

POMPERAUG HIGH SCHOOL



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2019-2020 Program of Studies



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SCHOOL INFORMATION

CORE VALUES & 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.

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 addition 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. Jessica Sciarretto, Director of Student Services, P.O. Box 395, 286 Whittemore Road, Middlebury, Connecticut 06762, 203-758-1729. The Coordinators of the District's efforts to comply with Title IX of the Education Amendments of 1972 are Mrs. Heidi Szymanski, Pomperaug High School, 234 Judd Road, Southbury, Connecticut 06488, 203-262-3200 and Mr. John Romeo, Principal Gainfield Elementary School, 307 Old Field Road, Southbury, Connecticut 06488, 203-264-5312.

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.

POMPERAUG HIGH SCHOOL GRADUATION REQUIREMENTS

ACADEMIC REQUIREMENTS

In order to be eligible to graduate from Pomperaug High School all students must meet the following graduation requirements as approved by the Region 15 Board of Education.

Graduation Requirements	
English	4 Credits
Social Studies	3.5 Credits
Math	3 Credits
Science	3 Credits
Fine Arts or CTE*	1 Credit
PE**/Health	2 Credits
Electives	6.5 Credits
Total	23 Credits

*CTE=Career & Technical Education

**PE=Physical Education

DEPARTMENT SPECIFICATIONS

Social Studies: Must include Modern World History, US History, and a Civics course

Mathematics: Must include one course covering Algebraic topics and one covering Geometric topics.

Accounting may count as a Math course.

Science: Must include Integrated Earth & Physical Science and Biology. Note: Beginning with the Class of 2022, students are required to take Chemistry or an equivalent course.

PE/Health: The required .5 credit of Health is embedded in the 9th and 10th grade courses. During the 11th and 12th grade school years students are required to take two .5 credit PE electives.

Electives: May include courses in any department on top of the required number.

ACADEMIC POLICIES & REGULATIONS

COURSE LOAD

Each year, all students are required to enroll in a minimum amount of credits per semester. However, the Principal may allow exceptions to the 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 or special health circumstances that preclude attending school for a full day). These requirements include:

9th & 10th grade students must take 7 credits

11th grade students must take 6 credits

12th grade students must take 5 credits

*Students that enter 12th grade with less than 20 credits are required to take 6 credits.

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 and earned at least an F+. Courses offered may vary. Please see your counselor for further information.

MARKING SYSTEM

A letter marking system is used at PHS. The 4.0 scale below is used to calculate Grade Point Average (GPA).

Letter Grade	100 Point Scale Equivalent	4.0 Point Scale Equivalent
A+	95 - 100	4.5
A	90 - 94	4.0
B+	85 - 89	3.5
B	80 - 84	3.0
C+	75 - 79	2.5
C	70 - 74	2.0
D	65 - 69	1.0
F+	50 - 64	0
F	< 50	0
WF	Withdraw/Fail	0
AUD	Audit (<i>No Credit</i>)	Not Reported
P	Pass (<i>No Credit</i>)	Not Reported
M	Medical Excuse (<i>No Credit</i>)	Not Reported
I	Incomplete (<i>All incompletes must be closed out within five school days after the marking period unless special permission is granted by administration.</i>)	

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. A cumulative, non-weighted GPA of **all** the student's courses will be computed. For the weighted GPA, those courses that are leveled (as described in the next section) will have level factors assigned to them: 2=Academic, 3=Honors and 4=AP. A student's weighted GPA average level factor will be computed and then added to the unweighted-GPA of all courses. For instance, a student might have an unweighted GPA of 3.3, and be taking a mix of academic level and honors level courses with an average weighted level factor of 2.8. The weighted GPA is then 6.1.

COURSE LEVELS

Courses that are leveled are listed in the description. The three levels include Academic, Honors, and Advanced Placement (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 achievement data. The grade weighting system assigns more quality points depending on the level. 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 completing an override form.

SENIOR CAPSTONE PROJECT

During their Senior year, students will work in Advisory to complete their Senior Capstone Project. This is a culminating project that is selected by the student. It will fulfill their civic responsibility for Graduation and should represent an interdisciplinary project-based learning. The projects should reflect the students' passions and dedication to the larger school community. There will be a student expo at the end of the school year for students to present their work to their peers. The Advanced Placement (AP) Capstone may serve as this project and these students will be able to use the time in their Advisory classes to work.

HONOR ROLL REQUIREMENTS

HIGH HONORS - Requires a grade point average (GPA) of 3.7 for that quarterly marking period with no one grade lower than a B.

HONORS - Requires a grade point average (GPA) of 3.2 for that quarterly marking period with no one grade lower than a 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

(SocieteHonoraire 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.

SCIENCE NATIONAL HONOR SOCIETY

In order to be considered for induction into the Science National Honor Society, students must meet the following criteria: have completed two years of secondary school science, maintained a B+ average in all science classes, maintained an overall GPA of 3.5, be enrolled in at least one honors or AP science class, and be enrolled in at least one AP science class by senior year. A grade of C+ or better must be maintained in honors science courses and a C or higher in AP science courses. Formal inductions are held in October and members are required to complete twelve hours of science volunteer service annually.

STUDENT HOMEWORK

The ability to work successfully without supervision is an important attribute that 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 is 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.

Students should expect to engage in approximately one to three hours of homework per night. This may include, but are not limited to:

- 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

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. These expectations and requirements will take various forms based on the course and curriculum. PowerSchool and Google Classroom are primary resources used throughout all content areas.

COURSE SELECTION & REGISTRATION

REGISTRATION PROCEDURES

The Program of Studies 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.

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 lose privileges including, but not limited to; early dismissal, late arrival, and parking.

Once schedules have been issued, changes in courses based on preferences cannot be made. Course requests after the registration window has closed and prior to schedules being issued will be placed on a waitlist for that course. Students must meet with their Counselor to be added to this waitlist. There is no guarantee that space will open in the course and students on the waitlist will be given priority on a first come first serve basis.

COURSE WITHDRAWALS, LEVEL CHANGES, & ADDITIONS

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 in the Counseling Office. The window to withdraw from a course is 24 total school days from the start of the course. Withdrawals that occur within this approved window will carry no academic penalty. After that period of time, a student who withdraws will receive a mark of Withdrawal Failure (WF) on the transcript, which has the same effect as any other failure on class standing. A student will not be allowed to withdraw from a class if it results in the student carrying less than the required number of courses.

Students may add a course only when they have a free period and meet all prerequisites. The window to add a course is 12 total school days from the start of the course. Course selection is based on availability

and meeting graduation requirements. Students and parents are advised to plan their schedules appropriately during course registration to avoid the necessity of changing classes during the school year. Teacher recommendations play an important role in this process and it is recommended that they are used as the primary driver during the course registration process. **A student going through the process of dropping or adding a course may not stop going to class and/or start going to another class until the appropriate form is signed by all parties and the counselor personally informs the student that the change has been finalized in PowerSchool.**

Students who struggle academically are encouraged to meet with their teachers for remediation and support. If these interventions are ineffective it may be necessary for the student to drop down a level if there is a course available. This process requires the approval of the teacher, counselor, and department administrator. Students are not eligible to move up a level after the add/drop window (24 total school days from the start of the course).

PREREQUISITES AND SEQUENCING

Prerequisites are required for many courses. The scope and sequence must be followed per the course descriptions. It is possible to double-up on some courses that are co-requisites upon the recommendation of the teacher and counselor.

COURSE AUDIT

Auditing a course allows a student a no-risk chance to learn for their own growth and pleasure. Although students receive no academic grade or quality points in their GPA, they are required to participate in all course activities. An audited course can only be taken as an addition to the required course load and is not included in the credits required for graduation. Students cannot audit a course at the same time they are taking the same course for credit or before they take a course. Students who do not follow all class academic, attendance, and behavioral expectations may be removed from the course at the discretion of administration. 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 and will not impact GPA. Students must register for a course within the same add/drop window (24 total school days from the start of the course).

INDEPENDENT STUDY

Independent Study is a self-directed learning activity. Subjects for Independent Study are those which are neither offered in the current Master Schedule or available for a student. 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 and must be turned in within the add/drop window (24 total school days from the start of the course). Independent Study does not count as one of required credits in a student's course load. Grades are Pass/Fail 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 aid assistant, and academic tutor. A student may earn .25 credits or .50 elective 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 GPA.
- Students who earn the maximum internship credit prior to the junior or senior year are encouraged to enter the Cooperative Work Experience program if additional credit in the skill area is desired.

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 a course 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. The rules that govern course withdrawals apply to VHS courses; i.e. a WF **will be issued** if the VHS course is not dropped within the add/drop window (24 total school days from the start of the course).

