves upper grade level students with cutting-edge technologies, current issues, and future applications. Students gain techniques and knowledge that will prepare them for success in high school, college, and the 21st century workforce. The Chem21 curriculum meets all state-established standards for high school chemistry as defined by the Connecticut Science Frameworks in the context of 21st century applications, including nanotechnology, materials science, and natural resource use.

Physics21: 1 year, lab science - 1.25 credits

Prerequisite: Algebra II

Physics21 provides upper grade level students with a basis for understanding the fundamental laws of nature as well as the role of physics in important technological innovations for the future. Central concepts and applications of physics are studied through real world contexts using inquiry and laboratory-based investigations. Students participate on research teams and apply artistic design and science research skills to develop simulations and visualizations of physics applications.

Geometry21: 1 year, 1 credit

Geometry21 is an inquiry-based course that explores geometry in the context of fields as diverse as architecture, history, and graphic design. Students investigate the relationships between two dimensional objects in the plane and three dimensional objects in space, in both independent and collaborative lessons. The major concepts of congruence and similarity are developed from a study of transformations, linking geometry and algebra in a meaningful way. Explorations, constructions, and proofs are completed through activities using paper and pencil, compass and straightedge, hands-on materials, computer software, and web-based applets. The emphasis in Geometry21 is on relevant and interesting applications of important geometric concepts, and the curriculum is aligned with CT State Standards.

Research, Design, and Development (RD2): 1 year, 1 credit

The Research, Design, and Development course (RD2) develops academic skills, communication skills, creative thinking, brainstorming, and problem solving through the completion of a comprehensive creative design project. Students become part of a design team and utilize a variety of communication technologies and multimedia software to research, design, develop, and present a viable solution to a comprehensive challenge. Students form a company and assume roles in the company to complete activities needed to develop a solution. Patent research and intellectual property management are integral components of the creative design project.

Digital Media and Movie Making (DM3): 1 year, 1 credit

How can digital media and movie making be used to educate and entertain, in a way comparable to, or better than, the traditional media formats of the past? The DM3 course develops skills in creativity, storytelling and digital media literacy while establishing student knowledge of the ever-expanding digital media and movie making industry.

Academy Courses - Academic

E-Commerce Entrepreneurship (ECE): 1 year, 1 credit

The E-Commerce Entrepreneurship (ECE) course develops students academic and 21st century skills through participation in a project-based challenge that engages and reinforces the concept of learning by doing. Students gain individual knowledge of business topics while establishing the foundation needed to be a valuable team member. Students do extensive research on business ideas and take on roles of business professionals. Student-managed teams present viable and feasible business ideas to a panel of judges as the culminating program event.

3D Modeling and Animation (3DMA): 1 year, 1 credit

How can digital animation and 3D modeling be used to educate, entertain, and persuade in a way comparable to, or better than the traditional media formats of the past? The 3DMA course develops digital media literacy, academic skills, and animation/3D modeling skills that increase students' knowledge of filmmaking careers with a focus on animation and 3D modeling. Students organize movie production teams and assume positions in a company to complete digital animation projects that will be entered in the Connecticut Student Film Festival.

The Capstone Experience: 1 year, 1 credit

The Capstone Experience is an integrated technology, math, and science class which culminates with an individual research-based project. Students will become reflective practitioners, surveying their own skill sets and interests and documenting growth via digital portfolios. Participants will study such topics as leadership, time management and organization, goal setting, and problem finding, all the while embracing 21st Century Skills and a dynamic work environment. Adult mentors will assist students with their individual Capstone Projects for the CT Innovation Exposition.

Building on the skills acquired in Video Production I, students in Video Production II will make projects to be aired over the Educational Access Channel, and develop a school video news program using communications tools to foster academic inquiry in meaningful, active ways beyond mere transmission of images. Students will be instructed from concept to creation on an intermediate level in all phases of video production including: scriptwriting, storyboarding, camera operation, audio production, lighting techniques, character generation, non-linear editing, and compositing. Students will also be introduced to special effects, animation, and compositing as they relate to their news broadcasts.



THEATRE ARTS

ACTING I

1/2 year, 1/2 credit

This course introduces the basics of acting. Students will develop skills in observation; concentration; voice; memorization; sense memory; and movement. Students participate in theatre games, improvisations, pantomime, scenes, and monologues, developing confidence and an understanding of character and interpersonal relationships. Students critique their performances, research dramatic texts, and engage in peer evaluation. They also develop cooperative work skills and an understanding of the actors' responsibilities both on and off stage. Considerable emphasis is placed on exploring all of the actor's resources - physical, intellectual, and emotional - in the creation of character and its presentation before an audience. Finally, the course explores acting techniques from both the Stanislavski and technical methods.

