

Tab 1



Program of Studies

2025-2026

Dear Grafton High School Students and Families:

Welcome to the 2025-2026 academic year!

I am delighted to share our Program of Studies, which outlines the diverse and enriching educational opportunities awaiting you at Grafton High School.

At GHS, we believe that each student's academic journey is unique. This guide serves as your roadmap to exploring the wide array of courses and programs that will help shape your high school experience and prepare you for future success. From advanced placement courses to internships, every offering is designed to challenge, inspire, and engage.

Our dedicated faculty and staff are committed to supporting your growth, not just academically, but as well-rounded individuals. Whether you're passionate about STEM, the arts, humanities, or athletics, GHS provides the platform for you to discover and pursue your interests.

High school is a time of discovery and growth. I encourage you to challenge yourself, step out of your comfort zone, and take full advantage of the opportunities before you. Our team is here to support you every step of the way.

Please review these offerings carefully with your family and consider how each choice aligns with your goals and aspirations. Our guidance department or administrative team are happy to answer any questions.

Here's to a successful and enriching academic year ahead!

Warm regards,

Tracey Calo

Principal

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SCHOLASTIC INFORMATION

MISSION

Our mission at Grafton High School is to prepare students intellectually, physically, and socially for their role as lifelong learners and responsible citizens.

Core Values and Beliefs

Students learn best:

- When provided with a comprehensive, challenging, and engaging curriculum that meets all learning styles.
- In an environment that fosters high expectations for one's own actions, motivation, and responsibility.
- When they are encouraged to think, work, and communicate effectively.
- In a safe and accepting learning environment that fosters respect and tolerance.
- When health and wellness are promoted and encouraged.
- By working independently and collaboratively to accomplish goals.
- When given equal opportunity to succeed academically and develop socially.
- When the entire Grafton community supports their learning in all regards.

21st Century Expectations

- Read, write, and speak effectively
- Demonstrate the ability to apply knowledge to complete tasks effectively
- Utilize critical thinking
- Enhance knowledge and skills with technology
- Exhibit behaviors that promote personal physical fitness and a healthy lifestyle
- Practice responsible and appropriate social behaviors
- Recognize and respect diversity
- Understand and demonstrate the duties and responsibilities that come with citizenship

ACCREDITATION STATEMENT

Grafton High School maintains accreditation through the New England Association of Schools and Colleges, demonstrating its commitment to educational excellence. This prestigious recognition confirms that the school not only meets or surpasses established standards for institutional quality but also possesses the essential resources to fulfill its educational mission. The accreditation verifies that Grafton High School effectively implements its academic programs and shows strong evidence of continued success and sustainability in the years ahead.

EQUAL OPPORTUNITY

It is the policy of Grafton High School not to discriminate on the basis of sex, color, religion, sexual orientation, handicap or national origin as in accordance with Chapter 622 of the Massachusetts General Laws, Title IX, of the 1972 Education Amendment and Section 504 of the Rehabilitation Acts of 1973. These laws are based on the sound premise that in a knowledge-based society, equal opportunities in education are fundamental to equality in all other forms of human endeavor. Claims of discrimination may be appealed to the principal or school counseling department head.

COURSE SELECTION

Choosing the right academic path demands careful personal consideration and a collaborative effort between students, their parents or guardians, and school staff. Throughout their high school journey, students should select courses that align with their abilities, interests, and post-graduation aspirations, whether those involve college or entering the workforce. Before making course selections, students should develop a clear understanding of their academic strengths and areas for growth, assess their current performance levels, and establish goals for their future.

When making decisions about courses, students benefit greatly from seeking guidance from their teachers, counselors, and parents. Teachers offer unique insights into students' capabilities based on their direct observations of classroom performance and achievement. Through their expertise in graduation requirements and long-term planning, counselors ensure students build coherent educational programs that serve their goals. Parents play a vital role by actively monitoring their children's academic journey and collaborating with school staff to foster their children's development and prepare them for life after high school.

All students are required to register for a total of 35 credits per school year. This reflects our school day schedule and state regulations.

COURSE SELECTION CHANGES

After course registration is complete and the master schedule is set, schedule modifications are restricted. Schedule changes at the start of the school year require students to present legitimate academic justification and secure approval from their teachers, parents/guardians, and school counselors.

The deadline for course changes is September 15, after which changes are only considered in exceptional circumstances and must receive administrative approval. Any course changes approved after September 15 in the first semester will be documented in the student's permanent record with a designation of either Withdrawn Pass (WP) or Withdrawn Fail (WF), depending on the student's standing at the time of withdrawal.

REQUIREMENTS FOR GRADUATION

To earn a diploma from Grafton High School, students must fulfill the following credit and course requirements:

Core Academic Requirements:

- English Language Arts (20 credits): Students must complete English courses for all four years, including English 9, 10, 11, and 12
- Social Studies (15 credits): Required courses include World History, U.S. History Part I, and U.S. History Part II
- Mathematics (20 credits)
- Science and Technology (15 credits): Students must complete three full years of laboratory sciences, with Biology as a mandatory course
- World Language (10 credits): Students must complete a minimum of two consecutive years of the same language at the high school level

Additional Required Courses:

- Health (2.5 credits)
- Physical Education (7.5 credits): Must be completed over three semesters during high school
- Electives (32.5 credits)

Total Credit Requirements:

- Minimum required credits: 122.5 out of 140 possible credits
- Students must take 35 credits per academic year
- Seniors must pass at least 25 credits during their final year, regardless of previously accumulated credits

Credits Needed to Advance to the Next Grade Level

- Advancement to Grade 10 requires earning at least 27.5 out of 35 possible credits in Grade 9
- Advancement to Grade 11 requires earning at least 57.5 out of 70 possible credits through Grade 10
- Advancement to Grade 12 requires earning at least 87.5 out of 105 possible credits through Grade 11
- Graduation requires earning at least 122.5 out of 140 possible credits by the end of Grade 12

Students transferring to Grafton High School must successfully complete the same proportion of attempted credits as other students. While students have the option to retake courses when space permits, they can only earn credit once for most classes. Both the original and repeated course grades will appear on their transcript. However, certain performance-based and skill-development courses are exempt from this single-credit rule, including Concert Band, Jazz Workshop, Chorus, Chamber Choir, Physical Education, Academic Development, and Academic Support. Students may earn multiple credits by repeatedly taking these specific courses.

CERTIFICATE OF ACHIEVEMENT

Those students enrolled in the Special Education Functional School-to-Work Program may meet certificate of achievement requirements upon approval of the principal. Students who do not earn a certificate of achievement will not be allowed to participate in the graduation ceremony. Students may make up the deficient credits or course(s) by successfully completing a summer school program approved in advance by the administration.

COURSE LEVELS

At Grafton High School, we empower every student to excel through challenging academics and comprehensive preparation for their future. Our mission is to cultivate graduates who are ready to thrive in college, technical programs, or careers while becoming active participants in our democracy.

We achieve this by:

- Offering differentiated instruction across multiple academic levels to meet each student's needs
- Maintaining rigorous standards that push all learners to reach their full potential
- Creating meaningful learning experiences that connect classroom knowledge to real-world applications
- Implementing innovative teaching strategies that accelerate academic growth and foster deep understanding

Through our dynamic learning environment, we ensure that every student receives the support, challenges, and opportunities they need to succeed both academically and as engaged citizens of tomorrow, regardless of their course level. We believe that all students deserve equal access to excellence, and we maintain our high expectations and comprehensive support across every academic program we offer.

- College Prep - Intended for college-bound students and for those students who wish to keep their post-secondary options open. Students should be willing to work independently and in groups, and contribute to class discussions. Course numbers that end in 2 are intended for college-bound students. Students should possess proficient skills in reading, writing, computing, analysis, comprehension and critical thinking. Course numbers that end in 1 are designed for college-bound students who are highly motivated and who have demonstrated superior academic ability. Students should possess outstanding skills in reading, writing, computing, analysis, comprehension and aptitude in the subject area, as well as the ability to deal with abstract concepts.
- Honors - Course work is demanding and requires students to move at a brisk intellectual pace. Students in these courses must have a very high degree of academic skills, be able to absorb a large amount of information quickly, and be highly self-motivated. Students must be willing to work independently and in groups, contribute to class discussions, and demonstrate a work ethic that is compatible with the pacing of honors level classes.
- Advanced Placement - Intended for those exceptional students who can achieve college level work in high school. Students in these courses must have a very high degree of academic skills, be able to absorb a large amount of information quickly, and be highly self-motivated. Students are also expected to read significantly above grade level. Students are required to take the College Board Advanced Placement Exams in May. **Students who do not take the AP Exam will be given Honors credit instead of AP credit.** Colleges may grant college credits and/or advanced standing to students on an individual basis based on AP test scores. AP Exam fees are required.
- Early College (EC) - Intended for college bound students who wish to enroll in online collegiate level coursework in their junior and/or senior year. Successful completion of each course will earn 3 college credits and 5 high school credits at AP course weight. Tuition rates apply.

GRADE REPORTING

The purpose of grading and reporting procedures is to evaluate student growth and progress in relation to the curriculum and to provide a report of this academic growth for the student. Academic success and achievement in high school results from regular attendance in school and class, mastery of skills, participation in class, completion of homework and independent study, extra help, determination, and conscientiousness. All students and parents receive PowerSchool accounts that enable them to check grades as often as desired. Online progress reports are prepared at mid-quarter and report cards at the end of each marking quarter.

GRADING POLICY

Report card grades may comprise the following components:

- o Tests
- o Quizzes
- o Projects
- o Homework
- o Classwork and participation

Each of the components used shall be averaged in to determine the marking quarter grade. A five letter (A-B-C-D-F) marking system is used with plus and minus distinctions. The following grade designations are also issued to students as needed: **I** = incomplete; **M** = medical excuse; **P** = passing; **WP** = withdrawn from course passing; **WF** = withdrawn from course failing; **X** = exempt from final examination. Academic achievement grades are assigned to students on the following performance standards:

Grade of A: Excellent. Student demonstrates a comprehensive and in-depth understanding of all concepts and processes embodied in the course content. Student demonstrates clear evidence of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 90-100% range in tests, quizzes, projects and final examinations.