ENGLISH

The Pomperaug High School English program is designed to foster students' skills and engagement in the areas of reading, listening, viewing, writing, and speaking. These receptive and expressive skills cross genres and require students to have control over their understanding and use of language. Students will read fiction and nonfiction 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 of well-written texts. Throughout their four years of English, students will write clearly, effectively and confidently, for a variety of purposes and in narrative, informative, and argumentative modes. As part of the learning process, students will set literacy-based goals and reflect upon their progress throughout the year.

ENGLISH I

1 Credit (Levels: Academic & Honors)

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 Credit (Levels: Academic & Honors)

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 Credit (Levels: Academic & Honors)

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 English Language & Composition

1 year, 1 credit (Level: AP)

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

This course is designed to prepare students for the AP Language and Composition exam and help students gain college level skills. 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. Students should be aware that their chosen elective may run during a different block than their Senior English and Composition course depending on enrollment and scheduling.

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 English Literature and Composition

1 year, 1 credit (Level: AP)

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

This course is designed to prepare students for the AP Language and Composition exam and help students gain college level skills. 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

CONTEMPORARY ISSUES

1/2 year, 1/2 credit

Open to students in grades 10-12.

Contemporary Issues will seek to build foundational knowledge of several current issues within our society. Utilizing nonfiction articles and texts, memoirs, and fiction, students will explore why controversy exists as they grow to understand why people feel the way they do about current topics. By focusing on differing views, students will need to think critically about current belief systems in the United States and worldwide. As a class, we will develop discussion skills and learn to isolate and understand bias in news articles and case studies. Students will ultimately formulate their own opinions regarding the issues which ties to the development of global citizenship and the Social Studies electives courses.

PUBLICATION & YEARBOOK DESIGN

Full Year 1 credit

Open to students in grades 11-12.

The course in Yearbook has two primary objectives: 1) to teach students the skills required to create a published yearbook and 2) to produce a yearbook that reflects journalistic standards. Time will be devoted to students learning their rights and responsibilities as student journalists, gaining proficiency in desktop publishing with Herff Jones EDesign, incorporating advanced design principles such as grid design and use of layered coverage into the yearbook. Students will be learning and using journalistic writing techniques, developing student leadership and decision-making skills, creating

and executing marketing plans to sell yearbooks and advertisements in the volume and most importantly, producing a yearbook staff, the school and community can enjoy.

CREATIVE WRITING I

1/2 year, 1/2 credit

Open to students in grades 9-11.

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.

SENIOR CREATIVE WRITING

1/2 year, 1/2 credit

Open to students in grade 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.

**This course is for students who have not previously taken Creative Writing I.*

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.

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. **This course does not meet NCAA core course requirements.**

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

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.

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.

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 Modern World History sequence, United States History and minimally a half year course related to civic education.

MODERN WORLD HISTORY

1 year, 1 credit (Levels: Academic & Honors)

In this course, 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 (Levels: Academic & Honors)

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

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.

AP UNITED STATES HISTORY

1 year, 1 credit (Level: AP)

This course is designed to prepare students for the AP U.S. History exam and help students gain college level skills. (Juniors and Seniors)

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 Modern World History 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 Modern World History 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

CONVERSATIONS ON RACE

½ year, ½ credit

Open to juniors and seniors. Sophomores may enroll pending permission of the Chair.

Students in conversations on Race will explore the role that perspective plays in shaping opinion, examine the historical aspects of race in the United States and investigate and create a plan for racial healing. Students will be actively engaged in learning why and how significant issues regarding race manifest themselves in our modern society. Students will explore how personal experience and perspective lead to explicit bias and the implications of those processes. Students will map their expectations and challenge them by participating with a more urban school in the state in a day experience where they compare their experience with their preconceived expectations and attitudes.

HUMAN RIGHTS

½ year, ½ credit

Open to juniors and seniors. Sophomores may enroll pending permission of the Chair.

Students in Human Rights will examine the history of human rights and the Declaration of Human Rights, explore national and international human rights violations and case studies and investigate how human right violations have been addressed and explore ways in which they can help to educate others and or take action. The course will provide historical background on the history of human rights, with a particular emphasis on universal human rights in the modern world. Students will be

asked to think about and critically examine the way in which human rights have been defined over time and throughout the world. Students will examine some of the more serious violations of human rights that have been occurred in the past, as well as the present day.

GLOBAL PROBLEM SOLVING

1/2 year, 1/2 credit

Open to juniors and seniors. Sophomores may enroll pending permission of the Chair.

Students in Global Problem Solving will be actively engaged in learning how significant world issues manifest themselves on the local level, and then planning and implementing a high impact service learning project. The course will be divided into two experiences. The first part of the course will be based on the analysis of a global problem using a Systems Thinking Approach. Students will evaluate the effectiveness of governments, non-governmental organizations, and nonprofits in addressing this problem. The second part of the course will be inquiry-based. Students will work in small groups to evaluate a global problem at the local level, and design and implement a plan to create sustainable change.

PSYCHOLOGY

1/2 year, 1/2 credit

Open to sophomores, juniors, and seniors.

This course introduces some of the major principles and concepts of psychology as applicable to today's society. Students will draw connections between these concepts and their everyday lives. Topics will include states of consciousness, personality theory and development, adolescent psychology, stress, emotions, social theories, 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.

SOCIOLOGY

1/2 year, 1/2 credit

Open to sophomores, juniors, and seniors.

Students will be introduced to the sociological study of society. Sociology focuses on the systematic understanding of social interaction, social organization, and social change. Students will explore the major themes in sociological thinking that include the relationship between the individual and society, how society is both stable and changing, and the causes and consequences of social inequality. Understanding sociology helps discover and explain social patterns and see how such patterns change over time and in different settings.

WORLD GEOGRAPHY

½ year, ½ credit

Open to sophomores, juniors, and seniors.

Students will be introduced to geographic thinking and knowledge of the geography of specific regions around the world. In particular, students will take a look at how land, resources and climate have shaped societies and how people have adapted to and altered the Earth's features to suit their needs. Students will utilize geographic resources, inquiry, research and technology to ask and answer geographical questions to develop a better understanding of the course's key elements.

AP PSYCHOLOGY

1 year, 1 credit (Level: AP)

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 introduces some of the major principles and concepts of psychology as applicable to today's society. Students will draw connections between these concepts and their everyday lives. Topics will include states of consciousness, personality theory and development, adolescent psychology, stress, emotions, social theories, and careers in psychology. Students are expected to actively participate in class discussions and do research on chosen topics. This course is designed to prepare students for the AP Psychology exam and help students gain college level skills.

AP EUROPEAN HISTORY

1 year, 1 credit (Level: AP)

Prerequisite: 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 teachers.

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. This course is designed to prepare students for the AP European History exam and help students gain college level skills.

AP MACROECONOMICS

1 year, 1 credit (Level: AP)

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.

Students will learn to think like economists - to question, to evaluate marginal costs and marginal benefits, to explore the many ways that one action will cause secondary actions. The course will provide students with an understanding of the impact of monetary and fiscal policies on economic growth, and will include case studies, graphical analysis of macroeconomic concepts and real life application of macroeconomic concepts. A.P. Macroeconomics will emphasize the study of national income, economic performance measures, economic growth and international economics. The aim of this course is to provide the student with a learning experience equivalent to that obtained in a typical college level introductory course. This course is designed to prepare students for the AP Macroeconomics exam and help students gain college level skills.

AP U.S. GOVERNMENT AND POLITICS

1 year, 1 credit (Level: AP)

Prerequisite: 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. This course is designed to prepare students for the AP Government and Politics exam and help students gain college level skills.

WORLD LANGUAGES & CULTURAL STUDIES

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.

FRENCH I

1 year, 1 credit (Levels: Academic)

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.

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

FRENCH II

1 year, 1 credit (Levels: Academic)

Prerequisite: Successful completion of middle school 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

1 year, 1 credit (Levels: Honors)

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 Academic leveled curriculum, honors level students will be expected to complete the following:

- Oral presentation in the language lab per chapter and special cultural project.
- Supplemental readings and writing assignments in the target language.
- Alternative assessments as assigned by the teacher.

FRENCH III

1 year, 1 credit (Levels: Academic)

Prerequisite: A minimum grade of C in French II 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

1 year, 1 credit (Levels: Honors)

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 Academic leveled curriculum, honors level students will be expected to complete the following:

- Increased Oral communication /listening comprehension and verbal assessments.
- Supplemental readings and original writing assignments in the target language.
- Alternative assessments as assigned by the teacher.

