

# Pelham High School



## Program of Studies

2020-2021

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Dear Students, Parents, and Guardians,

Our 2020-2021 Program of Studies outlines the diverse and challenging opportunities offered at Pelham High School. The more attention and commitment you make to plan your courses, the more personalized and valuable your education will become. I encourage you to take this process seriously and put effort into investigating the many learning experiences available here at Pelham High School.

Pelham High School provides students the opportunity to personalize their course schedule. The selection of courses available is designed to accommodate the many interests and diverse needs of our students. This plan of study should be a product of the collaboration between the student, parents, and the school counselor.

As a small school, the data collected during the course selection process is invaluable. We run courses based on student interest. Our master schedule and number of sections offered in each course are dependent on the accuracy and collection of this data.

We are excited for the upcoming school year. Our overall goal is to develop a personalized education plan that supports the interests of the student. The Program of Studies is a valuable tool to use in the process.

Dawn M Mead  
Principal  
Pelham High School

## **HISTORY OF PELHAM HIGH SCHOOL**

Pelham High School, founded in 1973, offers a comprehensive program of studies that invites students to explore the connections between languages, math, science, history, music, and technology. The curriculum programs meet national, regional, state, and local standards. PHS is a member of the New England Association of Schools and Colleges (NEASC).

Beyond academics, our school offers a variety of clubs and other activities, as well as a full range of interscholastic sports. Our school is an active participant in the New Hampshire Interscholastic Athletic Association (NHIAA).

## **PHS MISSION**

### **PELHAM HIGH SCHOOL MISSION and EXPECTATIONS FOR STUDENT LEARNING**

#### **Mission Statement**

Pelham High School is a community of adult and student learners whose actions encourage a collegial atmosphere and whose approaches promote a safe and positive environment. We believe the following:

- Education is a pathway to productive and socially responsible citizenship.
- Students will rise to the levels of expectations that are appropriately challenging in academic, social, and civic settings.
- Students will identify their individual strengths in order to explore and pursue individual goals.
- All students can learn and do so in different ways.

In support of our beliefs, **the mission of Pelham High School is to educate our students as life-long learners to meet the challenges of the 21<sup>st</sup> century so that they may pursue life goals, participate fully as active citizens, and be socially responsible members of the global community.**

#### **Learning Expectations**

##### **Academic Competencies:**

- Students will demonstrate creative and critical thinking skills in the analysis of concepts, enabling them to address authentic problems in conventional or innovative ways.
- Students will demonstrate effective communication skills through rigorous and authentic activities and applications (reading, writing, speaking, listening, and viewing skills).
- Students will demonstrate the ability to interpret and identify connections that lead to conclusions or new understandings within the context of a rigorous and relevant curriculum.
- Students will address contemporary problems incorporating collaborative skills.

##### **Social Competencies:**

- Students will behave appropriately and responsibly with regard to others, to oneself, and to one's surroundings.
- Students will act with integrity and honesty within the school community.

##### **Civic Competencies:**

- Students will demonstrate a civic responsibility to work effectively and respectfully to improve the world around them.

## **ACCREDITATION STATEMENT**

Pelham High School is accredited by the New England Association of Schools and Colleges (NEACS), a nongovernmental, nationally recognized organization, whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

Accreditation of an institution by the NEASC indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer review process. An accredited school or college is one which has available the necessary resources to achieve 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 NEASC 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 the individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

## **NON-DISCRIMINATION STATEMENT**

The District in accordance with the requirements of federal and state laws, and the regulations implementing those laws shall not discriminate in its education programs, activities or employment practices on the basis of race, color, national origin, age, sex, sexual orientation, gender identity, gender expression, gender transition, transgender status, gender nonconformity, marital or economic status, religion or disability. The District will not discriminate against any employee who is the victim of domestic violence, harassment, sexual assault or stalking.

This Policy implements Titles VI and VII of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendment of 1972, Section 504 of the Rehabilitation Act of 1973, RSA 354-A, RSA 275:71, and RSA 186:11, XXXIII.

Any person having inquiries concerning the District's compliance with this Policy and the applicable laws and regulations may contact the Superintendent of Schools.

## **COLLEGE AND CAREER GUIDANCE DEPARTMENT**

The College and Career Guidance Department serves all students in a variety of ways. Our services are designed to meet the academic, career, and personal counseling needs of PHS students at each grade level. Our goal is to assist students in achieving their maximum academic potential while encouraging social and extracurricular experiences that promote personal growth.

The school counseling program is available to assist students in making appropriate academic choices while also helping students cope with and manage challenging emotional and social situations. Services are delivered through individual counseling, group counseling, and classroom presentations. When necessary, referrals to outside therapeutic personal and/or mental health counseling resources will be made.

College and career activities are conducted on a regular and planned basis with the goal of providing students with experiences to help them grow and develop to their fullest potential, and to become

responsible, contributing members of their community. Department personnel will assist students and families in developing a comprehensive 4-year high school plan to meet individual college and career goals.

Each student is assigned to a school counselor who is available to students throughout the school day; however, to assure availability, students are encouraged to make an appointment by stopping by the College and Career Guidance Department or by emailing their school counselor. This practice also helps students develop emerging adult behavior that prepares them for responsible and self-managing skills necessary after high school.

School counselors also encourage team planning which includes the student, parent/guardian, and teachers to ensure optimum success. Parents and students are encouraged to contact the teacher directly with academic concerns while apprising their school counselor. School counselors are available to assist students and parents with possible solutions for academic concerns or if academic conflicts arise.

Throughout the school year, the College and Career Guidance Department provides additional services to students and parents including:

- Weekly Email Updates
- Freshmen Orientation
- Pelham High School Showcase
- PSATs (9<sup>th</sup> grade)
- PSAT/NMSQT (10<sup>th</sup> /11<sup>th</sup> grade)
- Club Fair
- Naviance Training (College and Career Planning Tools)
- College Visits
- College Fairs
- Sophomore College and Career Project
- Junior College Planning
- College Night for Juniors
- College Scholarship Opportunities
- Military Visits
- Financial Aid Workshop

## ACADEMIC DIPLOMA OPTIONS

The Pelham School Board establishes the following as policy:

Every student who attends PHS will be given the opportunity and is expected to meet the graduation requirements necessary to receive a diploma.

A. PHS will issue an **Honors with Distinction Diploma** to students who have met the Standard Diploma requirements and who:

- Earn 32 credits and meet all Graduation Requirements
- Complete all Level 1 required core academic classes
- Complete three (3) credits of the same world language
- Complete four (4) credits of Level 1 or higher sciences
- Complete four (4) credits of Level 1 math or higher
- Complete five (5) Honors level, Advanced Placement, or PHS College Credit courses
- Graduate with a 3.67 GPA\*

B. PHS will issue an **Honors with Merit Diploma** to students who have met the Standard Diploma requirements and who:

- Earn 32 credits and meet all Graduation Requirements
- Complete two (2) credits of the same world language
- Complete four (4) credits of sciences
- Complete Algebra II
- Graduate with a 3.33 GPA\*

C. PHS will issue an **Honors Diploma** to students who have met the Standard Diploma requirements and who:

- Graduate with a 3.33 GPA\*

D. PHS will issue a **Standard Diploma** to students who:

- Have successfully achieved the minimum number of credits (see Graduation Requirements)
- Meet specific course and community service requirements as stated in the PHS Program of Studies

*\*For new and transfer students, the class rank will be calculated after four (4) semesters of attendance at Pelham High School and GPA will be calculated when credit is awarded.*



**Certificate of Completion** - PHS will issue a **Certificate of Completion** to students who:

- Complete a minimum of four years of high school
- Are enrolled and in regular attendance at PHS for at least one semester in their final year
- Meet the requirements of their Individualized Education Programs and/or acquire those credits as defined by the Academic Review Committee (ARC)
- Are determined to be ineligible for the other academic diploma options by the Academic Review Committee (ARC)

A Certificate of Completion is not a diploma and is awarded to any student who has successfully completed an individual program of studies not leading to a standard diploma. Students eligible for special education and are pursuing a certificate of completion may participate in one graduation ceremony in the year determined most appropriate by the student's IEP team. For students eligible for special education, participation in graduation will not end the student's eligibility for a free appropriate public education. Students eligible for special education may continue in an approved program until such time as the student has earned a regular high school diploma or has attained the age of 21, whichever occurs first.

Application or referral for participation in the program is open to all students at PHS but is limited to students who are determined by the ARC to be unable to meet the requirements for the academic diploma options. Consideration of eligibility for the Certificate of Completion will be decided on a case-by-case basis, and is subject to review and recommendation by the Academic Review Committee, comprised of the high school leadership team and the student's respective school counselor. Eligibility for participation will be based on the following factors:

- Academic performance including, but not limited to, standardized achievement tests, report card grades, diagnostic testing
- Academic Review Committee's recommendation relative to the student's ability to successfully complete graduation requirements for the standard diploma
- Parent or student written referral
- IEP requirements (for students with educational learning disabilities)

The Academic Review Committee will receive all recommendations in writing from the student's school counselor and will make all recommendations and final decisions.



## GRADUATION REQUIREMENTS - 26 Credits

The time you, your parents, and your school counselor take to plan your course of study for the next four years will help you organize and focus your education as well as help you prepare for college or the world of work after high school. The time is well spent! **Please note:** All PHS graduation requirements pertain to transfer students as well, regardless of the year of transfer.

Subject	Credits	Required Courses
<b>English</b>	<b>4 Credits</b> <i>An English course must be taken each year of high school.</i>	Intro to Writing (.5 credits) - Freshman only Freshman English Sophomore English Junior English Elective Senior English Elective
<b>Social Studies</b>	<b>3 Credits</b>	World Geography (.5 credits) Civics (.5 credits) Economics (.5 credits) Western Civilization (.5 credits) U. S. History (1 credit)
<b>Math</b>	<b>3.5 Credits</b> <i>A math or math intensive course must be taken each year of high school.</i>	All students must complete 3 math credits, including Algebra I. <b><i>See below for a list of Math Intensive courses.</i></b>
<b>Science</b>	<b>3 Credits</b>	Physical Science, Biology and Chemistry
<b>Fine Arts</b>	<b>.5 Credits</b>	The <b>Fine Arts Requirement</b> may be met by taking any art or music course.
<b>Health</b>	<b>.5 Credits</b>	
<b>Physical Education</b>	<b>1 Credit</b>	
<b>Computer Application</b>	<b>.5 Credits</b>	Students must pass Computer Applications I or pass a computer technology test with a B- , which would allow them to enroll in an advanced computer course.
<b>Personal Financial Planning or Managing Your Money</b>	<b>.5 Credits</b>	
<b>Personal Choice Electives</b>	<b>9.5 Credits</b>	
<b>Community Service Learning</b>	<b>40 hours</b>	10 hours per year of enrollment

### MATH INTENSIVE COURSES

In addition to any mathematics course, the following courses fulfill the Math Intensive requirement. (Note: Some CTE classes qualify as Math Intensive. Please check with your counselor for determination.)

Accounting I	Intro to Programming w/ Python	Physics
CADD	Managing Your Money	Spreadsheet: Excel
Engineering and Design	Personal Financial Planning	

## COMMUNITY SERVICE PROGRAM

In 1992, the Pelham School Board approved the Community Service Program in an effort to promote civic responsibility and to encourage Pelham youth to make a commitment to serve others. All students must perform and document 40 hours of service as a requirement for graduation. This requirement promotes service to society and enhances the quality of life for others. PHS seeks to guide students in meaningful community service and service learning. Parents and students are advised that college admissions and scholarship selection committees look most favorably on meaningful community service.

Community Service hours are required to be completed no later than March 15 of a student's senior year. To assist in obtaining community service hours, the College and Career Guidance office sends emails to student with volunteer opportunities available. Students can also volunteer in many other ways. There are many local and community events and the hours served must be for the benefit of the community, not for the benefit of a profit-making business. Activities such as babysitting, yard or housework to help a friend or neighbor does NOT count toward the requirement unless preapproved. Upon completion of community service activities, students must complete a Community Service Completion form along with a written reflection about the experience and submit it to the College and Career Guidance office within 8 weeks. Forms submitted later than 8 weeks will receive only half credit provided the forms are presented within the academic year in which they were performed.

## MINIMUM REQUIREMENTS

The yearly requirement for students is eight credits of courses. The principal, in consultation with the Academic Review Committee may make exceptions. **Please note:** Some courses may not be offered due to insufficient enrollment. If courses are dropped from the schedule, students affected will be given an opportunity to select alternate courses. Please refer to the course selection process for more information.

## GRADE POINT AVERAGES AND CLASS RANK

Grade Point Averages (GPA's) are determined when credit is awarded. The GPA's for all students are placed in order from highest to lowest to determine each student's rank in class.

The class rank for transfers will be calculated after four (4) semesters of consecutive attendance at Pelham High School.

	Non-Leveled	Level 1	Honors/PHS College Credit	AP
A+ (97-100) =	4.33	4.67	4.84	5.0
A (93-96) =	4.0	4.33	4.5	4.67
A- (90-92) =	3.67	4.0	4.17	4.33
B+ (87-89) =	3.33	3.67	3.84	4.0
B (83-86) =	3.0	3.33	3.5	3.67
B- (80-82) =	2.67	3.0	3.17	3.33
C+ (77-79) =	2.33	2.67	2.84	3.0
C (73-76) =	2.0	2.33	2.5	2.67
C- (70-72) =	1.67	2.0	2.17	2.33
D (65-69) =	1.00	1.33	1.50	1.67

**Note:** Pass/Fail courses and alternative credit opportunities such as on-line courses, adult education courses and summer school courses are not calculated into the GPA.

## GRADING SYSTEM

97 - 100 A+	87 - 89 B+	77 - 79 C+	65 – 69 D
93 - 96 A	83 - 86 B	73 - 76 C	below 65 - Failure
90 - 92 A-	80 - 82 B-	70 - 72 C-	

For more information on grading philosophy and academic protocols, please refer to the Student Handbook on Pelham High School's Website.

## HIGH HONORS

Students must earn a minimum grade of **A-** in each of their courses.

## HONOR ROLL

Students must earn a minimum grade of **B-** in each of their courses.

## EXPLANATION OF COURSE LEVELS

**Advanced Placement:** Advanced Placement (AP) courses are designed to challenge highly motivated students who have demonstrated exceptional academic ability and who wish to study at the college level. The College Board provides tests for all Advanced Placement courses and these tests are administered during the month of May.

Students can register to take the AP exam in advance and pay the required fee. Information is available in the College and Career Guidance Department. Please note, if this fee will cause a financial hardship, students should contact their school counselor for information about financial assistance.

In order to be considered for college credit or college standing, students must satisfactorily complete these tests. Students enrolled in AP courses should check with the college of their choice to receive information concerning the college's policy regarding Advanced Placement credit.

Listed below you will find the AP courses which are offered at Pelham High School. Please be reminded that only courses which have adequate enrollment will run. However, students may take AP courses through the Virtual Learning Academy. Students are encouraged to discuss taking AP courses with their parents, school counselors and teachers.

- AP Biology
- AP Calculus
- AP Chemistry
- AP English Lit and Composition
- AP Environmental Science
- AP Macroeconomics
- AP Statistics
- AP Studio Art

**Honors:** An honors course provides a more rigorous program for the 4-year competitive college-bound student. Students who elect this option are expected to have strong communication, writing, and thinking skills. The student is expected to meet all expectations of Level 1, and is expected to:

- Complete all required assignments in a timely and independent manner
- Participate actively in class discussions and written assignments
- Read above grade level and complete significant independent readings
- Demonstrate the motivation to accomplish all assignments to the teacher's level of expectation
- Complete many types of research projects, including a variety of analytical and expository writings
- Write for a variety of purposes, in a variety of modes
- Demonstrate superior competence in reading, writing, listening and speaking

Depending on student requests, an Honors level to a course may be offered as a separate course. "Honors" will be cited on the student's transcript. (NOTE: Students may **not** opt out of an Honors Program once they have decided to participate in the honors program without permission of the principal and the Academic Review Committee.)

**Level 1:** A Level 1 course provides an accelerated program for the college-bound student. Students in Level 1 courses are expected to:

- Participate actively in the class discussions and written assignments
- Read at or above grade level and complete some independent reading
- Commit to independent outside readings
- Think, write, and discuss critically
- Engage fully in both individual and group activities

**Non-Leveled:** A course without a leveling designation is designed for the college-and-career-bound student. Students in these courses are expected to:

- Enhance their college readiness skills through writing, reading comprehension, and vocabulary
- Read at grade level and complete independent readings
- Participate actively in class discussions and written assignments
- Engage in research and analysis of specific topics

## **ACADEMIC SUPPORTS**

### **Academic Center**

The Academic Center is a quiet space used for students to work on alternative methods of earning academic credits and for testing purposes. Students who wish to take courses through an extended learning opportunity and/or online programs may do so after consultation with their school counselor and approval of the Academic Review Committee.

### **Advisory**

During the school day, students will be provided an opportunity to seek academic support, participate in enrichment activities, or take advantage of the opportunity to work on classroom assignments. Advisory is designed to provide personalized and individualized opportunities for students and teachers to address concerns; to help students recover grades; and to enable students to enrich their learning by challenging themselves with academic or co-curricular activities. Academic departments will provide extra help to students by re-explaining concepts and providing time to make up work. Additional benefits include workshops and guest speakers hosted by the College and Career Guidance Department; peer tutoring and mentoring sessions; and school assemblies to lessen interruptions and loss of instructional time. All students will have an adult mentor for all four years of high school to help address concerns and schedule support.

### **Tutoring**

Students experiencing academic difficulty should seek help from their teachers. Additionally, many academic departments routinely offer extra help after school to provide assistance and support to students for their academic studies. Students may also arrange for tutoring by other students through the Math Honor Society, English Honor Society, and National Honor Society.

### **Library Media Center**

The Media Center's goal is to provide resources and materials that are supportive of students' intellectual freedom and to act as an extension to the classroom. The Media Center provides access to materials and information beyond traditional textbooks such as databases, magazines, eBooks, audio books, along with a wide variety of non-fiction and fiction books. Since many of these resources are available online, information can be accessed outside of school hours, allowing students to work at their own pace. These resources also allow students to develop their critical thinking skills, refine their depth of knowledge and further their academic interests. Students also use the Media Center as a peer-tutoring location before/after school hours.

## ALTERNATIVE METHODS OF EARNING ACADEMIC CREDIT

Generally, courses required for graduation are taken at Pelham High School. However, it is the policy of the Pelham School Board (IHBH) to allow extended learning opportunities at the high school level as long as those opportunities are aligned with the school's educational goals and objectives. Extended learning means the primary acquisition of knowledge and skills through instruction or study which extends beyond the Pelham High School classroom and course requirements. **Please note: Alternative methods of earning academic credit cannot be a course offered at Pelham High School.**

Students who wish to take courses through an extended learning opportunity and/or online programs may do so in consultation with their school counselor and upon approval from the Academic Review Committee. If applicable, students or their parents/guardians are responsible for all related expenses including tuition and textbooks. Alternative credit may be accepted toward requirements leading to a Pelham High diploma if approved by administration.

An Alternative Credit Application is available in the College and Career Guidance office and must be completed and approved in advance of taking the course. Upon successful completion of the course, credit will be awarded and noted on the transcript, but grades will not be included in a student's GPA calculation.

**Independent Study**-Independent Study is intended to provide students with an opportunity to go beyond the classroom experience and to pursue and study a particular area of academic interest. Credit may be earned for projects that will be coordinated, supervised, and evaluated by a Pelham High School faculty member. Recognizing the value of self-discovery and self-teaching, the independent study will encourage responsibility and growth. Throughout the independent study, students will be asked to define goals regarding what they want to learn or accomplish. They will also refine their goals in an ongoing manner to make them specific and realistic. Students wanting to undertake an independent study will submit a proposal in writing to the Dean of Students who will present the proposal to the Academic Review Committee for final approval. In order to qualify for an Independent Study, students must be a junior or senior, maintain a B average in the chosen subject area and be in good academic standing. In no case will an independent study replace a course that is currently offered at Pelham High School.

**Internships** – The Internship is a supervised program, usually in a professional field, that affords students the opportunity to engage in a learning experience that augments classroom learning and extends beyond the traditional classroom walls. Working in conjunction with a worksite mentor and the school, the student develops a learning plan to coordinate academic and occupational skills that the student will learn and apply on the job. An internship is an excellent tool for testing out a career interest thus giving the student first-hand knowledge of a particular professional field. Importantly, students will gain real world experience while learning how to conduct themselves in a professional work-place environment. They observe first-hand how skills relating to decision-making, problem solving, teamwork, and technology are employed on the job. Students report that an internship helps them to value themselves and their abilities, gain confidence, and reflect on their future. Moreover, an internship experience can help when the time comes to apply to colleges or technical school; select a college major; and provide opportunities for future employment. Students are encouraged to find their own work site and all interns must provide their own transportation. **Prerequisite:** Senior Status

**Virtual Learning Academy** – The Virtual Learning Academy (VLACS) is a state-funded high school. Any New Hampshire resident enrolled in middle or high school is allowed to take online courses for free at any time. With prior approval from the Academic Review Committee, credit may be earned by successfully completing online through the VLACS. There are also college courses available for a fee. For more information, please visit their website at [VLACS.org](http://VLACS.org). Students who wish to have these courses on

their high school transcript must provide a VLACS official transcript to the registrar upon completion of the course. In no case will a VLACS course replace a course that is currently offered at Pelham High School unless permission was granted by the Academic Review Committee for extenuating circumstances.

**Early College**—Early college credit enables students to jump start their college education by earning college-level credits during their high school years by attending a regular college class on a college campus. With prior approval from the Academic Review Committee and from the local community college, students select courses from the general education program. Prior approval must be granted and a passing grade must be earned to transfer credits to fulfill high school graduation requirements. **Prerequisite:** Junior or Senior status. (**Note:** Students are responsible for any fees, transportation costs, and for assuring the transcript is sent to Pelham High School for credit.)

**Credit Recovery** – Students who have not successfully earned required course credits are provided the opportunity to get back on track through the Credit Recovery Program. The same rigorous competencies made available to students during a course at Pelham High are provided to students through the recovery program. Students needing remediation are provided with targeted resources to gain mastery and acquire course credits necessary to graduate on time. In order to participate in the Credit Recovery Program, students will need to have a reasonable foundation of the course material. The type of student successful in a credit recovery program is a strong independent worker motivated to complete the required work to earn credits. The Credit Recovery Program may require computer work and students will be expected to work independently and ask questions when needed.



# CAREER PATHWAYS



The Career Pathways initiative is a series of courses designed to help students increase their knowledge about occupations and careers that may be of interest to them. By participating in a pathway, students will be better prepared academically for college and will acquire the skills needed to compete in the labor market.

Many of the pathways provide an opportunity for students to earn college credit(s) through the Community College System of New Hampshire or with Southern New Hampshire University. Additionally, students in a pathway will be invited to participate in field trips, attend guest lectures, and other academic experiences geared specifically to their career interest.

It is never too early to think about your future. A pathway will allow you to take a series of courses to help you decide about your career choice *prior* to the expense of college. The benefits to students include:

- ✓ Increases academic motivation by taking courses relevant to future plans
- ✓ Allows students to have the opportunity to explore career interests while in high school
- ✓ Prepares students for the transition to college and/or a career
- ✓ Provide students with the opportunity to take college courses while in high school

Students are required to complete a commitment form in order to enroll in a pathway and entry requirements will vary. Ideally, students should apply in the second semester of their freshman year to benefit fully.

We invite you to explore one of the career paths below. By doing so, you will be connected to related courses and develop the skills needed to be successful in a career.

## Business

## Communications

## Careers in Education

## Global Citizenship

## Law, Public Safety, and Security

## STEM

- Computer and Information Technology
- Environmental Science
- Healthcare and Medical Profession
- Engineering, Engineering Technologies, and Pre-Engineering
- Life Sciences

## Visual and Performing Arts

- Music
- Art Education
- Studio Art
- Digital Art

## Business Pathway

The Business Pathway focuses on preparing students for a wide range of career options in business including accounting, advertising, finance, human resources, marketing, market research, retail, and sales. Most students trained in business understand a variety of business functions and have developed quantitative and reasoning skills. Students trained in business will find that their skills are highly marketable if they earn a bachelor's degree.