Students are encouraged to audition for the fall and spring productions or participate in some area aspect of these performances; however, this participation is not a requirement for this course.

ACTING II

1/2 year, 1/2 credit

Prerequisite: Passing grade in Acting 1

This course is built on the foundations laid in Acting 1. Students will develop an awareness of an individual's (and their own) social repertoire and examine how such social interactions can be revealed in a character's words and actions. They will be assigned challenging scenes and monologues in a master class format, where they will engage in open rehearsals and participate in constructive criticism. Students will also be required to engage in peer and self-evaluations regularly. A major portion of this course is given over to developing the special skills required to perform Shakespeare and other classic theatre works. This is a rigorous course and requires considerable out-of-class preparation.

ACTING IN PRODUCTION

1/2 year, 1/2 credit

This pass/fail course is a practicum in acting. Students audition for one of the two annual productions. If accepted, they will then rehearse and perform in the black box (fall semester) or mainstage (spring semester) production by the Pomperaug Theatre Company. Rehearsals occur directly after the regular school day. All aspects of professional performance are included: script analysis, rehearsal protocol, blocking, stage movement, memorization, characterization, physicalization, vocal projection, timing, delivery, character make-up, handling of props, wearing costumes, and responsiveness to fellow actors. It is emphasized throughout that every member of the cast and crew is important. Actors are expected to attend all rehearsals for which they are scheduled. Of course, they are also expected to attend and participate in all scheduled performances before a live audience. Occasionally, the PTC will bring a production to an outside venue, such as the Connecticut Drama Festival; actors are expected to participate in these events.

STAGECRAFT IN PRODUCTION

1/2 year, 1/2 credit in Arts/Vocational Arts

This pass/fail course is a practicum in stagecraft in conjunction with either the black box (fall semester) or mainstage (spring semester) production by the Pomperaug Theatre Company, with a strong emphasis on problem-solving. Students in this course must commit themselves to attending all rehearsals and performances. Rehearsals occur directly after the regular school day. Students are expected to read and become familiar with the play under production. Tasks are assigned depending on the needs of the production. Possible tasks may include assistant director; stage manager; set construction and painting; lighting; sound; props; house management; publicity; and running crew. Students will acquire and develop a stage vocabulary and familiarity with concepts in design and execution of stage technologies. Occasionally, crew members may be expected to participate in outside events, such as the Connecticut Drama Festival.

School of Fine Arts

(Art, Music)

ART

The goals of the high school art program are achieved through specific courses and studio experiences. It enables the student to be involved individually and in groups, in problem-solving, inquiry, and in skill development through various media.

CERAMICS & POTTERY 1

1/2 year, 1/2 credit

A course in techniques of hand-built pottery. Emphasis will be on individual creativity, structure, design, decoration and glazing techniques. The course is an introduction to ceramic sculpture and wheel-throwing. Preferential scheduling will be for seniors, juniors and sophomores.

ADVANCED POTTERY:

It is possible that students scheduled for Advanced Ceramics & Pottery 2, 3 or 4 will be scheduled into one classroom during the same block.

ADVANCED CERAMICS & POTTERY 2

1/2 year, 1/2 credit

Prerequisite: Ceramics & Pottery 1

This course is a second semester offering that builds upon techniques developed in Ceramics and Pottery 1. Students will develop skills in hand building, wheel throwing and sculpture. In addition, students will learn decorating and glazing techniques.

ADVANCED CERAMICS & POTTERY 3

1/2 year, 1/2 credit

Prerequisite: Ceramics & Pottery 2

In this advanced course, students will pursue individualized paths of instruction in the areas of sculpture, wheel throwing and/or hand building. Advanced decorating and glazing techniques within these individualized strands will be developed. As an advanced course, students considering a future in visual art or an art related field are strongly encouraged to take this class. Juniors and seniors will be given priority for placement in this course.

ADVANCED CERAMICS & POTTERY 4

1/2 year, 1/2 credit

Prerequisite: Ceramics & Pottery 3

This course is a second semester offering that builds upon techniques developed in Advanced Ceramics and Pottery 3. Through individualized instruction students work within the strands of sculpture, pottery and/or hand building. As an advanced course, students considering a future in visual art or an art related field are strongly encouraged to take this class.

Juniors and seniors will be given priority for placement in this course.

The Fine Art of Crafts

1/2 year, 1/2 credit

In this half year course students will increase their visual awareness while using a variety of media, techniques and processes to create two and three dimensional works of art such as drawing, painting, paper cutting, sculpture, mosaics, printmaking and fashion.