FRENCH IV

1 year, 1 credit (Levels: Honors)

Prerequisite: French III and Teacher Recommendation

This course focuses on developing and refining oral, listening and written proficiency. A variety of authentic material, short stories, music and poems serve as a vehicle to examine the Francophone world. Equal emphasis is given to verbal expression and writing. Second semester focuses on reading, analyzing and discussing an original novel with a continued review of grammar

AP FRENCH V

1 year, 1 credit (Level: AP)

Prerequisite: Teacher recommendation.

This course prepares the students to take the Advanced Placement French language examination in May. The main objective of this rigorous program is to perfect students' fluency in written, oral and listening communication. This course is comparable to a third-year university course with emphasis

on grammar study, conversation, composition and cultural awareness. Students who take the Advanced Placement exam may qualify for college credit.

SPANISH I

1 year- 1 credit (Levels: Academic)

This course is intended for beginners, as well as students who have taken Spanish, but have not mastered basic skills. This course presents and practices the language skills typical of the novice level. Students will be expected to perform in both a written and oral manner and demonstrate listening and reading comprehension skills. Culture aspects are part of each unit of study.

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

SPANISH II

1 year- 1 credit (Levels: Academic)

Prerequisite: Successful completion of 7th and 8th grade Spanish 1. A minimum grade of C+ is recommended for success.

This course concentrates on the development of oral and written proficiency. The focus will be on self-description and one's role within a community. Cultural customs and traditions of Spanish speaking countries are presented to create self-awareness of differences and similarities. Students are expected to communicate in the target language.

SPANISH II

1 year- 1 credit (Levels: Honors)

Prerequisite: Middle school or high school teacher recommendation as well as having earned a final grade of 90% or higher in Spanish 1.

Honors level is the same as Spanish 2 academic but includes a more extensive and rigorous pace as well as additional performance-based activities.

SPANISH III

1 year, 1 credit (Levels: Academic)

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

Spanish III builds upon what was learned in Spanish I and II. Spanish III emphasizes communication in the language, both spoken and written. Students practice conversations and telling stories in the past and present as well as skills to help the student be an independent learner of a language.

SPANISH III

1 year, 1 credit (Levels: Honors)

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 2 Honors and a pre-requisite for Spanish 4 Pre-AP. The curriculum is based on Spanish I and II and is more rigorous than Spanish 3 academic. Students will read, hear and view authentic materials as well as communicate in various tenses and modes and with an ever-broadening vocabulary. Culture continues to be incorporated into the curriculum. Students are expected to communicate in Spanish.

SPANISH IV

1 year, 1 credit (Levels: Academic)

This course reviews previously learned material from prior courses. The focus of the course is to increase production of language through the development of grammatical concepts as well as expansion of vocabulary. In addition, more complex reading through novels are introduced along with more extensive writings and speaking assessments. At this level students are expected to communicate entirely in Spanish.

SPANISH IV

1 year-1 credit (Levels: Honors)

Prerequisite: teacher recommendation and a grade of 90% or higher in Spanish 3 Honors

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.

SPANISH IV

1 year-1 credit (Levels: Honors/Pre-AP)

Prerequisite: teacher recommendation and a grade of 90% or higher in Spanish 3 Honors

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.

AP/ECE SPANISH V

1 year, 1 credit (Level: AP)

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 FOR HEALTHCARE PROFESSIONALS

.5 year, .5 credit (Level: Academic)

Prerequisite: Spanish 3

This course would center on the use of Spanish in the medical world. Students would practice situations that might occur in a medical situation, from intake interviews and understanding the needs of the patient to helping the patient understand what needs to be done and how it is to be done. Students would build upon the vocabulary they have already learned regarding health as well as pertinent grammar such as commands. Cultural aspects of healthcare may also be addressed.

INTRODUCTION TO ITALIAN

1 year, 1 credit (Level: Academic)

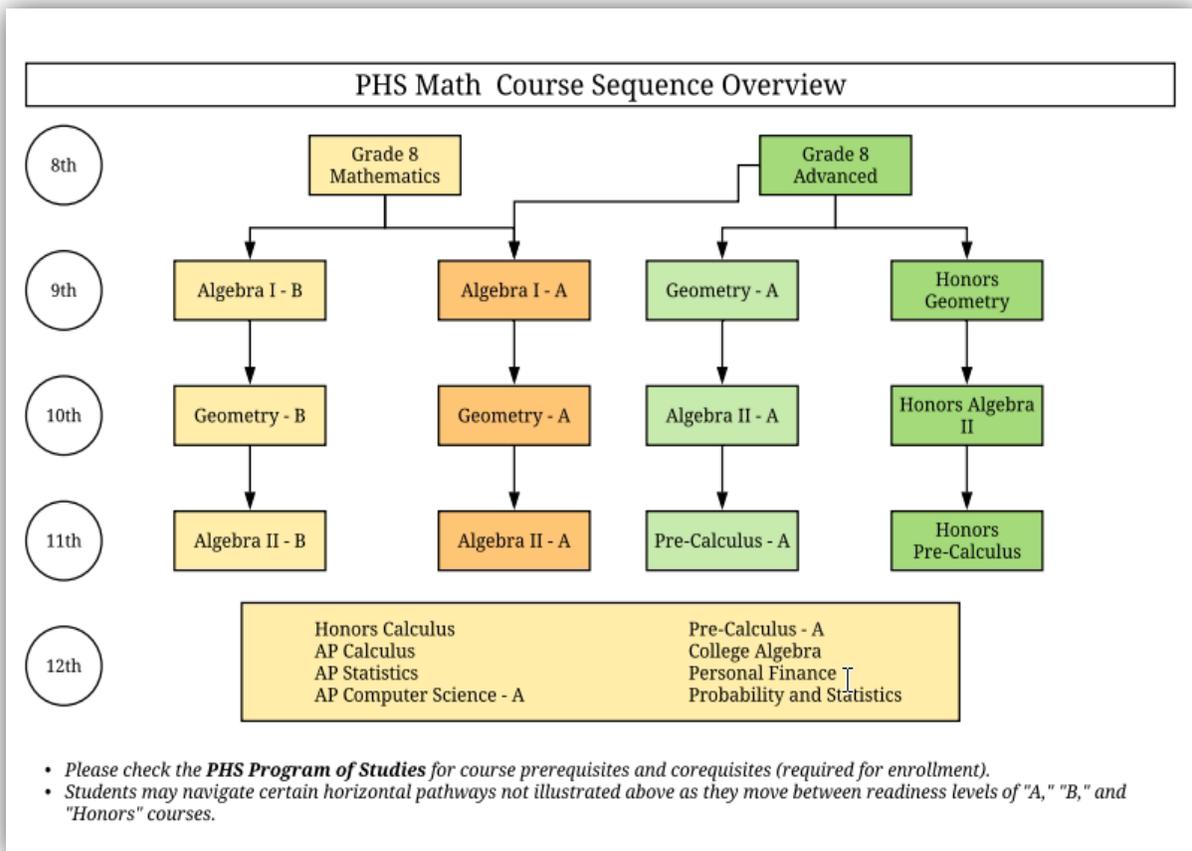
The introductory (Level 1) course would teach students the basic elements of Italian language and culture. Interactive lessons, authentic resources, and technology would be combined with basic grammar and vocabulary to build students' proficiency in both the spoken and written language.

MATHEMATICS

The mathematics program at Pomperaug High School is designed to offer a variety of courses that appeal to students' interests and are aligned with their abilities. Course sequences are designed to incorporate repeated exposure to a range of numerical, algebraic, geometric and statistical concepts that allow students to recognize mathematical themes. Students ultimately acquire the confidence to assess a problem, select the appropriate tool, execute a solution and evaluate the results. The expected outcome is that students will be able to effectively apply these skills in their daily life and as they pursue future endeavors in the study of mathematics.

Students who require extra support in math may be recommended to attend Math Lab, a support program aligned with the framework of Scientific Research-Based Interventions (SRBI). Teachers within the mathematics department work with students to target areas in need of improvement 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 chairperson.

Note: To fulfill graduation requirements, all students are required to successfully complete courses including algebra I, geometry and algebra II or probability and statistics.



Algebra I - A

1.0 Math Credit (Level: Academic)

Prerequisite: A grade of C+ or better in Grade 8 Mathematics is recommended or 8th grade teacher recommendation

In this college prep course students will develop the foundational skills and concepts of equations, inequalities and functions through logical reasoning, function behavior, and modeling. Concepts covered in this course consist of, sequences, solving equations and inequalities, writing linear equations efficiently, graphing linear equations and inequalities, solving systems of equations, solving and graphing absolute value equations, factoring and solving quadratics, writing and graphing quadratic equations, and writing and graphing exponential equations. Students are introduced to function notation and develop an understanding of function characteristics and apply function behavior and characteristics to various function families including linear, absolute value, quadratic, and exponential.