A+ 97-100 A 93-96 A- 90-92

Grade of B: Good. Student demonstrates a solid understanding of the essential concepts and processes embodied in the course content. Student demonstrates evidence of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 80-89% range in tests, quizzes, projects and final examinations.

B+ 87-89 B 83-86 B- 80-82

Grade of C: Fair. Student demonstrates a partial understanding of the essential concepts and processes embodied in the course content. Student demonstrates partial evidence of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 70-79% range in tests, quizzes, projects and final examinations.

C+ 77-79 C 73-76 C- 70-72

Grade of D: Needs Improvement. Student demonstrates a minimal understanding of the essential concepts and processes embodied in the course content. Student demonstrates a basic lack of comprehension and development of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 60-69% range in tests, quizzes, projects and final examinations.

D+ 67-69 D 63-66 D- 60-62

Grade of F: Failing. Student demonstrates insufficient understanding of the essential concepts and processes embodied in the course content. Student demonstrates substandard work and is deficient in the mastery of the competencies and mechanics of the course. Student may have failed to complete work assigned. Student ranks in the 0-59% range in tests, quizzes, projects and final examinations. No credit is earned for the course.

F 0-59

Incomplete Grades: Students may receive an incomplete for a course grade if he/she has excused absences during the quarter and has not completed the make - up work prior to the end of the quarter. A grade of "I" will remain for a maximum of 10 school days after report cards are issued. Should the student fail to make up the work within the 10 school day period, the student will receive a failing grade for that work which is not completed. Any extenuating circumstances, which may necessitate extension of this deadline, must be approved by the administration.

ATTENDANCE EXPECTATIONS

Regular school attendance is mandatory for all Grafton High School students. Massachusetts state law requires that all children between ages 6 and 16 attend school.

While Massachusetts compulsory education law specifically addresses students up to age 16, Grafton High School extends these attendance requirements to all enrolled students, regardless of age. Students who are 16 years or older must adhere to the same attendance policies and expectations as their younger peers.

Tardies after 11:00 a.m. or dismissals prior to 11:00 a.m. are considered absences from school per state regulations and will be recorded as such under this policy. A student may lose credit in a class if he/she has excessive unexcused absences (See absence policy in student handbook).

GRADE POINT AVERAGE

Grade Point Average (GPA) is calculated at the end of the school year. The final grades for each school year are used to determine the cumulative GPA for all years in high school.

Grade Point Average is calculated based on grades earned in college preparatory courses. Grades earned in honors and advanced placement courses are given an extra weight of .5 and 1.0 respectively. To calculate a student's weighted GPA, each final grade earned in college preparatory courses is converted to a 4.0 grading scale. Consult the following conversion scale to identify the value of each grade. Each converted grade is multiplied by the course credits earned, the products totaled, then the total is divided by the total number of course credits earned. This quotient is the student's weighted GPA.

GPA Conversion Scale

Level	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
AP/EC	5.3	5.0	4.7	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	0.0
H	4.8	4.5	4.2	3.8	3.5	3.2	2.8	2.5	2.2	1.8	1.5	1.2	0.0
CP	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7	0.0
2	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7	0.0

While Grafton High School does not determine class rank, calculation of the valedictorian and salutatorian is based on the top two highest weighted grade point averages. In order to be considered for Valedictorian and/or Salutatorian students must be enrolled as a Grafton High School student for 8 consecutive semesters. Final determination of these distinctions will be made at the conclusion of semester 1 of senior year.

HONOR ROLL

Students who achieve excellence in studies are recognized by honor roll participation at the end of each marking quarter. The following are the average grade requirements for the honor roll: *High Honors* is achieved by earning a GPA of 3.7 or higher for the semester; *Honors* is achieved by earning a GPA between a 3.0 and a 3.6 for the semester. GPA is calculated from all classes except those earning a Pass/Fail grade. A student may not achieve honor roll status if they have earned a grade of incomplete, or a C- or below.

POST SECONDARY PLANNING

Freshman and sophomore students are encouraged to follow a well-planned sequence of courses. Course offerings will provide a strong academic foundation in career preparation that may lead to post secondary opportunities. Juniors are encouraged to begin gathering information on colleges or universities and evaluating a major course of study based on personal interest and ability. Students should review materials in the school counseling office and explore college websites. Students are also advised to visit colleges with their parents/guardians. During the senior year, students should complete and submit college applications to a range of schools. Students should also arrange through the school counseling office to attend discussions with career specialists, college admissions counselors and Armed Services recruiters. Please refer to the student handbook for guidelines pertaining to college visits.

COLLEGE ADMISSION REQUIREMENTS

College-bound students are encouraged in their sophomore and junior years to begin gathering information on colleges and universities and evaluating a major course of study based on personal interest and ability. The school counseling department distributes a senior handbook to assist with this process. As admissions requirements may vary among colleges, students should consult with their counselor and read the college catalog for the admission requirements for a specific college or university. Following are the Department of Elementary and Secondary Education's requirements for admission to four-year public colleges in Massachusetts.

English	4 courses	English 9,10,11,12
Mathematics	4 courses	Algebra I and Algebra, Geometry or Trigonometry, or comparable coursework, including mathematics during the final year of high school.
Science	3 courses	Three years of lab-based science, including the natural/physical sciences or technology/engineering courses.
Social Studies	2 courses	Two courses to include one year of U.S. History
World Language	2-3 courses	Courses must be in a single language at the high school level
Electives	2 courses	Any course in the areas listed, the Arts or Computer Science

The Grade Point Average (GPA) must be achieved based on all college preparatory courses completed at the time of application and is weighted by course levels. The minimum GPA requirement is 3.0 for a state college or state university. If a student's GPA falls below the minimum required, a sliding scale that combines the GPA with SAT scores will be used. No applicant with a high school GPA below 2.0 may be admitted to a state college or university.

Applicants with professionally diagnosed and documented learning disabilities (documentation must include diagnostic test results) are exempt from taking standardized tests for admission to any public institution of higher education in the Commonwealth. Such students, however, must complete 16 required academic courses (an applicant may substitute two college preparatory electives for the two required world language courses only if the applicant has on file with the high school results of a psycho-educational evaluation completed within the past three years that provides a specific diagnosis of a learning disability and an inability to succeed in a world language) with a minimum required GPA of 3.0 for state universities or present other evidence of the potential for academic success.

COLLEGE ENTRANCE EXAMINATION TESTS

Sophomores and juniors are encouraged to take the PSAT in October. Juniors should take the College Board SAT Reasoning test and/or ACT test in the spring. Seniors should retake standardized tests in the fall. Most colleges will accept either SAT or ACT scores. Specific colleges may require two or more SAT Subject tests, which should be scheduled at the completion of the highest level of the course taken.

The **PSAT** is a 2-hour 45-minute test of critical reading, writing and mathematical skills, which previews the SAT and serves as the qualifier for Juniors for the National Merit Scholarship Program. Students must register in advance by submitting the necessary test fee to the school counseling office.

The **SAT** is a 3-hour test (with an optional additional 50 minutes for the essay) measuring critical reading, mathematical and writing skills, with scores ranging from 200 to 800 on each section. The Writing section is scored on a scale of 2-8.

The **SAT Subject Test** is a one-hour test measuring ability in a specific subject. Highly selective colleges frequently require SAT 2 scores in the admission process. Students should plan to take the test upon completion of the related high school course and must register with the College Board in advance of the desired testing date.

The **ACT** is an achievement test measuring English, math, reading and science. There is an optional 30-minute writing test (ACT plus Writing). With the writing portion, the ACT is 3 hours and 25 minutes.

Students are encouraged to prepare for all standardized tests by utilizing test prep resources available in the school counseling office or various online sites including KhanAcademy.org and ACTstudent.org. Registration for College Board tests can be found at sat.org/register.

DUAL ENROLLMENT

Juniors or seniors who have a GPA of 2.7 or higher may be eligible for participation in the Early College High School or Dual Enrollment Programs. Students may earn college credits, which are also applicable toward high school graduation, for courses taken at accredited colleges with the approval of their school counselor and the principal. Prior to beginning either Early College High School coursework or the full Dual Enrollment Program, students must consult with their school counselor to review their graduation requirements.

EARLY COLLEGE HIGH SCHOOL

Juniors and Seniors who have a GPA of 2.7 or higher may be eligible for selected Early College High School online or on campus courses through Quinsigamond Community College (QCC) in the areas of English, Mathematics, Business Studies, and Manufacturing. Successful completion of these courses will provide students with three (3) college credits per course and five (5) GHS credits with Advanced Placement weight per course. All Early College High School courses will honor the QCC grade scale. QCC Early College courses are transferable to most public and private colleges and universities throughout New England and beyond. Early College courses carry a tuition (not including books) and it is the responsibility of students/parents to pay for this expense. Course descriptions for QCC Early College courses are found in the department sections of the Program of Studies.

VIRTUAL HIGH SCHOOL

Virtual High School (VHS) is a globally recognized and accredited program of online learning. VHS classes are offered to all 10th, 11th, and 12th grade students and are rigorous in content and expectations. Students will be accepted based on a variety of criteria. A student must complete all the information that is included on their application. Additionally, a student who wishes to enroll must demonstrate a sense of responsibility including, but not limited to:

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

SUMMER SCHOOL GUIDELINES

For every summer school course passed, both the failing grade and the passing summer school grade will be reported on the student's transcript, but the failing grade will not be counted in honor roll or GPA.

Students who were unable to successfully pass one or more of their courses during the school year, are recommended to join our Summer School Academy. These recommendations will be made through the student's school counselor. Successfully completing courses and earning credits might be necessary for your child to advance to the next grade level. Additionally, students may opt to take summer school courses for advancing credits. Our Summer School Academy will run online in Edgenuity, an asynchronous platform with no live instruction. Your child will need to be self-motivated to work through the lessons assigned but can work at their own pace each day. You can expect weekly progress reports and monitoring, and assignments will be graded within 48 hours of submission. If your child needs additional time to complete the course, they will be able to continue to work throughout the summer.