DRAWING & PAINTING I

1 year, 1 credit

This course introduces students to a variety of art techniques and processes. Units are sequential and build upon one another so that the students will become comfortable using a variety of drawing and painting mediums such as colored pencils, markers, watercolors, acrylics, etc. Students will understand that visual literacy is essential for being a part of contemporary society. They will increase their awareness of contemporary and historical art movements and their role in history. They will seek and make connections between their efforts, other disciplines and daily life.

DRAWING & PAINTING II

1 year, 1 credit

Prerequisite: Drawing & Painting I

Students will focus on an in-depth range of art experiences with a more involved use of two-dimensional materials. They will develop a more sophisticated independent judgement and sense of aesthetic value.

Students considering an art career will develop and prepare a comprehensive art portfolio for college acceptance.

PHOTOGRAPHY I

1/2 year, 1/2 credit

This introductory course will explore both traditional and digital photography. Students will learn the skills needed to create successful images and the basics for successful composition and design. Areas of traditional photography will include camera operation, film processing, and darkroom processing. Students will learn and apply Adobe Photoshop skills in the digital section of this course. Emphasis will be placed on editing, manipulation, and enhancing techniques used to produce high quality compositions. Personal style and individual discovery is expected, therefore expectations are placed on student self direction.

The Art Department owns a limited number of cameras which may be shared among students within the school. It is highly recommended that students work with their own 35mm cameras.

PHOTOGRAPHY II

1/2 year, 1/2 credit - Prerequisite: Photography I

This course is geared for students who have acquired solid knowledge of traditional and digital photography. Major emphasis will be placed on advanced technical skills, artistic applications, experimental processes and problem solving. A high degree of motivation, creative thinking and individual style is expected. Students will build a body of work which will culminate with a quality portfolio for either college submissions or the work force. A high degree of motivation, individual discovery and critical thinking is expected at this level.

SCULPTURE I

1 year, 1 credit

Students will create three-dimensional forms using the additive, subtractive and assembly methods. Students will apply the art elements and principles of design into their works. Materials used may include wire, plaster, wood, paper products, carving materials, and clay. Individual style, a creative approach, craftsmanship, aesthetics and design will be a major focus throughout the course.

SCULPTURE II

1 year, 1 credit

This course will offer an extensive exploration of 3D media that builds from Sculpture I to further develop problem solving skills, creativity and self expression. Students will have the opportunity to explore as sculptors on a more advanced level that includes various media, including wood, paper, plaster, and clay.

STUDIO ART - AP

1 year, 1 credit

Prerequisites: Drawing and Painting II and recommendation by AP teacher

The advanced placement program in Studio Art enables highly motivated students to do college-level work in studio art while still in high school. AP Studio Art is not based on a written examination; instead, candidates submit a portfolio of work for evaluation at the end of the school year.

The guidelines for the AP Studio Art portfolios have been designed to accommodate a variety of interests and approaches to art. The three sections of the portfolio are:

- Quality - the development of a sense of excellence in art;
- Concentration - a commitment in depth to a particular artistic theme & problem; and
- Breadth - a variety of experiences in the formal, technical, and expressive means available to an artist.

MUSIC

Pomperaug Regional High School music department offers students the opportunity to nurture their musical skills through ensemble and classroom experiences. Music students are able to participate in multiple ensembles, further enriching their total musical experience at Pomperaug High School.

As an outgrowth of the large performing ensembles, the opportunity to perform in a smaller group setting may arise. These groups, such as girls choir, flute choir, etc. are open to all PHS music students based on availability. **This is not a scheduled course and no credit is awarded.**



CHAMBER ORCHESTRA

1 year, 1/2 credit

Corequisite: Orchestra.

Members are auditioned and must be a part of the PHS Orchestra. The group rehearses after school and performs in concerts and events throughout the school year. Advanced string repertoire is performed from a variety of composers and genres.

CHAMBER SINGERS

1 year, 1/2 credit

Members are auditioned and must be part of the PHS choral program. The group rehearses after school. A wide variety of selections are performed, including a cappella and show music.

CHORALE

1 year, 1 credit

Prerequisite: Concert Choir

Entrance into Chorale is granted by audition. Literature is selected from some of the most challenging material performed by high school choruses. Students enrolled are expected to

learn their music at an advanced pace.

CONCERT BAND

1 year, 1 credit

Repertoire is selected from standard literature, as well as some "Pop", and "Show" arrangements with the developing musician in mind. Emphasis is placed on nurturing each student's growth in the areas of, tone, balance, intonation, rhythm and musicality. Concert Band is a prerequisite to Symphonic Band. All members of the Symphonic and Concert Bands are members of the Marching Band, which performs at football games and parades. Freshmen can be members of both the Concert Band and Concert Choir.