Algebra I - B

1.0 Math Credit (Level: Academic)

Prerequisite: 8th grade math teacher recommendation.

In this college prep course students will develop the foundational skills and concepts of equations, inequalities and functions through logical reasoning, function behavior, and modeling. Concepts covered in this course consist of, sequences, solving equations and inequalities, writing linear equations efficiently, graphing linear equations and inequalities, solving systems of equations, solving and graphing absolute value equations, factoring and solving quadratics, writing and graphing quadratic equations, and writing and graphing exponential equations. Students are introduced to function notation and develop an understanding of function characteristics and apply function behavior and characteristics to various function families including linear, absolute value, quadratic, and exponential. Algebra 1 B is designed to include instructional supports to strengthen fundamental skills necessary for success in future math classes.

Algebra II - A

1.0 Math Credit (Level: Academic)

Prerequisite: A minimum grade of C+ in Algebra I-A and a minimum grade of C in Geometry-A are strongly recommended.

Algebra II-A expands upon skills and concepts introduced in Algebra 1. This course includes a serious study of functions, graphs, and their equations. Major topics include quadratic, polynomial, trigonometric (sine and cosine), radical, exponential, logarithmic, and rational functions. Graphing calculators are used frequently in this effort, and therefore a graphing calculator is recommended for this course. This course prepares students for college mathematics.

Algebra II - B

1.0 Math Credit (Level: Academic)

Prerequisite: Geometry teacher recommendation.

Algebra II-B expands upon skills and concepts introduced in Algebra 1. This course includes a serious study of functions, graphs, and their equations. Major topics include quadratic, polynomial, trigonometric (sine and cosine), radical, exponential, logarithmic, and rational functions. Graphing calculators are used frequently in this effort, and therefore a graphing calculator is recommended for this course. This course prepares students for college mathematics. In addition, Algebra II-B is designed to include instructional supports in order to review and reinforce algebraic skills.

Algebra II

1.0 Math Credit (Level: Honors)

Prerequisite: A minimum grade of C in Honors Geometry.

Honors Algebra II expands upon skills introduced in Algebra 1. This course includes an intense study of functions, graphs, and their properties. Major topics include quadratic, polynomial, trigonometric (sine and cosine), radical, exponential, logarithmic, and rational functions and their equations. Graphing calculators are used frequently; therefore, a graphing calculator is recommended for this course. In addition to a strong foundation in Algebra I and Geometry, students are expected to maintain a high level of academic independence. This course is appropriate for a student planning to pursue a college major or a career in a discipline dependent on mathematics.

Calculus

1.0 Math Credit (Level: Honors)

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 also required.

This 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. A graphing calculator is required along with a strong understanding of algebra, geometry, functional analysis, and trigonometry.

AP Calculus

1.0 Math Credit (Level: AP)

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.

This course is designed to prepare students for the AP Calculus exam and will help students gain college level skill. This course is regarded as a high level, accelerated course designed to give

students approximately one and a half semesters of exposure to college-level calculus. The course is designed to prepare 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.

College Algebra

1.0 Math Credit (Level: Academic)

Prerequisite: Successful completion of Algebra II

College Algebra is a course designed for students who have completed Algebra II but may not feel prepared to take Pre-Calculus. College Algebra covers a wide variety of topics that a college student would expect to encounter in a typical College Algebra course. The course will include an extension of topics in Algebra II and will touch on topics covered in Precalculus. Topics that may be included are set and function notation, linear and absolute value functions, exponential and logarithmic functions, polynomial functions, radical functions, rational functions, conic sections, systems and matrices, sequences and series, and trigonometry.

AP Computer Science (A)

1.0 Math/CTE Credit (Level: AP)

Prerequisite: Successful completion of Algebra II

This course is designed to prepare students for the AP Computer Science exam and will help students gain college level skill. Regarded as an introduction to computer science, this course is based on requirements that are comparable to an introductory course for computer science majors at a university or college. The course is also recommended for students who plan to major in other areas that require significant technology expertise. A large part of the course is built around the writing, running, and debugging of computer programs in Java to correctly design and implement solutions to problems. The design and implementation of computer programs is used as a context for introducing other important aspects of computer science such as the development and analysis of algorithms and the development and use of fundamental data structures. Object-oriented design and the ethical and social implications of computer use are recurring themes.

Geometry - A

1.0 Math Credit (Level: Academic)

Prerequisite: Successful completion of Algebra I - A or Algebra I - B and teacher recommendation

In this college preparatory course students will explore the concepts of congruence and similarity through inductive reasoning and formal proof. Concepts covered in this course include transformations, parallel lines, congruent triangles, quadrilaterals, similar triangles, right triangle trigonometry, coordinate geometry, and volume. It is expected that students have a strong algebraic foundation in order to apply algebraic skills through the lens of geometric concepts.

Geometry - B

1.0 Math Credit (Level: Academic)

Prerequisite: Successful completion of Algebra I - A or Algebra I - B

In this college preparatory course students will explore the concepts of congruence and similarity through inductive reasoning and informal proof. Concepts covered in this course include transformations, parallel lines, congruent triangles, quadrilaterals, similar triangles, right triangle trigonometry, and coordinate geometry. The Geometry B course is designed to include instructional supports in order to review and reinforce algebraic skills through the lens of geometric concepts.

Geometry

1.0 Math Credit (Level: Honors)

Prerequisite: Final grade of "A" or better in 8th grade advanced or a grade of B+ and teacher recommendation.

In this honors-level course students will establish triangle congruence and similarity through transformations. They will explore the concepts of congruence and similarity through inductive reasoning, constructions, and formal proof. Concepts covered in this course include transformations, parallel lines, congruent triangles, quadrilaterals, similar triangles, right triangle and non-right triangle trigonometry, coordinate geometry, and volume. In addition to a strong algebraic foundation, students are expected to develop and maintain a high level of academic independence.

Personal Finance

1.0 Math Credit (Level: Academic)

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. This course covers a number of topics including: informed money management, consumer decisions, personal bank accounts, loans, credit, taxes, insurance, etc.

Pre-Calculus

1.0 Math Credit (Level: Academic)

Prerequisite: A minimum grade of "B" in Algebra II - A is strongly recommended or a grade of C and a teacher's recommendation.

Pre-Calculus expands upon skills and concepts introduced in both Geometry and Algebra 2. This course includes a major study of Trigonometric Functions and their Applications, in addition to topics including Conic Sections, Limits, Vectors, and Rational Functions. This course involves extensive use of the graphing calculator, and therefore one is required for the course. In addition to a strong algebraic and geometric foundation, students are expected to develop and maintain a level of academic independence. A good working knowledge of a graphing calculator is required. This course is appropriate for a student planning to pursue a college major or a career in an area dependent on mathematics.

Pre-Calculus

1.0 Math Credit (Level: Honors)

Prerequisite: A minimum grade of “B” in Algebra II Honors is strongly recommended or a teacher’s recommendation.

Honors Pre-Calculus expands upon skills and concepts introduced in both Geometry and Algebra II. This course includes a major study of trigonometric functions and their applications, in addition to topics including conic sections, limits, vectors, rational functions, parametric and polar equations. This course involves extensive use of the graphing calculator, and therefore one is required for the course. In addition to a strong algebraic and geometric foundation, students are expected to maintain a high level of academic independence. This course is appropriate for a student planning to pursue a college major or a career in an area dependent on mathematics.

Probability and Statistics

1.0 Math Credit (Level: Academic)

Prerequisite or Corequisite: Successful completion of Algebra II.

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 good working knowledge of a graphing calculator is recommended and a graphing calculator is required for this course.

AP Statistics

1.0 Math Credit (Level: AP)

Prerequisite: Successful completion of Precalculus with a grade of C or better.

This course is designed to prepare students for the AP Statistics exam and will help students gain college level skill. This course will 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 successfully complete the AP examination may receive college credit and/or advanced standing for a one semester, introductory statistics course.

SCIENCE

The science program at Pomperaug High School is designed to provide students with a wide range of experiences that will foster the development of scientific literacy and reasoning. Through courses offered in the categories of life and physical science, students are challenged to explain various scientific phenomena by applying concepts and thinking critically. As students' progress through the program, it is expected they will develop an informed awareness of science-related issues and be equipped to critically examine each through the lens of scientific reasoning. As a result, students will be prepared to meet the expectations required in post-secondary education and in a career.