Students will follow a sequence of required courses. Some of these are college-level, which will provide the opportunity to earn college credits through the Community College System of New Hampshire:

### Three (3) Required Courses

Business Pathway Requirements	Recommended Year			
	9	10	11	12
Computer Applications I (.5 credit)	X	X		
Accounting I		X	X	X
Principles of Marketing <i>(College Credits Available)</i>			X	X

### + Three (3) Elective Courses - Choose 1 from each Column

Select One (1) Below	College Credits	Select One (1) Below	College Credits	Select One (1) Below	College Credits
Computer Applications II	3.0*	Entrepreneurship (.5 credit)	---	Personal Financial Planning	3.0
Excel	3.0	Principles of Management (.5 credit)	---	Managing Your Money (.5 credit)	---
		Retail Management (.5 credit)	---		

*\* Indicates that students have the option to sign up for either the college course or the non-leveled course.*

According to the U.S. Department of Labor (2016), long-term projections for business careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Financial Clerks	10%	High School Diploma
Meeting, Convention, and Event Planners	10%	Bachelor Degree
Market Research Analyst	23%	Bachelor Degree
Personal Financial Advisors	14%	Bachelor Degree
Financial Analyst	11%	Bachelor Degree
Human Resources Specialists	7%	Bachelor Degree
Accountants and Auditors	10%	Bachelor Degree
Advertising, Promotions, and Marketing	6%	Bachelor Degree
Sales Managers	7%	Bachelor Degree



**FBLA** – Future Business Leaders of America is an organization dedicated to helping students explore and experience the American enterprise system. The purpose of FBLA is to bring business and education together in a positive working relationship through innovative leadership development programs. FBLA is a non-profit educational organization that tries to teach students about the business world and prepare them for college through a wide range of competitions and workshops.

### Honor Cord Requirements for the Business Pathway

An honor cord signifying your academic achievement in the Business Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the Business Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Successful completion of an internship or approved job shadowing experience
- Active participation in FBLA (75% attendance and 1 conference) or a pre-approved activity

## Communications Pathway

The Communications Pathway is for students who have an interest in learning how to communicate information effectively. Communication is applied to careers in journalism, business, public relations, marketing, news broadcasting, intercultural communications, education, public administration and much more.

Students will follow a sequence of required courses. Some of these are college-level, which will provide the opportunity to earn college credits through the Community College System of New Hampshire or through Southern New Hampshire University.

### Seven (7) Required Courses

Communications Pathway Requirements	Recommended Year			
	9	10	11	12
Oral Communication (.5 credit)	X	X		
Essay Writing (.5 credit)		X		
Media Literacy (.5 credit)			X	X
Sociology (.5 credit)			X	X
College Composition ( <i>College Credits Available</i> )			X	X
Foreign Language (2 years)	X	X	X	X

### Choose One (1) Elective Course

Select One (1) Below	Recommended Year			
	9	10	11	12
Introduction to Digital Art (.5 credit)	X	X		
Introduction to Digital Photography (.5 credit)	X	X		
Creative Writing ( <i>College Credits Available</i> )		X	X	X

According to the U.S. Department of Labor (2016), long-term projections for communication careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Media & Communication Equipment	8%	High School Diploma
Public Relations Specialists	9%	Bachelor Degree
Public Relations & Fundraising Specialist	10%	Bachelor Degree
Marketing Managers	10%	Bachelor Degree
Advertising & Promotions Managers	6%	Bachelor Degree
Communications Teachers Postsecondary	10%	Doctoral or Professional Degree

## Honor Cord Requirements for the Communications Pathway

An honor cord signifying your academic achievement in the Communications Pathway will be awarded to students who complete the following requirements:



- Complete required and elective courses in the Communications Pathway with an overall 3.0 GPA
- Maintain a minimum overall 2.5 GPA in all high school courses
- Submit a piece of work to Ethereal Patter

## Careers in Education Pathway

The Careers in Education Pathway is for students who have an interest in exploring a career in early childhood, elementary, secondary, or postsecondary teaching and guidance related services. Students trained in education will find that their skills are highly marketable.

Students will follow a sequence of required courses. Some of these are college-level, which will provide the opportunity to earn college credits through the Community College System of New Hampshire or through Southern New Hampshire University:



### Three (3) Required Courses

Careers in Education Pathway Requirements	Recommended Year			
	9	10	11	12
Computer Applications I (.5 credit)	X	X		
Essay Writing (.5 credit)		X	X	X
Foundations of Education ( <i>College Credits Available</i> )			X	X

### + Four (4) Elective Courses - Choose from each Column

Select One (1) Below	College Credits	Select Two (2) Below	College Credits	Select One (1) Below	College Credits
Internship (Senior Year)	---	Creative Writing	3.0	Computer Applications II	3.0*
Careers in Education (Pinkerton CTE Program)	---	College Composition	3.0	Psychology	3.0*
		Oral Communication (.5 credit)	---	Trigonometry, Applied Algebra, Statistics*, or Pre-Calculus	3.0*

*\* Indicates that students have the option to sign up for either the college course or the non-leveled course.*

According to the U.S. Department of Labor (2016), long-term projections for education careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Teaching Assistants	8%	High School Diploma
Preschool Teachers	11%	Associate Degree
Special Education Teacher	10%	Bachelor Degree
Kindergarten and Elementary Teacher	7%	Bachelor Degree
Middle School Teacher	7%	Bachelor Degree
High School Teacher	7%	Bachelor Degree
Postsecondary Teacher	9%	Masters or Doctoral Degree

### Honor Cord Requirements for the Careers in Education Pathway

An honor cord signifying your academic achievement in the Careers in Education Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the Careers in Education Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Successful completion of an internship or approved job shadowing experience
- Membership in Educators Rising

## Global Citizenship Pathway

The Global Citizenship Pathway is for students who wish to incorporate global awareness and citizenship in their curriculum. The pathway is designed to foster students' greater awareness of their global imprint, satisfy their curiosity about the global community and its issues, and provide a vibrant forum for their examination of culture, language, and contemporary issues. Participation in the pathway will empower students to meet the challenges of the 21<sup>st</sup> century to participate fully as active citizens and to be socially responsible members of the global community.

Students involved in the pathway will achieve personal growth through the examination and reflection of global issues. This pathway provides students with the opportunity to realize their potential as thoughtful leaders of humanity in the 21<sup>st</sup> century.

### Option #1

#### Six (6) Required Courses

Global Citizenship Pathway Requirements	Recommended Year			
	9	10	11	12
World Geography (.5 credit)	X			
Western Civilization (.5 credit)		X		
Foreign Language (2 years)	X	X	X	X
Current Social & Political Issues ( <i>College Credits Available</i> )			X	X
World Lit Classics <i>or</i> World Lit Contemporaries (.5 credit)				X

### Option #2

#### Six (6) Required Courses

Global Citizenship Pathway Requirements	Recommended Year			
	9	10	11	12
World Geography (.5 credit)	X			
Western Civilization (.5 credit)		X		
Foreign Language (3 years)	X	X	X	X
Current Social & Political Issues ( <i>College Credits Available</i> )			X	X

The Global Citizenship Pathway is also co-curricular. Designed with a global focus, students will actively participate in relevant activities; promote global understanding and peaceful resolution of conflicts and perform community service.

If you are sensitive to cultural differences, committed to making a difference in the world, and willing to develop the knowledge needed for personal and professional success in the 21<sup>st</sup> century, you are encouraged to participate in the Global Citizenship Pathway.

Upon successful completion of the requirements for honors distinction of the Global Citizenship Pathway, students will receive the global citizen distinction at the awards banquet and receive an honor cord to wear at graduation.

### Honor Cord Requirements for the Global Citizenship Pathway

An honor cord signifying your academic achievement in the Global Citizenship Pathway will be awarded to students who complete the following requirements:



- Complete required and elective courses in the Global Citizenship Pathway with an overall 3.0 GPA
- Maintain a minimum overall 2.5 GPA in all high school courses
- Provide community service with an international dimension/purpose
- Complete a personal choice research project in Current Social & Political Issues class
- Write a reflection essay about the personal growth over the years as a global citizen participant
- Prepare a global resume
- Submit a global portfolio documenting all formal requirements of the program, including final capstone reflection essay

## Law, Public Safety, and Security Pathway



The Law, Public Safety & Security Pathway is for students interested in the broad career areas of law, public safety, and security. This pathway is opened to students who are interested in police work, firefighting, law, EMT, paralegal, officers of the court, FBI, criminal psychologist, judges, correction officers, criminal justice, and homeland security.

Students will follow a sequence of required courses. Some of these are college-level, which will provide the opportunity to earn college credits through the Community College System of New Hampshire:

### Six (6) Required Courses

Law, Public Safety, and Security Pathway Requirements	Recommended Year			
	9	10	11	12
Computer Applications I (.5 credit)	X	X		
Oral Communication (.5 credit)	X	X	X	X
Essay Writing (.5 credit)		X		
College Composition ( <i>College Credits Available</i> )			X	X
Forensic Science (.5 credit)		X	X	X
Criminology (.5 credit)			X	X

### Choose One (1) Elective Course

Select One (1) Below	Recommended Year			
	9	10	11	12
Psychology* ( <i>College Credits Available</i> )			X	X
Sociology (.5 credit)			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

According to the U.S. Department of Labor (2016), long-term projections for law, public safety and security careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Security Guards	6%	High School Diploma
Detective and Criminal Investigator	4%	High School Diploma
Police and Sheriff's Patrol Offices	7%	High School Diploma
Paralegal or Legal Assistant	15%	Associate Degree
EMTs and Paramedics	15%	Postsecondary Education
Private Detectives and Investigators	11%	Postsecondary Education
Firefighter	7%	Postsecondary Education
Lawyers	9%	Doctoral or Professional Degree

### **Honor Cord Requirements for the Law, Public Safety, and Security Pathway**

An honor cord signifying your academic achievement in the Law, Public Safety, and Security Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the Law, Public Safety, and Security Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Participation in the Police Explorer Program with the Pelham Police Department or other approved extended learning opportunity

## **Science, Technology, Engineering, and Math (STEM) Pathways**



The STEM Pathways are designed to engage students in wide-ranging careers in science, technology, engineering, and math. Most STEM occupations require study beyond high school leading to a certificate, associate, or bachelor degree.

Students who pursue the STEM Pathway will graduate with an impressive academic record that will make them competitive applicants at a number of colleges and universities. Please **choose one** of the following areas of concentration:

- ♦ Computer and Information Technology
- ♦ Environmental Science
- ♦ Healthcare and Medical Professions
- ♦ Engineering, Engineering Technologies, and Pre-Engineering
- ♦ Life Sciences

### **Computer and Information Technology Pathway**

Steve Jobs once said, "I think everyone should learn how to program a computer because it teaches you how to think." The field of computer and information technology makes use of computers to solve problems, including hardware and software. However, computer and information technology is very broad and includes programming languages, computer system design, network architecture, website design, computer animation, robotics, technical support, and many more disciplines.

The objective of the Computer and Information Technology Pathway is to provide students with general information and coursework to assist students in determining a specific career path within the broad field of computers. In addition to the three (3) required STEM academic courses, students will be introduced to the concepts of problem solving through a variety of courses. They may choose a programming class where they will learn the fields of application programming and software development or students may choose to study the design of computers including hardware components and networking concepts. Students may also learn spreadsheets and how to work with logical functions; maintain data tables; and record tasks with macros, or students may choose to solve technology issues in an authentic work environment. In any case, the IT industry is rapidly changing and we invite you to take full advantage of our course offerings below.

### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

### Option #1

Computer and Information Technology Pathway Requirements	Recommended Year			
	9	10	11	12
Computer Information Systems 1 (Pinkerton CTE Program)			X	
Computer Information Systems 2 (Pinkerton CTE Program)				X

### Option #2

Computer and Information Technology Pathway Requirements	Recommended Year			
	9	10	11	12
Computer Technology and Applications ( <i>College Credits Available</i> )		X	X	X
Technology Solutions and Connections (PHS Help Desk)			X	X
Intro to Programming with Python (.5 credit)			X	X

According to the U.S. Department of Labor (2016), long-term projections for Computer and Information Technology careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Computer Support Specialists	11%	Some College or Associate Degree
Web Developers	13%	Associate Degree
Database Administrators	12%	Bachelor Degree
Application Software Developers	31%	Bachelor Degree
Network Administrators	6%	Bachelor Degree
Computer Systems Analyst	9%	Bachelor Degree
Information Security Analysts	28%	Bachelor Degree
Computer Network Architects	6%	Bachelor Degree



**Computer Support Specialists**—Computer Support Specialists provide help and assistance to people and organizations using computer software or equipment. Sometimes called technical support specialists, computer support specialists provide information technology (IT) support to employees within organizations. Others, called help-desk technicians, assist non-IT users who are having computer problems.

**Database Administrators**—Database Administrators use software to store and organize data. They make sure that data are available to users and are secure from unauthorized access.

**Software Developers**—Software Developers are the creative minds behind computer programs. Some develop the applications that allow people to do specific tasks on a computer or other device. Others develop the underlying systems that run the devices or control networks.

**Network Administrators**—Network Administrators are responsible for the day-to-day operation of an organization's computer networks. They organize, install, and support an organization's computer systems, including local area networks (LANs), wide area networks (WANs), network segments, intranets, and other data communication systems.

**Computer Systems Analysts**—Computer Systems Analysts study an organization's current computer systems and make recommendations to management to help the organization operate more efficiently and effectively. They bring business and information technology (IT) together by understanding the needs and limitations of both.

**Information Security Analysts, Web Developers, and Computer Network Architects**—All use information technology (IT) to advance their organization's goals. Security analysts ensure a firm's information stays safe from cyber-attacks. Web developers create websites to help firms have a public face. Computer network architects create the internal networks all workers within organizations use.

### **Honor Cord Requirements for the Computer and Information Technology Pathway**

An honor cord signifying your academic achievement in the Computer and Information Technology STEM Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Participate in an approved extended learning opportunity

## **Environmental Science Pathway**

Students should participate in the Environmental Science Career Pathway if they have an interest in careers related to the environment and if they intend to pursue a degree in environmental studies, environmental science, environmental engineering, ecology, or other related fields.

The Environmental Science Pathway will provide students with concepts to understand the interrelationships of the natural world and analyze environmental problems both natural and human-made. In addition to the three (3) required STEM core courses, students will study the major environmental problems and issues facing society today. Topics include earth systems and resources, the living world, population biology and human population, land and water use, energy resources and consumption, impacts on the environment and human health, and global changes.

### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel <i>(College Credits Available)</i>			X	X
Statistics <i>(College Credits Available)*</i>			X	X
Pre-Calculus			X	X
Physics			X	X

*\* Indicates that students have the option to sign up for either the college course or the non-leveled course.*

### Option #1

Environmental Science Pathway Requirements	Recommended Year			
	9	10	11	12
Biochemistry			X	X
Statistics <i>(College Credits Available)*</i>			X	X
CP Biology			X	X
Environmental Science (AP)			X	X

*\* Indicates that students have the option to sign up for either the college course or the non-leveled course.*

### Option #2

Environmental Science Pathway Requirements	Recommended Year			
	9	10	11	12
Environmental Science and Natural Resources 1 (Pinkerton CTE Program)			X	
Environmental Science and Natural Resources 2 (Pinkerton CTE Program) or AP Environmental Science				X

According to the U.S. Department of Labor (2016), long-term projections for Environmental Science careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Environmental Science Protection Technicians	12%	Associate Degree
Environmental Engineers	8%	Bachelor Degree
Environmental Scientists and Specialists	11%	Bachelor Degree

**Environmental Science Protection Technicians**—Environmental science and protection technicians conduct laboratory and field tests to monitor the environment and investigate sources of pollution, including those affecting health. Many work under the supervision of environmental scientists and specialists, who direct their work and evaluate their results.

**Environmental Engineers**—Environmental engineers use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems. They are involved in efforts to improve recycling, waste disposal, public health, and control of water and air pollution.

**Environmental Scientists and Specialists**-Environmental scientists and specialists use their knowledge of the natural sciences to protect the environment. They identify problems and find solutions that minimize hazards to the health of the environment and the population.

### Honor Cord Requirements for the Environmental Science Pathway

An honor cord signifying your academic achievement in the Environmental Science STEM Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Active participation in the Recycling Club and/or Hiking Club or other approved extended learning opportunity

## Healthcare and Medical Profession Pathway

Students should participate in the Healthcare and Medical Profession Pathway if they have an interest in healthcare careers. The healthcare industry is one of the largest providers of jobs in the United States and according to the U.S. Bureau of Labor Statistics; occupations related to healthcare are projected to have one of the fastest job growths to 2026.

To work in the healthcare industry, you must have special training. Therefore, in addition to the three (3) required STEM core courses, students will be studying either the certificate and associate degree pathway or the bachelor, masters and doctorate degree pathway. Each pathway is designed to provide students with experience in courses that are typically required in college.

### Certificate and 2-Year Associate Degree Pathway

#### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

#### Option #1

Certificate and 2-Year Associate Degree Pathway	Recommended Year			
	9	10	11	12
Oral Communication (.5 credit)	X	X	X	X
Sociology (.5 credit)			X	X
Anatomy & Physiology			X	X

### Option #2

Certificate and 2-Year Associate Degree Pathway	Recommended Year			
	9	10	11	12
Oral Communication (.5 credit)	X	X	X	X
Sociology (.5 credit)			X	X
Health Science I & II (Pinkerton CTE Program)			X	X

According to the U.S. Department of Labor (2016), projections for Healthcare and Medical Profession careers to 2026 are:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Home Health Aides	47%	High School Diploma or Certificate
Diagnostic Medical Sonographers	23%	Associate Degree
Physical Therapist Assistants	31%	Associate Degree
Medical Assistants	29%	Associate Degree
Dental Assistants	20%	Associate Degree
Respiratory Therapists	23%	Associate Degree
Registered Nurses	15%	Associate Degree
Nursing Aides	11%	Associate Degree
Radiologic Technologists and Technicians	12%	Associate Degree
Licenses Practical Nurses	12%	Associate Degree
Medical Records and Health Technicians	14%	Associate Degree

### 4-Year Bachelor, Masters, or Doctorate Pathway

#### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

#### Four (4) Required Courses

4-Year Bachelor, Masters, or Doctorate Pathway	Recommended Year			
	9	10	11	12
Biochemistry			X	X
Biology (AP)			X	X
Calculus ( <i>College Credits Available</i> )			X	X
Anatomy & Physiology			X	X

According to the U.S. Department of Labor (2016), projections for Healthcare and Medical Profession careers to 2026 are:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Athletic Trainers	22%	Bachelor Degree
Occupational Therapists	21%	Master's Degree
Physician Assistants	37%	Master's Degree
Epidemiologist	9%	Master's Degree
Physical Therapists	25%	Doctorate Degree
Audiologists	20%	Doctorate Degree
Medical Scientists	13%	Doctorate Degree
Optometrists	17%	Doctorate Degree

### **Honor Cord Requirements for the Healthcare and Medical Profession Pathway**

An honor cord signifying your academic achievement in the Healthcare and Medical Profession STEM Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Participate in an approved extended learning opportunity

## **Engineering, Engineering Technologies, and Pre-Engineering Pathway**

Students should participate in the Engineering, Engineering Technologies and Pre-engineering Pathway if they like to design products and systems and have an interest in solving problems. The pathway is designed to place a focus on science, math, and engineering-related course work. In addition, students are encouraged to participate on the Robotics Team. Students should select one of the following engineering pathways to increase their knowledge in courses that are typically required in college:

**Engineering:** Engineers apply the principles of science and mathematics to develop solutions to problems. Engineers will need a bachelor degree for employment and can choose from a variety of specialties including electrical, mechanical, chemical, civil, computer hardware, materials, industrial, and many more.

**Engineering Technologies:** Engineering technicians may assist engineers in research and development or work in quality control, inspecting products and processes, conducting tests, and collecting data. Some engineering technicians work in manufacturing, sales, construction, and maintenance. A two-year associate degree is required to work as an engineering technician.

**Pre-Engineering:** Pre-Engineering degrees are intended to introduce students to the engineering profession and are two-year programs designed to transfer into a four-year degree. If you study pre-engineering, you will begin taking courses in math, physics, chemistry, and engineering aimed to provide you with a strong foundation for a career as an engineer.

In addition to the three (3) required STEM core courses, students will be studying either the associate degree pathway **or** the bachelor degree pathway. Each pathway is designed to provide students with experience in courses that are typically required in college.

## Pre-Engineering or 2-Year Associate Degree

### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

### Four (4) Required Courses

2-Year Associate Degree Pathway	Recommended Year			
	9	10	11	12
Engineering and Design I (.5 credit)		X	X	X
Manufacturing Processes (.5 credit) ( <i>College Credits Available</i> )		X	X	X
CADD I ( <i>College Credits Available</i> )			X	X
Physics			X	X

According to the U.S. Department of Labor (2016), projections for engineering technologies and pre-engineering careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Medical Equipment Repairers	5%	Associate Degree
Environmental Engineering Technicians	13%	Associate Degree
Civil Engineering Technicians	9%	Associate Degree
Mechanical Engineering Technician	5%	Associate Degree

## Mechanical and Electrical Engineering

### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

### Five (5) Required Courses

4-Year Bachelor Degree Pathway	Recommended Year			
	9	10	11	12
Engineering and Design I (.5 credit)		X	X	X
Manufacturing Processes (.5 credit) <i>(College Credits Available)</i>		X	X	X
CADD <i>(College Credits Available)</i>			X	X
Physics (Level 1)			X	X
Calculus <i>(College Credits Available)</i>			X	X

According to the U.S. Department of Labor (2016), long-term projections for engineering careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Computer Hardware Engineers	6%	Bachelor Degree
Electrical Engineers	9%	Bachelor Degree
Electronics Engineers	4%	Bachelor Degree
Mechanical Engineers	9%	Bachelor Degree

### Chemical and Bio-Medical Engineering

#### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel <i>(College Credits Available)</i>			X	X
Statistics <i>(College Credits Available)*</i>			X	X
Pre-Calculus			X	X
Physics			X	X

*\* Indicates that students have the option to sign up for either the college course or the non-leveled course.*

#### Choose Four (4) Elective Courses

4-Year Bachelor Degree Pathway	Recommended Year			
	9	10	11	12
Engineering and Design I (.5 credit)		X	X	X
Manufacturing Processes (.5 credit) <i>(College Credits Available)</i>		X	X	X
Physics (Level 1)			X	X
Calculus <i>(College Credits Available)</i>			X	X
AP Chemistry or Biochemistry			X	X

According to the U.S. Department of Labor (2016), long-term projections for engineering careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Biomedical Engineers	7%	Bachelor Degree
Chemical Engineers	8%	Bachelor Degree
Industrial Engineers	10%	Bachelor Degree
Materials Engineers	2%	Bachelor Degree

## Honor Cord Requirements for the Engineering, Engineering Technologies, and Pre-Engineering Pathway

An honor cord signifying your academic achievement in the Engineering, Engineering Technologies, and Pre-Engineering STEM Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Active participation on the PHS FIRST Robotics Team or participate in an approved extended learning opportunity

## Life Sciences

Life sciences or biological sciences is a branch of science that involves the study of life and organisms. The life sciences pathway is designed to prepare students for a career focusing in field and laboratory research. In addition to three (3) required STEM academic courses, students will learn the basic molecular, biological, and chemical concepts related to organisms and that are used in different career opportunities. Through a hands-on laboratory approach using equipment, specimens, and research students will study that classification of life, ecology, the structure of organism, DNA, and animal and plant biology.

### Choose Three (3) Required Courses

STEM Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to STEAM (.5 credit)	X	X		
Excel ( <i>College Credits Available</i> )			X	X
Statistics ( <i>College Credits Available</i> )*			X	X
Pre-Calculus			X	X
Physics			X	X

\* Indicates that students have the option to sign up for either the college course or the non-leveled course.

### Option #1

### Choose Four (4) Elective Courses

Choose Four (4) Elective Courses	Recommended Year			
	9	10	11	12
Biochemistry			X	X
Marine Biology (.5 credit)			X	X
Zoology (.5 credit)			X	X
Anatomy and Physiology			X	X
AP Biology			X	X
AP Environmental Science			X	X



## Option #2

Three (3) Required Courses	Recommended Year			
	9	10	11	12
Marine Biology (.5 credit)			X	X
Zoology (.5 credit)			X	X
Anatomy and Physiology			X	X
<b>+ CTE Program at Pinkerton Academy</b>				
Introduction to Animal Science (Pinkerton CTE Program)			X	
Animal Management (Pinkerton CTE Program)			X	
Animal Health and Veterinary Technology (Pinkerton CTE Program)				X
<b>Or + CTE Program at Alvirne High School</b>				
Veterinary Science I (Alvirne CTE Program)			X	
Veterinary Science II (Alvirne CTE Program)				X

According to the U.S. Department of Labor (2016), long-term projections for Life Science careers to 2026 are as follows:

<u>Career Path</u>	<u>Rate of Growth</u>	<u>Educational Experience</u>
Veterinary Assistants	19%	High School Diploma
Veterinary Technologist & Technician	20%	Associate Degree
Athletic Trainer	23%	Bachelor Degree
Biological Technician	10%	Bachelor Degree
Biology Teacher	8%	Bachelor Degree
Ecologist	6%	Bachelor Degree
Nutritionist	15%	Bachelor Degree
Geneticist	29%	Master's Degree
Biochemist	12%	Doctoral or Professional Degree
Veterinarian	19%	Doctoral or Professional Degree

### Honor Cord Requirements for the Life Sciences STEM Pathway

An honor cord signifying your academic achievement in the Life Sciences STEM Pathway will be awarded to students who complete the following requirements:

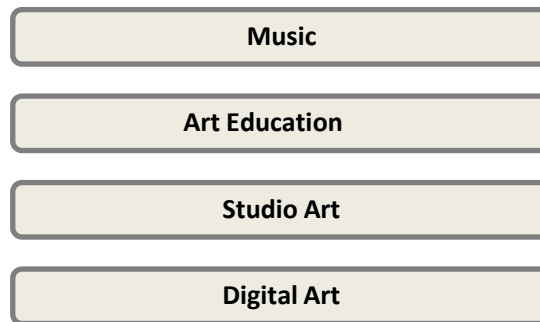


- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Participate in an approved extended learning opportunity

## Visual and Performing Arts Pathway

The Visual and Performing Arts Pathways are for students who wish to unlock their creative potential or enjoy taking a hands-on learning approach developing their artistic spirit. If you are creative and talented and have a passion for music or art, consider one of the pathways in Visual and Performing Arts. By following the coursework in a pathway, you will improve your technique and skill.