CONCERT CHOIR

1 year, 1 credit

Repertoire is selected from standard literature, as well as some, "Pop" and "Show" arrangements with the developing musician in mind. Emphasis is placed on nurturing each student's growth in the areas of, balance, diction, and understanding of the text. Concert Choir is a prerequisite to Chorale. Freshmen can be members of both the Concert Band and Concert Choir.

INTRO TO PIANO KEYBOARDING

1/2 year, 1/2 credit

This course is open to students who have no piano experience. The course focuses on the fundamental elements of music reading and piano performance. All students will learn a variety of piano skills and will be able to progress at their own pace. Repertoire will span from Bach to the Beatles. Students interested in developing music reading and piano skills are encouraged to take this class. The skills learned from this class will enable students to create their own songs/compositions.

JAZZ BAND

1 year, 1/2 credit

Members are auditioned and must be part of the PHS band program. The group rehearses after school and performs in concerts and events throughout the year. Advanced jazz compositions are performed.

MUSIC HISTORY AND APPRECIATION

1/2 year, 1/2 credit

This course is open to all students regardless of their musical background. The development of music, and its role in history, art and culture, will be traced from the Middle Ages to the present. Through listening, reading, discussion, projects and class presentations, students will explore important musical compositions and stylistic periods.

MUSIC THEORY

1/2 year, 1/2 credit

This course focuses on the basics of music notation, intervals, chord, scales and rhythm. It is recommended that students be able to identify notes on a staff. Students interested in developing a better understanding of music are encouraged to take the class.

MUSIC THEORY - AP

1 year, 1 credit

Prerequisite: Music Theory and Recommendation by AP Teacher

Prior musical training, including the ability to read traditional notation, is a prerequisite. The course focuses on the study of melody, harmony and all other elements of musical composition. As an advanced course, students considering a future in music or an arts related field are strongly encouraged to take this class.

ORCHESTRA

1 year, 1 credit

Repertoire is selected from standard literature of the Baroque, Classical and Contemporary era, and may also include "Pop" and "Show" arrangements with the developing musician in mind. Students have the opportunity to perform music written for string orchestra as well as full orchestra. Emphasis is placed on nurturing each student's growth in the areas of tone, balance, intonation, rhythm and musicality. Students enrolled are expected to practice consistently.

SYMPHONIC BAND

1 year, 1 credit

Prerequisite: Concert Band

Entrance into Symphonic Band is granted by audition. Literature is selected from some of the most challenging material performed by high school bands. Students enrolled are expected to practice consistently, and be able to learn their music at an advanced pace. All members of the Symphonic and Concert Bands are members of the Marching Band, which performs at football games and parades.

School of Physical Fitness and Health Sciences

HEALTH/PHYSICAL EDUCATION

The Pomperaug High School Wellness Program strives to educate students to be healthy and active throughout their lives. We recognize that regular physical activity is imperative to the well being of all people. We know that good health habits begin in youth. Our focus is to promote self motivated students toward a healthy and active lifestyle by helping them to value wellness, use knowledge of the physiological benefits of exercise, practice good health habits, have the opportunity to perform a variety of movements and appreciate the joy of active living.

The graduation requirement is 1 ½ credits in health and physical education. Students may exceed the credit requirement as described below under the "Electives" program.

GRADE 9 - "FOUNDATIONS OF TRAINING"

1 year, 1/2 credit

Required of all freshmen

The course covers basic understandings of healthy living as well as fundamental applications of fitness training. Topics include: Alcohol, Drugs, Care and Prevention of Injuries, Physical Training Basics, Swimming, Body Composition, STDs and Human Development.

GRADE 10- "HEALTH RELATED FITNESS"

1 year, 1/2 credit

Required of all sophomores

Students in this course reflect on their own well being as it applies to critical factors of health and fitness. Topics include: Problem Solving, Communication, HIV-AIDS, Cardiovascular Fitness, Flexibility, Fitness Testing, Strength, Endurance, Weight Management. Students will take the Ct. physical fitness test.

GRADES 11 AND 12 - "ELECTIVES"

1/2 year, .25 credit

For the two on-line courses, students need to have access to a home computer and internet access.

Each of the course offerings below may be taken by any junior or senior.

Students need to attain at least 1/2 credit from the electives so they need to take at least 2 of these courses. They can exceed the credit requirement and take as many elective courses as they wish. Students can take any single course only one time to complete the requirement. They can retake a course only after completing two different electives.

Dance

(Mostly Teacher Directed) Dance history, dance styles through the ages, fitting dance in a healthy lifestyle, various dance steps, using technology in dance (Flexibility, Muscle Toning, Balance, Movement).