The years of science must reflect exposure to scientific concepts in the areas life and physical science. To this end, all students must successfully complete Integrated Earth and Physical Science and Biology. 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.

REQUIREMENTS FOR THE HIGH HONORS SEQUENCE IN SCIENCE

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

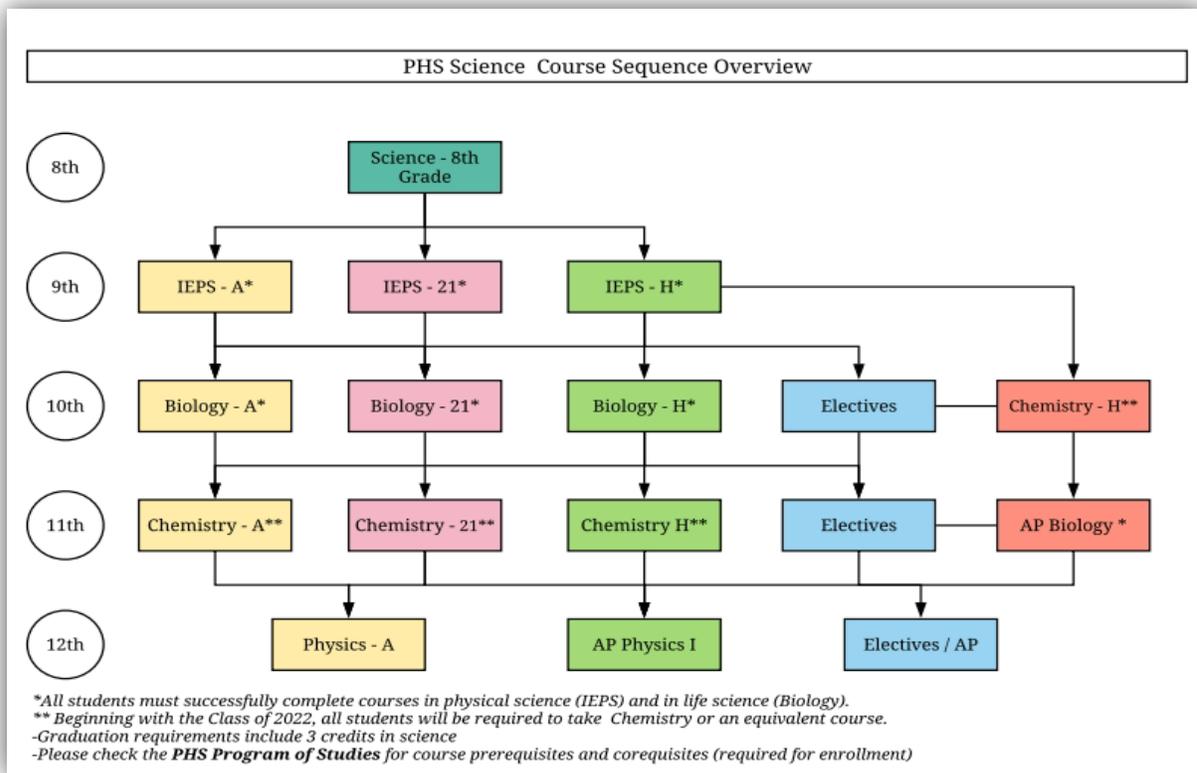
- Honors Integrated Earth and Physical Science
- Honors Biology (or AP Biology only)
- Honors Chemistry

In addition to the courses listed above, students must complete any three of the following advanced placement courses:

- AP Physics I
- AP Physics II
- AP Biology
- AP Chemistry
- AP Environmental Science

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 and Physiology

1.0 Science Credit (Level(s): Academic & Honors)

Prerequisite: Successful completion of biology

Anatomy & Physiology is an honors elective course that focuses on the structure and function of the body. Areas of study include: organization of the body, histology and the systems of the body (circulatory, endocrine, digestive, immune, integumentary, lymphatic, muscular, nervous, reproductive, respiratory, skeletal, and urinary). The interrelationship of the body’s systems is stressed. The course will include some medical aspects of the human body.

Astronomy

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science.

Open to sophomores, juniors, and seniors.

This semester course focuses primarily on the universe or virtually everything beyond earth. The areas of study include studying planets, scale, solar systems, stars, asteroids, and moons.

Biology

1.0 Science Credit (Level(s): Academic & Honors)

Prerequisite: Successful completion of Integrated Earth and Physical Science

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of biology as they are connected with other scientific disciplines. Major themes include an examination of ecosystems through the lens of matter and energy transformations and interdependent relationships. The structure and function of organisms will be investigated along with the study of DNA and inheritance. The theories of natural selection and evolution as they relate to our observation of how species change over time will also be examined. A particular emphasis will also be placed on human's impact on the biodiversity of species.

Biology 21

1.0 Science Credit (Level(s): Academic)

Prerequisite: Integrated Earth and Physical

Corequisite: Concurrently enrolled in Video Production 1 (first semester) and Mobile App Design (second semester)

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of biology as they are connected with other scientific disciplines. Major themes include an examination of ecosystems through the lens of matter and energy transformations and interdependent relationships. The structure and function of organisms will be investigated along with the study of DNA and inheritance. The theories of natural selection and evolution as they relate to our observation of how species change over time will also be examined. A particular emphasis will also be placed on human's impact on the biodiversity of species. *Students enrolled in Biology 21 will also be engaged in a course-long challenge involving the engineering design process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.*

AP Biology

1.0 Science Credit (Level: AP)

Prerequisite: Successful completion of Chemistry Honors and/or teacher recommendation.

This course is designed to prepare students for the AP Biology exam and will help students gain college level skill. 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

1.00 Science Credit (Level(s): Academic/Honors)

Prerequisite: Successful completion of Biology and Geometry and/or teacher recommendation

Corequisite: Concurrently enrolled in or successfully completed Algebra II

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of chemistry as they are connected with other scientific disciplines. Major themes include an investigation of matter, energy, nuclear processes and the atomic model as they relate to various phenomena. Further connections will be made between the structure and properties of matter as they related to the dynamics of earth's surface. Chemical bonding and associated reactions will also be a focus. A particular emphasis is placed on students' understanding of the Earth as seen through the lens of chemical processes.

Chemistry 21

1.00 Science Credit (Level: Academic)

Prerequisite: Successful completion of Biology and Geometry and teacher recommendation

Corequisite: Concurrently enrolled in or successfully completed Algebra II.

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of chemistry as they are connected with other scientific disciplines. Major themes include an investigation of matter, energy, nuclear processes and the atomic model as they relate to various phenomena. Further connections will be made between the structure and properties of matter as they related to the dynamics of earth's surface. Chemical bonding and associated reactions will also be a focus. A particular emphasis is placed on students' understanding of the Earth as seen through the lens of chemical processes. *Students enrolled in Chemistry 21 will also be engaged in a course-long challenge involving the engineering design process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.*

AP Chemistry

1.0 Science Credit (Level: AP)

Prerequisite: Successful completion of Chemistry Honors and/or teacher recommendation

Corequisite: Precalculus strongly recommended

This course is designed to prepare students for the AP Chemistry exam and will help students gain college level skill. Specifically, 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 viewpoint 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 encouraged to take the AP exam.

Environmental Science

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

This semester course is designed for students with an interest in studying how humans have influenced the environment. The goal is to provide an introduction to topics related to environmental science and also to expose students to careers related the field. Topics such as human population growth, biodiversity, land use, climate change and others are among those that will be investigated.

AP Environmental Science

1.0 Science Credit (Level: AP)

Prerequisite: Successful completion of Biology and Chemistry (or concurrently enrolled in Chemistry) and teacher recommendation

This course is designed to prepare students for the AP Environmental Science exam and will help students gain college level skill. Specifically, the AP Environmental Science course is designed to be the equivalent of a one semester, introductory college course in environmental science. The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. There are several major themes that cut across many units within the curriculum such as ecology, biomes, pollution, population, environmental laws, and climate change. Students will be expected to recognize connections between the different sciences as they work together to learn about the myriad of problems facing humans and their environment. [Adapted from College Board]

Field Biology

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

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 students' knowledge in the biological sciences by presenting topics not covered in their first year of biology.

Forensic Science I

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

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

.5 Science Credit

Prerequisite: Successful completion of Forensic Science I

Open to sophomores, juniors, and seniors.

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 including 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 spatter 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 requiring students to solve a case as a team.

Geology

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

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, the earth's interior, volcanoes, geologic time, and earth's history. Included is an emphasis on geologic processes that have shaped the Middlebury and Southbury area.