Most students trained in Visual and Performing Arts are persistent, disciplined, and hard working. They have passion and are determined to achieve their best. Students who pursue the Visual and Performing Arts Pathway can choose one of the following areas of concentration:



### Music Pathway

The Music Pathway is designed to prepare students to play instruments or sing for live audiences and in recording studios. Musicians and singers often perform in settings such as concert halls, arenas, and clubs. They perform in a variety of styles such as Pop, Rock, Jazz, Classical, Hip-Hop, etc. Students in the Music Pathway should choose one of the following options:

#### Option #1

Music Pathway Requirements	Recommended Year			
	9	10	11	12
Marching/Concert Band (4 years)	X	X	X	X

#### Option #2

Music Pathway Requirements Choose Three (3) Courses Below	Recommended Year			
	9	10	11	12
Guitar 2 (.5 credit)		X	X	X
Piano 2 (.5 credit)		X	X	X
Percussion 2 (.5 credit)		X	X	X
Singing and Song Writing (.5 credit)		X	X	X
Music Theory (.5 credit) <i>(College Credits Available)</i>			X	X
<b>Required</b>				
Music Combo (1 credit required)		X	X	X

*Students of music performance practice their skills as musicians. Classes and live performances will help you develop a personal style and prepare you for performing as soloists, ensemble players, and accompanists.*

## Honor Cord Requirements for the Performing Arts Pathway

An honor cord signifying your academic achievement in the Performing Arts Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the Performing Arts Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Marching/Concert Band students are expected to perform at all home football games and march in the Pelham Old Home Day parade in the fall during marching season. During concert season, students are expected to participate in performances such as the annual NHMEA large group music festival, spring concert, and PHS commencement ceremony.

## Art Education Pathway

The Art Education Pathway focuses on preparing students who are interested in exploring a career in the visual arts education field. Students will be exposed to instruction and experiences to develop competencies in teaching and grading in art education. In addition, students will be required to complete observation hours in an art classroom environment through our job shadowing program. These hours will be completed at a local school.

Art Education Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to Art	X			
Oral Communications (.5 credit)	X	X	X	
Ceramics I (.5 credit)	X	X	X	X
Intro to Digital Art (.5 credit)	X	X	X	X
Drawing and Painting I		X	X	X
Foundations of Education <i>(College Credits Available)</i>			X	X
<b>(+) Choose One (1) Below:</b>				
Ceramics II (.5 credit) <b>and</b> Advanced Ceramics (.5 credit)		X	X	X
Graphic Design (.5 credit) <b>and</b> Digital Illustration (.5 credit)		X	X	X
Modern Art			X	X
Drawing and Painting II			X	X
Advanced Art			X	X

## Studio Art Pathway

The Studio Art Pathway aims progressively to provide students with the means to undertake self-direction work within a broad range of disciplines. The structure of the Studio Art Pathway provides a means by which students can contextualize their work while forming a knowledge and understanding of fine art practice.

### Option #1 – 2D Studio Art

2D Studio Art Requirements	Recommended Year			
	9	10	11	12
Introduction to Art	X			
Drawing and Painting I		X	X	
<b>(+) Choose Two (2) Below:</b>				
Advanced Art			X	X
Modern Art			X	X
Drawing and Painting II			X	X
AP Studio Art			X	X

### Option #2 – 3D Studio Art

3D Studio Art Requirements	Recommended Year			
	9	10	11	12
Introduction to Art	X			
Ceramics I (.5 credit)	X	X	X	
Ceramics II (.5 credit)	X	X	X	
Drawing and Painting I		X	X	
Advanced Ceramics (.5 credit)		X	X	X

## Digital Art Pathway

The Digital Art Pathway focuses on preparing students for 21<sup>st</sup> century career options in the visual arts. Students will be trained in traditional media, digital photography, digital editing, and design/animation programs based on industry trends and standards. Students who pursue a degree in these creative fields will be developing a professional portfolio in support of a career in design, advertisement, digital/multi-media, photography, or web design. Choices within the elective course options allow for students to shift the focus of their learning toward digital photography/editing or graphic design based learning.

Digital Art Pathway Requirements	Recommended Year			
	9	10	11	12
Introduction to Art	X			
Introduction to Digital Art (.5 credit)	X			
Introduction to Digital Photography (.5 credit)	X	X		
Drawing and Painting I		X	X	
Graphic Design (.5 credit)		X	X	X
Digital Illustration (.5 credit)		X	X	X

### Honor Cord Requirements for the Visual Arts Pathway

An honor cord signifying your academic achievement in the Visual Arts Pathway will be awarded to students who complete the following requirements:



- Completion of required and elective courses in the Visual Arts Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses
- Portfolio composed of a culmination of artwork created throughout the pathway
- Art Education Pathway students are required to submit a written teaching philosophy statement and complete observation hours
- Studio Art and Digital Art students are required to submit a written artist's statement

## College Credit Opportunities

Pelham High School has developed partnerships with the Community College System of New Hampshire (CCSNH) and Southern New Hampshire University (SNHU) providing students with the opportunity to earn college credits prior to high school graduation.

These courses are taught at the college level by Pelham High School teachers who have met or exceeded the hiring qualifications for adjunct faculty (usually a Master's Degree) and have agreed to meet the college level standards set forth by both the CCSNH and SNHU.

**Running Start** – The Running Start program is offered through the Community College System of New Hampshire (CCSNH) and allows for high school students with junior and senior status to enroll in select college courses. The CCSNH sets all required fees, currently \$150 per course and tuition is paid directly to the college.

**SNHU in the High School** - In collaboration with Southern New Hampshire University (SNHU), qualified high school sophomores, juniors and seniors may participate in college credit opportunities. SNHU sets all required fees, currently \$100 per course (plus \$25 for science lab credits) and tuition is paid directly to the college.

Dual-Enrollment College Credit Opportunities have several advantages:

- ✓ Reduces cost of a college education
- ✓ Prepares students for the academic transition from high school to college
- ✓ Encourages more students to pursue a college education
- ✓ Demonstrates to college admission offices a willingness to take rigorous courses

The college credits earned through these programs may be used toward completion of a degree, diploma, or certificate at the college(s) in which they were earned or may be used to transfer credit to other colleges or universities throughout the country. **Please note that the determination of transfer credit is at the discretion of the receiving institution.**

## 2020-2021

### College Credit Opportunities At Pelham High School

Pelham High Course	College Course	Credits	College Partner
American Literature Classics	LIT100 Intro to Literature	3	SNHU
Calculus - CC	MATH210N Calculus I	4	Nashua CC
Chemistry College Credit	CHM101 Fundamentals of Chemistry	3	SNHU
	CHM101L Foundations of Chemistry Lab	1	
College Composition	ENGL101N College Composition	4	Nashua CC
Computer Applications II College Credit	BCPT119N Software Applications	3	Nashua CC
Computer Technology and Applications	BCPT101N Computer Technology and Applications	3	Nashua CC
Computer-Aided Design I (CADD)	CAD111N CADD I	5	Nashua CC
Creative Writing	ENG226 Introduction to Creative Writing	3	SNHU
Current Social and Political Issues	POLS2220L Current Social & Political Issues	3	Lakes Region CC
Foundations of Education	EDU102 Foundations of Education	3	SNHU
	EDU102L Foundations of Education Lab	1	
Manufacturing Processes	MTTN101N Manufacturing Processes	3	Nashua CC
Music Theory	MUS211 Music Theory and Aural Skills I	3	SNHU
Personal Financial Planning	FIN120M Personal Financial Management	3	Manchester CC
Principles of Marketing	BUS104N Principles of Marketing	3	Nashua CC
Psychology College Credit	PSYC101N Introduction to Psychology	3	Nashua CC
Spanish IV	LSP211 Intermediate Spanish I	3	SNHU
Spreadsheet: Excel	BCPT208N Spreadsheet: Excel	3	Nashua CC
Statistics - CC	MATH106N Statistics I	4	Nashua CC
U.S. Government and Politics	POLS2310L American Government	3	Lakes Region CC
U.S. History College Credit	HIS114 U.S. History II: 1865 - Present	3	SNHU

**Please Note:** For your convenience, we have identified courses available for college credit with a “CC” along with their course descriptions in the Program of Studies Guide. Course offerings may vary and not all sections of classes will be designated as a college credit opportunity. Students should also be aware that college courses have attendance policies as defined by the respective college.



## New Hampshire Scholars Program



New Hampshire Scholars is part of the State Scholars Initiative, a national program that encourages students to complete a rigorous course of study in high school—one that will give students a boost on college applications while preparing them for a successful transition to college or a career.

To be recognized as a NH Scholar, students must complete the course requirements below and achieve a minimum GPA of 3.33\*. Students who successfully complete the program will be publicly recognized as a New Hampshire Scholar. Additionally, gold medallions will be given to students who participate in the program and a New Hampshire State Scholar seal will be placed on the high school diploma.

\*Note: The GPA is calculated after semester 1 of the student's senior year and only includes courses where credit has been earned.

### NH Scholars Requirements

- 4 years of English
- 4 years of Math
- 3 credits of Lab-Science
- 3.5 Credits of Social Science
- 2 Credits of a Foreign Language (*Must be the same*)
- Minimum 3.33 GPA (*determined end of semester 1 of senior year*)

### New Hampshire Scholars 4 Year Planner

Student Name: \_\_\_\_\_ Year of Graduation: \_\_\_\_\_

Grad Req.	Course	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Total Credits
4 yr.	English					
4 yr.	Mathematics					
3 cr.	Lab-Science					
3.5 cr.	Social Studies					
2 cr.	Foreign Language (same)					

By signing this planner, the student agrees to complete the NH Scholars Core Course of Study listed above. This curriculum supplements the minimum graduation requirements of Pelham High School. The parent/guardian agrees to support their student's efforts. Please return to the College and Career Guidance Department.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Legal Guardian Signature

\_\_\_\_\_  
Date

# COURSE SELECTION PROCESS

## Scheduling Statement

The master schedule is developed to maximize each student's opportunity to take the courses (at the appropriate level) each year. Seniors are given priority in the scheduling process followed in order by juniors, sophomores, and freshmen. In some cases, students will not be able to be scheduled for every course, which they would like to take. This situation may occur when students are trying to take courses out of the typical sequence or if courses are offered at the same time.



Students, make the effort to talk about your course selection with your parents, teachers, and/or your school counselor. Think about which courses will help you the most; which ones you need to prepare for college and your future career, how much time and energy you need for other responsibilities such as family, sports, work, or other extracurricular activities. Make the most of the opportunities provided for you at PHS.

Students need to select their classes and their alternate selections carefully during the scheduling period. Because classes are determined based on student interest, it is essential that we get an accurate count for each class. Once registration is complete, the courses will be scheduled for the student. When all of the students are scheduled, decisions will be made regarding the number of teachers needed to staff our high school. **Therefore, students and parents should treat the course selection sheet as a contract.** Parents indicate that they support the classes selected by signing the course selection sheet.

## Schedule Changes

The master schedule and staff allocations are determined based on student course selections. The College and Career Guidance Department strives to create a balanced schedule in order to maintain class sizes which best promote learning. In certain extreme situations, approval may be granted for a schedule change. Students need to review the following criteria prior to requesting a schedule change:

- Graduation requirements are missing
- Prerequisite requirements have not been met
- Duplication of courses
- Student wants to add an available elective in place of an open block
- College is requesting a specific course
- Student was placed in a course they did not request

**Please Note: All requests for schedule changes should be made prior to the start of the academic year through the College and Career Guidance Department and in accordance with deadlines published by the high school.**

To request a change, students need to obtain a ***Schedule Change Request Form*** from the College and Career Guidance Department Office, fill it out, have it signed by a parent, the teachers involved (if required), and return it to the school counselor. The College and Career Guidance Department will advise the student if or when the new schedule will take effect.



## **Policy Regarding Failed Classes and Make Ups**

Many courses at PHS follow a sequence. Therefore, students cannot advance to the next course until they have successfully completed the prerequisite. In many cases, it is impossible to reschedule make-up courses during the school year. We strongly recommend that students who fail courses, especially required courses, enroll in a summer, night, online, or credit recovery program. This will not only ensure a timely progression through courses but also ensure that graduation target dates will be maintained. Under no circumstance will students enroll in a course where the required prerequisite has not been met. The College and Career Guidance Department will provide listings of **pre-approved summer or night school courses** available in the surrounding area. Results from summer or night courses are not configured into the student's GPA. Only courses taken at PHS are configured into the GPA.

## **Transfer Students**

High school students who live in Pelham or who move to Pelham and wish to transfer to PHS should contact the PHS College and Career Guidance office to obtain a New Student Information Packet. This packet contains registration information as well as a list of essential records and other documents required for enrollment in PHS. New students should also schedule an appointment with a school counselor to complete the scheduling process. During this appointment, the school counselor will review the transcript(s) from the other school(s), discuss the remaining graduation requirements, and make recommendations and suggestions regarding a course schedule.

The administration will make a determination on transfer of credit on all courses taken, grades earned, and equivalent credits earned by the student to a PHS transcript. All courses, grades, and credits earned at PHS will be added to the transcript thereafter. High school curricula and course leveling systems differ greatly from school to school. Due to such complexity, it is difficult to obtain an accurate assessment of grades from previous schools; therefore, only classes taken at PHS will be included in a student's grade point average (GPA). Students will not receive a rank in class until they have completed four (4) semesters at PHS.

All prospective students and their parents should feel free to contact the PHS College and Career Guidance Department to obtain additional information regarding the transfer of a student.

## **Early Graduation**

PHS offers a comprehensive program of studies that requires all students to attend school for eight semesters. In the event that a student and their parent seek to graduate early, consideration will be decided on a case-by-case basis, and is subject to review and recommendation by the Academic Review Committee, comprised of the high school leadership team and the student's respective school counselor. Under no circumstances will an exception be made for less than seven (7) semesters of attendance. All early graduation requests shall be related to career and/or educational plans of the student making the request.

Students need to meet the requirements listed below.

- The student has successfully completed all required courses and has maintained an overall GPA of 2.0.
- The student has achieved the minimum number of credits for graduation eligibility.
- The student has presented an Application for Early Graduation and a letter stating the extenuating circumstances and/or reasons for the exception to their school counselor no later than the end of their junior year.
- The student has discussed and reviewed the plan with a school counselor prior to the formal request.
- The student has completed the Community Service Program requirements prior to making the request for early graduation.

# COURSE DESCRIPTIONS

## BUSINESS PROGRAM

### **601-COMPUTER APPLICATIONS I** **(½ credit)**

Students will be introduced to Microsoft Office including Word, Excel and PowerPoint. Microsoft Office is considered the language of colleges and corporate America. Learn what Microsoft Office can do for you. This course satisfies the graduation requirement for computer technology.

### **610-SPREADSHEET: EXCEL** **CC (1 credit)**

This course provides students with knowledge of Excel, a spreadsheet program for managing and presenting data in the Microsoft® Windows environment. Excel offers spreadsheets, charting, drawing, scenario, data maps, and macros. This course helps prepare students to take the Microsoft Expert Level Certification Exam. **This course qualifies as a Math Intensive course.**

**Prerequisite:** Sophomore, Junior or Senior; Algebra I and Computer Applications I or equivalent

### **611CC-COMPUTER APPLICATIONS II COLLEGE CREDIT** **CC (1 credit)**

This course covers several components of the Microsoft® Office. Students will complete a college level Microsoft® Office (Word, Excel, Access, and PowerPoint) textbook. The skills acquired in this course will prepare students for the MOUS (Microsoft® Office User Specialist) Certification. Students must be able to work independently. **Students must sign up for College Credit; otherwise, they take Computer Applications II (617).**

**Prerequisite:** Sophomore, Junior or Senior; Computer Applications I or equivalent

### **617-COMPUTER APPLICATIONS II** **(½ credit)**

This course covers several components of the Microsoft® Office, but is not part of the college credit program. Students will create Word, Excel, PowerPoint, and Access documents using introductory to intermediate functions. The skills acquired in this course prepare students to enter the work force or college with excellent computer skills.

**Prerequisite:** Computer Applications I or equivalent

## **616-COMPUTER TECHNOLOGY AND APPLICATIONS**

### **CC (1 credit)**

This course promotes a working knowledge and understanding of computers while developing computer-related skills to support your high school studies, college, and career. Upon completion of the course, students will be able to identify the major hardware components of a computer system, will be familiar with networking concepts, and will learn how to protect digital devices from viruses and cybercrime. Different categories of operating systems and the most widely used software applications will be reviewed. Students will learn about digital citizenship including how to use technology safely, legally, and ethically. Responsible, respectful, and appropriate online behavior will be discussed, as well as an understanding of the risks and personal implications of one's actions in a digital society. Students will learn Microsoft® Word and the Windows operating system.

**Prerequisite:** Sophomore, Junior or Senior; Computer Applications I or equivalent

## **651-ACCOUNTING I**

### **(1 credit)**

In this course, students study the complete accounting cycle for a service and a merchandising type of business. They will explore careers in accounting, learn accounting terms, prepare financial reports, and be exposed to several financial ratios. Students will participate in the Stock Market Game by analyzing and reporting on a company using financial ratios learned. Students will use Word, Excel, and PowerPoint. A calculator is strongly recommended for this course.

**This course qualifies as a Math Intensive course.**

**Prerequisite:** Sophomore, Junior or Senior; Computer Applications I or equivalent

## **672-PRINCIPLES OF MARKETING**

### **CC (1 credit)**

This college credit course is designed to provide students with an understanding of marketing's role in the American economy and the individual firm. The components of an organization's strategic marketing program including how to plan, price, promote, and distribute goods and services will be covered. Students will be able to apply skills learned by creating a survey, a marketing plan, and an advertising campaign through hands-on activities. Students will use Word, Excel, and PowerPoint. This is a college-level course and a college-level textbook will be used.

**Prerequisite:** Junior or Senior; Computer Applications I or equivalent

## **673-PRINCIPLES OF MANAGEMENT**

### **(½ credit)**

This course is designed to expose students to the nature of the organizational environment and the major activities performed by its managers—planning, organizing, leading, and controlling. Students will learn the personal and leadership skills necessary to be an effective manager. Students will be exposed to issues faced by managers including supervision of a workforce, making financial decisions, and developing & implementing quality improvement systems. The course is designed with a skills based approach and focuses on: communication (oral, written, non-verbal, and listening), problem solving, teamwork, decision making, conflict resolution, critical analysis and ethical reasoning.

**Prerequisites:** Sophomore, Junior or Senior; Computer Apps I. It is highly recommended that students have previous/current experience in the workforce.

## **674-RETAIL MANAGEMENT**

### **Level 1 (½ credit)**

Students will examine contemporary management issues in the retail environment through the management of the school store, with a focus on, problem-solving techniques and decision-making processes. Students will discuss and demonstrate a range of retail management topics, including inventory planning and control, location assessment and store design, merchandising and retail promotion, product and brand management, human resources administration, legal and ethical concerns, information technology resources, financial and accounting needs and sales and trend forecasting. Students may be asked to work in the school store outside of class time.

**Prerequisite:** Principles of Marketing or taking concurrently; Junior or Senior

## **926-MANAGING YOUR MONEY**

### **(½ credit)**

This course provides the student with a foundation in personal money management. Students will learn how to manage their money, build financial security and make sound financial decisions. Course topics include creating a budget, using credit, saving, calculating discounts, computing the amount you will be taxed, planning for the future, investing and other topics that will help you with your finances now and in the future. **This course qualifies as a Math Intensive course and a personal finance course as required for graduation.**

**Prerequisite:** Junior or Senior

## **941-PERSONAL FINANCIAL PLANNING**

### **CC (1 credit)**

This college credit course provides students with an effective learning experience in personal finance. Emphasis is on helping students make sound financial decisions in the area of careers, budgeting, insurance, credit, stock and other investments, risk management, real estate, government taxes, and retirement planning. Students will calculate and analyze future/present value of an investment, ratio formulas, home affordability and amortization, income taxes, percent increase/decrease, and unit pricing. Students will explore different careers and analyze how income from these careers affects lifestyle. Outside reading and knowledge of PowerPoint and Excel is expected. A calculator is needed for this class. **This course qualifies as a Math Intensive course and a personal finance course as required for graduation.**

**Prerequisite:** Junior or Senior; Computer Applications I or equivalent

## **946-ENTREPRENEURSHIP**

### **(½ credit)**

This course is designed to introduce students to the basic concepts of Entrepreneurship including developing the personal skills necessary to succeed. Students will explore the steps necessary to starting a business including, but not limited to, analyzing opportunities in the market, obtaining financing, and developing marketing & pricing strategies. They will also learn about the operational issues that new businesses face such as protecting intellectual property and managing financial risks. This course meets requirement for the business pathway.

**Prerequisite:** Sophomore, Junior or Senior

## ENGLISH PROGRAM

All students are required to take 4 credits of English for graduation (Freshman English, Sophomore English and 2 credits of elective English). An English class must be taken each year of high school. Listed below are suggested sequences for students. Students will have the option of changing as their academic plans change.

Grade	Career Path	2 yr. College & Some 4 yr. Colleges	4 yr. College	4 yr. Competitive College
9	Freshman English <i>and</i> Introduction to Writing	Freshman English <i>or</i> Freshman English L1 <i>and</i> Introduction to Writing	Freshman English L1 <i>or</i> Freshman English Honors <i>and</i> Introduction to Writing	Freshman English Honors <i>and</i> Introduction to Writing
10	Sophomore English	Sophomore English <i>or</i> Sophomore English L1	Sophomore English L1 <i>or</i> Sophomore English Honors	Sophomore English Honors
11*	American Literature Contemporaries <i>or</i> Electives*	American Literature Contemporaries <i>or</i> American Literature Contemporaries L1 <i>or</i> Electives*	American Literature Contemporaries L1 <i>or</i> American Literature Classics <i>or</i> Electives* (CC)	American Literature Classics <i>or</i> Electives* (CC or AP)
12*	World Literature Contemporaries I & II <i>or</i> Electives*	World Literature Contemporaries I & II <i>or</i> World Literature Contemporaries I & II, L1 <i>or</i> Electives*	World Literature Contemporaries I & II, L1 <i>or</i> World Literature Classics-Honors <i>or</i> Electives* (CC)	World Literature Classics-Honors <i>or</i> Electives* (CC or AP)
<b>*Electives That Meet Graduation Requirements</b>			<b>Electives That Do NOT Meet Graduation Requirements</b>	
AP English Literature & Composition (AP)			Advanced Research Methods	
Best Shorts			Foundations of Education (CC)	
College Composition (CC)			Yearbook	
Creative Writing (CC)				
Essay Writing				
Film Analysis				
Heroes and Villains				
Media Literacy				
Oral Communication				

**100-FRESHMAN ENGLISH HONORS (1 credit)**

**110-FRESHMAN ENGLISH Level 1 (1 credit)**

**120-FRESHMAN ENGLISH (1 credit)**

**Honors is strongly recommended if considering AP Literature & Composition.**

Students develop a working knowledge of the use of language. Students expand their vocabulary and develop their speaking, listening, and writing skills. The students critically read, view, and interpret short stories, novels, plays, and nonfiction selections. Students are expected to develop comprehension skills through independent reading. **Outside/summer reading requirements must be met in order for students to complete MLA reading/writing activities within the first weeks of class.**

## **122-INTRODUCTION TO WRITING (½ credit)**

Incoming students develop their essay writing ability by improving their grammar, mechanics, and word choice skills. They extend their writing opportunity by using all steps of the writing process from prewriting to publishing. Students will practice writing skills applicable across the curriculum. Specific skills will include applying MLA formatting, developing thesis statements supported by evidence, introducing and concluding essays, developing unified paragraphs, and expressing an original voice while avoiding plagiarism.