Advanced Dance

Semester Long Course

1/4 credit

Prerequisite: Dance

(Mainly student directed) Students must have completed Dance prior to taking this course. Various dance styles explored. Composition and choreography of dances. Peer teaching of dances. Nutrition for dancers. Dance Fitness.

Outdoor Adventures

Kayaking, Hiking, Orienteering, Snow Activities (Cardio, Skin Care, Safety, Endurance)

Aerobics and Conditioning

Various aerobic methods explored (step aerobics, low impact, Zumba, kickboxing, water aerobics). Basic fitness training (circuits, machines, equipment). Physiology of exercise. Sculpt and tone exercises. Designing personal fitness plans. Stress,

nutrition, weight management (Cardio, Flexibility, Weight Management).

Net Games

Tennis, Badminton, Pickleball, Volleyball (Lifetime Activity, Coordination, Community Resources)

Mixed Martial Arts

Mixed martial arts (MMA) is a combative sport that allows a wide variety of fighting techniques and skills, from a mixture of martial arts and non-martial arts traditions, to be used in competitions. The emphasis in this course will be on training, technique and strategy with minimal contact.

Yoga/Pilates

Experience the basics of Yoga and Pilates. (Stress, Flexibility, Strength, Core)

Self Defense

Great for fitness, self confidence and personal safety. (Strength, Functional Fitness, Safety)

Team Sports 1

Basketball, Soccer, Wiffle Ball (Functional Fitness, Strength, Flexibility, Endurance, Team Play, Sportsmanship)

Team Sports 2

Flag Football, Ultimate Frisbee, Lacrosse (Functional Fitness, Strength, Flexibility, Endurance, Team Play, Sportsmanship)

Individual Sports

Tennis, Golf, Cycling, Swimming (Strength, Endurance, Lifestyle, Community Resources)

Recreational Games

Ping Pong, Badminton, Bowling, Mini Golf, Team Handball, Shuffleboard, Bocci, Horseshoes and more! (Sports Organization, Activity and Socialization)

First Aid and CPR

Students can become certified by the American Red Cross in both First Aid and CPR. The course offers theoretical exposure to medical emergencies. Practical treatment will occur through simulation exercises designed to train the student to respond to the following: patient assessment, basic life support, choking, bleeding and shock, head and spine injuries, fractures, dislocations, medical emergencies, etc.

Lifeguard Training

This course provides students with the knowledge, skills, and practice needed to become well trained and effective

lifeguards at pools and non-surf beaches. In addition to learning preventative lifeguard and facility safety, participants practice rescue approaches, assists, tows, and carries, as well as defenses and escapes. This course teaches first aid for seizures in the water, for heat emergencies, and for hypothermia. The class includes practice in rescue breathing and using special rescue equipment. Emergency care for spinal injury in the water is emphasized. Red Cross certification is awarded for successful completion. Requires outstanding swimming skill.

Weight Training

Learn to muscle train and program design as a personal trainer or strength coach. (Strength, Safety, Goal Setting, Program Planning)

Nutrition and Healthy Eating

Food processing, food labels, nutrients, and food choices.

Walking and Jogging

Walk or jog your way to a healthy heart. (Cardio, Warm-up and cool down, shoes and clothing, safety)

Walking and Jogging (Independent Course)

This course requires that the student have on-line access through a home computer. Students develop cardiovascular fitness goals, develop a personal fitness plan and carry out a program of walking and jogging independently. This class will meet three times after school, once at the beginning of the semester, once after the marking period and again at the end of the semester. (Cardiovascular, Respiration, Physiology of Exercise, Program Planning). Students will use a GPS tracking device (which will be provided) to log workouts out of school.

Online Healthy Foods

Students must check their Region 15 gmail regularly to receive information from the instructor. All work assigned by the instructor will be done independently, electronically, or online. (Food Safety, Local Farming, Additives, GM, Organic Farming)

ELECTIVE:

Grades 9-12

EMERGENCY MEDICAL RESPONDER (EMR)

1 Semester, .50 Credit (**Grades 9-12**)

This elective course is designed for students interested in the medical science and emergency services fields. Through a combination of lecture videos and hands-on experiences, students will learn a variety of important basic life support skills, such as CPR, how to deal with cardiac and respiratory emergencies, traumatic injuries, emotional and psychological emergencies, and bandaging and splinting. Students will actually use the equipment carried on ambulances and apply this

equipment to one another in a controlled environment. The course will be taught by a certified health teacher/staff member at PHS, as well as personnel from Southbury Ambulance. Students will have the option of taking the State of CT Exam for EMR Certification at the end of the course. This is the medical basic certification required by all police departments in Connecticut, as well as many fire departments and EMS providers.