Human Biology

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

This course is designed to accommodate any student who has an interest in human body systems, regardless of their science background. Following successful completion, students will broaden their

understanding of how body systems function, and in doing so, inform them as to the various types of disease that can affect the human body. Students will also gain an understanding of the preventative steps one could take to avoid such disorders.

Integrated Earth and Physical Science

1.0 Science Credit (Level(s): Academic & Honors)

Integrated Earth and Physical Science is a course that is aligned to the Next Generation Science Standards. The course examines Earth and its place in the universe through the lens of concepts relating to physics, earth and space science, and environmental science. Students explore topics ranging from force and motion to resource use/availability on Earth. Throughout the course, students will engage in the explanation of scientific phenomena as they pertain to topics related to earth science, environmental science, astronomy, and physics. All freshman students are to enroll in Integrated Earth and Physical Science course.

Integrated Earth and Physical Science 21

1.0 Science Credit

Corequisite: Concurrently enrolled in Skills 21 (full-year elective)

Integrated Earth and Physical Science is a course that is aligned to the Next Generation Science Standards. The course examines Earth and its place in the universe through the lens of concepts relating to physics, earth and space science, and environmental science. Students explore topics ranging from force and motion to resource use/availability on Earth. Throughout the course, students will engage in the explanation of scientific phenomena as they pertain to topics related to earth science, environmental science, astronomy, and physics. All freshman students are to enroll in Integrated Earth and Physical Science course. *Students enrolled in Integrated Earth and Physical Science 21 will also be engaged in a course-long challenge involving the engineering design process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.*

Marine Biology

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

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 interactions with the environment. This introductory course will cover the basic chemical and physical properties of seawater, the impacts of humans on the world's oceans and the general categories of marine life. The different marine biological focus groups include: phytoplankton, zooplankton, phylum mollusca (clams, snails, octopus), phylum crustacean (crabs, shrimp, lobster), phylum echinodermata (starfish, sea urchins), and phylum chordata (sharks, stingrays, fish, marine mammals). Enrollment in this course may require attendance on field trips.

Meteorology

.5 Science Credit

Prerequisite: Successful completion of Integrated Earth and Physical Science

Open to sophomores, juniors, and seniors.

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

Physics

1.0 Science Credit (Level(s): Academic)

Prerequisite: Successful completion of Biology and Algebra II

Corequisite: Concurrent enrollment in Precalculus recommended

Physics is the study of the relationships between matter and energy on macroscopic scales. Students will examine topics that include motion in one and two dimensions: forces, energy and momentum, electrically and magnetism, waves; sound and optics. There is a strong focus on problem solving, laboratory work and writing of laboratory reports.

AP Physics I

1.0 Science Credit (Level(s): AP)

Prerequisite: Successful completion of Algebra II

Corequisite: Concurrent enrollment in Precalculus strongly recommended.

AP Physics I is a college-level course in conceptual and algebra-based physics, designed to prepare students to take the AP Physics I exam in May. Students enrolled in this course are encouraged to take the AP exam. An understanding of physics is cultivated through inquiry-based laboratory investigations as students explore topics in Newtonian mechanics including kinematics, dynamics, energy, and momentum in one dimension, two dimensions and circular frames of reference. Topics of exploration will also include wave behavior, sound and electric circuits. A summer assignment is a required part of this course.

AP Physics II

1.0 Science Credit (Level(s): AP)

Prerequisite: Successful completion of AP Physics I and Precalculus or teacher recommendation

AP Physics II is an algebra-based, introductory college-level Physics course that serves as an extension of AP Physics I. This course will prepare students to take the AP Physics II exam, which students are encouraged to take in May. An understanding of physics is cultivated through inquiry-based laboratory investigations as students explore topics including fluids, thermodynamics, electricity, and magnetism. Quantum, atomic and nuclear physics will also be part of students' exploration. A summer assignment is a required part of this course.

PHYSICS C - AP (AP Physics C is offered through Pomperaug's Virtual High School.)

ACADEMY OF DIGITAL ARTS AND SCIENCES

The Academy is a sequence of connected courses that incorporates project-based learning in a blended environment. Courses are offered in the areas of science and technology and are aligned with state standards. 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.

Academy courses use a blended learning model to ensure the integration of internet and communication tools. 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.

The sequence of courses in the Academy begin in 9th grade and extend through 12th grade. Required elective courses and science courses in the Academy sequence are outlined in the table below.

If interested in enrolling in the Academy sequence, please see a school 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 students in the Academy sequence. 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 EdAdvance.

***NOTE:** Students who register for the Academy sequence receive priority enrollment in the courses below, however, students not enrolled in the Academy may register for the courses and may be enrolled if space permits.*

Academy Sequence of Courses

	<i>Grade 9</i>	<i>Grade 10</i>	<i>Grade 11</i>	<i>Grade 12</i>
<u>Science Course</u>	Integrated Earth and Physical Science 21	Biology 21	Chemistry 21	
<u>Electives</u>	Skills 21	<u>Video Production 1</u> (first semester) <i>AND</i> Mobile App Design (second semester)	3D Modeling and Animation (full year) <i>OR</i> E-Commerce Entrepreneurship (full year)	The Skills 21 Capstone Experience

3D Modeling and Animation (3DMA)

1.0 CTE Credit

Corequisite: Concurrently enrolled in Chemistry 21 (Academy sequence students only)

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 Innovation Exposition.

Biology 21

1.0 Science Credit (Level(s): Academic)

Prerequisite: Successful completion of Successful completion of Integrated Earth and Physical

Corequisite: Concurrently enrolled in Video Production 1 (first semester) and Mobile App Design (second semester)

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of biology as they are connected with other scientific disciplines. Major themes include an examination of ecosystems through the lens of matter and energy transformations and interdependent relationships. The structure and function of organisms will be investigated along with the study of DNA and inheritance. The theories of natural selection and evolution as they relate to our observation of how species change over time will also be examined. A particular emphasis will also be placed on human's impact on the biodiversity of species. *Students enrolled in Biology 21 will also be engaged in a course-long challenge involving the engineering design process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.*

Chemistry 21

1.00 Science Credit (Level: Academic)

Prerequisite: Successful completion of Biology and Geometry and teacher recommendation

Corequisite: Concurrently enrolled in or successfully completed Algebra II, in addition to E-Commerce and Entrepreneurship OR 3D Modeling and Animation

This laboratory-based course is aligned with the Next Generation Science Standards and includes opportunities for students to explore principles of chemistry as they are connected with other scientific disciplines. Major themes include an investigation of matter, energy, nuclear processes and the atomic model as they relate to various phenomena. Further connections will be made between the structure and properties of matter as they related to the dynamics of earth's surface. Chemical bonding and associated reactions will also be a focus. A particular emphasis is placed on students' understanding of the Earth as seen through the lens of chemical processes. *Students enrolled in Chemistry 21 will also be engaged in a course-long challenge involving the engineering design*

process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.

E-Commerce Entrepreneurship (ECE)

1.0 CTE Credit

Corequisite: Concurrently enrolled in Biology or Chemistry 21 (Academy sequence students only)

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 at the Connecticut Student Innovation Exposition.

Integrated Earth and Physical Science 21

1.0 Science Credit

Corequisite: Concurrently enrolled in Skills 21 (full-year elective)

Integrated Earth and Physical Science is a course that is aligned to the Next Generation Science Standards. The course examines Earth and its place in the universe through the lens of concepts relating to physics, earth and space science, and environmental science. Students explore topics ranging from force and motion to resource use/availability on Earth. Throughout the course, students will engage in the explanation of scientific phenomena as they pertain to topics related to earth science, environmental science, astronomy, and physics. All freshman students are to enroll in Integrated Earth and Physical Science course. *Students enrolled in Integrated Earth and Physical Science 21 will also be engaged in a course-long challenge involving the engineering design process. Students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.*

Mobile App Design

.5 CTE Credit

Corequisite: Concurrently enrolled in Biology 21 (Academy sequence students only)

This course 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. Specific areas of concentration include app and game design.

Skills 21

1.0 CTE Credit

Corequisite: Integrated Earth and Physical Science 21

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. As part of the course, students coordinate a research team to design a scientifically-inspired product or technology. Preparation will culminate in a presentation at the annual Connecticut Student Innovation Exposition.

Video Production 1

.5 CTE Credit

Corequisite: Concurrently enrolled in Biology 21 (Academy sequence students only)

Utilizing the high school's video studio and post-production facility, Video Production I is an introductory course in video production and editing. Video Production I will provide students with visual literacy skills to make informed and critical decisions as they create several choice-based video projects including stop motion animation, interviews, and dramatic shorts. Students will be instructed from concept to creation on an introductory level in all phases of video production including ideation, storyboarding, camera operation, audio production, lighting techniques, and non-linear editing using Final Cut Pro software. The course will also promote the following skills: goal setting, 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.