**This course is required for all freshmen.**

## **123-ESSAY WRITING (½ credit)**

Students develop their essay writing ability by improving their grammar, mechanics, and word choice skills. They extend their writing opportunities by using the writing process and word processing. Students develop a variety of essays, which may include narration, description, demonstration, cause/effect, persuasion, and a multigenre research paper. Students can conference on essays from other content areas.

**Prerequisite:** Freshman English or Introduction to Writing

## **124-FILM ANALYSIS (½ credit)**

Students will learn about the formal elements of film (narrative, mise-en-scene, cinematography, sound and editing). Students will watch a variety of films, from Classic Hollywood to modern blockbusters, writing analysis essays and examining how the medium of film differs from that of literature. A strong emphasis on writing, reading, and visual analysis will be evaluated.

**Prerequisite:** Junior or Senior

## **125-SOPHOMORE ENGLISH HONORS (1 credit)**

### **130-SOPHOMORE ENGLISH Level 1 (1 credit)**

### **140-SOPHOMORE ENGLISH (1 credit)**

**Honors is strongly recommended if considering AP Literature & Composition.**

Students study grammar, composition, and literature. They apply grammar usage concepts in written and oral assignments and learn to write a formal essay and a research paper. They read and analyze novels as well as works of nonfiction, poetry, mythology, and drama. They also complete vocabulary units. They learn study skill techniques for reading, note taking, and test taking. **Outside/summer reading requirements must be met in order for students to complete MLA reading/writing activities within the first weeks of class.**

**Prerequisite:** Freshman English

For students to select Honors or Level 1, they need to earn a B- or better in the current Honors or L1 English course.

## **129-HEROES AND VILLAINS Level 1**

### **131-HEROES AND VILLAINS**

**(½ credit)**

Students study the characteristics of heroes and villains from the Classical Age to modern media. They take into consideration what the creator of the character had in mind, what circumstances affected this person's actions, and what culture or society produced this character. They discuss how their own principles, prejudices, and associations influence people's perceptions. They read stories that seem to have an obvious hero and an obvious villain and learn how character development, sentiment, and tone can blur the line between hero and villain.

**Prerequisite:** Junior or Senior; Sophomore English

## **132-BEST SHORTS**

**(½ credit)**

Students have the opportunity to read short writings in prose, poetry, drama, and media. They read great short pieces of literature and participate in class discussions of students' writing. They study societal issues and events portrayed through centuries of global media. They read, write, think, and discuss critically the material covered in class.

**Prerequisite:** Junior or Senior; Sophomore English

## **136-ORAL COMMUNICATION (½ credit)**

Students prepare to assume an active part in those phases of professional and social life requiring effective oral communication. They improve skills in public speaking, self-confidence, and self-awareness. Students learn to speak clearly and pointedly, and to plan and organize thought before delivery. Along with formal and impromptu speechmaking, students critically analyze, research, and argue topics of interest.

## **147-CREATIVE WRITING**

**CC (1 credit)**

Students develop their skills in writing poetry, prose, fiction, and drama, while working on specific exercises in a supportive critical environment. Because of the strong emphasis on peer editing, students must be mature enough to give and receive constructive criticism regarding sensitive, often personal, work. Some exercises expose students to the protocols, as well as the problems associated with particular genres of writing; others assist the writer in mastering specific writing skills. Students read texts by various published authors for instructional support. Grammar and punctuation skills are reinforced as needed. **Summer writing requirements must be met.**

**Prerequisite:** Sophomore, Junior or Senior; Essay Writing

## **151-COLLEGE COMPOSITION**

**CC (1 credit)**

Students develop a mastery of the writing process, particularly an ability to reconsider and revise their own work. Students practice writing effectively for college courses across the curriculum areas and for their own personal and professional lives. Students practice narrative, informational, argumentative, and research writing. They review Standard English grammar and MLA documentation. They also learn how to use the APA style guide. The writing assignments include SAT writing samples, college application and scholarship essays, college writing assignments, and a persuasive research paper.

**Prerequisite:** Junior or Senior; Essay Writing or SAT EBRW score of at least 550

## **152-MEDIA LITERACY**

**(½ credit)**

This course will provide a 21<sup>st</sup> century look at the media of American culture and the cultures in the rest of the world. It will provide a critical lens through which to view all forms of media, including those in print, on video, and web-based. Through this class, students will learn the skills necessary to evaluate and closely analyze ideas on social media, objectively critique advertisements for possible hidden meaning and propaganda, and learn how to produce valid creations of their own that are both meaningful and timely to members of a democratic nation.

**Prerequisite:** Junior or Senior; Intro to Writing or Essay Writing

## **155-AMERICAN LITERATURE CLASSICS**

**CC (1 credit)**

American Literature focuses on the classics and requires students to read notable works throughout American history in various genres: short story, novel, poetry, drama, and essay. Students read both fictional and nonfiction works written by authors from the United States. Students analyze the importance of the readings and reflect on specific issues and literary trends. They learn by reading, writing, speaking, listening, and viewing print sources, the arts, and media. Students expand vocabulary skills. Students also explore the college application process. **Outside/summer reading requirements must be met in order for students to complete MLA reading/writing activities within the first weeks of class. This course is recommended for any students interested in taking AP Literature and Composition.**

**Prerequisite:** Sophomore English

For students to select CC, they need to earn a B- or better in a current Level 1 English course.

## **156-AMERICAN LITERATURE CONTEMPORARIES Level 1 (1 credit)**

## **157-AMERICAN LITERATURE CONTEMPORARIES (1 credit)**

American Literature Contemporaries requires students to read notable, contemporary American works in the various genres: short story, novel, poetry, drama, and essay. Students read both fictional and nonfiction works written by authors from the United States. Students analyze the importance of the readings and reflect on specific issues and literary trends. They learn by reading, writing, speaking, listening, and viewing print sources, the arts, and media. Students expand vocabulary skills. Students also explore the college application process. **Outside/summer reading requirements must be met in order for students to complete MLA reading/writing activities within the first weeks of class.**

**Prerequisite:** Sophomore English

For students to select Level 1, they need to earn a B- or better in a current Honors or Level 1 English course.

## **166-WORLD LITERATURE CONTEMPORARIES I Level 1 (½ credit)**

## **167-WORLD LITERATURE CONTEMPORARIES I (½ credit)**

World Literature Contemporaries emphasizes the themes prevalent in works characteristic of different countries. In fictional and nonfiction works, students learn how authors reflect the times, ideas, and social issues of the period. Students analyze world literature by reading, writing, speaking, listening, and critical viewing. Students expand vocabulary and writing skills.

**Prerequisite:** Senior

For students to select Level 1, they need to earn a B- or better in the current Level 1 English course.



## **168-WORLD LITERATURE CONTEMPORARIES II Level 1 (½ credit)**

## **169-WORLD LITERATURE CONTEMPORARIES II (½ credit)**

World Literature Contemporaries continues the emphasis on the themes prevalent in works characteristic of different countries. In fictional and nonfiction works, students learn how authors reflect the times, ideas, and social issues of the period. Students analyze world literature by reading, writing, speaking, listening, and critical viewing. Students expand vocabulary and writing skills.

**Prerequisite:** Senior; World Literature Contemporaries I

For students to select Level 1, they need to earn a B- or better in the current Level 1 course.

## **183-AP ENGLISH LITERATURE AND COMPOSITION**

### **AP (1 credit)**

The AP Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit from the sixteenth to the twenty-first century. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays (APcentral.collegeboard.com). Students will be able to take the AP Literature and Composition exam as administered by College Board. Test fees are the responsibility of the student. **Students must meet all AP reading requirements, including outside reading assignments.**

**Prerequisite:** Junior or Senior; American Literature Classics or American Literature Contemporaries L1 or World Literature Classics or World Literature Contemporaries II L1; may be taken concurrently. For a student to take this course, they need to earn a B- or better in Sophomore English Honors or Level 1.

## **186-WORLD LITERATURE CLASSICS HONORS**

### **Honors (1 credit)**

World Literature focuses on the classics and requires students to read notable works throughout the centuries in various genres: short story, novel, poetry, epic, drama, and essay. Students read both fictional and nonfiction works written by authors from countries other than the United States. Students analyze the importance of the readings and their influence on modern retellings. They connect ancient classic literature to contemporary literature. They learn by reading, writing, speaking, listening, and viewing print sources, the arts, and media. **Outside/summer reading requirements must be met in order for students to complete MLA reading/writing activities within the first weeks of class.**

**Prerequisite:** American Literature Classics or American Literature Contemporaries L1

For students to select the Honors level, they need to earn a B- or better in the current L1, Honors or College Credit English course.

## ENGLISH ELECTIVES

**(Note: These courses do not meet graduation requirements for English credits.)**

### **148-YEARBOOK**

**(1 credit)**

The yearbook course is an unlevleled course that runs at the pace of an honors course with real world deadlines that have financial repercussions when not met. This course takes students through the production process of the school yearbook. Students learn the fundamentals involved in creating a yearbook: layout, copy, photography, advertising, and marketing. Students also learn to organize and design layouts on the computer and submit the pages to meet production deadlines. Yearbook deadlines are crucial and students learn to work with others in a responsible, timely, and cooperative way. Students will participate in outside activities including school and community events. **This course does NOT meet the English graduation requirement.**

**Requirements:** Two teacher recommendation forms and an interview with the teacher before the end of the previous school year. Plus, a digital photo journal must be turned in the first day of school (will be graded). If one of these requirements is not met, then the student will be required to choose another course.

**Prerequisite:** Sophomore, Junior or Senior

### **159-ADVANCED RESEARCH METHODS**

**Level 1 (½ credit)**

In this course, students will embark on a semester long inquiry based research assignment, allowing students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students will design, plan, and implement their investigation to address a research question. Through this inquiry they will further develop research skills, utilize the information search process (Carol Kuhlthau), and understand the legal and ethical uses of information including economic and social issues that affect that use. Students will synthesize the information landscape of the 20th and 21st centuries to reflect upon how it impacts their life. Sample of research from another course and interview may be requested. **This course does NOT meet the English graduation requirement.**

**Prerequisite:** Freshman English, Sophomore English.

### **189-FOUNDATIONS OF EDUCATION**

**CC (1 credit)**

High school juniors and seniors explore the art of teaching through classroom-based lessons coupled with school-to-career activities. Students examine the philosophical, historical, legal, and social/cultural aspects of education in the United States. Students formulate a beginning philosophy of education and “practice teach” a sample lesson plan. They keep a reflective journal and portfolio to document their level of progress and examine resources needed to become highly qualified teachers. They will participate in classroom observations. The course content will set a foundation for a career in education. **This course does not meet English credit requirements for graduation.**

**Prerequisite:** Junior or Senior; Essay Writing

## **FAMILY AND CONSUMER SCIENCE PROGRAM**

### **901-CHEFS**

**(½ credit)**

This course provides students with the fundamentals of cooking across a life span. Students will study and practice various cooking skills and techniques leading to more difficult and challenging recipes. Students will be able to identify nutritional requirements of food throughout a life span using the My Plate® guidelines. Additional topics that will be covered will include, but are not limited to, food safety and sanitation, quick breads, soups, fruit and vegetable preparation, lunch and dinner items, and desserts.

### **906-WORLD CUISINE AND CULTURE**

**(½ credit)**

Grab your suitcase and let's take a trip through many different regions of the world, with food!—Western Europe, Southeast Asia, Caribbean. One week we might stop by Italy for some coffee and Biscotti and the next travel to China for some Dun Dun noodles. There are so many amazing world cuisines that we will be cooking and tasting. In addition to cuisine, we will be looking at their culture and customs—music, dancing, and etiquette. Do you know what Ghana and St. Lucia have in common? Hint: What's your favorite sweet?

**Prerequisite:** Chefs

### **915-BAKING**

**(½ credit)**

When your sweet tooth just won't quit, bake! Do you have a sweet tooth? Do you just love to bake? Do you wish you knew more about baking? Well, Baking 101 is a great way to help you develop the advanced skills you need to bake. Whether you know you want to have a career in baking or you would just like more experience in the kitchen, Baking 101 can help. Throughout this course we take a look at the science of baking and how to create the best sweet treats. We will cover everything from cookies to pies. We will be using advanced techniques for decorations and flare.

**Prerequisite:** Chefs

## **FINE ARTS PROGRAM**

### **ART**

#### **700-INTRODUCTION TO ART (1 credit)**

This course is an introduction to drawing, painting, printmaking, and three-dimensional concepts, materials, and techniques. Students who have had limited prior visual arts experience will be able to develop drawing skill, brush technique, and sculpting/building ability in ceramics (clay) to improve their confidence and ability in the visual arts. Students who enter Introduction to Art with a more developed artistic background will be able to perfect the skills needed in higher-level 2-D and 3-D art courses. Line quality, shading, perspective, scale, texture, and an understanding of value/contrast will be emphasized. Some assignments may require artwork and materials to be brought home for completion.

#### **703-CERAMICS I (PINCH, COIL & SURFACE DESIGN) (½ credit)**

Students learn to design and create 3D pieces of art using ceramic hand building techniques. Students will explore the following introductory building methods and surface design techniques; pinch pots, coil pots, sgraffito and glazing. A strong emphasis will be placed on creative problem solving, artisanship, and productivity. Concepts such as form, balance, texture, and space will be looked at. Students are expected to have the ability to plan and execute projects once they have learned the basic ceramic construction methods. Students are also expected to participate in the care and management of the ceramic studio. Glazing and firing procedures will covered.

#### **704-CERAMICS II (SLAB, STAMPS & SCULPTURE) (½ credit)**

Students learn to design and create 3D pieces of art using ceramic hand building techniques. Students will explore the following building methods and surface design techniques; slab construction, stamp creating, and sculpture. Opportunities to learn how to throw pottery on the wheel will be given. A strong emphasis will be placed on creative problem solving, artisanship, and productivity. Concepts such as form, balance, texture, and space will be looked at. Students are expected to have the ability to plan and execute projects once they have learned the basic ceramic construction methods. Students are also expected to participate in the care and management of the ceramic studio. Glaze combinations and alternative surface finishing techniques will be experimented with.

**Prerequisites:** Ceramics I

#### **705-DRAWING/PAINTING I (2-DIMENSIONAL DESIGN) (1 credit)**

Students develop the ability to produce realistic and abstract drawings and paintings by building on skills, techniques, and concepts covered in Introduction to Art (Intro to Drawing & Painting). In addition, this course's objective is for students to expand and apply the principles of 2-dimensional design to drawing, painting and design works through creative expression and problem solving. Students will work in various materials including pencil, charcoal, acrylics, mixed media collage and have the opportunity to build and stretch their own canvases. They will also develop research skills during their projects on historical figures in painting.

**Prerequisite:** Introduction to Art (Intro to Drawing and Painting)

## **708-INTRODUCTION TO DIGITAL ART**

**(½ credit)**

This course is designed as an overview of basic art concepts, media, and techniques with both traditional media as well as digital media. Drawing skills, planning, and digital skills will be emphasized. Students will be exposed to the major techniques used in several art disciplines such as drawing, painting, and printmaking, and how they can be incorporated into digital design. Students are expected to build on skills already covered at the middle and elementary level. Written critiques and research papers will be assigned.

## **709-ADVANCED CERAMICS**

**Level 1 (½ credit)**

Students will apply knowledge acquired in Ceramics I & II to further develop their 3D thinking skills and ability to create unique ceramic work that possesses a high level of integrity in surface and form. A heightened focus will be placed on craftsmanship and the independent development and execution of ideas. Students will be expected to plan, execute, and present finished work at a more independent level than in Ceramics I & II. Students will be expected to participate in the care and management of the ceramics studio. Students will be expected to assist in the firing and clay recycling processes allowing greater insight into the workspace of the functioning studio potter or ceramic artist. Written critiques and reflections will be required.

**Prerequisites:** Ceramics I & II

## **713-DIGITAL ILLUSTRATION**

**(½ credit)**

This course is designed to expand upon fundamental skills and concepts gained at the introductory level through exploration and production of digital artwork. Students are provided a drawing tablet for the duration of the course and develop confidence and skill with digital drawing and painting techniques. Students will learn about illustration, cartooning, and animation through a variety of media including print and film sources. Class discussions and critiques will complement class projects.

Using Adobe Photoshop and Illustrator, students will create original artwork incorporating the elements of art and principles of design. A heavy emphasis on creative expression and personal voice will take place in the form of an individual digital portfolio. Exposure to introductory drawing skills will enhance work.

**Prerequisite:** Introduction to Art (Intro to Drawing and Painting) or Introduction to Digital Art; Sophomore, Junior or Senior.

## **714-ART HISTORY**

**(½ credit)**

This course is designed for intermediate and advanced art students and expands upon an understanding of the Elements of Art & Principles of Design within the context of Art History. Students will learn specific concepts relating to individual movements within Art History through presentations, discussions, and class critiques and demonstrate their knowledge through student-proposed projects. This course will cover a variety of media such as clay, paint, pastel, and charcoal. Students are expected to plan and execute independent projects and discuss their work within the wider context of Art History and theory.

**Prerequisite:** Introduction to Art (or Introduction to Drawing & Painting); junior or senior status.

## **717-DRAWING/PAINTING II (2-DIMENSIONAL DESIGN)**

### **Level 1 (1 credit)**

Students build on skills, approaches, and concepts covered in Drawing/Painting I while learning advanced color theory, design principles and developing personal techniques and imagery. The objective of this course is for students to participate in a studio atmosphere that allows them to explore their ideas, develop creative thinking skills, and begin to define their interests and goals as 2-dimensional artists through working on individual and group projects. Students will work in various materials such as watercolor, acrylic, pastel, charcoal etc. The course will allow the students to create several artworks that can be used for college portfolio admissions. The ability to plan and work independently on creative problems will be encouraged and independent and class research will be expected.

**Prerequisite:** Introduction to Art (Intro to Drawing and Painting) and Drawing/Painting I (2-Dimensional Design)

## **720-ADVANCED ART**

### **Level 1 (1 credit)**

Advanced art is for the student dedicated to developing their skills and artistic vision. This class is designed to let the students explore the principles and elements of art further. In this class, students will create 2D and 3D pieces in a variety of media that exemplify the elements and principles of design only on a higher level than they experienced in general art courses. This course will also offer advanced ceramic techniques when dealing with slab construction and thrown pottery. Each student will be expected to produce many art pieces and each will be critiqued. Students must be self-motivated and productive in a studio environment. Students will be expected to maintain a sketch journal, work outside of class time, and attend a local art function. A portfolio of work must be completed by the conclusion of the course.

**Prerequisite:** Junior or Senior; Introduction to Art (Intro to Drawing and Painting); Drawing/Painting I; a portfolio must be viewed and approved by instructor.

**Note:** Students who plan to take AP Studio Art 2-D will satisfy the breadth area of the AP portfolio requirements in Advanced Art.

## **722-MODERN ART**

### **Level 1 (1 credit)**

This course is designed for advanced art students as an exploration into various media beyond drawing, painting, and traditional ceramic techniques. Students will explore the concepts of both two dimensional and three dimensional design using various processes and materials. Visual art forms such as printmaking, mixed media, mosaic construction, glass slumping (high temperature melted glass molds), ceramic tile and relief molds, spray paint art, book and paper making, large scale sculpture, computer applied arts, and film making will be explored throughout the course. Collaborative work will be encouraged and required for some assignments. Students are expected to have the ability to plan and execute independent projects once they have learned the basic techniques and processes for each unit. Artist research and writing assignments will be assigned. **This is an advanced course.**

**Prerequisites:** Introduction to Art (Intro to Drawing and Painting) and Drawing/Painting I

## **725-AP STUDIO ART (2-DIMENSIONAL DESIGN)**

### **AP (1 credit)**

The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. The instructional goals of the course are to encourage creative as well as systematic investigation of formal and conceptual issues and to emphasize making art as an ongoing process that involves the student in informed and critical decision-making. Further, the course helps students to develop technical skills and familiarize them with the functions of the visual elements and to encourage students to become independent thinkers who will contribute inventively and critically to their culture through the making of art. The AP portfolio should reflect three areas of concern: quality, concentration, and in addition, breadth (APcentral.collegeboard.com). Participation in the AP exam/portfolio is available. Test fees are the responsibility of the student.

**Prerequisite:** Junior or Senior; Advanced Art. The instructor must view a portfolio.

## **885-GRAPHIC DESIGN**

### **(½ credit)**

Students will learn how the elements of art and principles of design come together to present information in a visually compelling manner. At the fruition of this course, students will be able to skillfully incorporate type and graphics into a document with a singular cohesive message. Students will look at historical and contemporary graphic arts as references to guide their growth.

Using Adobe Photoshop, In Design, and Illustrator to create logos and layouts, students will learn how to color, shape, line, and texture come together to make compelling graphics and how to incorporate their designs into websites. As a project based course, students will work to create real world examples of business cards, logos, magazine layouts, posters and websites on their journey to become successful graphic artists.

**Prerequisite:** Introduction to Digital Photography, Introduction to Art (Intro to Drawing and Painting) or Introduction to Digital Art.

## **887-INTRODUCTION TO DIGITAL PHOTOGRAPHY**

### **(½ credit)**

Students will learn to use a DSLR camera to create meaningful photographic images that reflect an understanding of modern visual aesthetics. A great deal of this course will address the elements of art and principles of design as well as understanding light and composition.

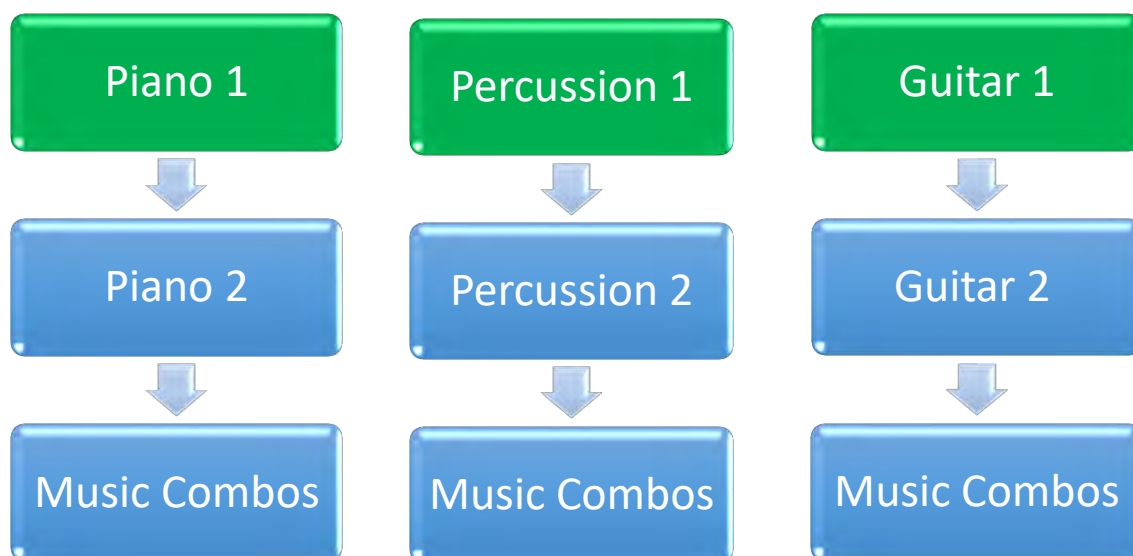
Students will come away from this course with a strong understanding of how the elements of art and principles of design come together with sound technical skills to create powerful images reflecting the intent of the photographer. Exploration of people, landscapes and action photography will help build students visual and technical skills. Images will be captured digitally and modified with Adobe Photoshop CS6.

**Please Note:** Access to a DSLR camera at home is recommended.

## MUSIC

*(All Music courses are part of the Music Pathway.)*

The music department suggested flow chart for general music classes is as follows:



**812-MARCHING/CONCERT BAND FALL HONORS (1 credit)**

**811-MARCHING/CONCERT BAND FALL Level 1 (1 credit)**

**810-MARCHING/CONCERT BAND FALL (1 credit)**

*The above courses run every day during Semester 1.*

**815-MARCHING/CONCERT BAND SPRING HONORS (1 credit)**

**814-MARCHING/CONCERT BAND SPRING Level 1 (1 credit)**

**813-MARCHING/CONCERT BAND SPRING (1 credit)**

*The above courses run every day during Semester 2.*

**833-MARCHING/CONCERT BAND HONORS (1 credit)**

**836-MARCHING/CONCERT BAND Level 1 (1 credit)**

**843-MARCHING/CONCERT BAND (1 credit)**

*The above courses run every other day for a full year.*

This course is designed for students with previous experience in school band. In marching/concert band, students will continue to develop and hone their instrumental playing skills and music literacy. Marching/concert band runs for a full year. The first part of the fall semester is devoted to athletic/marching band; all band members are expected to perform at all home football games, as well as march in the Pelham Old Home Day parade. After football season (usually late October), the band rehearses and performs as a concert (indoor) ensemble.