THE MARY I. JOHNSON PROGRAM

The Mary I. Johnson Program (formerly Alternative Education) is a satellite program of PHS which provides repeating freshman and tenth through twelfth graders the small group, structured, specialized program they require in order to complete their high school graduation requirements. Students must take the same courses, meet the same standards, and, if successful, receive a regular PHS diploma. Students must be recommended for placement by an admissions committee consisting of representatives from both PHS and MIJ.

Committee members will review and consider the academic needs of each individual student, his/her academic record, and whether placement in the MIJ alternative school is appropriate.

Student Support Services

Hours: M-Th 7:30 a.m.-3:00 p.m.; Friday 7:30a.m.-2:00 p.m.

Located across from the school cafeteria, tutors are available throughout the day (both by special arrangement and/or drop-in) to support students with academics including projects and assignments, content-related questions, and study skills.

SPEECH AND LANGUAGE

The Speech, Language and Hearing Program provides services for students demonstrating a communication disorder which adversely affects his or her educational performance. Programs may be provided in individual, small group and/or classroom settings. The Speech/Language Pathologist works closely with classroom teachers and other staff members involved with the student in an effort to facilitate communication skills and promote academic success.

SPECIAL EDUCATION RESOURCE

The Special Education Resource Program provides assistance and support to those students with special education needs, who can be successful in the regular classes provided they receive some extra support and assistance from a special education teacher. These services may be provided in the regular classes working collaboratively with the regular education teacher and/or in a special education resource room. These teachers also provide consultative services to the regular education teachers of these students and other at risk students who may not meet criteria for special education placements.

SPECIAL EDUCATION LEARNING CENTER

Learning Centers provide special individualized, education programs to students who are unable to adjust to and/or benefit from a regular classroom environment even with support. Students may participate in one or more learning center classes dependent upon their individual needs. They are also provided with practical social and emotional experiences designed to help them develop more positive attitudes toward themselves and others. This program also has a prevocational/vocational component to begin helping these students to prepare for the transition into the adult world.

COURSE OFFERINGS INDEX

COURSE #	COURSE	CREDIT	LEVEL	GRADES AVAILABLE				PAGE
				9	10	11	12	
ENGLISH								
1232	American Studies**	2	A			X		1
1018	Creative Writing I	.50	A	X	X	X	X	2
1012	English I	1	A	X				1
1011	English I	1	H	X				1
1022	English II*	1	A		X			1
1021	English II*	1	H		X			1
1032	English III*	1	A			X		1
1031	English III*	1	H			X		1
1391	English III*: AP Language	1	AP			X		1
1047	Senior English and Composition*	.50	A				X	2
1491	English IV*: AP Literature & Comp.	1	AP				X	2
1016	Public Speaking	.50	A	X	X	X	X	3,17
1049	Philosophy and Film	.50	A				X	2
1050	Contemporary Poetic Voices	.50	A				X	3
1048	Science Fict:The Human Mind & MW	.50	A				X	2
1051	Shakespeare on Stage & Screen	.50	A				X	3
1052	Advanced Creative Writing	.50	A				X	2
1053	He Said, She Said	.50	A				X	3
1055	Contemporary World Fiction	.50	A				X	3
SOCIAL STUDIES				9	10	11	12	
1232	American Studies**	2	A			X		1
2291	U.S. Government and Politics:AP*	1	AP				X	4
2191	European History: AP*	1	AP			X	X	5
2036	Intro To Psychology I*	.50	A			X	X	4
2042	Practical Law	.50	A			X	X	4
2432	Participatory Civics	.50	A			X	X	4
2037	Psychology II*	.50	A			X	X	4
2391	Psychology: AP*	1	AP				X	5
2032	United States History*	1	A			X		4
2031	United States History*	1	H			X		4
2091	United States History: AP*	1	AP			X	X	4
2012	World History I	1	A	X				3
2011	World History I	1	H	X				3
2022	World History II*	1	A		X			3
2021	World History II*	1	H		X			3
WORLD LANGUAGES				9	10	11	12	
3012	French I	1	A	X	X	X	X	5
3022	French II*	1	A	X	X	X	X	5
3021	French II*	1	H	X	X	X	X	5
3032	French III*	1	A		X	X	X	5
3031	French III*	1	H		X	X	X	6
3041	French IV	1	H			X	X	6
3091	French V* AP	1	AP				X	6
3112	Spanish I	1	A	X	X	X	X	6
3122	Spanish II*	1	A	X	X	X	X	6
3111	Spanish II*	1	H	X	X	X	X	6
3132	Spanish III*	1	A		X	X	X	6
3131	Spanish III*	1	H		X	X	X	6
3142	Spanish IV*	1	A			X	X	7
3141	Spanish IV*	1	H			X	X	7
3151	Spanish V*	1	H				X	7
3191	Spanish V* AP	1	AP				X	7

*Prerequisite(s), **Corequisite, +Science courses with labs will receive additional credit (beyond 1.0) based on the number of lab hours per year.