GRAFTON HIGH SCHOOL PATHWAYS OF RECOGNITION

Grafton High School offers five (5) pathway recognition opportunities for students in the areas of: Business Studies, Community Service, Creative Arts & Communication, Global Studies, and STEAM (**S**cience, **T**echnology, **E**ngineering, **A**rts, and **M**athematics). General descriptions of each recognition level within the pathways documented below. Full descriptions for each pathway are found in the appendix on pages 60.

To distinguish the consistent efforts of our students, and to reward those with initiative, we would like to recognize students' efforts with special recognition. There are three levels of recognition: (1) Certification, (2) Certification with Honors, and (3) Certification with Distinction. Students with Certification or Certification with Honors will be recognized through the college and/or career application process that includes professional recommendations. Those students who successfully complete all components of a Pathway will receive additional special recognition on their transcripts and at the graduation ceremonies.

Pathway Recognition Programs

Grafton High School offers specialized pathway recognition in five key areas:

- Business Studies
- Creative Arts & Communication
- Global Studies
- STEAM (Science, Technology, Engineering, Arts, and Mathematics)
- Community Service

Recognition Levels

Business Studies, Creative Arts & Communication, Global Studies and STEAM pathways offer three levels of distinction:

1. Certification
2. Certification with Honors
3. Certification with Distinction

Students who earn Certification or Certification with Honors receive:

- Professional recommendations for college and career applications
- Recognition on school documentation

Students who achieve Certification with Distinction receive:

- All benefits of previous certification levels
- Special recognition on academic transcripts

- Acknowledgment during graduation ceremonies

These recognition programs celebrate student initiative and sustained excellence in their chosen pathways. Each pathway has specific requirements and criteria for achievement, which are detailed in full in the program appendix on page 61.

Our pathway recognition program reflects Grafton High School's commitment to acknowledging students who demonstrate dedication, skill development, and outstanding achievement in their chosen fields of study.

Business Studies Pathway Recognition

The Business Studies Pathway Recognition allows students to participate in a unique, focused program that includes Math and Business courses for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in Business related fields and to develop the creativity, critical-thinking, and problem-solving skills needed for the workforce.

Creative Arts & Communication Pathway Recognition

The Creative Arts and Communication Pathway allows students to participate in a unique, focused program that includes courses in language, presentation, and the arts for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in the Media, Fine, Visual, and Performing Arts.

Global Studies Pathway Recognition

The Global Studies Pathway Recognition is designed to promote global awareness in our graduates and to foster an appreciation of the interconnected, worldwide political, economic, and social relations. For our graduates, this would encompass the knowledge, skills, and habits of mind necessary to understand the global environment; similarly, we want our students to participate actively and constructively with global issues both individually, through their community, and in international contexts.

STEAM Pathway Recognition

The STEAM Pathway Recognition allows students to participate in a unique, focused program that includes Math, Science, Technology, and Arts courses for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in science, medicine, engineering, and mathematics and to develop the creativity, critical-thinking, and problem-solving skills needed for the workforce.

Community Service Pathway Recognition

Every year, many students graduate from Grafton High School having given a great deal of themselves in service to their school and area community. In addition, Grafton High School offers an array of programs, both curricular and extracurricular, that supports the needs of school and community. Our school community would also like to foster an environment in which students give back to the surrounding community on a consistent basis, bridging across academic years, and providing opportunities for students to collaborate, all while demonstrating our core values in the community at large.

A graduating senior would be eligible for a "Service Distinction" diploma at graduation if s/he accumulated a minimum of 100 hours of school/community service throughout his/her four years at Grafton High school.

** Detailed descriptions of each pathway are provided in the appendix of the Program of Studies.

SPECIAL EDUCATION PROGRAMMING

Grafton High School offers a wide range of opportunities for students with individual special needs. The goal is to maximize successful learning experiences within the least restrictive

learning environment, consistent with the special education regulations Chapter 71B-603 CMR 28.00. The department develops programs for those students who may need specialized strategies, accommodations or modifications of curriculum in order to participate fully in the high school community and prepare for post secondary goals. Services are only open to students who have been evaluated by an assessment team and have a current, signed Individualized Educational Program (I.E.P.). The I.E.P. team will determine appropriate placement for each student according to his or her current Individualized Educational Program.

In addition to inclusion services, two specialized programs have also been developed to assist students:

(1) The foundations classes are designed for students who require remedial instruction due to a variety of disabilities and are determined appropriately by the IEP Team. Sequential courses in English language arts, social studies, mathematics and science are offered using a multi-sensory, differentiated instructional model. Each course follows the high school curriculum and focuses on application to real world experiences. Students will also take selected electives to participate with their peer group as much as possible. Class experiences are designed with clear expectations and supports, which focus on the development of basic skills to increase independence and move students toward more inclusive participation. Preparation for postsecondary education and employment is also emphasized.

(2) A functional academics-based program is also available for students as determined appropriate by the IEP Team. This is broken into two components: Life Skills Program for students in grades 9-12 and School to Work Program for students who have completed grade 12 and continue to require special education services, which may continue up to age 22. Grafton High School provides identified students with opportunities to develop appropriate social, academic, vocational, emotional and daily living skills. Students will learn to understand and value their abilities, develop skills and strategies to achieve their maximum potential, and develop a sense of self-determination that will enable them to live as independently as possible after their educational program ends. Students will gain necessary insight and strategies to become productive members of the school and community as well as acquire skills to assist them in becoming active, contributing members of the community.

- Life Skills Program, special education program designed for students identified through the IEP Team. Students who experience developmental handicaps and/or cognitive challenges are typical participants in this program. Through a functional, hands-on approach, the program emphasizes activities of daily living, functional academics in core areas including but not limited to English, science, math and social studies, as well as pre-vocational and vocational training. The program provides structured, individualized instruction that includes a nurturing classroom environment as well as a community-based instructional approach to work on the generalization of skills to natural environments. Depending upon the student's individual abilities, the program prepares them for transitioning to post secondary activities, such as the high school's School to Work Program.
- The School to Work Program emphasizes vocational training and community learning for students 18-22 years of age, or sooner based on a recommendation by the IEP Team. This program provides work exploration through worksite visits and tours as well as through internship experiences. Job placement and onsite training is provided on an individual basis geared toward vocational interests, aptitudes and skills of the student. Other activities carried over from prior educational experiences (life skills, language-based and inclusion programs) are enhanced as determined through the team process. Depending on the students' abilities and recommendations of the educational team, they will learn skills such as transportation, acquiring a driver's license, banking, budgeting, community access, activities of daily living and independent living skills, along with participating in post-secondary education and vocational skill development. Instruction is provided on an individual or group basis.

9009 Life Skills/Voc Training*5.0 Credits**Grades 9-12*

This course covers the development of life skills needed to become independent responsible adults. These include the activities of daily living, safety, community-based learning, communications and social skills. The curriculum includes small group learning with frequent teacher interaction. Prerequisite: Recommendation of special education team.

Students may also receive individualized support for their participation in regular education through the Academic Support program. This class is offered to students who will require specific intervention to further develop skills in an identified area. This can include instruction in the areas of organization, study skills, and task completion as well as support in previewing/reviewing materials. Prerequisite: Recommendation of IEP Team.

9080 Academic Support*5.0 Credits**Grades 9-12*

This course is designed for students who work best with frequent teacher interaction. Students will receive instruction on specific learning and study strategies and will be encouraged to develop organizational skills by working on and completing short and long-range assignments. Students will also receive understanding of their IEP. They will be encouraged to take an active role in their IEP process. Students will also build skills to have them able to strive toward increased independence, self-determination and self advocacy. Prerequisite: Recommendation of IEP Team.

GRAFTON HIGH SCHOOL SEAL OF BILITERACY

The Grafton High School vision, in coordination with the State of Massachusetts, is to help students recognize the value of their academic success and see the tangible benefits of being bilingual. As a result, Grafton High School awards the Massachusetts State Seal of Biliteracy to graduating seniors who have studied and attained proficiency in both English and a world language. The State Seal of Biliteracy takes the form of a seal that appears on the transcript or diploma of the graduating senior and is a statement of accomplishment for future employers and for college admissions.

SCHOOL COUNSELING SERVICES

School Counseling services combine the student support efforts of our school counselors, school adjustment counselors, school psychologist, administration, resource officer, and school nurse. This student support team works together and collaborates with the school's faculty in guiding the academic and social development of each student. Our team approach is to view the whole student as both an evolving individual and as a learner and to help our students prepare themselves for life after high school.

The GHS School Counseling Department supports the American School Counseling Association National Standards and the Massachusetts Model for School Counseling by providing academic, career, and personal/social development including post-secondary support for all students at GHS. School counseling programming is delivered to students in grades 9-12 through a classroom developmental guidance curriculum, individual meetings, and various group activities.

Seminars

School counselors design, plan, and deliver a developmental school counseling curriculum through group seminars. Counselors will use a career and college program, Naviance, to help students in every step of their post-secondary planning.

Grade 9

Students participate in a three-day curriculum that assists students through the transition of high school by addressing the culture of GHS through its Core Values and understanding how to navigate GHS academically and personally to achieve success. Students are also introduced to our career and college search program in Naviance.

Grade 10

Students participate in a two-day curriculum understanding personal academic goals and school resources available to support their goals. In addition, students will develop a personal

in-depth career exploration. Students are also introduced to test preparatory resources for access to SAT and ACT preparation.

Grade 11

Students participate in a junior planning seminar. Juniors begin the post-secondary planning research process by utilizing our career and college program in preparation for Junior Planning Night for students and parents/guardians. During semester two, counselors will meet with juniors to discuss post-high school planning and the college search process.

Grade 12

Students participate in a two-day post-planning application workshop including a stress education and management workshop with counselors. Individual meetings are planned for personalized planning throughout the college and post-planning application process. Additionally, various evening programs are presented to students and parents/guardians on the application process and financial aid.