During the spring semester, the band continues to function as a concert group. Performances will include the annual NHMEA large group music festival, spring concert, and PHS commencement ceremony.



Community service hours are available for band members participating in certain community events. This course can be repeated.

A typical year consists of the following performances (events for which community service hours are available are italicized):

**September** - Home football games (usually two), *Pelham Old Home Day Parade*

**October** - Home football games (usually two), *PMS Pops Concert*

**December** - *Southern NH Festival of the Trees*, PHS Winter Concert

**March** - NHMEA Large Group Festival

**April** - Pelham School District Fine Arts Night

**May** - Bi-annual trip, PHS Spring Concert, *Pelham Memorial Day Parade*

**June** - PHS Commencement Ceremony

***Students are encouraged to enroll in Marching/Concert Band for all four years of high school. The success of the group is dependent on consistent membership and participation.***

***Students may enroll in Marching/Concert Band with a level 1 or honors option during their third or fourth year of membership.***

**Level 1:** Third or fourth year students enrolled in level one marching/concert band will be required to prepare for NHMEA classical all state auditions in the fall, as well as participate in a chamber ensemble to perform in the spring concert in May.

**Honors:** Fourth year students enrolled in honors marching/concert band will be required to prepare for NHMEA classical all state auditions in the fall, as well as perform in a chamber ensemble on the winter concert in December. These students will be required to prepare and perform a solo work on the spring concert in May.

**Prerequisite:** Band members must have previous school band experience.

## **820-GUITAR 1**

**(½ credit)**

This course is designed for students with no prior musical experience. Students will learn the fundamentals of playing the guitar. Students will focus primarily on rhythm and accompaniment style playing, with some time devoted to lead style as well. Students will learn the basics of formal music notation, guitar tablature, and reading lead sheets. Regular practice at home is vital for individuals to develop their musicianship.

**Student Note:** Pelham High School owns a limited number of acoustic guitars, which are available for student use. It is helpful, though, if students own their own instrument.

## **822- PERCUSSION 1**

**(½ credit)**

This course is designed for students with no prior musical experience, although is open to anyone with an interest in the material. Students will learn the fundamentals of drumming technique through playing on percussion instruments. Students will focus primarily on reading formal music notation as well as the basics of using lead sheets and chord charts. With the development of instrument technique, students will also spend time learning about the wide variety of percussion instruments and ensembles in the world. Basic music composition and music literacy will be covered as well.

## **823-PIANO 1**

**(½ credit)**

This course is designed for students with no prior musical experience. Students will learn the fundamentals of playing the piano and other keyboard instruments. Students will focus primarily on reading formal music notation, as well as the basics of lead sheets and chord charts. Literature will include the genres of folk, classical, jazz, and modern pop/rock. Students work primarily on electronic keyboards with headphones, so each individual can focus on material that interests him/her. This course is designed for beginners, but because of the individualized nature of it, students with any amount of experience are encouraged to enroll to continue to develop their musicianship.

## **821-GUITAR 2**

**(½ credit)**

This course is designed as a continuation of the Guitar 1 class. Students will continue to develop their musicianship on the guitar by reading some formally notated music, playing from lead sheets/chord charts, and learning through tablature. Students will be reading more difficult music, playing more complex chords, and learning more substantial literature through reading tablature. In this course, students will also begin to study improvisation and musical creativity.

**Prerequisite:** Guitar 1

## **827-PERCUSSION 2**

**(½ credit)**

This course is designed as a continuation of the Percussion 1 class. Students will continue to develop their musicianship on various percussion instruments by reading formally notated music, playing from lead sheets/chord charts, and playing by ear. A stronger focus will be placed on melodic percussion instruments and the reading of melodic music notation. Students will continue to develop their music literacy and understanding of music composition.

**Prerequisite:** Percussion 1

## **824-PIANO 2**

**(½ credit)**

This course is designed as a continuation of the Piano 1 class. Students will continue to develop their musicianship on the piano by reading formally notated music, playing from lead sheets/chord charts, and playing by ear. Musical creativity and improvisation will be covered further. Students will learn more challenging music and will work primarily independently so each individual can focus on material that interests him/her.

**Prerequisite:** Piano 1

## **826-SINGING AND SONG WRITING**

**(½ credit)**

This course is designed for any student who has at least a rudimentary amount of experience with music. Students will develop their singing technique, and basic music literacy, through the study of song writing. Personal expression and creativity will also be a focus of the course. Various song forms will be studied and students will write songs using a number of different stylistic and formal considerations. The singing and song-writing students will perform an end of course concert, attendance at which is mandatory.

**Prerequisite:** Piano 1 or Guitar 1

## **819-MUSIC COMBOS-FALL**

**(½ credit)**

This is an advanced music course for students who have an interest in working with other players in the setting of small bands or combos during the fall semester. Groups will be formed based on enrollment and will be structured based on interest/instrumentation. Possible ensembles include, but are not limited to, rock bands, jazz combos, instrumental chamber groups, etc. Students will spend their time working within their group preparing songs or pieces of music. Music written by others, as well as original compositions will be prepared. The combo's class will perform a concert at the end of the course, featuring all the various groups. This course may be repeated for credit.

**Prerequisite:** Piano 2 or Percussion 2 or Guitar 2 or taking Marching/Concert Band concurrently.

## **825-MUSIC COMBOS-SPRING**

**(½ credit)**

This is an advanced music course for students who have an interest in working with other players in the setting of small bands or combos during the spring semester. Groups will be formed based on enrollment and will be structured based on interest/instrumentation. Possible ensembles include, but are not limited to, rock bands, jazz combos, instrumental chamber groups, etc. Students will spend their time working within their group preparing songs or pieces of music. Music written by others, as well as original compositions will be prepared. The combo's class will perform a concert at the end of the course, featuring all the various groups. This course may be repeated for credit.

**Prerequisite:** Piano 2 or Percussion 2 or Guitar 2 or taking Marching/Concert Band concurrently.

## **866-MUSIC THEORY**

**CC (½ credit)**

Music Theory introduces students to the basic elements, materials, and structure of Western tonal music with an emphasis on harmony, voice leading, and counterpoint. Students will develop aural skills through sight singing, ear training, rhythmic reading, dictation, and part-singing.

**Prerequisite:** Level 2 music course OR 2 years of band; junior or senior status.

## **HEALTH AND PHYSICAL EDUCATION PROGRAM**

**(One Physical Education credit and ½ Health credit are required for graduation)**

### **13-INTRODUCTION TO PHYSICAL EDUCATION** **(1 credit)**

This is a beginner physical education course. Students will focus on individual skills needed to be successful in playing a team or individual sport. This course will also explore many ways of attaining and maintaining an appropriate level of fitness through walking, jogging, flexibility, and nutrition.

### **18-INTRODUCTION TO TEAM SPORTS** **(½ credit)**

In this course, students will take the individual sport skills learned in Introduction to Physical Education and apply them to the team-sport concept. Students will learn the rules and regulations of each sport played and play in competitive daily games.

**Prerequisite:** Introduction to Physical Education

### **19-CONDITIONING AND MOVEMENT** **(½ credit)**

In this elective course, students are encouraged to develop strategies to work toward a lifetime enjoyment of fitness through weight training, aerobics, walking, running, and other health-enhancing physical activities.

**Prerequisite:** Sophomore, Junior or Senior

### **32-HEALTH** **(½ credit)**

In this **required** course, students learn the fundamental concepts of health promotion and disease prevention in the following content areas: nutrition, physical activity, mental health, alcohol and other drugs, family life and sexuality, injury prevention, tobacco, personal and consumer health. Health will provide the opportunity to learn how to make healthy choices, and to live a better and longer life.

**Prerequisite:** Sophomore, Junior or Senior

### **34-YOGA** **(½ credit)**

In this yoga course, students will begin to develop and implement yoga practice in their personal lives. Students will work on improving their stamina and increasing their flexibility through several different yoga techniques. We will cover a wide range of topics including the history of yoga, meditation, mindfulness, breathing exercises, and yoga benefits. In addition, students will learn how to implement a lifestyle with relaxation techniques enabling them to learn how to create a balance in their personal day-to-day lives. **This does not count as a Physical Education credit**

### **35-MANAGING YOUR MIND**

**(½ credit)**

Managing Your Mind is a course that helps individuals identify stress in one's life and the impact it has on one's quality of life. Students will learn the impact stress has on the body and the correlation with disease. Additionally, students will be exposed to holistic stress management strategies to implement into their daily life in order to gain control over their physical and emotional responses to stress. In the end, this course will provide a better understanding of the major stress sources in one's life, allow students to gain control of their stress levels, and experience a more effective approach to optimal lifelong health.

### **36-CARDIO-FIT**

**(½ credit)**

Cardio-Fit is a physical education department option if individual and team games are not for you. This class combines cardiovascular activity with strength and body core exercise. The objectives will be to focus on the components of physical fitness.

### **38-BEGINNER WEIGHT TRAINING**

**(½ credit)**

This course is designed to give students the opportunity to learn weight training concepts and techniques used for building muscular strength. Students will also learn the appropriate skills necessary to maintain a safe and sanitary environment.

### **39-ADVANCED WEIGHT TRAINING**

**(½ credit)**

This course is designed as a continuation of the Beginner Weight Training course. Students will learn more complex movements and training styles, as well as nutrition. The objectives of this course will be to maximize the students total strength and power.

**Prerequisite:** Beginner Weight Training

### **53-UNIFIED PHYSICAL EDUCATION**

**(½ credit)**

This course is designed for the student who wants to enjoy physical fitness while helping to support a student with special needs. Students will work in one on one peer relations with a student with special needs in a comprehensive physical education program. Students will support the student with special needs with social skills and participate in fitness activities, individual sports, and team sports. The course will focus on age appropriate leisure and fitness activities that all students can enjoy for a lifetime. Students in this course will also reflect on their experiences in a variety of ways.

**Prerequisite:** Successful completion of 1 physical education credit. Enrollments is limited and Dean of Students approval is required. Seniors will have priority.

## MATHEMATICS PROGRAM

**Graduation Requirements:** A math or math intensive course must be taken each year in high school, including Algebra I.

Career Path	2 Year College +some 4 Year Colleges	4 Year College	4 Year College	4 Year Competitive College
Pre-Algebra	Algebra I	Algebra I, L1	Algebra I, L1	Algebra I, Honors
Algebra I	Geometry	Geometry, L1	Geometry, L1 & Algebra II, L1	Geometry, Honors & Algebra II, Honors
Geometry	Algebra II	Algebra II, L1		
Algebra II	Select from Below: Trigonometry Applied Algebra Statistics	Trigonometry Or Statistics AP/CC	Pre-Calculus	Pre-Calculus, Honors
			Calculus AP/CC	Calculus AP/CC
				Statistics AP/CC

*Please remember to use the teacher's recommendation when choosing a math course.*

### 396-FOUNDATIONS OF MATHEMATICS

**(1 credit)**

Students will review basic math skills and concepts to prepare students for Pre-Algebra. Topics include operations of whole numbers, decimals, fractions, divisibility rules, factors and multiples, prime and composite numbers, prime factorization, place value, percentages, and graphing basics.

**Enrollment in this course will be determined by the math placement process.** This course meets every day for half a year. Students must also choose Pre-Algebra (394).

### 394-PRE-ALGEBRA

**(1 credit)**

This course is a continuation of the half year Foundations of Mathematics course. It meets every day for half a year. Students will study algebraic expressions, integers, one and two step equations and inequalities, decimals and equations, factors, fractions, exponents, operations with fractions, ratios, proportions, and percents, slope, linear functions, graphing, data analysis and probability.

**Enrollment in this course will be determined by the math placement process.** This course meets every day for half a year. Students must also choose Foundations of Mathematics (396).

### 398-PRE-ALGEBRA

**(1 credit)**

Students will study algebraic expressions, integers, one and two step equations and inequalities, decimals and equations, factors, fractions, exponents, operations with fractions, ratios, proportions, and percents, slope, linear functions, graphing, data analysis and probability.

**Enrollment in this course will be determined by the math placement process.**

#### **405-ALGEBRA I (1 credit)**

Students will study how to simplify algebraic expressions, translate verbal expressions to algebraic expressions, properties, relations, functions, literal equations, weighted averages slope, systems of equations and inequalities, exponents, quadratics, graphing, factoring, descriptive statistics, and polynomial operations.

**Enrollment in this course will be determined by the math placement process.**

#### **414-ALGEBRA I (2 credits)**

Students will study how to simplify algebraic expressions, translate verbal expressions to algebraic expressions, properties, relations, functions, literal equations, weighted averages slope, systems of equations and inequalities, exponents, quadratics, graphing, factoring, descriptive statistics, and polynomial operations.

The pacing at which students explore the content has been adapted to allow remediation of core skills. Upon successful completion of the course, 2 credits will be awarded, and the second credit meets the PHS Algebra I graduation requirement.

**Enrollment in this course will be determined by the math placement process.**

#### **400-ALGEBRA I Level 1 (1 credit)**

This course is designed for students who have demonstrated strong mathematical abilities. The content standards in this class are the same as Algebra I. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Level 1 Algebra I are expected to demonstrate the work habits and mindsets associated with Level 1 work.

**Enrollment in this course will be determined by the math placement process.**

#### **404-ALGEBRA I Honors (1 credit)**

This course is designed for students who have demonstrated exceptional mathematical abilities. The content standards in this class are the same as Algebra I. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Honors Algebra I are expected to demonstrate the work habits and mindsets associated with honors-level work.

**Enrollment in this course will be determined by the math placement process.**

#### **425-GEOMETRY (1 credit)**

This course begins by developing the tools of Geometry, including technical vocabulary and proofs. Students will explore geometric concepts and applications through a variety of approaches including discovery and inductive/deductive reasoning. Students develop the geometric structure through theorems, postulates, properties, and definitions. Topics include proofs, congruence, similarity, trigonometry, coordinate geometry, probability, circles and extending shapes into three dimensions.

**Prerequisite:** Algebra I

### **420-GEOMETRY Level 1 (1 credit)**

This course is designed for students who have demonstrated strong mathematical abilities. The content standards in this class are the same as Geometry. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Geometry Level 1 are expected to demonstrate the work habits and mindsets associated with Level 1 work.

**Prerequisite:** Grade of B- or better in Algebra I L1

### **421-GEOMETRY Honors (1 credit)**

Honors Geometry is designed for students who have demonstrated exceptional mathematical abilities. The content standards in this class are the same as Geometry. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Honors Geometry are expected to demonstrate the work habits and mindsets associated with honors-level work.

**Prerequisite:** Grade of B- or better in Honors Algebra I

### **435-ALGEBRA II (1 credit)**

Students review and expand the essential content of Algebra I including properties of real numbers, solving and graphing equations and inequalities (including absolute value), and solving linear systems. Students will then explore linear programming, behaviors of graphs, quadratics, radical expressions, relations, functions, factoring, polynomials, rational expressions, exponential and logarithmic functions.

**Prerequisite:** Algebra I and Geometry

### **430-ALGEBRA II Level 1 (1 credit)**

Algebra II L1 is designed for those students who have demonstrated strong mathematical ability. The content standards in this class are the same as Algebra II. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Algebra II L1 are expected to demonstrate the work habits and mindsets associated with level one work.

**Prerequisite:** Grade of B- or better in Algebra I L1 and a B- or better in Geometry L1  
Geometry L1 can be taken concurrently with Algebra II L1

### **431-ALGEBRA II Honors (1 credit)**

Honors Algebra II is designed for students who have demonstrated exceptional mathematical abilities. The content standards in this class are the same as Algebra II. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Honors Algebra II are expected to demonstrate the work habits and mindsets associated with honors-level work.

**Prerequisite:** Grade of B- or better in Algebra I Honors and B- or better in Geometry Honors  
Geometry Honors can be taken concurrently with Algebra II Honors



## **438-APPLIED ALGEBRA**

### **(1 credit)**

Applied Algebra is a survey course, focusing primarily on Algebra skills and emphasis will be placed on applying these skills in real world situations. Students will develop ease in simplifying and evaluating polynomial and rational expressions, as well as solve linear equations and inequalities, quadratic equations and systems of linear equations. This is a full-year course.

**Prerequisite:** Junior or Senior; Algebra II

## **443-TRIGONOMETRY**

### **(1 credit)**

In this course students study trigonometric properties, applications, and they apply these skills and concepts to practical applications. Students solve triangular problems, and they learn trigonometric functions, convert radian measures, prove trigonometric identities, graph trigonometric functions, and apply Heron's Formula.

**Prerequisite:** Algebra II and Geometry

## **447-PRE-CALCULUS Level 1 (1 credit)**

Students will explore the twelve basic functions and their algebraic properties which reinforce connections among algebraic, graphical, and numeric representations. Students connect the algebra of functions to the visualization of their graphs, introduce parametric equations, limit notation, continuity, boundedness, end behavior, domain, and range. This course integrates graphing technology throughout the course, not an additional topic, but rather as an essential tool for both mathematical discovery and effective problem solving.

**Prerequisite:** Grade of B- or better in Algebra II Level 1 and B- or better in Geometry Level 1

## **448-PRE-CALCULUS Honors (1 credit)**

Precalculus Honors is designed for students who have demonstrated exceptional mathematical abilities. The content standards in this class are the same as Precalculus. Students are expected to work at an increased pace and engage with the content at a deeper level. Students enrolling in Precalculus Honors are expected to demonstrate the work habits and mindsets associated with honors-level work.

**Prerequisite:** Grade of B- or better in Algebra II Honors and B- or better in Geometry Honors

## **450-CALCULUS CC (1 credit)**

Students will explore broad concepts and focus on understanding and manipulating functions, curves, theorems, and problem types. Students should understand the meaning of the derivative in terms of a rate of change and local linear approximation and should be able to use derivatives to solve a variety of problems. With the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, students should be able to communicate mathematics in well-written sentences and should be able to explain solutions to problems (APcentral.collegeboard.com). Students learn to use the graphing calculator. It is recommended that students purchase their own graphing calculator for home use.

**Prerequisite:** Grade of B- or better in Precalculus

## **455-CALCULUS AP (1 credit)**

The AP Calculus part of the course engages students to be able to work with functions represented in various ways, understand the meaning of derivatives and integrals to solve a variety of problems, communicate mathematics and explain solutions, model written descriptions of physical situations with a function, a differential equation, or an integral, use technology, and develop an appreciation of Calculus as a coherent body of knowledge (APcentral.collegeboard.com). Students are able to take the AP Calculus exam as administered by the College Board. Test fees are the responsibility of the student.

**Prerequisite:** Grade of B- or better in Precalculus Honors

## **462-STATISTICS (½ credit)**

Students learn the fundamental concepts of probability: graphs and tables, random sampling, measures of central tendency, probability and probability distributions, confidence interval, linear correlation, regression analysis and prediction. This course is for the student who plans to enter such fields as biology, business, economics, education, medicine, psychology, and sociology and is not yet ready for the college Statistics course. This is a half-year course.

**Prerequisite:** Algebra II and Geometry

## **463-STATISTICS CC (1 credit)**

Students learn the fundamental concepts of probability: graphs and tables, random sampling, measures of central tendency, probability and probability distributions, confidence interval, error and sample size estimation, hypothesis testing, linear correlation, regression analysis and prediction. Statistics is a course for the student who plans to enter such fields as biology, business, economics, education, medicine, psychology, and sociology. It is recommended that students purchase their own graphing calculator for home use.

**Prerequisite:** Grade of B- or better in Algebra II

## **456-STATISTICS AP (1 credit)**

The course introduces students to the major concepts and tools for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI 84+ graphing calculator to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analysis of real data. Students are able to take the AP Statistics exam as administered by the College Board. Test fees are the responsibility of the student.

**Prerequisite:** Grade of B- or better in Algebra II

## **467-INTRODUCTION TO PROGRAMMING WITH PYTHON**

**(½ credit)**

This course is intended as an introduction to programming which will provide students with a strong foundation using the programming language Python, as well as general computer science theory. It is assumed that students taking this course have no formal programming experience. Therefore, the course focuses on basic programming concepts such as commands for performing calculations, receiving input and displaying output, basic flow control structures, and functions / methods. The class will also begin looking at the object-oriented programming concepts of classes and objects. This course requires mathematical problem solving skills, as students will be examining complex problems that computers can solve more effectively than humans can. This is a half-year course.

**This course qualifies as a Math Intensive course.**

**Prerequisite:** Junior or Senior; Algebra II or taking concurrently

## SCIENCE PROGRAM

All students are required to take 3 credits of science for graduation (Physical Science, Chemistry and Biology). Many colleges require 3-4 years of high school lab science courses. Listed below are suggested sequences for students. Students will have the option of changing as their academic plans change.

Grade	Career Path	2 yr. College & Some 4 yr. Colleges	4 yr. College	4 yr. Competitive College
9th	Physical Science	Physical Science <i>or</i> Physical Science L1	Physical Science L1 <i>or</i> Physical Science Honors	Physical Science Honors
10th or 11th	Chemistry <i>and</i> Biology	Chemistry <i>or</i> Chemistry L1 <i>and</i> Biology <i>or</i> CP Biology L1	Chemistry <i>or</i> Chemistry L1 <i>or</i> Chemistry CC <i>and</i> CP Biology L1 <i>or</i> CP Biology Honors	Chemistry CC <i>and</i> CP Biology Honors
12th		Science Elective	Science Elective(s)	Science Elective(s)
<b>Non-Levelled Science Electives</b>			<b>Advanced Science Electives</b>	
Forensic Science			Anatomy & Physiology	
Introduction to Green Technology			AP Biology	
Marine Biology			AP Chemistry	
Zoology			AP Environmental Science	
			Biochemistry	
			Physics	

### 508-PHYSICAL SCIENCE HONORS (1 credit)

### 506-PHYSICAL SCIENCE Level 1 (1 credit)

### 507-PHYSICAL SCIENCE (1 credit)

This course enables students to develop an understanding and experience an introduction to physical science. Fundamentals of physics and chemistry including study of motion, forces, matter, and energy are experienced through laboratory experience. Earth science principles are addressed including the Big Bang Theory, origin of the universe, and the five interacting systems of earth and human impact on those systems.

**Note:** Incoming freshmen recommended for Physical Science L1 or Honors will be able to test out of the Physical Science requirement. They may test-out of the earth science portion of the course but must complete a physics course before their senior year. If a student who tested out of the freshman course does not complete a physics course by the end of their junior year, they must take the Physical Science course to fulfill that requirement.

### 570-CHEMISTRY (1 credit)

In this course, students investigate chemistry and the world of material things. They learn through mathematical problem-solving and laboratory activities that natural processes are no longer mysterious but are very predictable.

**Prerequisite:** Physical Science

## **562CC-CHEMISTRY CC (1 credit)**

### **560-CHEMISTRY Level 1 (1 credit)**

In Chemistry Level 1, students investigate chemistry concepts and develop laboratory skills. Students learn lab techniques that emphasize precision and accuracy of measurement and chemistry concepts including atomic structure, bonding, molecular geometry and behavior, kinetics and equilibrium, stoichiometry, gas stoichiometry, and acid-base chemistry, as well as laboratory safety, and error analysis. A laboratory journal and scientific calculator are required. **College Credit is recommended for students who plan to take AP Chemistry.**

**Prerequisite:** Physical Science

For students to select CC or Level 1, they need to earn a B- or better in the current Honors or Level 1 science course.

## **564-BIOCHEMISTRY HONORS**

### **563-BIOCHEMISTRY Level 1 (1 credit)**

This course explores the structure and role of essential biological molecules including carbohydrates, lipids, proteins and nucleic acids. Students will review fundamental principles of chemistry including atomic structure, chemical bonding, chemical reactions, polar and non-polar solvents, water as a universal solvent and acids and bases. Students will be introduced to organic chemistry and will learn basic structures, IUPAC naming, functions and reactions of various organic compounds. Biological topics designed in this course will focus on the structure and function of biomolecules, relationship of biochemistry to the physiology of an organism, description of the chemistry underlying metabolic reactions, nutrition and metabolism, enzyme structure and catalysis, DNA, RNA and protein synthesis, and the role of DNA in inheritance.

This course provides the linkage between the inorganic chemistry and the chemistry of the living world.

**Prerequisite:** Junior or Senior status; Chemistry L1 or CC

## **565-AP CHEMISTRY**

### **AP (1 credit)**

The AP Chemistry course is designed to be the equivalent of a first year college chemistry course. Students taking AP Chemistry should take Chemistry College Credit in their sophomore or junior year so they will be able to work AP Chemistry into their course schedule. The course is laboratory intensive and focuses on quantitative analysis and math-driven word problems. Topics such as the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, and the basic concepts of thermodynamics are presented in considerable depth (APcentral.collegeboard.com). The course requires a separate laboratory notebook. Students are able to take the AP Chemistry exam as administered by the College Board. Test fees are the responsibility of the student. **Chemistry CC is required.**

**Prerequisite:** Chemistry College Credit; junior or senior status

## **585-BIOLOGY**

### **(1 credit)**

This course is designed for a student to fulfill the third science course requirement. This course focuses on an approach to the study of biology that emphasizes common experiences and interactions within the natural world. Through a hands-on laboratory approach to the study of science, students are exposed to the major concepts underlying Cellular Biology, Molecular Biology, Microbiology, and Evolutionary Biology.