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COURSE #	COURSE	CREDIT	LEVEL	GRADES AVAILABLE				PAGE
MATHEMATICS				9	10	11	12	
4016	Algebra I Sequence I - Part 1*	.50	C	X	X			7
4017	Algebra I Sequence I - Part 2*	.50	C	X	X			7
4018	Algebra21	1	A	X				8,19
4012	Algebra I*	1	A	X	X	X	X	8
4211	Algebra I*	1	H	X	X	X	X	8
4025	Algebra I Sequence II*	1	C		X	X		8
4043	Introduction to Algebra II*	1	A			X	X	8
4032	Algebra II*	1	A		X	X	X	8
4021	Algebra II*	1	H		X	X	X	8
4035	Applied Geometry - Part 1*	.50	C		X	X	X	8
4036	Applied Geometry - Part 2*	.50	C		X	X	X	9
4151	Calculus*	1	H				X	9
4091	Calculus* AP	1	AP				X	9
4432	Personal Finance*	1	A			X	X	9
4022	Geometry*	1	A	X	X	X	X	9
4011	Geometry*	1	H	X	X	X	X	9
4028	Geometry21	1	A		X			9,19
4031	Precalculus*	1	H			X	X	9
4042	Precalculus*	1	A			X	X	9
4142	Prob/Statistics *	1	A			X	X	10
4191	Statistics* AP	1	AP		X	X	X	10
SCIENCE				9	10	11	12	
5052	Anatomy & Physiology/Lab*	1.00+	H			X	X	10
5022	Biology/Lab*	1.00+	A		X			10
5011	Biology/Lab*	1.00+	H	X	X			11
5091	Biology/Lab: AP*	1.00+	AP			X	X	11
5322	Bio21/Lab*	1.00+	A		X	X	X	10,19
5032	Chemistry/Lab*	1.00+	A			X	X	11
5021	Chemistry/Lab*	1.00+	H		X	X	X	11
5191	Chemistry/Lab: AP*	1.00+	AP			X	X	11
5038	Chemistry 21/Lab**	1.25	A			X		11,19
5222	Earth Science I*	.50	A			X	X	11
5232	Earth Science II*	.50	A			X	X	11,12
5402	Environmental Science I*	.50	A			X	X	12
5502	Environmental Science II*	.50	A			X	X	12
5412	Field Biology*	.50	A			X	X	12
5310	Forensic Science*	.50	A			X	X	12
5313	Forensic Science II*	.50	A			X	X	12
5311	Marine Biology*	.50	A			X	X	12
5612	Meteorology*	.50	A			X	X	12
5013	Physical Science**	1.00+	C	X				12
5012	Physical Science**	1.00+	A	X				12
5018	Earth & Energy Essentials(E3)	1.00	A	X				19
5042	Physics/Lab *	1.00+	A				X	13
5031	Physics/Lab*	1.00+	H			X	X	13
5291	Physics/Lab: AP*	1.00+	AP				X	13
5048	Physics21/Lab*	1.25	A				X	13,19