The Skills 21 Capstone Experience

1.0 CTE Credit

Prerequisite: Successful completion of Chemistry 21

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 Connecticut Student Innovation Exposition.

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.

BUSINESS AND FINANCE TECHNOLOGY

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 student's 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. This course covers the influences of food, safety, sanitation, essentials of cooking, nutrition, eggs, dairy, quick breads, yeast breads, fruits, vegetables, cookies and pies or cakes. Students will practice gaining culinary independence by making a variety of foods in the Culinary lab.

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 while building culinary skills and knowledge. This course covers safety, sanitation, health, wellness, equipment and appliances, introduction to the restaurant industry, vegetables and soups, dairy products, advanced breads, pasta, sauces, meats and poultry, cakes, entertaining and serving foods. Students participate in weekly labs to demonstrate understanding of culinary knowledge.

EXPLORING CHILDHOOD I

1/2 year, 1/2 credit

An elective course designed to introduce students the principles of child development. Students explore the physical, social, emotional, intellectual and moral development of children from conception to age five. Students have the option of participating in the Real Care Baby Infant simulator project as part of the Infancy unit. Students learn about various aspects of infant development while caring for a sophisticated, computerized infant simulator for the weekend. Throughout the course emphasis is given to careers related to children and families.

EXPLORING CHILDHOOD II

1/2 year, 1/2 credit

Prerequisite: Exploring Childhood I

Course will run every other year based on enrollment numbers.

An elective course designed to build on the principles of human growth and development learned in Exploring Childhood I. Students will learn about careers related to children and families while exploring current topics in child development. Students will learn the physical, social, emotional, moral and intellectual patterns of development for ages two to eight. Students will apply their knowledge by running a playschool for children ages two to four from the community. Students will plan and teach a developmentally appropriate lesson to young children as part of their play school teaching experience.

INTERIOR DESIGN

1/2 year, 1/2 credit

Course will run every other year based on enrollment numbers.

An elective course designed to introduce students to the principles of design in home and interior design. Students will learn about careers related to the interior design industry. The purpose and history of home interiors will be studied from the 18th century until present day. Students will learn about lighting, furniture, layouts and color choice. Students will participate in a collaborative group design challenge project as their final project.

INTERNATIONAL CULTURES AND CUISINE

1/2 year, 1/2 credit

Prerequisite: Culinary Arts I

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 and ENGINEERING 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.

WOOD TECHNOLOGY

½ year, ½ credit

This is an introduction to the basics of woodworking. The course is designed to initiate and develop the student's hands on ability to intelligently design and construct useful products. Construction principles, procedures, machines, materials and hand tools will be covered. Units of student will include safety, designing using Autocad software, fasteners, joinery, and material science. Safe working procedures, proper design and pride in craftsmanship will be emphasized. Some sample class projects consist of chairs, boxes and playhouses.

CONSTRUCTION ENTERPRISE

½ year, ½ credit

Prerequisite: Wood Technology

Entrepreneurs Welcome! Students have an opportunity to think big and make it become a reality. They will be paid for their products. This course provides an opportunity for the students to design a product using Autocad software. Students will create a set of drawings and create a lumber list for their projects. They will build the structures they designed for their clients. This course provides students the experience of participating in the building of a structure along with various woodworking skills. Safe working procedures, proper design and pride in craftsmanship will be emphasized.

PRE-ENGINEERING: MECHANICAL & TRANSPORTATION

1/2 year, 1/2 credit

The course includes discussion and experimentation in design, communications, production and manufacturing, and transportation systems. Topics and units may include alternative energy, communication, power and energy transportation, manufacturing engineering. Students will complete hands on projects to learn these concepts.

TRANSPORTATION TECHNOLOGY II

1/2 year, 1/2 credit

Prerequisite: Pre-Engineering Mechanical & Transportation or Transportation Technology I

This course will provide a more in-depth study of the topics of alternative energy sources, material science, aerodynamics and physics. The course will include the construction of radio control planes that students will fly based on previous learning from Transportation Technology I. Students will build an Electrathon America Car to race at Lime Rock Raceway in May.

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, Frozen, and Toy Story. Projects in this animation technology & engineering

class 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.

AP Capstone I (Seminar)

AP Capstone I is the prerequisite to AP Capstone II.

This dynamic new course allows students to immerse themselves in topics that matter to them while developing the analytic, research, problem-solving, and communication skills that colleges seek in their applicants. This challenging program helps deepen students' passion for learning, giving them greater confidence in their academic skills and a broader perspective on the world. In AP Capstone I, students learn to consider an issue from multiple perspectives, to evaluate the strength of an

argument, and to make logical, fact-based decisions. Technology, discourse, and student-led decisions are integral components of this engaging class.

AP Capstone II (Research)

Open to Juniors and Seniors who have successfully completed AP Capstone I (Seminar) and seek a rigorous, self-driven learning experience.

AP Capstone II (Research), the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Capstone I (Seminar) course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information.

PROGRAMMING FOR GAME DESIGN

1/2 year, 1/2 credit

Want to learn programming by creating computer games? Students will experience object oriented programming by recreating classic 2D games like Pong, Space Invaders, and Super Mario Bros using C# and the Unity application programming interface. Students will develop an understanding of how psychology and cognitive flow impact game development and will channel their creativity and innovation through coding their own game.

MOBILE APP DESIGN

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.)

GRAPHIC COMMUNICATION

1/2 year, 1/2 credit

This technology and engineering course is designed to give students a truly unique adventure into the world of digital imaging. Throughout the semester, students will learn real-world production techniques and will be challenged to develop concepts, designs, and effective technical solutions spotlighting careers in the advertising, motion graphics, animation, and gaming industry. Projects may include screen printed t-shirts, magazine covers, motion graphic commercials, 3D texture mapping of a superhero, or creating sprites for a game engine.

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, administering the Local Area Network (LAN), and helping users with applications.

HONORS COMPUTER SCIENCE

½ year, ½ credit

Prerequisite: Programming for Game Design or Animation and teacher recommendation

This honors computer science technology application course will provide a challenging 21st century blended learning STEM experience for students to create and immerse themselves into an exciting new field of converging technologies. Students will be challenged to push the boundaries of object oriented programming, animation, computer design, and digital imaging to create interactive 3D experiences for room scale virtual reality.

AP COMPUTER SCIENCE PRINCIPLES

1 year, 1 credit

Prerequisite: teacher recommendation

Whether it's 3-D animation, game design, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. In this college level course in computing technology, students will explore broader ideas behind computing such as algorithms, abstraction, cybersecurity, programming, innovation, and creativity while producing digital images, animation, visual effects video compositions, and software apps/games. C++ and/or C# will be the programming language covered in this course.

Source: <https://apcentral.collegeboard.org/courses/ap-computer-science-principles>

PRE-ENGINEERING: ELECTRONICS & ROBOTICS

1/2 year, 1/2 credit

Pre-Engineering is a STEM focused course which explores engineering through a firm and in-depth exploration of multiple engineering fields. With an emphasis on Computer Science and Robotics, students will design and build machines to perform specific tasks through the use of Robotic kits, students then explore multiple programming languages and their applications such as Visual Basic and Java. Student work is collected and published in a digital portfolio at the end of the Semester.

HONORS ROBOTICS

1/2 year, 1/2 credit

Prerequisite: Pre-Engineering (Robotics & Electronics) or Computer Design I or II

Honors Robotics is a STEM focused course which further develops students' knowledge of engineering through a firm and in-depth exploration of Robotics as an Engineering field. Students will explore C++ Programming Language. Through Computer Science programming, adaptation of advanced machines are explored and the design and build of such machines. Computer-integrated manufacturing is explored through programming, virtual design, manufacturing, and automation. Honors Robotics incorporates identifying, designing, building, programming, and testing of advanced robotic designs through the use of the C++ Programming Language. Benchmark assessments are employed to track individual student progress.

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: Acting I

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

Prerequisite: Acting II

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. Students may repeat this course upon successful completion.



By: Stephanie Milite, 2017

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.

INTRODUCTION TO PRINTMAKING

1/2 year, 1/2 credit

Introduction to printmaking would be a semester-long program that explores the medium of printmaking. Students will learn about the processes involved in; monoprint, block printing, reduction printing, screen printing, and embossing techniques. Both the fine and applied aspects of this medium will be explored.

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 I

1/2 year, 1/2 credit

The content in this course is designed to engage the beginning art student as well as challenge the college bound student planning a career in an art-related field. Students will employ communication and critical thinking skills while using a variety of techniques and processes to create two and three dimensional works of art. Units of study include but are not limited to mosaics and glass work, ceramics, sculpture, painting, paper cutting, tie dye and fashion.