**Prerequisite:** Physical Science

**581-COLLEGE PREPARATORY BIOLOGY HONORS (1 credit)****580-COLLEGE PREPARATORY BIOLOGY Level 1 (1 credit)**

Students will develop analytical, critical thinking, and laboratory skills while conducting inquiry based laboratory investigations that explore the major concepts underlying biochemistry, cellular biology, microbiology, genetics, and evolutionary biology. **Honors option is recommended for those who plan to take AP Biology. CP Biology is recommended for those who plan to take AP Environmental.**

**Prerequisite:** Chemistry L1 or CC or taking concurrently

**573-AP BIOLOGY****AP (1 credit)**

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Students will build upon the concepts, techniques, and skills presented in Level 1 Biology. After completion of the course, students will be able to analyze scientists' understanding of molecules and cells, heredity and evolution, as well as organisms and populations. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology, and an appreciation of science as a process (APcentral.collegeboard.com). Students are able to take the AP Biology exam as administered by the College Board. Test fees are the responsibility of the student. **Anatomy and Physiology is highly recommended.**

**Prerequisite:** Chemistry L1 or CC with a B- or better; CP Biology Honors with a B- or better.

**574-AP ENVIRONMENTAL SCIENCE****AP (1 credit)**

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. There are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. Themes and analysis of problems include earth systems and resources, the living world, population biology and human population, land and water use, energy resources and consumption, impacts on the environment and human health, and global changes including stratospheric ozone, global warming, and loss of biodiversity. The course requires a separate laboratory notebook. Students are able to take the AP Environmental Science exam as administered by College Board. Test fees are the responsibility of the student. **Chemistry Level 1, CP Biology and Algebra II Level 1 are highly recommended.**

**Prerequisite:** Junior or Senior; Chemistry; Biology and Algebra II

**521-PHYSICS HONORS (1 credit)****520-PHYSICS Level 1 (1 credit)****530-PHYSICS (1 credit)**

Students are involved in the study of the interactions between matter and energy. Their laboratory encounters and use of mathematics require them to explore, develop, and apply the major concepts that drive our mechanical universe. Through a variety of experiences, students recognize and appreciate the role that physics plays in their everyday lives. **This course qualifies as a math intensive course.**

**Co-requisite: Physics-Honors/Level 1** - Pre-Calculus; junior or senior status

**Co-requisite: Physics:** Trigonometry or Pre-Calculus; junior or senior status

## **541-ANATOMY AND PHYSIOLOGY HONORS (1 credit)**

### **540-ANATOMY AND PHYSIOLOGY Level 1 (1 credit)**

Students pursue a detailed study of anatomical structure and physiological function of human body systems. Students are expected to participate in a variety of laboratory activities and experiences. Individuals are encouraged to develop their ability to make appropriate decisions on socially relevant topics in human biology.

**Prerequisite:** Chemistry and College Preparatory Biology

## **543-INTRODUCTION TO GREEN TECHNOLOGY**

**(½ credit)**

Students with basic math and science skills will explore current alternative energy technologies, energy efficient transportation models, sustainable resources, current environment state and federal regulations, sustainable energy efficient architecture and building technology and potential career opportunities in green technology.

**Prerequisite:** Chemistry and Algebra I

## **556-FORENSIC SCIENCE**

**(½ credit)**

Students will experience the scientific process in which criminologists are involved. The work of a forensic scientist involves the observation, collection, evaluation, and interpretation of physical evidence as it relates to matters of legal significance.

**Prerequisite:** Sophomore, Junior or Senior; Physical Science.

## **587-MARINE BIOLOGY**

**(½ credit)**

Marine Biology is designed to be an elective course for students with a special interest and high motivation for marine biology. Marine Biology explores and introduces students to marine life, marine biological communities and marine. Topics students will study include the physical structure and chemistry of the ocean, the diversity of ocean life, marine ecology, and the scope and impact of human interactions with the oceans. Students will complete hands on activities, group projects, debates and lab reports. **Background in Biology and Chemistry is highly recommended.**

**Prerequisite:** Junior or Senior

## **588-ZOOLOGY**

**(½ credit)**

Students will be introduced to animal biology. Course includes an in depth look at different phylums and classes of species including *Nematoda*, *Arthropoda*, *Chordata*, *Reptilia*, *Mammalia* and much more. Different topics such as development, function, ecology, and aspects of animal behavior including communication, orientation, foraging strategies and the impact of captivity on behavior will be discussed, researched and explored. Students will enjoy different activities while exploring the animal kingdom.

**Prerequisite:** Junior or Senior

**Co-requisite:** Biology

## SOCIAL STUDIES PROGRAM

All students are required to take 3 credits of social studies for graduation (World Geography, Economics, Civics, Western Civilization, and US History). Many colleges require 3-4 years of social studies courses. Listed below are suggested sequences for students. Students will have the option of changing as their academic plans change.

Career Path	2 yr. College & Some 4 yr. Colleges	4 yr. College	4 yr. Competitive College
World Geography	World Geography <i>or</i> World Geography L1	World Geography L1 <i>or</i> World Geography Honors	World Geography Honors
Civics ----- Economics	Civics <i>or</i> Civics L1 ----- Economics <i>or</i> Economics L1	Civics L1 <i>or</i> Civics Honors ----- Economics L1 <i>or</i> Economics Honors <i>or</i> AP Macroeconomics	Civics Honors ----- Economics Honors <i>or</i> AP Macroeconomics
Western Civilization	Western Civilization <i>or</i> Western Civilization L1	Western Civilization L1 <i>or</i> Western Civilization Honors	Western Civilization Honors
US History	US History <i>or</i> US History L1	US History L1 <i>or</i> US History CC	US History CC
	Social Studies Elective	Social Studies Elective(s)	Social Studies Elective(s)
<b>½ Credit Social Studies Electives</b>		<b>1 Credit Social Studies Electives</b>	
Advanced Topics in Psychology		AP Macroeconomics	
Civil War		Current Social and Political Issues CC	
Criminology		Psychology CC	
Holocaust Studies		US Government and Politics CC	
Psychology			
Sociology			

### 217-WORLD GEOGRAPHY HONORS (½ credit)

### 218-WORLD GEOGRAPHY Level 1 (½ credit)

### 219-WORLD GEOGRAPHY (½ credit)

Students will study the earth's surface and the processes that shape it, the relationship between people and the environment, and the connections between people and places. An emphasis will be placed upon the application of the five themes of geography to the cultural parts of the Eastern Hemisphere.

**Unleveled:** Requires independent reading and writing skills as well as analytical response and presentations on summative assessments.

**Level 1:** Requires strong independent reading and writing skills as well as extended analytical response, and presentations on summative assessments.

**Honors:** Will encourage students with high academic skills and motivation to work independently to gain depth of understanding in the subject matter. Students will have the opportunity to demonstrate knowledge and understanding through extensive research projects and presentations.



**226-CIVICS HONORS (½ credit)****227-CIVICS Level 1 (½ credit)****228-CIVICS (½ credit)**

In Civics, students will focus on understanding the purpose, structure, and function of American government at the local, state, and national levels. Additional focus will be given to comparative political systems, the political process, and rights and responsibilities.

**Level 1:** Requires strong independent reading and writing skills as well as extended analytical response on summatives.

**Honors:** Will encourage students with superior academic skills and motivation to work independently to gain depth of understanding in the subject matter. Students will have the opportunity to demonstrate knowledge and understanding through extensive research projects.

**223-ECONOMICS HONORS (½ credit)****224-ECONOMICS Level 1 (½ credit)****225-ECONOMICS (½ credit)**

In Economics, students will explore basic economic concepts and principles using economic models, simulations, and decision-making activities. An emphasis will be placed on understanding how economics affects individuals as decision-makers. The national economy and its interaction with the global economy will also be addressed.

**Level 1:** Requires strong independent reading and writing skills as well as extended analytical response on summatives.

**Honors:** Will encourage students with superior academic skills and motivation to work independently to gain depth of understanding in the subject matter. Students will have the opportunity to demonstrate knowledge and understanding through extensive research projects.

**Prerequisite:** Sophomore; World Geography

For students to select Honors or Level 1, they need to earn a B- or better in the current Honors or Level 1 social studies course.

**276-AP MACROECONOMICS****AP (1 credit)**

AP Macroeconomics is a course designed to provide students with a thorough understanding of the principles of economics in examining aggregate economic behavior. Students taking the course can expect to learn how the measures of economic performance, such as GDP, inflation and unemployment, are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. Students will also learn the basic analytical tools of macroeconomics, primarily the aggregate demand and aggregate supply model and its application in the analysis and determination of national income, as well as evaluating the effectiveness of fiscal policy and monetary policy in promoting economic growth and stability. Recognizing the global nature of economics, students will also have ample opportunities to examine the impact of international trade and international finance on national economies. Various economic schools of thought are introduced as solutions to economic problems are considered. Competencies will include: skills/content, analysis/problem solving, and communication. Students are able to take the AP exam as administered by the College Board. Test fees are the responsibility of the student.

**Prerequisite:** Sophomore, Junior or Senior; Algebra I

**Note:** This course meets the Economics graduation requirement.

**232-WESTERN CIVILIZATION HONORS (½ credit)****233-WESTERN CIVILIZATION Level 1 (½ credit)****234-WESTERN CIVILIZATION (½ credit)**

Students will explore western civilization from the emergence of modern nation states to current day. The focus will be centered on the relationship between economic systems, political ideas and structures, and society/culture. Competencies will include: skills/content, analysis/problem solving, and communication.

**Level 1:** Requires strong independent reading and writing skills as well as extended analytical response on summatives.

**Honors:** Will encourage students with superior academic skills and motivation to work independently to gain depth of understanding in the subject matter. Students will have the opportunity to demonstrate knowledge and understanding through extensive research projects.

**Prerequisite:** Sophomore; World Geography

For a student to remain at the Honors or Level 1, they need to earn a B- or better in the current Honors or Level 1 social studies course.

**245CC-U.S. HISTORY COLLEGE CREDIT (1 credit)****250-U.S. HISTORY Level 1 (1 credit)****260-U.S. HISTORY (1 credit)**

United States History students develop an understanding of the dynamics of modern America. They define the causes, effects of late 19th and 20th century political, economic, and social events and trends. Students analyze and interpret primary and secondary sources, develop and defend opinions, work collaboratively, and demonstrate their learning through verbal and non-verbal expression.

**Level 1:** Requires strong independent reading and writing skills as well as extended analytical response on summatives.

**CC:** Will encourage students with superior academic skills and motivation to work independently to gain depth of understanding in the subject matter. Students will have the opportunity to demonstrate knowledge and understanding through extensive research projects.

**Prerequisite:** Junior or Senior; Western Civilization

For a student to remain at the Honors/CC or Level 1, they need to earn a B- or better in the current Honors or Level 1 social studies course.

**271-PSYCHOLOGY****(½ credit)**

This course focuses on topics such as approaches to psychology, its contributors and its historical development, psychology disciplines, the structure and function of the brain, personality development, learning, emotions, stages of life, mental health, and therapies. Students will have the opportunity to explore psychology in many ways including individual projects and group activities. This course is the basis of exposure for college.

**Prerequisite:** Junior or Senior

## **289-ADVANCED TOPICS IN PSYCHOLOGY**

**(½ credit)**

Designed for students to further investigate a deeper understanding of psychology in their everyday life. Emphasis on developmental and social psychology including human relations, personality and abnormal psychology. Course includes using individual and collaborative approaches to evaluate contemporary topics.

**Prerequisite:** Junior or Senior; Psychology or Psychology CC

## **273CC-PSYCHOLOGY COLLEGE CREDIT**

**CC (1 credit)**

This course focuses on topics such as approaches to psychology, its contributors and its historical development, psychology disciplines, the structure and function of the brain, personality development, learning, motivation, emotions, stress and stress management, memory, sleep and sleep cycles, dreams, altered states of consciousness, mental health, and social behavior. Students will have the opportunity to explore psychology through many ways including individual projects and group activities. Students who sign up for Psychology College Credit are required to apply for college credit through the Community College System of New Hampshire. Strong independent reading and writing skills are required.

**Prerequisite:** Junior or Senior

## **275-CIVIL WAR**

**(½ credit)**

The American Civil War is one of the most divisive and important events in American history. In this course, students will analyze the coming of the war, considering the political, social, and cultural issues and attitudes which divided the Americans in both the North and the South. Students will explore the role of government, state's rights, slavery, and the fate of the Union. Sectional conflict centered on a series of questions that involved the future of African slavery, and the Southern way of life. This course attempts to briefly summarize and present the major events and battles related to the war in chronological order. This course will explore the major political issues and philosophies that set the stage for the Civil War, sustained is, and continue to the present.

## **278-HOLOCAUST STUDIES**

**(½ credit)**

Explore and analyze the complex factors contributing to the Holocaust, interpret the events of 1933-1945, and evaluate the impact of the genocide on post-war Europe and generations to come. The course examines the Holocaust both chronologically and thematically. The course incorporates primary sources and many elements of psychology, sociology, ethics, and economics. Individual and group collaboration approaches for assessments.

**Prerequisite:** Sophomore, Junior or Senior

## **280-US GOVERNMENT AND POLITICS**

### **CC (1 credit)**

Are you interested in what is going on in our nation's capital? Do you want to understand more about how our government works and who is able to influence it? Do current political beliefs and behaviors in Washington D.C. matter? Have you thought about what you can do to influence our current leaders? This course examines the relationship between government, politics, and power. Students discuss how people in a democracy can effect change in government to address current and future needs. Topics include political beliefs and behavior, political parties, interest groups, mass media, civil rights, civil liberties, etc. Strong independent reading and writing skills are required.

**Prerequisite:** Junior or Senior; Civics

## **284-SOCIOLOGY**

### **(½ credit)**

This course examines the social world, using the study of social interactions. With focus on culture and human interaction, students will learn how to connect research to concepts, through the study of social customs, social norms and social institutions. This course will examine the connections among the individual, social groups and social institutions with a focus on issues, such as gender, race, crime, and class struggles. Students will learn how to connect research to concepts, and develop critical thinking skills, deepening their understanding of the social world.

**Prerequisite:** Sophomore, Junior or Senior

## **287-CURRENT SOCIAL AND POLITICAL ISSUES**

### **CC (1 credit)**

This course explores current social and political issues facing the United States and the world today. Discussion will focus on how current events are changing today's society. Topics will include foreign affairs and politics, civil rights and liberties, economic and welfare issues, political and social reform, gender issues, racial and ethnic disharmony, ethics and social justice. The 2020 American presidential election will prove to be an additional exciting component of the 2020-2021 course. Strong independent reading and writing skills are required.

**Prerequisite:** Junior or Senior

## **295-CRIMINOLOGY**

### **(½ credit)**

This course provides students with the foundations of the Criminal Justice System by placing an emphasis on the four domains of Criminology: Crime and Crime Causation, Law Enforcement, the Justice System and Institutional Corrections. The course is introduced by having students both explore the careers that are associated with the study of Criminology. The course concludes by addressing the issues confronting criminal justice in an age of technology and terrorism.

**Prerequisite:** Sophomore, Junior or Senior

# TECHNOLOGY PROGRAM

## 873-COMPUTER-AIDED DESIGN (CADD)

**CC (1 credit)**

This is a college credit course offering 5 college credits and will teach the student:

- The basics of the “SolidWorks” Computer Aided Design software (for mechanical drawings).
- The basics of mechanical drawing.
- Working with others to complete a larger assignment.
- The ability to assess the work and contributions of coworkers.

Several drawing projects will be given to the student to complete. Their ability to complete both the creation of the part and represent it accurately on standard drawing formats will be the basis for the grade earned. Most projects will be individual efforts but a few will be done by teams. Those that excel in the course will be offered the opportunity to take a “SolidWorks Certification Exam”. **This course qualifies as a Math Intensive course.**

**Prerequisite:** Geometry

## 885-GRAPHIC DESIGN

**(½ credit)**

Students will learn how the elements of art and principles of design come together to present information in a visually compelling manner. At the fruition of this course, students will be able to skillfully incorporate type and graphics into a document with a singular cohesive message. Students will look at historical and contemporary graphic arts as references to guide their growth.

Using Adobe Photoshop, In Design, and Illustrator to create logos and layouts, students will learn how color, shape, line, and texture come together to make compelling graphics and how to incorporate their designs into websites. As a project based course, students will work to create real world examples of business cards, logos, magazine layouts, posters and websites on their journey to become successful graphic artists.

**Prerequisite:** Introduction to Digital Photography, Introduction to Art (Intro to Drawing & Painting) or Introduction to Digital Art.

## 886-INTRO TO STEAM (Science, Technology, Engineering, Art, and Math)

**(½ credit)**

This course serves as a gateway to the exploration of career paths in various technology fields. Emphasis on collaborative projects and intelligent problem solving will support our investigations of the seven fields of technology.

Design process and design theory serve as the foundation of all projects in this course tying Science, Technology, Engineering, Art, and Math together. In this survey course, students will explore the processes of technology; how technology relates to progress and ethical decision making as they work on creative STEAM based projects. A great deal of emphasis will be placed on real-world applications and hands-on exploration.

## **891-INTERMEDIATE STEAM (Science, Technology, Engineering, Art, and Math)** **(½ credit)**

This course serves as a continuation of the exploration of problem solving and processes as begun in Intro to STEAM. After completing the half-credit Intro to STEAM, if students are interested in continuing learning and investigating skills that will help them in future STEM career paths, this course will further tie together Science, Technology, Engineering, Art and Math and dig deeper into how these subjects work together. Students are expected to work efficiently on their own with their own investigative skills and curious minds. Self-driven projects are the core of a more personalized way of learning skills that students will find valuable to their future.

**Prerequisite:** Introduction to STEAM

## **887-INTRODUCTION TO DIGITAL PHOTOGRAPHY** **(½ credit)**

Students will learn to use a DSLR camera to create meaningful photographic images that reflect an understanding of modern visual aesthetics. A great deal of this course will address the elements of art and principles of design as well as understanding light and composition.

Students will come away from this course with a strong understanding of how the elements of art and principles of design come together with sound technical skills to create powerful images reflecting the intent of the photographer. Exploration of people, landscapes and action photography will help build students visual and technical skills. Images will be captured digitally and modified with Adobe Photoshop CS6.

**Please Note:** Access to a DSLR camera at home is recommended.

## **713-DIGITAL ILLUSTRATION** **(½ credit)**

This course is designed to expand upon fundamental skills and concepts gained at the introductory level through exploration and production of digital artwork. Students are provided a drawing tablet for the duration of the course and develop confidence and skill with digital drawing and painting techniques. Students will learn about illustration, cartooning, and animation through a variety of media including print and film sources. Class discussions and critiques will complement class projects.

Using Adobe Photoshop and Illustrator, students will create original artwork incorporating the elements of art and principles of design. A heavy emphasis on creative expression and personal voice will take place in the form of an individual digital portfolio. Exposure to introductory drawing skills will enhance work.

**Prerequisite:** Introduction to Art (Intro to Drawing and Painting) or Introduction to Digital Art; Sophomore, Junior or Senior

## **708-INTRODUCTION TO DIGITAL ART** **(½ credit)**

This course is designed as an overview of basic art concepts, media, and techniques with both traditional media as well as digital media. Drawing skills, planning, and digital skills will be emphasized. Students will be exposed to the major techniques used in several art disciplines such as drawing, painting, and printmaking, and how they can be incorporated into digital design. Students are expected to build on skills already covered at the middle and elementary level. Written critiques and research papers will be assigned.

## **889-ENGINEERING AND DESIGN (½ credit)**

This is a project based course that will require student to work in teams to solve problems. Students will not be given formulas or answers in a lecture format; instead they will be required to use both information gathering (internet, library, etc.) and experimentation. The results of each team's endeavors will be written up and presented by the team to the balance of the class. Each team member will be asked to grade themselves and their team member's contributions to each project. The members of the audience will be required to ask questions at the end of each presentation and to critique each presentation. **This course qualifies as a Math Intensive Course.**

Grading will be based on:

- The ability of the team to define a plan based on a stated hypothesis, and to solve each assigned task.
- Accuracy and completeness of the results for each project.
- Clarity and accuracy of the group presentation.
- The student's ability to assess the work of fellow students within the team and the work presented by competing teams.

**Prerequisite:** Algebra I

## **892-MANUFACTURING PROCESSES CC (½ credit)**

This course introduces students to the preparation of materials for manufacturing through the extraction and development of ferrous and nonferrous metals and the influence of elements in the production of alloy steels and irons. The classifications of steel, the mechanical and physical characteristics of metals as well as heat treatment processes are also covered. Manufacturing processes such as forging, powdered metal processes, sand castings, additional casting processes, presswork, rolling, drawing, bending, extrusion, welding, electrical discharge machining (EDM), electrochemical machining (ECM), and numerical control (NC) operations are emphasized.

**Prerequisite:** Sophomore, Junior or Senior; Algebra I

## **410TECH-TECHNOLOGY SOLUTIONS AND CONNECTIONS I (PHS Help Desk) (1 credit)**

Students enrolled in this course, the PTech Squad, will commit themselves to providing technology solutions in the Pelham school community and will strive to create connections within and outside of the greater Pelham community. This service based course will require students to assess technological issues throughout the school day and determine the best way to solve the issues encountered. Students must be self-driven problem solvers who are able to work both independently and within a group setting, and are capable of managing multiple projects at the same time. Because students will be functioning in an authentic work environment, they will be learning skills that will develop college, career, and life skills that are immediately transferable to the world at large. To best function in this course, students must be minimally proficient in the utilization of the G Suite of Google Apps, the Google Chrome environment, basic Chromebook functionality, and the Microsoft Office Suite. Students will participate in an interview and brief assessment of tech skills for admission into the course. This course may be repeated with permission of the instructor.

**Prerequisite:** Junior or Senior; Computer Applications I or equivalent; Algebra II; Permission of instructor.

## **467-INTRODUCTION TO PROGRAMMING WITH PYTHON** **(½ credit)**

This course is intended as an introduction to programming which will provide students with a strong foundation using the programming language Python, as well as general computer science theory. It is assumed that students taking this course have no formal programming experience. Therefore, the course focuses on basic programming concepts such as commands for performing calculations, receiving input and displaying output, basic flow control structures, and functions / methods. The class will also begin looking at the object-oriented programming concepts of classes and objects. This course requires mathematical problem solving skills, as students will be examining complex problems that computers can solve more effectively than humans can.

**This course qualifies as a Math Intensive course.**

Co-requisite: Junior or Senior; Algebra II or taking concurrently



# **WORLD LANGUAGES PROGRAM**

## **300-SPANISH I (1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at the basic level. Reading and listening proficiency will be stressed. Oral and writing proficiency will be introduced. Cultural aspects will be woven into the course.

## **305-SPANISH II (1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at the intermediate level. Oral and listening proficiency will continue to be stressed along with reading and writing proficiency. Cultural aspects will be woven into the course.

**Prerequisite:** Spanish I

## **310-SPANISH III (1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at a proficient level. Oral, listening, reading, and writing proficiency will be heavily stressed. The expectation that the student will consistently express themselves with originality and personal input will be required. Cultural aspects will be woven into the course.

**Prerequisite:** Spanish II

## **315-SPANISH IV CC (1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at an advanced level. Their previously learned skills will be applied to and expanded upon through exposure to literature, film, and culture of the target language.

**Prerequisite:** Spanish III

## **330-FRENCH I (1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at the basic level. Reading and listening proficiency will be stressed. Oral and writing proficiency will be introduced. Cultural aspects will be woven into the course.

### **335-FRENCH II**

**(1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at the intermediate level. Oral and listening proficiency will continue to be stressed along with reading and writing proficiency. Cultural aspects will be woven into the course.

**Prerequisite:** French I

### **340-FRENCH III**

**(1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at a proficient level. Oral, listening, reading, and writing proficiency will be heavily stressed. The expectation that the student will consistently express themselves with originality and personal input will be required. Cultural aspects will be woven into the course.

**Prerequisite:** French II

### **345-FRENCH IV**

**(1 credit)**

Students will learn to communicate in the target language through speaking, listening, reading, and writing activities. Students will become competent in the target language at an advanced level. Their previously learned skills will be applied to and expanded upon through exposure to literature, film, and culture of the target language.

**Prerequisite:** French III

## **SPECIAL EDUCATION PROGRAM**

The Special Education Department is committed to providing all students a free and appropriate public education within the least restrictive environment. Individualized supports and services are implemented in accordance with the Individual Education Program (IEP). The IEP is designed by the student's team to meet the student's needs and assist them in making progress toward identified goals. Once the IEP is developed, proper placement in courses is determined by the team.