GRAFTON HIGH SCHOOL STUDENT SUCCESS PROGRAM/TRANSITION PROGRAM (SSP/TR)

Student Success Program (SSP)

The Student **Success** Program provides customized, long-term academic and therapeutic support to enable high-need students to increase academic achievement, improve attendance, strengthen skill sets, and improve their quality of life. Students who are involved in the SSP are targeted, high-risk students who may have specific learning disabilities, emotional disorders, have experienced trauma, or have had major interruptions to their learning. These **formal student referrals** account for approximately 1% of the student population and are a Tier 3 intervention. The SSP includes access to the adjustment counselors, a special education teacher, and a paraprofessional who work individually with students to ensure all needs are met.

Transition Program (TR)

The Transition Program is for students who are resuming a full schedule after being out of school for an extended amount of time due to mental health, life transition challenges, or a medical injury. A **formal student referral** to the Transition Program provides clinical support, academic coordination, family support, and care-coordination services. The Transition Program is a short-term program with supports that are individualized, culturally competent, clinically informed, and flexible. Program staff, including a school adjustment counselor, special education teacher and paraprofessional, strive to coordinate resources within Grafton High School and the wider community, as well as partner effectively with families to help students reintegrate and finish the school year on track for graduation.

COURSE DESCRIPTIONS

BUSINESS AND COMPUTER SCIENCE

The Business and Computer Science courses are designed to prepare students for success in the working world as they learn about the expectations of the business community. Students will have the opportunity to gain knowledge in basic economics, career development, marketing, personal finance, web design and computer programming. Students will research current topics, utilize technology, and learn valuable presentation skills. Exploratory and advanced courses expose students to a wide range of technology and its applications. Students will become literate, knowledgeable and comfortable with computer systems, software, hardware, and programming languages. Skill development is a priority as students discover talents, clarify values, and define goals to ensure success as a responsible citizen in our global economy.

5811S Advertising (College Prep) *2.5 credits* *Grades 10-12*

Advertising explores both the business development and communication media aspects of product development from idea origination to marketing execution. Students will work in creative teams to develop a marketing plan while growing understanding of finances and ethics in advertising. Advertising plans will move to communication aspects and campaign processes including storyboarding, persuasive writing, and artistic direction in order to create TV commercials, publicity campaigns and plan events.

This is an excellent course for anyone who wants to be a brand manager, media buyer, advertising accounts manager, journalist or copywriter. This class will be highly collaborative and is co-taught with a business and video production teacher. Prerequisite: Students must pass either Business Studies or Business Applications before enrolling in this course.

5511 Accounting I (College Prep) *5.0 Credits* *Grades 10-12*

This course provides the student with a strong foundation in financial accounting. Students will learn and apply accounting theory, record business transactions into journals and ledgers, generate financial statements from scratch, perform complex investment analyses, manually audit the inventory and financial records of the school store, and prepare quarterly projects covering real world companies. Prerequisite: Students must pass either Business Studies or Business Applications before enrolling in this course.

5521S Business Studies *2.5 credits* *Grades 9-12*

This course provides students a basic introduction to the business world, with a focus on general business topics. These will include understanding basic economic concepts, ethical and social responsibility, forms of business ownership, human resources and labor concepts, basic finance, basic accounting, financial institutions, money and banking, financial management, securities, tax, and legal ideologies. Students will be introduced to practical and fundamental business studies.

5531S Business Applications *2.5 credits* *Grades 9-12*

This course provides students with a basic introduction to the business world with a focus on applying their skills from this course to real world applications. Topics will include basic entrepreneurship, basic marketing, advertising, trade, the global economy and your career in business. Students will learn how to make rational consumer decisions, as well as create their own business idea, and write a business plan.

5661S Personal Finance (College Prep) 2.5 Credits Grades 10-12

This course is about advancing student money skills and modifying consumer behavior. Students will learn how to use spreadsheets to create and maintain personal monthly budgets, manage savings goals, and perform financial calculations with ease. Students will learn the ins and outs of buying automobiles, what to look for when choosing a financial institution to bank with, the unnecessary risks of credit cards and how to live without one, the importance of automating your financial life, the pros and cons of renting an apartment and buying homes, how to pay for higher education, how to file their own taxes, how to plan for retirement, and how to be educated and self-advocating consumers.

5681S Marketing (College Prep) 2.5 Credits Grades 10-12

This course provides students a series of experiences designed to understand and apply the foundations of marketing. Topics include customer segmentation, market research, data analysis, utility, the marketing mix, product positioning, promotion, financial analysis, supply chain management, selling techniques, pricing strategies, and brand extensions. Students will conduct in-person surveys, make frequent business recommendation presentations, sell merchandise during lunch blocks, and generally "be" the marketing department for the school store. Prerequisite: Students must pass either Business Studies or Business Applications before enrolling in this course.

5761S Career and College Exploration 2.5 Credits Grades 9-12

This course "begins with the end in mind" and provides students with the opportunity to learn about themselves to prepare for a meaningful life and satisfying career. Students will work on a semester long SMART goal project that will help them identify their life roles and goals, by performing a series of thorough self-assessments, identifying and researching personally relevant occupations for tomorrow's workplace, establishing a personal network with professionals in those occupations, exploring viable education and training pathways for after high school, creating portfolio documents such as resumés and cover letters, and preparing for and experiencing the interview process on video and with professionals from the community.

5651S Entrepreneurship (College Prep) 2.5 Credits Grades 10-12

This course teaches students to embrace their inner "shark" and hone their creative problem solving skills. Through frequent practice of "rocket pitch" business presentations, students will develop their public speaking abilities and stage presence. In addition to learning about the lean startup model, lean canvases, business plans, franchises, buying existing businesses for sale, joining family businesses, legal forms of ownership, identifying company core values and writing mission statements, calculating profitability and returns on investment, exploring corporate social responsibility and social entrepreneurship, plus managing certain aspects of the school store, all students will form groups to pitch for funding and launch actual student-run enterprises. Students will learn and practice active listening, shared decision making, teamwork, leadership, collaboration, and other soft skills vital to career success in the workplace and as an entrepreneur. Student business teams will write business plans for how to continue their ventures following the end of the semester. Prerequisite: Students must pass either Business Studies or Business Applications before enrolling in this course.

5621S Sport Management (College Prep)**2.5 Credits****Grades 9-12**

This course covers basic philosophies and principles of sport from youth level to professional level. The emphasis of the course will be on management, marketing, ethics, community and youth sports, interscholastic and intercollegiate athletics, professional sports, sponsorship, communications, broadcasting, and strategies for a successful career in sport. Course work will be both individual and group based, and will culminate with students developing their own, new sport franchise. Students will also collaborate with the GHS Athletic Department. Real world insight will be obtained through guest speakers and a field trip to a professional sports facility in Boston.

5831S Digital Photography**2.5 credits****Grades 9-12**

Photography captures moments in time through light & allows us to view the world through different lenses either as the viewer or the photographer. The ever evolving technology of photography is exciting and inspiring. This course is designed to give students experiences with the creative and technical aspects of photography. Students will use digital cameras to take, compose, manipulate images. Photoshop and Lightroom will be used to process and enhance images.

5900 Independent Study Business**5.0 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

5910S Independent Study Business**2.5 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

QCC, BSL 101 Business Law**5 GHS Credits / 3 QCC Credits****Grade 11-12**

This is a college level semester long course which examines law and society; the operation of law as it reflects the mores of human relations; and the ethics of business, criminal, and tort law with special emphasis on the law of contracts. Topics include the general principles of the law assigned, the nature of the United States legal system, the trial process, and the sources of law available. Students analyze court decisions and learn to apply the law both in fact situations and in reasoning in gray areas. Successful completion of the course will provide students with five (5) GHS credits and three (3) college credits. Parents/students are responsible for the cost of \$250 for the college course plus any textbook expenses. Prerequisites: Students must have a 2.7 GPA or better and a guidance counselor or teacher recommendation for this course.

QCC, ECO 215 Principles of Macroeconomics**5 GHS Credits / 3 QCC Credits****Grade 11-12**

This is a college level semester-long course which examines the broad and general aspects of an economy and covers the traditional macroeconomic elements of an introductory economics program. Students study the theories of supply and demand, national income, fiscal and monetary policy, cyclical fluctuations, economic growth, inflation, employment, and international trade. Students learn now to understand and interpret statements and policies made by both national and world leaders. Successful completion of the course will provide students with five (5) GHS credits and three (3) college credits. Parents/students are responsible for the cost of \$250 for the college course plus any textbook expenses. Prerequisites: Students must have a 2.7 GPA or better and successful completion of English 101 or concurrent enrollment in English 101.

6511 Computer Science I (College Prep) 2.5 Credits Grades 9-12

This introductory course provides the student with a hands-on opportunity to develop programming skills and to gain an understanding of the Java programming language. Students will solve problems by writing programs and completing hands-on applications using structured programming techniques. In addition, students will review and discuss the ethical responsibilities of the computer programmer in the 21st century.

6523S Computer Science II (Honors) 5.0 Credits Grades 10-12

This course provides the student with a continuation of the principles learned in Computer Science I. Using the JAVA programming language, the student will learn a disciplined approach to computer programming. Topics include, but are not limited to, program flow, algorithm design, program and system design, error handling, procedural and data abstraction, graphical user interfaces, and app development. In addition, students will review and discuss the legal and ethical responsibilities of using information technology in the 21st century. Special project work will also be included in the curriculum. Prerequisite: Successful completion of Computer Science I and teacher recommendation.

6604 AP Computer Science 5.0 Credits Grades 11-12

This course is designed to prepare students to take the Advanced Placement Level A Exam in Computer Science. The AP computer science exam is administered using the JAVA programming language. Course curriculum is outlined by the College Board and utilizes a JAVA compiler for project-based instruction. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: "B" average in Computer Science II and teacher approval.

6551S HTML and JavaScript 2.5 Credits Grades 9-12

This course offers an introduction to Web site design utilizing HTML and JavaScript. The course gives students an in-depth understanding of Web design concepts and techniques that are essential to planning, creating, testing, publishing and maintaining Web sites. Students will also learn to incorporate CSS and JavaScript into their design to create a robust and interactive website. This course is recommended for students with an interest in programming, Internet technologies, visual design and communications.