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COURSE #	COURSE	CREDIT	LEVEL	GRADES AVAILABLE	PAGE
BUSINESS AND FINANCE TECHNOLOGY				9 10 11 12	
6414	Accounting I/Proprietorship	.50		X X X X	14
6415	Accounting II/Partnership*	.50		X X X X	14
6416	Accounting III/Corporate*	.50		X X X X	14
6417	Accounting IV/Advanced Corporate*	.50		X X X X	14
6440	CWE*	1		X X	13
6441	CWE* (Work)	.25-1		X X	13
6418	E-Commerce Entrepreneurship	1		X X	15
6421	Economics	.50		X X X X	15
6461	Marketing	.50		X X X X	15
FAMILY AND CONSUMER SCIENCES				9 10 11 12	
6310	Culinary Arts I	.50		X X X X	15
6311	Culinary Arts II*	.50		X X X X	15
6320	Exploring Childhood	.50		X X X X	15
6321	Exploring Childhood II*	.50		X X X X	15
6317	Interior Design	.50		X X X X	15
6312	International Cultures & Cuisine*	.50		X X X X	15
TECHNOLOGY EDUCATION				9 10 11 12	
6220	Advanced Graphics*	.50		X X X X	17
6213	Animation	.50		X X X X	16
6229	Architectural Design	.50		X X X X	16
6338	3D Modeling & Animation	1		X X	20
6218	Computer Design I	.50		X X X X	16
6214	Computer Design II*	.50		X X X X	17
6239	Construction Tech I	.50		X X X X	16
6248	Construction Tech II*	.50		X X X X	16
6008	Skills21	1		X	19
6018	Research, Design, Development	1		X X X	17
6228	Digital Media & Movie Making*	1		X X X X	17
6219	Graphic Communication	.50		X X X X	17
6265	Information Systems	.50		X X X X	17
6237	Technological Enterprise	.50		X X X X	16
6246	Transportation Technology I	.50		X X X X	16
6247	Transportation Technology II*	.50		X X X X	16
6221	Video Production I	.50		X X X X	17
6223	Video Production II*	.50		X X X X	17
THEATRE ARTS				9 10 11 12	
6501	Acting I	.50		X X X X	21
6502	Acting II*	.50		X X X X	21
6513PM	Acting in Production (1st sem.)	.50		X X X X	21
6514PM	Acting in Production (2nd sem.)	.50		X X X X	21
6511PM	Stagecraft in Production (1st sem.)	.50		X X X X	21
6512PM	Stagecraft in Production (2nd sem.)	.50		X X X X	21

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COURSE #	COURSE	CREDIT	LEVEL	GRADES AVAILABLE				PAGE
				9	10	11	12	
ART				9	10	11	12	
6020	Ceramics & Pottery 1	.50		X	X	X	X	21
6021	Adv. Ceramics & Pottery 2*	.50		X	X	X	X	22
6022	Adv. Ceramics & Pottery 3*	.50			X	X	X	22
6023	Adv. Ceramics & Pottery 4*	.50			X	X	X	22
6029	The Fine Art of Crafts	.50		X	X	X	X	22
6030	Drawing and Painting I	1		X	X	X	X	22
6031	Drawing and Painting II*	1			X	X	X	22
6010	Photography I	.50		X	X	X	X	22
6011	Photography II*	.50		X	X	X	X	22
6040	Sculpture I	1		X	X	X	X	22
6041	Sculpture II*	1			X	X	X	22
6091	Studio Art* AP	1	AP		X	X	X	23
MUSIC				9	10	11	12	
6132PM	Chamber Orchestra**	.50			X	X	X	23
6123PM	Chamber Singers**	.50		X	X	X	X	23
6115	Choir/Band	1		X	X	X	X	N/A
6121	Chorale*	1			X	X	X	23
6100	Concert Band	1		X	X	X	X	23
6120	Concert Choir	1		X	X	X	X	23
6142	Intro Piano Keyboarding	.50		X	X	X	X	23
6103PM	JazzBand**	.50		X	X	X	X	23
6141	Music History and Appreciation	.50		X	X	X	X	23
6140	Music Theory*	1		X	X	X	X	23
6191	Music Theory AP*	1	AP		X	X	X	24
6112	Orchestra	1		X	X	X	X	24
6118	Orchestra/Symphonic Band	1		X	X	X	X	N/A
6101	Symphonic Band*	1			X	X	X	24

*Prerequisite(s), **Corequisite

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COURSE #	COURSE	CREDIT	LEVEL	GRADES AVAILABLE				PAGE
				9	10	11	12	
HEALTH/PHYSICAL EDUCATION								
9600	Foundations of Training (9)	.50		X				24
9621	Health Related Fitness (10)	.50			X			24
9624	Advanced Dance*	.25				X	X	24
9604	Dance	.25				X	X	24
9605	Outdoor Adventures	.25				X	X	24
9606	Aerobics & Conditioning	.25				X	X	24
9607	Net Games	.25				X	X	25
9608	Mixed Martial Arts	.25				X	X	25
9609	Yoga/Pilates	.25				X	X	25
9610	Self Defense	.25				X	X	25
9611	Team Sports 1	.25				X	X	25
9612	Team Sports 2	.25				X	X	25
9613	Individual Sports	.25				X	X	25
9614	Recreational Games	.25				X	X	25
9615	First Aid and CPR	.25				X	X	25
9617	Lifeguard Training	.25				X	X	25
9616	Weight Training	.25				X	X	25
9619	Nutrition and Healthy Eating	.25				X	X	25
9620	Walking and Jogging	.25				X	X	25
9623PM	Walking and Jogging (Independent)	.25				X	X	25
9622	Online Healthy Foods	.25				X	X	25
8027	EMR	.50		X	X	X	X	25

*Prerequisite(s), **Corequisite

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