### **Specialized Programming**

#### **52-EXPLORATION IN PHYSICAL EDUCATION**

**(½ credit)**

This half year (.5 credit) adapted physical education course is co-taught by a physical educator and special educator. The course has a modified curriculum for students with special needs. The class offers students the opportunity to be paired with a typical peer to help support a comprehensive physical education program while focusing on social skills, fitness activities, individual sports, and team sports. The goal of this class is for students to look to peers for natural supports and gain social skills opportunities while finding leisure and fitness activities that they can enjoy for a lifetime.

**Prerequisite:** Permission is required from the Dean of Students and student helpers should select Unified Physical Education as their course.

#### **971- ACADEMIC SKILLS**

**(½ credit)**

The focus of this course is to address IEP-driven goals (reading, writing, math, executive functioning), while enhancing self-advocacy and the awareness of educational strengths, interests, and needs. After direct instruction aligned to IEP goals, students may have opportunity to apply learned skills to general education assignments.

Students may enroll in this course as frequently as determined appropriate by his/her IEP team. Students will earn a pass/fail grade which will not impact their GPA.

#### **972-DAILY LIVING**

**(½ credit)**

Students will improve their daily living skills necessary to access the general curriculum, the work force, and/or post-secondary programming. This course is an elective and does not count toward the academic requirements for a Pelham High School Standard Diploma.

#### **973-JOB SKILLS**

**(½ credit)**

Students will improve academic or job skills necessary to access the general curriculum, the work force, and/or post-secondary programming. This course is an elective and does not count toward the academic requirements for a Pelham High School Standard Diploma. This course can be repeated for credit.

## **High School Equivalency Testing Program (HiSET)**

The High School Equivalency Test (HiSET) provides adults and out-of-school youth with an opportunity to demonstrate their academic skills and to earn the New Hampshire Equivalency Certificate. The exam consists of five subtests; English Language Arts, Reading, Math, Social Studies and Science.

The HiSET preparation program, offered at Salem Continuing Education, is available to students who are planning to take the HiSET exam in lieu of achieving a high school diploma, and who are willing to follow the plan described below. In order to participate in the HiSET prep program, students:

- Must have reached their 16<sup>th</sup> birthday.
- Must develop an alternative plan with their school counselor before taking the HiSET exam to help plan for school to career opportunities.
- Must remain in attendance at PHS until such time as they receive their HiSET certificate, unless otherwise authorized by the principal (official passing scores on the HiSET exam must be reported to the principal by the testing center before a student under 18 will be allowed to leave school).
- Must have completed a minimum of six courses, including at least one each in math, science, social studies and English, unless otherwise authorized by the principal.
- Must have permission to participate in the HiSET program from the Academic Review Committee and parents.
- Must attend and participate appropriately (i.e., complete assignments) in a minimum of three Pelham High School credit bearing courses until they pass the HiSET exam.

**NOTE: Any student under 21 who passes the HiSET exam will be welcome to return to school for their high school diploma with the principal's approval.**

# Career and Technical Education Programs

## Pinkerton Academy - Alvirne High School

**Pinkerton Academy** in Derry, NH is our primary Career and Technical Education (CTE) affiliation. However, some **Alvirne** High School CTE courses are also available to our students.

- Pelham High is allotted a limited number of seats in each CTE course. These are granted to juniors and seniors based on an application process that considers appropriate placement, attendance, academic achievement, and discipline reports.
- Travel to and from the CTE centers necessitate the loss of some time from both PHS and CTE class time.
- Students are responsible for all course requirements in both their CTE center and PHS classes.
- Some CTE courses run for only one semester. The majority of the courses run for a whole year. Students who enroll in a yearlong class at a CTE center must maintain their enrollment in that class.
- For full year courses, two credits are awarded only at the end of the year.
- Students are under the regulations of the Attendance Policy of the Career Technical Center they attend. Excessive absences may lead to automatic withdrawal from the class with a grade of F. Should a student withdraw from the CTE course after the official drop/add period, a WF (Withdrawal Failure) will appear on the student's transcript with the loss of credit.
- Students and their families are encouraged to visit the career technical centers by attending open houses or scheduling a daytime visit. Contact the career technical center offices of Pinkerton Academy or Alvirne, High School.
- To register, students must complete an application with parent/guardian signature. Applications are available in the College and Career Guidance Department and are due before the course selection process begins.

# **Pinkerton Academy**

## **Career and Technical Education Center**

### **AUTOMOTIVE SYSTEMS TECHNOLOGY**

#### **P271-AUTOMOTIVE SYSTEMS TECH I (2 credits)**

This **full year** (2 credit) course is the first half of a 2-year program that subscribes to the training certification program of ASE. Students explore career opportunities and requirements of a professional service technician.

Content emphasizes beginning transportation service skills and workplace success skills. Students study: Safety; Three C's (Concern, Cause, Correction); Tools, Equipment, and Measuring Skills; Basic Engine/Maintenance; Tires; Steering and Suspension; Brakes; Electrical Charging and Starting Systems. The program is aligned with the NATEF certified automotive programs of the NH Community College system. The Automotive Maintenance and Light Repair 1 (MLR) program is certified by the National Automotive Technicians Educational Foundation (NATEF) under the authority of the Institute of Automotive Service Excellence (ASE). Eligible students may have the opportunity to participate in a paid internship at a dealership during the summer between the first and second year of the program.

**Note:** This course runs every day for the full year.

#### **P276-AUTOMOTIVE SYSTEMS TECH II (2 credits)**

This **full year** (2 credit) course is the second half of a 2-year program and intensifies, follows through and elaborates on material covered in Automotive Systems Technology 1. The curriculum subscribes to the training certification program of ASE. Students study: Safety including Hybrids and SRS (Safety Restraints Systems); General Engine and Repair; Engine Performance; Electrical and Electronic Systems; Heating and Air Conditioning; Manual Drivetrains and Axles; Automatic Transmissions/Transaxles; and Employability Skills. The program is aligned with the NATEF certified automotive programs of the NH Community College system.

**Prerequisite:** Successful completion of Automotive Systems Technology I with a minimum grade of B- and permission from the CTE director.

**Note:** This course runs every day for the full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

### **BUILDING CONSTRUCTION TECHNOLOGY**

#### **P301-BUILDING CONSTRUCTION TECH I (2 credits)**

This **full-year** (2 credit) course provides students with a fundamental background in many aspects of the construction industry. Students should develop an understanding on how to successfully manage, plan, and create projects ranging from framing of floors, walls, and ceilings, while gaining a deep understanding for the International Residential Code. Personal protective equipment required to be worn.

**Prerequisite:** Completion of Algebra I with a 75 or higher.

**Note:** This course runs every day for the full year.

## **P306-BUILDING CONSTRUCTION TECH II**

### **(2 credits)**

In this **full-year** (2 credit) program, students will begin to gain a deeper understanding about the construction industry and how it operates. Students will demonstrate an understanding of new green building codes, as well as energy efficiency practices used in today's construction. Students will plan and schedule the various phases of construction, processing of required permits, developing material lists and ordering of materials. Students will also understand the different aspects of the industry, specifically directed towards company startups, and college readiness. Building Construction Technology 2 students will work to gain their OSHA 10 and IRC certifications. Personal protective equipment required to be worn.

**Prerequisite:** Successful completion of Building Construction Technology I and permission from the CTE director.

**Note:** This course runs every day for the full year.

## **COMPUTER INFORMATION SYSTEMS**

### **P361-COMPUTER INFORMATION SYSTEMS 1**

#### **(2 credits)**

This **full-year** (2 credit) course focuses on computer hardware design and building, operating system installation and configuration, client side networking, security, and system programming. Students have fun while working toward becoming computer experts in a blend of classroom and online activities, simulated and hands-on labs. Students work in a fully equipped state-of-the-art lab to develop the skills to install, configure, troubleshoot and diagnose hardware and software problems. Earn college credit and industry-recognized certifications, such as TestOut PC Pro, CompTIA IT Fundamentals and A+. Student have an opportunity to join SkillsUSA and learn leadership and technical skills to compete locally, state and nationally and earn college scholarships.

**Note:** This course runs every day for the full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

### **P366-COMPUTER INFORMATION SYSTEMS 2**

#### **(2 credits)**

This **full-year** (2 credit) course focuses on local area and wide area networking. Students are challenged with real world networking problems. Students will design, configure and deploy a variety of network devices such as, switches, routers, and integrated service routers. Understanding IPv4 fixed length and variable length subnets and IPv6 will prepare students for college and profitable careers. Students will understand and design complex networks utilizing network devices connected by copper, fiber and wireless mediums. Students will understand concepts such as Power over Ethernet (PoE), VLANs, WAP's, Voice over IP, Router on a Stick, and much more. Earn college credit and industry-recognized certifications such as Cisco CCENT, and CompTIA Network+. Students have the opportunity to join SkillsUSA and learn leadership and technical skills to compete locally, in state and nationally and earn college scholarships.

**Prerequisite:** Successful completion of Computer Systems I-Maintenance with a minimum grade of 75 and permission from the CTE director.

**Note:** This course runs every day for the full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **COSMETOLOGY**

### **P161-COSMETOLOGY I**

**(2 credits)**

In this **full-year** (2 credit) course, cosmetology students receive comprehensive training in all areas of hairdressing and related fields while earning hours on their cosmetology apprentice license. Cosmetology 1 students are exposed to a blend of classroom instruction and hands-on learning experiences using a human hair mannequin in a simulated salon environment. Students learn a variety of hairstyling techniques, nail design and proper sanitation. Student will learn about advanced hair cutting, facials, hair design, hair coloring, and chemical texture. In addition, students will learn about the business side of the cosmetology industry and salon management. Students will have the opportunity to work directly with customers in the salon and to job shadow professional cosmetologists. Students will be delivering cosmetic services as well as receiving services. Students will need to register and pay for an apprentice license and purchase a personal tools/supply kit and wear a uniform when in the classroom/lab. Total costs range from \$100 plus \$25 State apprentice license (with fundraising and payment plan options available.) **All absences must be made up with physical hours per the requirement of the State Board of Cosmetology.**

**Note:** This course runs every day for the full year.

### **P163-COSMETOLOGY II**

**(2 credits)**

In the second year of this **full-year** (2 credit) course, students will continue learning and mastering their skills from the previous year as well as cultivating new skills in the areas of advanced hair cutting, facials, hair design, hair coloring, and chemical texture. In addition, students will learn about the business side of the cosmetology industry and salon management. Students will have the opportunity to work directly with customers in the salon and to job shadow professional cosmetologists. Students will be delivering cosmetic services as well as receiving services. Upon successful completion of this two-year program and state competency exam, students will be able to transfer hours to a post-secondary school. Second-year students will need to purchase additional tools/supplies (cost is approximately \$75, financial aid and/or payment plans are available).

**Prerequisite:** Successful completion of Cosmetology I with a minimum grade of 80 or better, completion of state required lab hours, and permission form the CTE director.

**Note:** This course runs every day for the full year.

## **CULINARY ARTS & BAKING**

### **P368-CULINARY ARTS I**

**(2 credits)**

In this **full-year** (2-credit) course, students will develop refined skills in preparing a variety of foods in a commercial kitchen for a full-service restaurant. Techniques include, but are not limited to, appetizers, soups, salads, salad dressings, sandwiches, entrees, pastries, breads, and molecular gastronomy. Specific topics covered are kitchen safety, indoor produce cultivation, knife skills, proper moist and dry heat cooking techniques, culinary history, small and large equipment operation, culinary terminology, bakeshop mixing methods, pastry technique, and becoming ServSafe certified. Students will be required to participate in some after school catering.

A non-refundable lab fee of \$120 (with payment plans and financial assistance available) covers the cost of three chef coats, two pairs of culinary pants, two aprons, one hat and two certification exams. (ServSafe and Prostart 1. The same uniforms may be used in Culinary 2. Students will also be required to obtain kitchen safe shoes.

**Note:** This course runs every day for the full year.



## **P370-CULINARY ARTS II**

### **(2 credits)**

In this **full-year** (2 credit) program, students will build on the foundation of knowledge acquired in year one, and they will operate and manage all aspects of a full-service restaurant operation. Each student will contribute to writing menus and cultivate new skills in business and kitchen management, customer relations, and nutrition. Students will be required to participate in some catered functions outside of the school day. Skills acquired through the student's success in the program will enable them to successfully transition to industry or to culinary college. Students are required to adhere to the same uniform policy as Culinary Arts I.

**Prerequisite:** Successful completion of Culinary Arts I with a minimum of 80 and permission from the CTE director.

**Note:** This course runs every day for the full year.

## **ARCHITECTURE & DESIGN PROGRAM**

### **P231-ARCHITECTURE and DESIGN I**

#### **(2 credits)**

This **full-year** (2-credit) program provides an excellent opportunity for those creative students interested in pursuing careers in Architecture, Engineering or the many fields of Design. Using the latest Autodesk design software package, students are able to take the skills to a level unimaginable one year earlier. Students learn how to design and build an energy-efficient three-bedroom home one drawing at a time. The finished product is a polished, professional-quality set of construction plans for each student's design portfolio. The "Cardboard chair" Design Project has become a student favorite as it allows their creative juices to flow by designing and constructing a very cool "theme-oriented" hat. This creative project rounds out the first year by taking the students' 2D drafting and design skills, now quite impressive, into the 3D realm of Solid Modeling and full-color presentations. Students are encouraged to develop their observation and pencil sketching skills along with AutoCAD and PhotoShop skills.

**Note:** This course runs every day for the full year. We recommend that students take Computer Aided Design (CADD) at Pelham High in the 10<sup>th</sup> grade.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

### **P236-ARCHITECTURE and DESIGN II**

#### **(2 credits)**

This **full-year** (2-credit) course is the second half of a two year program concentrating on further developing the student's design and visual presentation skills through a series of creative design projects using many of the advanced features of AutoCAD and PhotoShop design and image presentation software. Students work independently and cooperatively on several challenging, long-term projects designed around a variety of themes to engage the most creative and curious minds. Graduates leave the program with a solid design portfolio and impressive AutoCAD skills to take with them on the next leg of their journey.

**Prerequisite:** Successful completion of Architecture and Design I and permission from the CTE director.

**Note:** This course runs every day for the full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **ELECTRICAL TECHNOLOGY**

### **P401-ELECTRICAL TECHNOLOGY I (2 credits)**

This **full-year** (2 credit) course is the first half of a 2-year program designed to have the student gain the knowledge and skills necessary to successfully enter the field as an apprentice electrician. The student will acquire skills in all phases of residential wiring including basic electrical theory, safety, special tools and test equipment, blueprint reading and local requirement calculations, normal residential circuits, and special purpose wiring systems. Hands-on experience is accomplished in a simulated residential setting. Job searching skills as well as quality workmanship and professionalism will be an integral part of the classroom environment.

**Successful completion** of the Electrical Technology 1 and 2 programs will credit the student with a portion of classroom and work hours required to obtain a **Journeyman Electrical License**.

**Note:** This course runs every day for the full year. Students will be required to obtain the NH Apprentice Electrical license-approximate cost is \$30.

### **P406-ELECTRICAL TECHNOLOGY II (2 credits)**

This full-year (2 credit) course is the second half of a 2-year program and intensifies, follows through, and elaborates on material covered in Electrical Technology 1. It covers small appliance repair, industrial electricity and motors, basic CAT 5 and fiber terminations, and work with transformers and generators. Students will also participate in the actual wiring, planning, cost estimation, NEC code requirements, and material acquisition needed to complete various renovations and repairs on the Pinkerton campus. Successful completion of the Electrical Technology 1 and 2 programs will credit the student with a portion of classroom and work hours required to obtain a Journeyman Electrical License.

**Successful completion** of the Electrical Technology I and II programs will credit the student with a portion of classroom and work hours required to obtain a **Journeyman Electrical License**.

**Prerequisite:** Completion of Electrical Technology I with a 75 or higher and permission from the CTE director.

**Note:** This course runs every day for the full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **ENGINEERING PROGRAM**

"Project Lead the Way" is a nationally recognized program that was developed to introduce high school students to engineering to attract more students to these fields and to allow them, before college, to determine whether they are interested in pursuing an engineering-related career. The courses in the program, when combined with traditional mathematics and science courses, introduce students to the scope, rigor and discipline of engineering prior to entering college. However, students not intending to pursue further formal education will benefit greatly from the knowledge and logical thought processes that result from taking courses within this curriculum. Students who complete all of the Engineering courses can earn up to 16 college credits through the NH Technical Institute "Running Start" program.

## **P208-INTRO TO ENGINEERING DESIGN**

### **(full year-1 credit)**

This **full-year** (1 credit) course is the first course in the Engineering Program. The course is designed to develop student problem-solving skills with emphasis placed upon the concept of developing a 3-D model of an object. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed, and evaluated using a computer-aided design system. Students will use modern, state-of-the-art computer hardware and Inventor software to create product solutions. Various design applications will be explored with discussion of possible career opportunities.

**Note:** This course runs every day for a full year in conjunction with Principles of Engineering.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P210-PRINCIPLES OF ENGINEERING**

### **(full year-1 credit)**

This **full-year** (1 credit) course is designed to enable students to understand the field of engineering/engineering technology. Students will explore various technology systems and manufacturing processes to learn how engineers and technicians use math, science and technology in an engineering problem-solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

**Note:** This course runs every day every day for a full year in conjunction with Intro to Engineering Design.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P211-DIGITAL ELECTRONICS**

### **(full year-1 credit)**

This **full-year** (1 credit) course is a course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

**Prerequisite:** Intro to Engineering Design and Principles of Engineering and permission from the CTE director.

**Note:** This course runs every day for a full year in conjunction with either Engineering Design and Development or Computer Integrated Manufacturing. Students must sign up for two courses.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P215-COMPUTER INTEGRATED MANUFACTURING** **(full year-1 credit)**

This full-year (1 credit) course applies principles of robotics and automation. This course builds upon the computer solid modeling skills developed in Introduction to Engineering Design. Students will use computer controlled CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis, and make appropriate modifications before producing their prototypes.

**Prerequisite:** Intro to Engineering Design and Principles of Engineering and permission from the CTE director.

**Note:** This course runs every day for a full year in conjunction with either Engineering Design and Development or Digital Electronics. Students must sign up for two courses.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P216-ENGINEERING DESIGN and DEVELOPMENT** **(full year-1 credit)**

This full-year (1 credit) class is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. They must present progress reports, submit a final documentation package, and defend their solutions to a panel of outside reviewers at the end of the school year. This course is open to all students interested in study and careers in the STEM field.

**Prerequisite:** Successful completion of Intro to Engineering Design and Principles of Engineering.

**Please Note:** This course runs every day for a full year in conjunction with Digital Electronics or Computer Integrated Manufacturing. Students must sign up for two courses.

## **ENVIRONMENTAL AND AGRICULTURAL SYSTEMS**

### **P200-INTRODUCTION TO ANIMAL SCIENCE** **(½ credit)**

This half-year (0.5 credit) course is designed for students who might be considering a career in some phase of animal science such as animal management/trainer, veterinary science, or agribusiness. Selected units of instruction will include zoo noses, reproduction, digestive systems, and nutrition of companion and livestock animals.

This is a ½-credit course. Students will enroll in another ½ credit course offered at Pinkerton Academy and approved by PHS.

**Note:** This course runs every day for a half-year in conjunction with Animal Business Management. Students must sign up for both courses.

## **P201-ANIMAL MANAGEMENT**

### **(1 credits)**

In this **full-year** (1 credit, 45 minute) course, students will learn how to successfully become prepared to work in an animal care facility by learning proper sanitation and care techniques of the small animals within the lab. Specific units of instruction will include but are not limited to; proper animal husbandry of large and small animals, breeds of animals, careers in the animal industry, resumes, animal economics and All Aspects of Industry.

**Note:** This course runs every day for a full year in conjunction with Introduction to Animal Science. Students must sign up for both courses.

## **P203-ANIMAL HEALTH and VETERINARY TECH**

### **(2 credits)**

This **full-year** (2 credit) course is designed for students who are interested in a future career with animals in the health and veterinary technology field. Specific units of instruction will include but are not limited to; Introduction to Veterinary technology, Veterinary terminology, veterinary technology skills, animal diseases, animal welfare ethics and treatment, animal first aid. Students will also learn how to properly groom canines and run a student CTE enterprise “The Pinkerton Pet Palace.”

**Prerequisite:** Successful completion of Introduction to Animal Science and Animal Management with a minimum grade of 80, and permission from the CTE director.

**Note:** This course runs every day every day for a full year.

## **ENVIRONMENTAL SCIENCE**

### **P102-ENVIRONMENTAL SCIENCE AND NATURAL RESOURCES 1**

#### **(2 credits)**

This **full-year** (2 credit) course is for students who wish to explore and conserve both public and private habitats through a variety of real life science applications. Activities in this course use science, planning, and geospatial technology to protect and restore forest ecosystems. This course will teach students how to conserve and sustain the forest to provide wildlife habitat, conserve soils, watersheds and recreational opportunities. Students will gain skills and experience through a variety of engaging real life activities in the vast Pinkerton Academy outdoor and indoor classroom. Students will utilize class time to engage in outdoor activities throughout the seasons applying skills to both Pinkerton Academy’s outdoor classroom and Forsaith Forest in Chester, NH. Students attend the Deerfield Fair (FFA Forestry event) and obtain Industry certifications in outdoor safety. College articulations are available. Related student organizations: FFA and SEA.

**Note:** This course runs every day every day for a full year.

## **P103- ENVIRONMENTAL SCIENCE AND NATURAL RESOURCES 2**

### **(2 credits)**

*(Students take Environmental Science & Natural Resources 2 or AP Environmental Science during year 2)*

This **full-year** (2 credit) course is for students who wish to further their knowledge and skills in environmental science. Activities include analyzing and applying the skills acquired in classes like Biology, Environmental, Animal science and other ecological sciences. This course will teach students to apply knowledge to global ecosystems, native & invasive wildlife and plants, drinking water and pollution. Students will deploy game cameras on campus to study and understand the diversity of Pinkerton. They will participate in a citizenship science project that focus on responsible stewardship of the environment. There are many hands on activities and chances to develop industry relations with maple syrup production, NH Fish and Game, NH Audubon, Manchester Water Works and Forsaith Forest in Chester. Students will obtain Industry certifications in outdoor safety. College articulations are available. Related student organizations: FFA and SEA.

**Prerequisite:** Successful completion of Environmental Science and Natural Resources 1 & permission from CTE director.

**Note:** This course runs every day every day for a full year.

## **P104- AP ENVIRONMENTAL SCIENCE**

### **(2 credits)**

*(Students take Environmental Science & Natural Resources 2 or AP Environmental Science during year 2)*

This **full-year** (2 credit) course is for those interested in pursuing careers and college programs in the environmental sciences. The course takes advantage of the Pinkerton Academy outdoor classroom and develops student based research case studies for natural resource inventories and management strategies. Using tools of environmental scientists to develop a deeper understanding of ecosystem analysis and its role in natural populations. Students should be interested in areas such as wild and marine life, zoology, water resources, pollution, energy, human and climate impacts. Classroom and outdoor labs will include Anecdota and Tuva software. Students will be required to develop a multidisciplinary capstone project. Related student organizations include FFA and SEA.

**Prerequisite:** Successful completion of Environmental and Natural Resources 1.

**Note:** This course runs every day every day for a full year.

## **HEALTH SCIENCE AND TECHNOLOGY**

### **P181-HEALTH SCIENCE TECHNOLOGY I**

#### **(2 credits)**

This **full-year** (2 credit) course is the first half of a 2-year program designed to help students explore the medical/healthcare field. The course will expose students to a variety of healthcare occupations and will provide them with the skills needed to assist qualified personnel providing diagnostic, therapeutic, preventative and rehabilitative services to patients. Instruction will include medical terminology, as well as anatomy and physiology with an emphasis on body systems, disease process and disorders. Students will receive training in American Heart Association First Aid and Health Care Provider Basic Life Support and will participate in healthcare career observations. Students are eligible to participate in the co-curricular organization Health Professionals of America (HOSA). A non-refundable lab fee of \$60 is due at the start of class (payment plan options available).

**Note:** This course runs every day for a full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P186-HEALTH SCIENCE TECHNOLOGY II**

### **(2 credits)**

This **full-year** (2 credit) program is the second half of the 2-year Health Science Technology curriculum, which includes continued study of the body systems and the associated disease processes. Emphasis is placed on critical thinking skills, analyzing professional/ethical characteristics required of healthcare professionals, and development of clinical skills through classroom lab experiences. The curriculum provides the student with a strong foundation of knowledge and skills to successfully transition into post-secondary health care education.

During the second semester, students will receive a minimum of 60 hours of clinical experience in a local health care facility in a specialty area of their choice. Students will focus their clinical internship on one of the following pathways: Students completing EMT or LNA will have the opportunity to take the state licensure/certification exam.