6900 Independent Study Computer Science 5.0 Credits Grade 12

This is an advanced, contract-based course designed to offer the motivated student an opportunity to further explore his or her interest in a specific area of computer science and to demonstrate proficiency through special projects. The course is designed to develop problem-solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

6910S Independent Study Computer Science 2.5 Credits Grade 12

This is an advanced, contract-based course designed to offer the motivated student an opportunity to further explore an interest in a specific area of computer science and to demonstrate proficiency through special projects. The course is designed to develop problem-solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal related skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3510S Video Production 2.5 Credits Grades 10-12

Video Production is an entry-level course that will serve as an introduction to basic video/film/audio production. The goal of the course is for the student to develop the ability to capture great video images and audio, and to be able to edit those two elements together to

tell a story. This course will focus on basics of photography, camera functions, video editing, media analysis, and filmmaking. Students will work individually and in groups to write, shoot, and edit their own projects. Sample student projects during the semester include PSA's, commercials, short films, music video and audio editing. Selected videos are screened during class throughout the semester to enhance the critique process. Students will work with Final Cut Pro X.

3940 Television Production

5.0 Credits

Grades 10-12

This course provides students with a unique opportunity to develop skills in planning, writing, using television production equipment, problem solving and time management. It has been developed for students interested in all phases of television production, including camera operation, producing, writing, audio engineering, reporting, editing, and anchoring a show. Students will explore special effects and animation. Students will gain experience using Final Cut Pro, a professional non-linear editing program, as they produce a weekly show for the school's YouTube channel and Grafton Community Television (GCTV). Prerequisite: Video Production and recommendation from teacher. Advertising can count as a prerequisite.

3940S Television Production

2.5 Credits

Grades 10-12

This course provides students with a unique opportunity to develop skills in planning, writing, using television production equipment, problem solving and time management. It has been developed for students interested in all phases of television, such as camera person, producer, writer, audio technician, anchor, reporter and editor. Students will explore special effects and animation. Students will gain experience using Final Cut Pro, a professional non-linear editing program, as they produce a weekly show for Grafton Cable. Prerequisite: none

5821S Sports Broadcasting

2.5 Credits

Grades 11-12

This course trains students to produce live sports broadcasts and sports studio shows. Students work behind and in front of the camera, in production and on-air roles, which include: play-by-play announcer, color analyst, sideline reporter, and studio show host and analyst. Students utilize the equipment from each area to produce both in the field and in the studio production assignments. The aspects of sports broadcasting that will be covered include interview techniques, highlight package construction, sports talk shows and live event coverage. **Students must be available to cover events after school.** This course will be offered as a one semester class in a blended format. **Students will report to the class once during the rotation cycle. The remainder of the course will take place at events after school.** Course is offered to students in 11th and 12th grades.

Digital Photography

2.5 credits

Grades 9-12

Photography captures moments in time through light & allows us to view the world through different lenses either as the viewer or the photographer. The ever evolving technology of photography is exciting and inspiring. This course is designed to give students experiences with the creative and technical aspects of photography. Students will use digital cameras to take, compose, manipulate images. Photoshop and Lightroom will be used to process and enhance images.

3950 Independent Study Television Production

5.0 Credits

Grade 12

This course is open to those students who wish to continue honing their skills in editing and television production. This course is graded Pass/Fail. Prerequisite: Successful completion of Television Production

3950S Independent Study Television Production

2.5 Credits

Grade 12

This course is open to those students who wish to continue honing their skills in editing and television production. This course is graded Pass/Fail. Prerequisite: Successful completion of Television Production

COMMUNITY SERVICE LEARNING

The mission of Community Service Learning is to provide an avenue by which Grafton High School students may grow socially, intellectually and as individuals. Students are given opportunities to provide school or community service within the school environment or off campus settings, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Through service to school and/or community, our students will better understand the connection between living and learning and what it means to live as a responsible citizen whose actions reflect a compassionate and caring human being. Projects may last for a half year and would be awarded 2.5 credits or for a full year which would be awarded 5.0 credits. Students may only earn a total of 5.0 credits during the school year.

9610 Community Service

5.0 Credits

Grade 12

Students are given opportunities to provide service within the community, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students can also choose to provide Tech Force services to district schools. Students will be required to keep a self-reflective journal about their community service experience. Students will be expected to provide their own transportation to and from community service sites. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9820S Community Service

2.5 Credits

Grade 12

Students are given opportunities to provide service within the community, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students can also choose to provide Tech Force services to district schools. Students will be required to keep a self-reflective journal about their community service experience. Students will be expected to provide their own transportation to and from community service sites. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9630 School Service

5.0 Credits

Grade 12

Students are given opportunities to provide service such as tutoring or in class assistance within the school setting, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students are referred to administrators, counseling staff and faculty in order to find an appropriate match. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9840S School Service

2.5 Credits

Grade 12

Students are given opportunities to provide service such as tutoring or in class assistance within the school setting, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students are referred to administrators, counseling staff and faculty in order to find an appropriate match. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9650S Teaching Assistant

2.5 credits

Grades 11-12

Teaching Assistants will work with GHS classroom teachers in authentic workplaces to provide classroom support for the teacher in a subject in which the student has demonstrated previous success. Teaching Assistants will aid the teacher with student questions, one-on-one tutoring, small group instruction, reinforcing topics and be required to maintain a journal. Teaching Assistants will earn a Pass/Fail grade and be assigned to a specific teacher and class section. There will be mentoring, direction, and support provided to the Teaching Assistant by the classroom teacher and other GHS staff members. This course is open to juniors and seniors. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor/principal approval.. Students must have earned at least a 3.2 GPA in the course they are interested in assisting and submit a recommendation from the teacher who taught them in the course.

WORK BASED LEARNING

9830S Senior Internship*2.5 credits**Grade 12*

The Grafton High School Senior Internship allows seniors the opportunity for an authentic, real-world learning experience. During the last six (6) weeks of school, participants will work with a coordinator and internship supervisor to explore areas of interest, potential academic fields, and possible career pathways. Interested candidates will complete the Senior Internship Workshop Series to prepare for a successful internship experience. Participants will communicate weekly with the Grafton High School Internship Coordinator and participate in the Senior Internship Showcase at the conclusion of the internship period. Candidates for the internship must complete and meet application requirements which include good academic and disciplinary standing, all school and graduation obligations, and a teacher letter of recommendation. Students selected to participate in the Senior Internship will complete 25 hours per week during the internship for six weeks. Academic responsibilities such as AP, early college, and VHS as well as co-curricular responsibilities must be maintained by students. Final course grades for the year will be calculated using the grades attained during the first three quarters of the academic year. Notification of Senior Internship completion will appear on the transcript for the fourth quarter.

9870/9870S School to Career Program*Grade 12*

The Grafton High School's *School to Career Program* provides students in grade 12 an opportunity to meet their academic graduation requirements while gaining meaningful work experience. Through this employment experience, students will work on developing and growing the knowledge, skills and self-confidence to be successful in the workplace, in higher education and in life. Students participating in the *School to Career Program* will attend their academic classes daily and be granted a late arrival/early dismissal to participate in employment during school hours. Candidates for the *School to Career Program* will be identified by administrators and/or counselors. Candidates must be on track to graduate at the conclusion of their junior year.

The English curriculum is based on the communication skills of reading, writing, speaking, viewing, listening and presenting. Specifically, the curriculum provides instruction in the different modes of written and oral expression, analytical reading, vocabulary, grammar/usage, and media study. All students must take English throughout their four years of high school. Students who fail any required English course must make up the credit. However, students may not take any two of the following courses at the same time: English 9, 10 or 11.

Students who choose to take English at the Honors level must display an exemplary grasp of the subject matter and seek unique and innovative solutions to problems. Students should expect to read and write nightly, and to be stringently assessed on both aspects of the curriculum on a regular basis. **While there is no prerequisite for Advanced Placement or honors classes, teacher recommendations should be strongly considered when registering for courses at the honors level.**

0101 English 9

5.0 Credits

Grade 9

This is a required, unlevleled class for all freshmen. This course focuses on creating a solid skill foundation in high school level reading comprehension, literary analysis, and writing with an additional emphasis on listening and speaking. This course includes a review and regular utilization of MLA format and the close study of the writing process as it applies to literary analysis. Grammar is taught in context and mini-lesson format. The components of research are reviewed and utilized throughout the course in a variety of contexts. The study of literature includes an analytical critique of fiction, drama, poetry, non-fiction articles, and the short story. Novels and works of nonfiction are read in class as well as independently and are analyzed for character, content, and style. English 9 will prepare students to take English 10 at either the college preparatory or honors level.

0203 English 10 (Honors)

5.0 Credits

Grade 10

The purpose of English 10 at the Honors Level is to increase the student's understanding of reading comprehension, literary analysis, and the mastery of essay writing. At the honors level, students must be willing to work independently and in groups, must be willing to contribute to class discussions, and must demonstrate a work ethic that is compatible with the pacing of honors level classes. This class requires students to think deeply and richly about both fiction and non-fiction. Additionally, English 10 Honors further develops students' vocabulary, grammar, and habits of mind and thinking skills. Students will work on integrating outside sources into their writing, as well as developing their own points of view. Students must expect to participate regularly and constructively in order to be successful in this class. Students should **expect a rigorous, challenging and active experience.**

0201 English 10 (College Prep)

5.0 Credits

Grade 10

The purpose of this course is to increase the student's understanding of reading comprehension, literary analysis and the mastery of essay writing. The literary goals of the class are achieved through the study of the novel, classic drama, non-fiction, poetry and the short story. The many elements of literature are areas of focus. Students will read all types of literature both in and outside of class. Students will also develop as readers and writers through reading comprehension practice and frequent essay writing. Throughout the course, there is an emphasis on the mechanics of grammar in relation to a number of formal writing assignments. Students will work on integrating outside sources into their writing, as well as developing their own points of view.