THE FINE ART OF CRAFTS II

1/2 year, 1/2 credit

Prerequisite: Fine art of crafts I

This course is open to students who have been successful in The Fine Art of Crafts 1. Self directed students will delve deeper into the techniques and processes associated with glassworks and batik. In addition, students will complete functional design prototypes as they relate to fashion. Students will also sharpen their critiquing skills while discussing the history of art as it relates to their units of study.

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.

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 workforce. A high degree of motivation, individual discovery and critical thinking is expected at this level.

SCULPTURE I

½ year, 1/2 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

½ year, ½ 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.

AP STUDIO ART

Drawing and Painting Option

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.

Photography Option

1 year, 1 credit

Prerequisites: Drawing and Painting II or Photo II and recommendation by AP teacher

AP Digital Photography is for serious students whom are highly motivated and committed to building an impressive portfolio. This is a yearlong college level exploration of the principles and elements of design as expressed through photography. This is not a course based on a written explanation; instead, the students will submit a portfolio to the College Board and teacher.

The three reflection structure requires them to show imperative skills and a broad mastery of visual design concerns and approaches.

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 an introductory course in video production and editing. Video Production I will provide students with visual literacy skills to make informed and critical decisions as they create several choice based video projects including stop motion animation, interviews, and dramatic shorts. Students will be instructed from concept to creation on an introductory level in all phases of video production including ideation, storyboarding, camera operation, audio production, lighting techniques, and non-linear editing using Final Cut Pro software. The course will also promote the following skills: goal setting, 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

Media Literacy, Electronic News Gathering,
News Broadcasting

1/2 year, 1/2 credit

Prerequisite: Video Production I

Building on the skills acquired in Video Production I, students in Video Production II will participate in a variety of projects including, a PSA, and a collaborative lesson with the music department where students create music videos. Students will build on their learning and use their skills to work in teams fostering 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, and non-linear editing using Final Cut Pro software.

VIDEO PRODUCTION III

1/2 year, 1/2 credit

Prerequisite: Video Production I, Video Production II

Building on the skills acquired in Video Production I & II, students in Video Production III will begin by creating their own production company and work in teams to design their own project topics with specific skills based instruction. Students will advance their learning and build on their skills, working in teams to create video projects that are meaningful to them and inline with their interests. Students will be instructed from concept to creation on an advanced level in all phases of video production including scriptwriting, storyboarding, camera operation, audio production, lighting techniques, and non-linear editing using Final Cut Pro software.



By: Samantha Pangle, 2018

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. Concerts for all performing groups occur twice a year.

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 participate in 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.

MUSICAL THEATER/FILM MUSIC

1/2 year, 1/2 credit

A non-performance course that will study an overview of the history of musical theater: the emergence of Broadway, character analysis and development through music and dance will be analyzed through the study of various musicals. Social issues, including interconnections of theater, community, other cultures, and historical periods will be explored. In addition, this course offers students the opportunity to study the history of the relationship between music and film and to gain an understanding of the main historical developments surrounding the use of music in a film. Students will have the opportunity to analyze various examples of film music, taken from the silent era through to the present day.

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.

AP MUSIC THEORY

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.

PHYSICAL EDUCATION & HEALTH SCIENCES

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 required .5 credit of Health is embedded in the 9th and 10th grade courses. During the 11th and 12th grade school years students are required to take two .5 credit PE electives.

GRADE 9 - "FOUNDATIONS OF TRAINING"

1/2 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"

1/2 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.

DYNAMIC PHYSICAL EDUCATION

(Sophomores)

1/2 year, .50 credit

This course is for students who want to improve their academic performance by learning how to focus better in class, improve concentration, reduce stress and improve memory. Physical activity that includes relaxation, mindfulness, aerobic exercise, yoga, meditation and breathing techniques can help academic performance. Topics include exercise and memory, mindfulness, improving sleep, reducing stress, goal setting, exercise and memory, study and activity, nutrition, breathing and meditation.

PHYSICAL EDUCATION ELECTIVES GRADES 11 AND 12

Each of the course offerings below may be taken by any junior or senior and all PE Electives are .5 credit courses. Students 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. **Students may retake a course only after completing two different electives.**

ATHLETIC CONDITIONING AND PERFORMANCE

Designed to help the young athlete improve their overall performance in their sport. Focus is on speed, strength, and agility training while sport specific skill work. Students participate in resistance training, coordination, and skill development activities. Perfect for the student athlete in any sport.

FIRST AID, C.P.R., AND A.E.D.

Students can become certified by the American Red Cross in both First Aid, CPR and AED. 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 skills.

MIXED MARTIAL ARTS

Mixed Martial Arts (MMA) lets you practice skills that you might see in competitions like the UFC. You will study the skills of professional fighters and train kickboxing, wrestling, and submission grappling.

ADVENTURE PE

This course will expose you to indoor and outdoor activities. In this course you will learn about the benefits, risks and safety associated with lifelong outdoor physical activities and that fitness can also be enhanced with indoor and outdoor activities. Activities in this course can include basic kayaking skills, snowshoeing skills, orienteering skills along with map reading, archery skills and safety, fishing- casting and equipment along with team building & cooperative activities.

DANCE

Students will learn and practice different movement principles for the following dance styles. Hip hop dance and ballroom partner styles including the waltz, salsa, cha-cha, swing, and foxtrot. This class gives the opportunity to learn how to be creative while exploring movement, and working with peers to create group dances.

PEER HEALTH EDUCATORS

Designed to give students the opportunity to investigate and research current health issues and various components of the health curriculum. As a results, students will use their findings to formulate projects and lessons to be dynamically presented to Region 15 students in grades 4-9. This is a student centered community based class. The purpose of the group is to educate and inform the youth in Middlebury and Southbury about topics that have the potential to affect them.

RECREATIONAL AND NET GAMES

Students participate in a variety of racquet games and sports (tennis, badminton, pickleball) as well as recreations games and activities (volleyball, table tennis, bocce, spikeball, kan-jam) that range in low intensity to moderate intensity.

SELF-DEFENSE

Self-defense lets you practice skills that you might need if attacked or in threatening situations. You will practice KravMaga skills including weapon defense, kickboxing training, and escaping various holds and grabs.

TEAM SPORTS

Classes participate in sports such as basketball, speedball, and flag football and develop individual teammate qualities throughout practices and tournaments.

WEIGHT TRAINING AND BODYBUILDING

Workout in our weight room every other day with detailed workouts designed to build muscle size and strength. Learn how to record your progress and develop personal training skills as you train within a variety of workout plans.

YOGA AND PILATES

This course is designed to introduce students safely to the basics of postures, breathing techniques, mindfulness and relaxation methods of yoga and pilates. Students will begin to experience the benefits of stretching, moving and breathing freely as they relieve stress, learn to relax and ultimately get more out of day to day living.

ONLINE COURSES

*For the online physical education courses, students need to have access to a home computer and internet access.

ONLINE PERSONAL FITNESS

Students will work individually to improve their own fitness and achieve their personal fitness goals. They will analyze their current fitness, identify primary health risk factors, understand the health benefits of physical activity, and learn the relationship between wellness and physical activity. Each individual will create a goal setting action plan towards creating a personal fitness program to help achieve their fitness goals.

ONLINE HEALTHY FOODS

Students must regularly check their region 15/school email to receive information from the instructor. All work assigned by the instructor will be done independently, electronically, or online.

ONLINE WALKING AND JOGGING

This course requires that the student have online 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 at least twice during, before, or after school. Students will use a GPS tracking device (provided by the school) to log workouts out of school.

PHS PROGRAMS & SUPPORT SERVICES

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.

CWE-COOPERATIVE WORK EDUCATION-CWE

(1-2 credits over one year)

Prerequisites: Junior or Senior 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.

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.

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.

WORLD LANGUAGE SUPPORT

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.

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 students 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.

SRBI

Pomperaug is committed to preparing 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. The labs are based upon interventions designed to target areas of weakness and to be better able to support student learning. Interventions in Math Lab focus on computational skills, problem-solving skills, and comprehension of math on a conceptual level to strengthen and deepen mathematical understandings. Students recommended and assigned to the SRBI Math Lab will attend on a regular basis as part of their scheduled day.

RESOURCE PROGRAM

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.

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.

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.

EARLY GRADUATION

There is a procedure for students considering graduating before they have spent four years at PHS. Early graduation is not recommended for most students and does require administrative approval prior to the start of the school year. 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.

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.
- 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.