**Prerequisite:** Successful completion of Health Science Technology I with a grade of 80 or better and permission from the CTE director. Should requests for LNA and EMT exceed maximum enrollment as prescribed by the state, the CTE enrollment rubric will be used to select students. Students who are not selected for LNA and EMT may be placed in General.

**Please Note:** A non-refundable non-refundable lab fee of \$60.00 lab fee is due at the start of class (payment options available). Lab fees include uniforms, specialty texts and workbooks, (if applicable), background checks, TB Mantoux and Drug Test. Students will need to provide updated immunization/physical records. A fee may be required for students interested in obtaining industry-recognized certifications.

**Note:** This course runs every day every day for a full year.

## **CAREERS IN EDUCATION**

### **P410-CHILD DEVELOPMENT**

#### **(½ credit)**

This **half-year** (0.5 credit) course is built on a combination of theoretical information and self-discovery to insure that the knowledge gained can be put to use. Since child development includes physical maturation and social, emotional, and cognitive growth, there is an emphasis on the interaction between all areas of development. In addition to observing in the preschool lab and other off campus sights, students will investigate their own child and adolescent development.

This is a ½-credit course. Students will enroll in another ½ credit course offered at Pinkerton Academy and approved by PHS.

**Note:** This course runs every day for a semester in conjunction with Careers in Education I. Students must sign up for both courses.

## **P413-CAREERS IN EDUCATION 1 (1 credit)**

This **full-year** (1 credit) course is designed for those wanting to pursue a career in education. Careers in Education 1 invites students to think about why they want to work with children and then introduces them to the possibilities in the field. Emphasis is placed on developing career readiness skills applicable to education as well as other human service fields. Investigation into topics including child and adolescent development, ethics, and health and safety in the classroom environment will culminate in field experiences where students will be required to plan, implement and reflect on lessons in a preschool lab in addition to completing classroom observations.

**Note:** This course runs every day for a full year in conjunction with Child Development. Students must sign up for both courses.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **P414-CAREERS IN EDUCATION 2 (1 credit)**

This **full-year** (1 credit) course is the second half of the two-year Teacher Preparation curriculum designed for high school seniors planning to pursue a career in education. Teacher Preparation 2 includes continued study of the classroom environment and best teaching practices. Emphasis is placed on the diversity of students' lives and how that can affect, becoming a professional, the foundations of education, creating an educational environment and developmentally appropriate best teaching practices. Students will be required to complete classroom observations in various school environments and complete volunteer, coop or internship hours in a school setting.

This is a 1 credit course. Students will enroll in another 1 credit course (or 2 half credit courses) offered at Pinkerton Academy and approved by PHS.

**Prerequisite:** Successful completion of Teacher Preparation 1 with a minimum grade of 80 and permission from the CTE director.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **VIDEO PRODUCTION**

### **P421-VIDEO PRODUCTION I (2 credits)**

This **full-year** (2 credit) program provides the student interested in video and television production an opportunity to advance their media production skills and techniques. Attention is paid to camera and audio shooting and capturing techniques in the creation of various video and television projects; including music videos, movie trailers, and short narrative films. An emphasis is placed on planning and organizational skills to include storyboarding and script writing. Non-linear editing skills are explored with an in-depth exploration of Final Cut Pro X editing software. Students will learn the importance of planning ahead and meeting deadlines.

**Note:** This course runs every day for a full year.



## **P426-VIDEO PRODUCTION II**

### **(2 credits)**

This **full-year** (2 credit) program is for the serious video production student who is interested in pursuing a career in media production. Students will learn to use cinema quality production equipment, 1080P HD and 4K cameras, lighting equipment, high end microphones, drone cameras and professional editing software to produce various projects for local cable television, film festivals, and competitions. Students fill the roles of producer and/or director, discovering what it takes to create their own independent films. The business side of the filmmaking industry is explored as students discover what steps need to be taken to fund and produce an independent film project or start and maintain a professional production company. Students will prepare for video production beyond high school creating portfolios and reels for college and careers in the video/television industry. Many will have an opportunity to test and become Apple Certified Professional editors, their names added to the professional registry searched by companies looking to hire editors. A fee may be required for students interested in obtaining industry-recognized certifications.

**Prerequisite:** Successful completion of Video Production I with a 70 or better and permission from the Video Production teacher.

**Note:** This course runs every day for a full year.

**This course is part of Pinkerton Academy's college credit opportunity for a fee, determined by the college.**

## **WELDING TECHNOLOGY**

### **P431-WELDING TECHNOLOGY I**

#### **(2 credits)**

This **full-year** (2 credit) course is the first half of a 2-year program and is designed for anyone who wishes to learn welding and metal fabrication. Students are instructed in the safe operation of all tools, material handling and techniques used in welding. Areas of instruction include flame cutting, brazing, gas welding, arc welding, and metal-fabrication. Personal protective equipment required to be worn.

**Note:** This course runs every day for a full year.

### **P436-WELDING TECHNOLOGY II**

#### **(2 credits)**

This **full-year** (2 credit) course is the second half of a 2-year program and intensifies, follows through, and elaborates on material covered in Welding Technology 1. Emphasis will be on entry-level job proficiency with gas welding, soldering, cutting skills with ferrous and non-ferrous materials, shielded electrode arc welding equipment, metal fabrication and power tools, metal inert gas (MIG) welding, and tungsten inert gas (TIG) welding. Modern welding techniques developed for aluminum and steel alloys will be skill options available to students. Focus will be on production, fabrication and repair skills rather than home-type objectives. Personal protective equipment required to be worn.

**Prerequisite:** Successful completion of Welding Technology I with a grade of 75 or better and permission from the CTE director.

**Note:** This course runs every day for a full year.

# **Alvirne High School**

## **Career and Technical Education Center**

### **AGRICULTURE PRODUCTION TECHNOLOGY**

#### **A241-HEAVY DUTY MECHANICS I (Juniors)** **(2 credits)**

This course is designed to give students an understanding of large diesel and gasoline engines, as related to construction and agricultural equipment. Subject areas include equipment operation and maintenance, theory of engine operation, engine overhaul, hydraulics, power train, operation, welding, diagnostics, and troubleshooting. Safety will be stressed in all aspects of the course. Students will apply what they learn by gaining practical experience in the heavy equipment shop. Students can apply what they learn to help them with careers in mechanics, agriculture, construction, or trucking. **Students MUST successfully complete all year one competencies to advance to year two.**

**Note:** This course runs every day for a full year.

#### **A246-HEAVY DUTY MECHANICS II (Seniors)** **(2 credits)**

This course allows students to apply and expand upon skills and knowledge gained in the first year of the program. Students will work on construction and agricultural equipment performing repair, overhaul, diagnostics, and troubleshooting. Students will become independent through projects requiring record keeping, disassembly, analysis, replacement of parts, and final reassembly to a working condition. Students will troubleshoot basic diesel engine malfunctions using the latest computer technology. This course will help prepare students for an entry-level job in heavy equipment maintenance or a technical program in mechanics.

**Prerequisites:** Successful completion of Heavy Duty Mechanics I.

**Note:** This course runs every day for a full year.

#### **A101-VETERINARY SCIENCE I (Juniors)** **(2 credits)**

The first year of this two-year program introduces students to the applied principles and practices used in small and large animal related business with a special emphasis on veterinary medicine. Students will explore concepts through hands-on experiences working with Alvirne's kennel animals such as chinchillas, rabbits, guinea pigs, ferrets, rodents, and birds along with our large animal species including donkeys, dairy cattle, and horses. Topics will also include safety, animal behavior, breed and species identification, animal health, welfare and client relations. Through continuous exposure to animals on the school farm and small animal facility, students will develop hands on skills in handling, restraint, grooming, feeding, cleaning/ disinfection, training, and record keeping. Students will develop skills in professional telephone etiquette and customer service. Students will also be required to complete 12 hours of community service in an animal related service project. The Veterinary Science curriculum will also enable students to develop their leadership skills and veterinary skills and opportunities through their involvement in the State and National Youth FFA organization including participation the Veterinary Science Career Development Event (Competition). This course will provide students with entry levels skills and knowledge for employment as veterinary assistants, pet shop workers, humane society assistants or assistant groomers.

**Prerequisites-** A Biology course taken previously or concurrently is strongly recommended for Veterinary Science I. Students MUST successfully complete all first-year competencies to advance to the second year of this program.

**Note:** This course runs every day for a full year.

## **A106-VETERINARY SCIENCE II (Seniors)** **(2 credits)**

In the second year of the Veterinary Science program, students will continue to build on their knowledge and skills gained in the first year. Using the kennel's small animals and large animal species, advanced topics in veterinary science II will include nutrition and anatomy, health and disease and veterinary medical terminology and entrepreneurship. Hands-on skills will be developed in feed selection, laboratory procedures (i.e. fecal analysis, blood and urine analysis), animal health and disease prevention, such as vaccinations, deworming, grooming, physical exams, office skills, equipment identification and business management. Students will also be required to complete 12 hours of community service in an animal related service project. The Veterinary Science curriculum will also enable students to develop their leadership skills and veterinary skills and opportunities through their involvement in the State and National Youth FFA organization including participation the Veterinary Science Career Development Event (Competition). With the completion of this program, a student's potential for success in post-secondary education /an entry level job and/or in an animal science field is greatly enhanced. Students successfully completing Veterinary Science I and II with a C+ or better can earn 2 college credits at Great Bay Community College through Project Running Start or may earn articulation credits toward SUNY at Cobleskill.

**Prerequisites-** Successful completion of Veterinary Science I.

A chemistry course taken previously or concurrently is strongly recommended for Veterinary Science II.

**Note:** This course runs every day for a full year.

## **AIR FORCE Junior ROTC**

The mission of Air Force Junior ROTC is to develop citizens of character dedicated to serving their nation and community. As such, the focus is on citizenship and the courses are not considered a military recruiting effort. Students will be held to a high standard of behavior and personal conduct. No student is under any obligation whatsoever to join the military if they enroll in Junior ROTC. At Pelham High School, the Air Force Junior ROTC program is a 2-year program for high school students. Each year is divided into two broad fields of study: Aerospace Academics and Leadership Education. Aerospace Academics includes history, science, space, and global cultural studies. Leadership education include Air Force customs and courtesies, cadet group activities, study habits, time management, communication skills, life skills, leadership and management studies, and wellness and healthy lifestyles training. Students are required to wear military uniforms one day per week, and participate in drill and ceremonies practice. The uniforms are provided by the Air Force, and students are only responsible for cleaning the uniform while it is in their possession. Upon graduation from high school, students who choose to enlist in any branch of the service and who have completed 2 years of Junior ROTC will be enlisted at a higher rank (E-2 versus E-1). Students may also compete for scholarships to college through the services college-level ROTC programs or service academy appointments.

## **A110-AIR FORCE JROTC 1 (Junior)** **(1 credit)**

This is the entry-level course for Junior ROTC, and runs in conjunction with Air Force JROTC 2. Aerospace Academics focus on the history of aviation. The study of aviation pioneers and strong military leadership complements the history lessons. Leadership education is designed to help freshmen adapt to the high school environment, and include time management, fitness and wellness, flag etiquette, and customs and courtesies of the Air Force.

**Note:** This course runs every day for a full year in conjunction with Air Force JROTC 2; students must select both classes.

## **A111-AIR FORCE JROTC 2 (Junior)**

### **(1 credit)**

This course runs in conjunction with Air Force JROTC 1 and is still taught at an introductory level. Aerospace Academics focus on the science of aviation, covering topics such as basic aerodynamics, aviation physiology, meteorology, and navigation. Additionally, topics in space studies are covered to include the solar system and the development of the U.S. Space Program. The Leadership Education is designed to improve student communication skills, and include speaking and writing assignments, study of individual and group behavior, and basic leadership concepts.

**Note:** This course runs every day for a full year in conjunction with Air Force JROTC 1; students must select both classes.

## **A112-AIR FORCE JROTC 3 (Senior)**

### **(1 credit)**

Aerospace Academics for this course is focused on Global Studies. This is a customized course about the world's cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force Junior ROTC programs. It introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Leadership academics are designed to study and improve student management skills, choosing a career path, how to apply for and fund college, skills inventory and resume writing.

**Prerequisite:** Air Force JROTC 1 & 2.

**Note:** This course runs every day for a full year in conjunction with Air Force JROTC 4; students must select both classes.

## **A113-AIR FORCE JROTC 4 (Senior)**

### **(1 credit)**

Cadets in this class will be held to the highest academic and behavioral standards. Cadets in JROTC 4 will be charged with the management and leadership of the Alvirne High School cadet organization. Returning JROTC students must have an excellent academic record of performance, an exemplary record of behavior and classroom conduct, not only in JROTC but in all Alvirne classes, in order to enroll in JROTC. Students not meeting that standard may be denied enrollment in JROTC 4. The leadership Education academics are all designed to study and improve student management skills. Students from JROTC classes may be assigned to supervise JROTC 1 classes.

**Prerequisite:** Air Force JROTC 1 & 2.

**Note:** This course runs every day for a full year in conjunction with Air Force JROTC 3; students must select both classes.

# PHS STUDENT ACTIVITIES

PHS offers a wide variety of extracurricular activities to all students. These activities may help students gain valuable skills and explore interests that will benefit them in the future.

## HONOR SOCIETIES

### **FRENCH NATIONAL HONOR SOCIETY**

The French Honor Society is a program available to all junior, and senior students who have shown an interest in the French culture and language and have achieved excellence in all academics. Eligible students must have successfully completed French I and II with a minimum B+ average and be enrolled in French III or have already taken French III. Also students must have maintained a 3.33 GPA in all other classes. Accepted members must uphold their grade average, be an active leader and role model in both school and community, and commit to attending all meetings and activities.

### **MU ALPHA THETA MATH HONOR SOCIETY**

The Mu Alpha Theta is the National High School and Two-year College Mathematics Honor Society. The purpose of Mu Alpha Theta is to promote a keener interest in mathematics, to develop sound scholarship in the subject and promote enjoyment of mathematics among high school and two-year college students. The chapter is dedicated to inspiring interest and developing strong scholarship in mathematics and promoting the enjoyment of mathematics in high school. Student in grades 10 through 12 who have completed two courses of college preparatory mathematics, including Algebra II and Geometry, and who have completed or are currently enrolled in a more advanced course are eligible for membership in Mu Alpha Theta. Additionally, the work in mathematics must be done with distinction. This shall mean at least a 3.0 grade point average. Once accepted, current members must maintain a minimum B average in their current math courses to remain in the society. Members participate in national mathematics competitions, provide lessons to younger students in the community with a focus on showcasing mathematics as an enjoyable endeavor, as well as providing tutoring to students in the high school.

### **NATIONAL HONOR SOCIETY**

The National Honor Society is an organization of junior and senior students who are elected by a faculty committee. The criteria for membership are:

- Scholarship (maintain a 3.5 GPA or above)
- Character
  - Teachers past and present will attest to your classroom/school behavior
  - Attendance will be monitored throughout the year
    - No more than three (3) days out per term
    - School activities do not count toward the three absences
    - Extenuating circumstances must be on file with nurse
    - No more than three (3) tardiness per term
- Leadership and Service
  - Have an ongoing involvement in at least three community service activities, one of which must be outside the school
  - Participation in sports may be considered as a community service activity but can only be one of the minimum three



If elected as a member of NHS, you must:

- Attend all meetings
- Tutor one PHS student per academic year, usually one day per week
- Help raise money to help with community activities
- Maintain GPA of 3.5
- Participate in other NHS activities

## **NATIONAL ENGLISH HONOR SOCIETY**

National English Honor Society is an outreach from Sigma Tau Delta, the International English Honor Society. The goals of NEHS are to:

- Recognize students on the national level who, based on academic grades and performance, merit special note for past and current accomplishments.
- Nurture these persons in such ways that they are encouraged to develop further their abilities in the various fields of English.
- Encourage members to use their talents in the service of others.

Students are selected because they have demonstrated exceptional academic and leadership qualities. The group meets monthly and sponsors events such as book drives for local charities, tutoring, field trips, and other social and service-related events.

## **NATIONAL TECHNICAL HONOR SOCIETY**

The NTHS recognizes members who excel in academics, with an emphasis on technical education, leadership, and service to their school and community. The goal of the society is to see that deserving technical students are recognized and that people of the community become aware of the talents and abilities of the young people who choose technical education pathways to a successful future.

In order to qualify for membership, students need to maintain an overall grade point average of 3.33 in all of their academic classes. In addition, students must also maintain a grade point average of at least 3.0 in all technical courses and have taken, or be in the process of completing, their second CTE course. A commitment to community service, as well as a commitment to the continued pursuit of a technical education, must be demonstrated.

## **SPANISH HONOR SOCIETY**

The goal of the Spanish Honor Society is to promote interest and understanding of Spanish and the Spanish-speaking world. The Spanish Honor Society is opened to all junior, and senior students who have shown an interest in the Spanish culture and language and have achieved excellence in all academics. Eligible students must have successfully completed Spanish I and Spanish II with a minimum B+ average and be enrolled in Spanish III or have already taken Spanish III. Also students must have maintained a 3.33 GPA in all other classes. Accepted members must uphold their grade average, be active leaders and role models in both school and community, and commit to attending all meetings and activities.

## **TRI-M MUSIC HONOR SOCIETY**

The Tri-M Music Honor Society is the international music honor society for middle/junior high and high school students. It is designed to recognize students for their academic and musical achievements, reward them for their accomplishments and service activities, and to inspire other students to excel at music and leadership. Through more than 5,500-chartered chapters, Tri-M has helped thousands of young people provide years of service through music in schools throughout the world.

Tri-M shares and supports the objectives of every dedicated music educator—to increase student and school involvement with music and to make a stronger and more unified school music program. Tri-M offers a complete system of rewards that helps inspire students and recognizes excellence in individuals.

## **ART HONOR SOCIETY**

The Pelham Art Honor Society (AHS) was created specifically for high school students in grades 10-12. The program is designed to recognize, motivate, and mobilize individuals who have shown outstanding ability and interest in art. The society aims to aid members in attaining the highest standards in art scholarship, character, and service, and to bring the visual arts to the attention of the school and community. Membership is determined by nomination, interview, and portfolio review with faculty sponsors, but interested students are encouraged to communicate with art teaching faculty or AHS peer leaders for more information.

# LEADERSHIP OPPORTUNITIES

## CLASS OFFICERS

Every year each class at PHS selects seven officers to represent them and guide their class for the academic year. The seven officers, along with their class advisors, organize their class activities. All students are encouraged to consider carefully their choice of officers and select students who will be concerned with the well-being of all members of the class. The class officers are President, Vice-President, Secretary, Treasurer, and three Representatives. The President and the Representatives also become members of student government.

## SCHOOL BOARD AND SCHOOL COUNCIL

During the spring, Student Government organizes a school-wide election for student representatives to both the School Board and the School Council. After a nomination process, the entire student body votes in the selection of a junior for a one-year term on the Pelham School Board, and one sophomore for a two-year term on the School Council. Both positions require a strong commitment and a willingness to represent the students of PHS.

## STUDENT GOVERNMENT

The PHS community looks to the Student Government to assist in the development of policies and procedures that govern the entire student body. This group, consisting of the presidents and three representatives of each class and the student representative to the Pelham School Board, is involved in problem solving and decision-making on school-wide issues. All students are encouraged to contact their student representatives with any concerns or ideas that they may have.

## STUDENT AMBASSADOR GROUP

The PHS Student Ambassadors are student leaders within the high school who exhibit academic excellence and a strong commitment to community service. As role models, Ambassadors are encouraged to inspire their peers to explore new initiatives within the school and surrounding communities by organizing community service projects and gatherings with fellow members to support the vision of PHS. The majority of the Ambassadors' responsibilities are volunteering after-school hours.

## CLUBS

PHS offers a number of extra-curricular activities including various clubs and groups. Clubs allow students to be involved in their school community and work with other student and faculty with similar interests. A club fair is offered in September of each school year for all students to receive information and enroll in clubs they are interested in. Some of our extra-curricular activities that are available to our students are listed below:

Art Club	Drama Club	Psychology Club
Be the Change Club	Future Business Leaders of America	Robotics
Chess Club	Hiking Club	Science Club
Collaborative Gaming Club	Jazz Band Club	Technology Club
Creative Writing Club	LARP Club	Yearbook Club
Dance Club	Peer Mentor Club	



## PHS ATHLETIC PROGRAM

PHS offers an extensive athletic program, which we believe, is an integral part of each student's education. We know the intellect needs to be trained, invigorated, and disciplined. So too does the body. We offer a variety of activities for students to challenge their physical potential to the fullest. Our school encourages student participation, sportsmanship, and team spirit. The New Hampshire Interscholastic Activities Association and the PHS Athletic Department determine eligibility. Athletic regulations are described in the Athletic Handbook. PHS offers a three-season interscholastic athletic program on the varsity and junior varsity level under the auspices of the NHIAA.

### **FALL**

Boys' Cross Country  
Girls' Cross Country  
Field Hockey  
Football  
Golf  
Boys' Soccer  
Girls' Soccer  
Spirit Team  
Volleyball

### **WINTER**

Boys' Basketball  
Girls' Basketball  
Gymnastics  
Ice Hockey  
Boys' Indoor Track  
Girls' Indoor Track  
Swim  
Spirit Team  
Wrestling

### **SPRING**

Baseball  
Boys' Lacrosse  
Girls' Lacrosse  
Softball  
Boys' Tennis  
Girls' Tennis  
Boys' Track and Field  
Girls' Track and Field

Prospective Student/Athletes who plan to play sports while in college may refer to specific eligibility rules and guidelines at the **NCAA Clearinghouse** website at "[www.eligibilitycenter.org](http://www.eligibilitycenter.org)" for further information.

## **FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) affords parents and students over 18 years of age (“eligible students”) certain rights with respect to the student’s education records. For more information on FERPA and Pelham School District’s Policy, please refer to the following link:

[JRA Student Records and Access](#)

**Persons have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the District to comply with the requirements of FERPA.**

The office that administers FERPA is:

Policy Compliance Office  
U. S. Department of Education  
400 Maryland Avenue SW  
Washington, D.C. 20202-4605

**Pelham High School 4-Year Planning**
**Student Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Graduation Requirements		Post High School Goals		9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English:</b> Fr. English = 1.0 So. English = 1.0 English Electives = 2.0 Intro to Writing=.5 (2022)	<b>4 Cr.</b>	2 Yr. College/Career	<b>4 Cr.</b>	Fr. English Intro to Writing	So. English	English Elective	English Elective
		4 Yr. College/Univ.	<b>4 Cr.</b>				
		Selective 4 Yr. College/Univ.	<b>5 Cr.</b>				
<b>Social Studies:</b> World Geography =.5 Economics = .5 Civics = .5 Western Civ. = .5 U. S. History = 1.0	<b>3 Cr.</b>	2 Yr. College/Career	<b>3 Cr.</b>				
		4 Yr. College/Univ.	<b>3 Cr.</b>				
		Selective 4 Yr. College/Univ.	<b>4 Cr</b>				
<b>Math:</b> PreAlg./Alg. I, Alg. II Geometry/Trigonometry Applied Algebra PreCalc/Calc/Statistics	<b>3 + .5* Cr.</b>	2 Yr. College/Career	<b>3 Cr.</b>				*Math or Math Intensive
		4 Yr. College/Univ.	<b>4 Cr.</b>				
		Selective 4 Yr. College/Univ.	<b>5 Cr.</b>				
<b>Science:</b> Physical Science Chemistry Biology	<b>3 Cr.</b>	2 Yr. College/Career	<b>3 Cr.</b>				
		4 Yr. College/Univ.	<b>4 Cr.</b>				
		Selective 4 Yr. College/Univ.	<b>5 Cr.</b>				
<b>Foreign Language</b>		2 Yr. College/Career					
		4 Yr. College/Univ.	<b>3+ Cr.</b>				
		Selective 4 Yr. College/Univ.	<b>4+ Cr.</b>				
<b>Fine Arts:</b> Art or Music	<b>.5 Cr.</b>						
<b>Health</b>	<b>.5 Cr.</b>						
<b>Physical Education</b>	<b>1 Cr.</b>						
<b>Computer App:</b> Computer Apps I, II Computer Tech & App.	<b>.5 Cr.</b>						
<b>Personal Choice Electives</b>	<b>9.5</b>			<b>Elective(s):</b>	<b>Elective(s):</b>	<b>Elective(s):</b>	<b>Elective(s):</b>
<b>Personal Financial Plan. <i>or</i> Managing Your Money</b>	<b>.5 Cr.</b>						
<b>TOTAL CREDITS =</b>							

\*A math or math intensive course must be taken each year. Accounting I; CADD; Engineering and Design; Intro to Programming with Python; Managing Your Money; Personal Financial Planning; Physics; and Spreadsheet: Excel; meet this requirement.