0304 AP English Language and Composition

5.0 Credits

Grades 11-12

Advanced Placement Language and Composition (11th and 12th grade) is a college-level course in effective writing and critical reading. Students will be expected to assess prose writing by examining an author's use of diction, syntax, tone, structure, purpose, and meaning. Students will analyze writings through close reading drills, and the lessons learned will be transferred to their own writing. Students will read from primary and secondary sources carefully, to synthesize materials from these texts in their own compositions, and to cite sources using conventions recommended by the Modern Language Association (MLA.) Student's writing skills will develop to

become sufficiently rich and complex allowing them to communicate effectively with mature readers. Emphasis will be focused on knowing how to select and use appropriate modes of writing. This course encourages students to reconsider strategies of writing and help students move beyond such programmatic responses as the five-paragraph essay. This course will use a variety of literature; it will require more reading and focused writing than honors English. Additional summer reading is required. Students enrolled in this course must take the College Board Advanced Placement Exam in May.

0303 English 11 (Honors)

5.0 Credits

Grade 11

This course is designed for those students interested in continuing their preparation for college and those with a true interest in the nuances of all forms of literature and the craft of writing. Students choosing to take English 11 at the honors level are expected to have mastered the fundamentals of sophisticated reading comprehension and written literary analysis. Students study classic novels, primarily focusing on American literature, with a close analysis of major literary elements. Students are expected to complete independent reading assignments with written analysis. Throughout the course, there is emphasis on the mechanics of grammar in relation to a number of formal writing assignments.

0301 English 11 (College Prep)

5.0 Credits

Grade 11

This course is designed for those students interested in continuing their preparation for college. Students study classic novels and plays, with a close analysis of major literary elements. Throughout the course, there is emphasis on the mechanics of grammar in relation to a number of formal writing assignments. Students will work on integrating outside sources into their writing, as well as developing their own points of view.

0404 AP English Literature and Composition

5.0 Credits

Grades 11-12

AP English Literature and Composition (11th and 12th grade) is a course that mirrors literature classes that students encounter during their freshman year of college not only in content but in structure as well. This course is focused on preparing students to take the AP English Literature and Composition Exam offered by The College Board. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The purpose of this three-hour exam is to determine if students can successfully show that they have mastered literary and writing skills equivalent to those seen in a college freshman literature class. However, as emphasized throughout the *AP English Literature and Composition Teacher's Guide*, "the important issue is the course, not the exam."

Using the textbook *Perrine's Literature: Structure, Sound and Sense*, students are expected to actively read and take thorough notes that indicate a genuine understanding of the assigned material. The expectation is that they will not merely read the assigned pages, but that they will, if necessary, re-read the material to ensure a thorough understanding and, if unclear about it, will come to class prepared to ask questions about that material. They are often expected to make presentations about the notes they take independently, so it is critical that they read for accuracy and understanding. The curriculum itself focuses on an in-depth study of prose (the novel, short stories, drama, the essay) as well as poetry. Students will read a variety of works from each genre and respond to those works through writing. Through our study of various pieces of literature and genres, students will work to develop their own voice as writers and should incorporate various literary elements in their own writing.

0403 English 12 (Honors)

5.0 Credits

Grade 12

English 12 at the honors level assumes the student's mastery of nuanced literary analysis, developed critical writing using outside sources, and the ability to approach challenging texts independently. Students study a range of literary genres, ranging from drama to political essay. Students are expected to read and write regularly, as part of a curricular instruction focused on improving students' writing and discourse. Composition is mainly expository, with some creative tasks. Students will focus on writing with a voice. Students continue to build vocabulary through the study of key words and vocabulary in context. Grammar is taught through the study of usage in student-generated work. Regular class participation is essential to student success.

0401 English 12 (College Prep)**5.0 Credits****Grade 12**

The purpose of English 12 is for students to master communication (writing, speaking, and listening) skills that will prepare them for success after high school. Students will write for different audiences and purposes. This course requires strong student performance and well-developed skills. Students will respond to a variety of teacher-selected fiction and non-fiction works, which may include novels, short stories, poems, essays, articles, and films. Research is completed regularly with an emphasis on the process, which includes selecting a topic, finding credible sources, taking notes, and using proper MLA format.

0541S Creative Writing (College Prep)**2.5 Credits****Grades 9-12**

Creative Writing is a workshop course designed for students who have an interest in or a passion for writing. We will explore various types of writing and genre throughout the semester. The goal of the course is to inspire you to continue writing, and explore your creative interests even when the course ends. In sum we will explore: The Writing Process, Observational Writing, Poetry, Basic Narrative Construction and Techniques, and Playwriting and Visual storytelling. This course will require you to read independently and complete many writing assignments. The interdisciplinary nature of this course requires you to write, present, create art, and perform. But don't let that scare you! You need to be highly self-motivated and have a genuine interest in literature, writing, and art to succeed in this course. During the course we will also look at and examine the work of many writers, artists, filmmakers, and musicians that will hopefully inspire and challenge you.

0750S Reading, Writing and Study Skills 2.5 Credits**Grades 9-12**

The emphasis of this course will be on teaching students how to learn through reading, with studying and writing strategies incorporated with content instruction. The emphasis for this learning laboratory will be on teaching students how to learn basic skills that are applicable to all academic disciplines. Requirement: Placement based on counselor recommendation.

9122 Foundations of English 9**5.0 Credits****Grade 9**

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Prerequisite: Recommendation of special education team.

9222 Foundations of English 10**5.0 Credits****Grade 10**

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression with particular attention to preparation for five paragraph essay development. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Prerequisite: Recommendation of special education team.

9322 Foundations of English 11**5.0 Credits****Grade 11**

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Additionally students will begin to address individual post-secondary planning with skills such as writing skills for the workplace, job applications, and/or college essay writing. Prerequisite: Recommendation of special education team.

9422 Foundations of English 12**5.0 Credits****Grade 12**

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be

geared toward improving and refining skills in reading comprehension, written language, and oral expression. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Students will continue to address individual post-secondary planning with skills such as writing skills for the workplace, job applications, and/or college essay writing. Prerequisite: Recommendation of special education team.

9003 English

5.0 Credits

Grades 9-12

This is a language arts course that focuses on functional reading, writing, and comprehension. These skills are embedded within activities in the areas of life skills and pre-vocation. Prerequisite: Recommendation of the special education team.

0581S Speech and Debate

2.5 Credits

Grades 9-12

In this semester-long course, students will develop their public speaking, listening, and critical thinking skills by completing independent speeches and debates on teams. Students will primarily focus on speaking in front of a group to argue for a point and support their side of an argument during a debate. The course will include study of the format of the Lincoln-Douglas debate style, the argumentative speech, the use of rhetorical strategies, and the development of an effective argument.

0591S Documentary Filmmaking - English

2.5 Credits

Grades 9-12

In this semester-long class, students will learn the basics of documentary filmmaking and have an opportunity to research, write, and shoot their own documentary.

9111S Habits for Success - English

2.5 Credits

Grades 9-12

This semester-long class will help students strengthen skills that are essential for success both in the classroom and in their personal lives throughout high school and beyond. Students will learn strategies for Time Management, Organization, Note-Taking, and Study Skills. Students will use materials from courses they are currently taking to practice various strategies. Students will also learn about the importance of maintaining balance in their lives, managing stress, and self-care and will read a variety of articles and excerpts from contemporary resources.

0541S Creative Writing - English

2.5 Credits

Grades 9-12

Creative Writing is a workshop course designed for students who have an interest in or a passion for writing. We will explore various types of writing and genre throughout the semester. The goal of the course is to inspire you to continue writing, and explore your creative interests even when the course ends. In sum we will explore: The Writing Process, Observational Writing, Poetry, Basic Narrative Construction and Techniques, and Playwriting and Visual storytelling. This course will require you to read independently and complete many writing assignments. The interdisciplinary nature of this course requires you to write, present, create art, and perform. But don't let that scare you! You need to be highly self-motivated and have a genuine interest in literature, writing, and art to succeed in this course. During the course we will also look at and examine the work of many writers, artists, filmmakers, and musicians that will hopefully inspire and challenge you.

0711S Intro to Film Analysis- English

2.5 Credits

Grades 9-12

In this semester-long class, students will analyze films of various eras and styles, considering the literary and cinematic techniques and perspectives which contribute to their meaning. Students will learn various approaches to analyzing film and will show their understanding through written and oral presentations.

0801S Nature Literature

2.5 credits

Grades 9-12

In this semester-long course, students will study a variety of texts that explore humankind's relationship with nature. From our Indigenous Peoples' spiritual connection to the land to the

adventures of Chris McCandless, we will consider diverse perspectives about the environment we live in. Along the way, we will regularly hold classes outside, including a field trip to Wachusett Mountain.

0900 Independent Study English **5.0 Credits** **Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

0910S Independent Study English **2.5 Credits** **Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

QCC - Eng 101 Composition I **3 QCC Credits / 5 GHS Credits** **Grade 11-12**

The course focuses on theme-based argument. Students practice and develop critical reading, thinking, and writing skills necessary for college. Students read, analyze, and summarize college-level analytic arguments from various genres (popular, academic, etc.) and compose research-based analytic arguments based on the course's theme. Students become aware of writing decisions made for different audiences, purposes, and genres, with a focus on academic writing conventions. Students also learn beginning research skills, including appropriate quotation, summary, paraphrase, and documentation skills. At the end of the semester, students compile a portfolio of 15-25 pages, to include their summary, synthesis, and analysis projects. Successful completion of the course will provide students with five (5) GHS credits and three (3) college credits. Parents/students are responsible for the cost of the college course plus any textbook expenses. Prerequisites: Students must have a 2.7 GPA or better and a guidance counselor or teacher recommendation for this course.

QCC - Eng 102 Composition II **3 QCC Credits / 5 GHS Credits** **Grade 12**

This theme-based course, the second in the composition sequence, develops and refines skills learned in ENG 101, with a specific focus on independent research. Students sharpen rhetorical, critical thinking, and academic-writing skills and practice locating, evaluating, summarizing, synthesizing, and citing primary and secondary sources. Students will manage a sustained independent inquiry project(s) to include a research question or problem analysis, an annotated bibliography, and a research project. By the end of the semester, students will compile a portfolio of 15-25 pages that includes a self-reflection assignment and displays a writing and research process to include pre-writing, drafting, feedback, revision, and appropriate citation. Prerequisite: ENG 101 F/S/SU. Successful completion of the course will provide students with five (5) GHS credits and three (3) college credits. Parents/students are responsible for the cost of the college course plus any textbook expenses.

FINE ARTS

Visual and performing arts are a vital part of a student's educational program. The Fine Arts Department offers a selection of courses that will enrich and enhance the lives of all students. Courses strive to provide an understanding of the visual arts through studio activities, art history, art criticism and aesthetics. The performing arts stimulate creativity through authentic application of musical skills. By studying one or more of the arts, students can acquire skills in concentration, organization, effective listening, artistic judgment and self-discipline.

7303 Art and Design Honors

5.0 Credits

Grade 10-12

Honors Art & Design is a year-long honors level class that will expand upon students' abilities to utilize various media to create meaningful, well-composed, high quality works of art. Emphasis will be placed on art history, still life, portraiture, and producing concept-driven work that is rich with symbolism and purpose. Students will begin with written and drawn study of works in art history that will serve as a launch pad for the creation of original works and the development of unique visual voices. Media for final assignments will vary from assignment to assignment, sometimes being open-ended but other times being restricted to charcoal, watercolor, or water-based oil paint. Focus will be placed on process and the manipulation of materials to solve visual problems. Prerequisites: Course placement is based on successful completion of Art Fundamentals and teacher recommendation.

7304 AP Art and Design

5.0 Credits

Grade 11-12

The AP Art and Design program consists of two different courses and AP Portfolio Exams—AP 2-D Art and Design and AP Drawing—corresponding to college and university foundations courses. Students may choose to submit either of the AP Portfolio Exams. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Students who are enrolled in AP Art and Design are expected to submit a portfolio to the College Board in May. College Board states: AP Art and Design courses are for all students who are interested in inquiry-based thinking and making. Although there is no prerequisite for AP Art and Design courses, prior experiences learning about and making art and design support student success in AP Art and Design. Prerequisites: Course placement is based on successful completion of Art Fundamentals and teacher recommendation.

7400S Art Fundamentals

2.5 Credits

Grades 9-12

Building a basic understanding of art elements and principles of design, students will learn to recognize, explore, and apply knowledge to a wide variety of studio projects. Emphasis is on developing ability to see and discern, practicing studio skills and expanding creative thinking. Sketchbook assignments will complement class work. *Art Fundamentals is a half-year course; successful completion of this course is a prerequisite for all subsequent half-year electives.*

7510S Drawing I

2.5 Credits

Grades 9-12

Students will build on and strengthen their observational and inventive drawing skills that were introduced in Art Fundamentals and will work in a wider range of drawing mediums. Projects may include learning to draw in perspective, drawing in a larger scale and achieving realistic texture. Sketchbook assignments will complement class work. Prerequisite: Art Fundamentals

7520S Drawing II

2.5 Credits

Grades 10-12

Students who wish to continue their drawing experience with more challenging projects will work in a variety of mediums. Projects may include learning to draw metallic, transparent and textile forms, as well as further developing a personal style. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisites: Art Fundamentals and Drawing I

7630S Painting I

2.5 Credits

Grades 9-12

Students will learn more about and apply basic color knowledge while working in watercolor, gouache and acrylic mediums. Studio projects may include learning about how to achieve opacity, translucence, and texture. Work will include painting from observation and imagination. Sketchbook assignments will complement studio work. Prerequisite: Art Fundamentals

7640S Painting II*2.5 Credits**Grades 10-12*

This course will build on the knowledge and skills developed in Painting I. Studio projects will include work in acrylic and oil. Students will be expected to apply their personal vision and ideas to projects. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisites: Art Fundamentals and Painting I

7540S 2D Design*2.5 Credits**Grades 9-12*

In this studio course, students will learn about and express the same design principles that graphic artists and professionals use to achieve effective compositions and layouts. Projects may include working with letter styles, cut and painted papers, and music references as inspiration. Students will keep a visual notebook that contains design references and examples from printed media. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7610S 3D Design*2.5 Credits**Grades 9-12*

Students who enjoy working in a variety of physical mediums such as mat board, clay, wire, mesh, paper, plaster, wood and found objects will use the basic elements of line, plane, form and space to create dimensional art. Projects may include realistic and abstract sculptures. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7410S Art Journals*2.5 Credits**Grades 9-12*

Students will learn how to apply drawing, printing, painting, and other mixed media processes to create a visual journal. Themed possibilities may include travel, social interactions, dreams, music, family or daily routines. Projects may include other book structures. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7650S Printmaking*2.5 Credits**Grades 9-12*

Printmaking is the transfer of an image on a surface from a plate. Students will learn how to make multiple prints using relief, monotype, screen, and mixed media processes. Sketchbooks assignments will complement class work. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7530S Ceramics I*2.5 Credits**Grades 9-12*

This is an introductory studio course consisting of both hand-built and wheel-thrown methods of construction. The emphasis of this course is on understanding and applying the aesthetics, processes, form, and function of the clay medium. This course may include an examination of clay, glaze, decoration methods, and firing process. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Successful completion of Art Fundamentals

7720S Ceramics II*2.5 Credits**Grades 10-12*

Building on Ceramics I as an introductory course, students in Ceramics II will continue their personal exploration of clay by learning more advanced techniques of hand building, wheel throwing, and glazing. Students will gain greater knowledge and experience in studio practices such as kiln operation, and clay recycling. Students will be expected to challenge themselves through advanced concepts and ideas, craftsmanship, and glazing techniques. Prerequisites: Successful completion of Art Fundamentals, Ceramics I, and teacher recommendation.

7600S Advanced Studio /Portfolio*2.5 Credits**Grades 11-12*

This class will have an emphasis on originality of work and medium. Students will build and prepare, at their own expense, a portfolio of work required by most art colleges. Students will be required to complete written reports and keep a daily sketchbook of their work. Prerequisite: Successful completion of Art Fundamentals, Drawing I, and Drawing II.

7550 Concert Band**5.0 Credits****Grades 9-12**

This is an instrumental music instruction and concert band program. Participation requires attendance at all public performances. Participation in band provides an opportunity for students with a degree of musical ability to rehearse appropriate literature and perform in varied functions and concerts throughout the year. Students will become familiar with a variety of music literature; direct transcription of pre-classical, classical, romantic and contemporary, Broadway show music, and pop rock. Participation in band is also a valuable social experience that involves a group of young people working together to improve performance capabilities both at individual festivals and exchange concerts. Prerequisite: Reading and playing knowledge of a musical instrument.

7560 Chamber Choir**5.0 Credits****Grades 10-12**

Chamber Choir is composed of a select group of mixed singers who are admitted by audition only. This choral group performs music of an advanced level. In addition to the group's select repertoire and performances, members perform with the concert choir. Rehearsals include strong emphasis on vocal skills, tone production and intonation, musical terminology and development of a balanced ensemble sound. Students will encounter music of both early as well as modern composers. Prerequisite: Successful audition and concurrent performances with concert choir.

7570 Chorus**5.0 Credits****Grades 9-12**

Chorus is a mixed, non-auditioned chorus (all students are accepted) for students in grades 9-12. Vocal skills, techniques, rhythms, tone, pitch and group balance are emphasized. Literature will include pop and show tunes, folk songs, spirituals and classical selections. This choral group will perform at numerous school and community events throughout the year. Opportunity to participate in All-District and All-State concerts is available.

7581S Harmony and Theory (College Prep)**2.5 Credits****Grades 9-12**

This course is offered to students interested in the fundamentals of musical construction. The course begins with an overview of the principles of music notation and continues with a study of melodic writing and an analysis of basic harmony. It also includes ear training to enable the student to hear those aspects of music theory studied. Students will also become familiar with transposition, instrument ranges and vocal ranges. Prerequisite: Music reading skill.

7541S Jazz History (College Prep)**2.5 Credits****Grades 9-12**

This course offers students an opportunity to trace the developments in music through critical listening and personal research.

7500 Jazz Workshop**5.0 Credits****Grades 9-12**

This course is offered as an opportunity to extend the instrumental options for the high school musician. Extensive listening will be stressed, as well as a focus on jazz theory and improvisation. Prerequisite: Reading and playing knowledge of a musical instrument and participation in Concert Band, Chorus, or Chamber Choir.

7580S Guitar I**2.5 Credits****Grades 9-12**

This class is offered to familiarize students with the basics of playing the guitar. Basic reading, chord and strumming skills will be stressed. Students will have the flexibility and freedom to explore many guitar styles and even delve into songwriting.

7590S Guitar II**2.5 Credits****Grades 9-12**

This class is offered to explore techniques, styles and musicianship of the intermediate to advanced level guitarist. Students who successfully complete Guitar I are eligible to enroll in Guitar II. All other students are eligible only with the approval of the teacher.

7670S Guitar Ensemble - Fine Arts**2.5 Credits****Grades 9-12**

Guitar Ensemble offers students the opportunity to apply their guitar playing and reading skills in a more formal performance ensemble. The group performs music written specifically for guitar ensemble and participates in a summative performance; Completion of Guitar 1 and/or Guitar 2 recommended, but not required. Requirements: Basic guitar skills and a moderate reading ability.

7680S Introduction to Technical Theatre & Design-Fine Arts 2.5 Credits Grades 9-12

The course is designed to give students an overview of core concepts and elements of theatrical design. The course will combine study of theatre history, dramatic analysis of text and theory with practical work in all areas of design; including scenic design, lighting, costumes and sound. It will focus on understanding the role of a designer in executing an artistic vision for production, from initial reading of a script to performance. Students in the class will be encouraged to join the crew for one of the Performing Arts productions to gain further practical experience.

7690S Introduction to Musical Theatre-Fine Arts 2.5 Credits Grades 9-12

Explore the history of the American Musical and its various forms from operetta to currently running musicals on Broadway. Students will have the choice of concentrating on performance technique or musical production. Students concentrating on performance will learn foundational vocal technique and the musical theatre style; students concentrating on production will focus on the business and technical roles in a musical. All students will have the opportunity to apply these techniques to a live musical performance.

7700S Acting I - Fine Arts 2.5 Credits Grades 9-12

A workshop format designed to develop and strengthen acting, observation and listening skills through exercises in creative movement, vocal work, improvisation, creative dynamics, pantomime and theater exercises. The central focus of this beginning level class is to build ensemble within the class and begin to reflect on our own inner resources as actors.

7710S Acting II - Fine Arts 2.5 Credits Grades 9-12

Building on the skills gained in Acting I, this advanced class strives to complete the actor's portfolio with an emphasis on acting, analysis of dramatic literature and principles of directing. Students will explore various methods and styles of acting through in-class scene study and monologue prep. Students will combine acting training with study of dramatic literature, from classical to contemporary including Greek Drama, Shakespeare and Modern American Drama. This culminating theater class at the high school will introduce the acting student to the world of directing through script analysis, production design and practical directing work. Prerequisite: Successful completion of Acting I

7920 Independent Study Music 5.0 Credits Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

7930S Music 2.5 Credits Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

MATHEMATICS

As the impact of technology on our society continues to broaden, a foundation in and facility with mathematics will become increasingly necessary. Success in mathematics courses depends upon the mastery of skills, understanding of basic concepts, proper placement and adequate motivation. With this in mind, a student's placement into a course will be determined by teacher assessment of prerequisite skills. Teachers will reflect on all aspects of student success and achievement and make a recommendation with the student's best interests in mind. Homework is an essential element in all mathematics courses. It is expected that all students will spend sufficient time on the homework assignments not only to complete the homework but also to gain the necessary practice, skills and understanding of the material. Students are encouraged to do calculations without a calculator whenever possible. It is expected that students purchase their own scientific calculator (recommended: TI 30X IIS) so that they may become familiar with its functions. Additionally, it is expected that students taking Algebra/Geometry 3 at the Honors or College Prep level purchase their own graphing calculator (TI -84+ or higher is recommended).

2161 Algebra/Geometry 1 (College Prep) 5.0 Credits Grades 9-10

This course is designed to provide students with a strong foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include seeing structure in expressions; creating, solving and reasoning with equations and inequalities; interpreting and building functions; and linear, quadratic and exponential function models. Intermixed in these topics, students will also study the geometry concepts of congruence and expressing geometric properties with congruence. Students will also be introduced to interpreting categorical and quantitative data through a statistics unit. Prerequisite: Completion of Grade 8 Mathematics. Teacher recommendation.

2163 Algebra/Geometry 2 Honors 5.0 Credits Grades 9-10

This course is designed to expand on student foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include an introduction to complex numbers, seeing structure in expressions, arithmetic with polynomials and rational expressions, creating and reasoning with equations, interpreting and building linear, quadratic and exponential functions. Intermixed in these topics, students will also study the geometry concepts of similarity, right triangles and trigonometry, circles and geometric dimension. Students will also be introduced to conditional probability through a statistics unit. Prerequisite: Teacher recommendation.

2171 Algebra/Geometry 2 (College Prep) 5.0 Credits Grades 9-10

This course is designed to expand on student foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include: an introduction to complex numbers, seeing structure in expressions, arithmetic with polynomials and rational expressions, creating and reasoning with equations, interpreting and building linear, quadratic and exponential functions. Intermixed in these topics, students will also study the geometry concepts of similarity, right triangles and trigonometry, circles and geometric dimension. Students will also be introduced to conditional probability through a statistics unit. The content of this course is the same as Algebra/Geometry 2 Honors but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Teacher recommendation.

2172 Algebra/Geometry 2 (College Prep 2) 5.0 Credits Grades 9-10

This course is designed to expand on student foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include: an introduction to complex numbers, seeing structure in expressions, arithmetic with polynomials and rational expressions, creating and reasoning with equations, interpreting and building linear, quadratic and exponential functions. Intermixed in these topics, students will also study the geometry concepts of similarity, right triangles and trigonometry, circles and geometric dimension. Students will also be introduced to conditional probability through a statistics unit. The content of this course is the same as Algebra/Geometry 2 CP but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Teacher recommendation.

2273 Algebra/Geometry 3 Honors**5.0 Credits****Grades 10-11**

This course is designed to solidify student foundations in each of the main branches of high school mathematics. A focus on Algebra II concepts will include: inverse, logarithmic, polynomial and rational functions, trigonometry and modeling with functions. Intermixed in these topics, students will also study geometric modeling and an introduction to statistics. Prerequisite: Teacher recommendation.

2271 Algebra/Geometry 3 (College Prep)**5.0 Credits****Grades 10-11**

This course is designed to solidify student foundations in each of the main branches of high school mathematics. A focus on Algebra II concepts will include: inverse, logarithmic, polynomial and rational functions, trigonometry and modeling with functions. Intermixed in these topics, students will also study geometric modeling and an introduction to statistics.

The content of this course is the same as Algebra/Geometry 3 Honors but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Teacher recommendation.

2372 Algebra/Geometry 3 (College Prep 2)**5.0 Credits****Grades 10-12**

This course is designed to solidify student foundations in each of the main branches of high school mathematics. A focus on Algebra II concepts will include: inverse, logarithmic, polynomial and rational functions, trigonometry and modeling with functions. Intermixed in these topics, students will also study geometric modeling and an introduction to statistics.

The content of this course is the same as Algebra/Geometry 3 CP but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Teacher recommendation.

2414 AP Calculus AB**5.0 Credits****Grade 12**

The AP Calculus course is equivalent to a one-semester college Calculus I course. This course begins with a review of elementary functions from algebra and analytic geometry, which are prerequisites for calculus. Other topics included are limits, continuity, derivatives, applications of definite integrals, derivatives and integrals of transcendental functions, techniques of integration, and solving differential equations. Possession and use of a graphing calculator (TI84 or better) is required. Students enrolled in this course must take the College Board Advanced Placement Calculus AB Exam in May. Students may elect Advanced Math and AP Calculus AB concurrently during their senior year. Prerequisite: "B" average in Pre-Calculus (Honors) or teacher approval.

2514 AP Calculus BC**2.5 Credits****Grade 12**

This extension course that can accompany AP Calculus AB or be completed after AP Calculus AB is equivalent to a one-semester college Calculus II course. This course is a teacher supported online class that takes place during the second semester only. Content includes Advanced Integrations Techniques, Polar and Parametric Calculus, Sequences and Series. Students enrolled in this course will take the College Board Advanced Placement Calculus BC Exam in May. Prerequisite: Teacher Recommendation

2753 Calculus (Honors)**5.0 Credits****Grade 12**

Calculus provides the student with in-depth instruction in the basic concepts of calculus. Calculus brings together many of the concepts and procedures from algebra, geometry and trigonometry. The focus in the first half of the year will be on functions, limits and differential calculus with an emphasis on real world problems in the area of related rates, optimization, motion and business applications. The focus in the second half of the year will be on integral calculus with applications that include finding areas enclosed by the graphs of functions, finding the volumes of shapes defined by functions and calculating quantities by integrating derivative functions. Prerequisites: Successful completion of Pre-Calculus and teacher recommendation.

2473 Pre-Calculus (Honors) *5.0 Credits* *Grades 11-12*
This course begins with function analysis. Other topics included are properties of the trigonometric functions, graphs and inverses of the trigonometric functions, trigonometric identities and equations, applications of trigonometry, polar coordinates and complex numbers, linear relations and functions, vectors, exponential and logarithmic functions, sequences and series and the conic sections and their applications. Prerequisite: Teacher recommendation.

2371 Pre-Calculus (College Prep) *5.0 Credits* *Grades 11-12*
This course begins with an in-depth exploration of functions, their composition and inverses, and the characteristics of their respective graphs. The trigonometric functions and their properties, graphs, inverses, identities, equations, and applications are covered next. Additional topics included are complex numbers, polar coordinates, vectors, logarithmic and exponential functions, conic sections, and analytic geometry. Prerequisite: "C" average in Algebra II or teacher approval.

2341 Quantitative Reasoning (College Prep) *5.0 Credits* *Grade 12*
Quantitative Reasoning is an application-based course centered on the use of mathematics to model changes in the real world, and the effective communication of these mathematical ideas. The mathematics covered includes topics from financial mathematics, linear and exponential growth, geometric measurements and scaling, and the collection, analysis and interpretation of quantitative data. This course builds on, reinforces, and extends what students have learned and covers a range of mathematics topics. It offers student activities in a range of applied contexts and helps students develop college and career readiness skills. This course is a general overview of mathematical concepts used in quantitative reasoning with the emphasis on processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. The content of this course is the same as Quantitative Reasoning Honors but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Teacher Recommendation

2761 Statistics (College Prep) *5.0 Credits* *Grades 11-12*
Statistics is the art and science of collecting, organizing, analyzing, and drawing conclusions from data. In Introduction to Statistics, we will focus on four major themes: exploratory data analysis, designing studies, probability models and simulation, and statistical inference. In this course, students will develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students will design, administer, and tabulate results from surveys and experiments to draw conclusions about populations, as well as being able to recognize when results are invalid and methods are ineffective. Prerequisite: Completion of Algebra II and teacher recommendation.

2764 AP Statistics *5.0 Credits* *Grades 10-12*
The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will develop analytical and critical thinking skills and learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Possession and use of a graphing calculator (T184 or better) is required. Prerequisite: Teacher recommendation.

9152 Foundations of Math I *5.0 Credits* *Grade 9*
This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. Topics from arithmetic, algebra, geometry,

data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

9252 Foundations of Math II

5.0 Credits

Grade 10

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

9352 Foundations of Math III

5.0 Credits

Grade 11

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Additionally, students will begin to address topics related to individual post-secondary planning with skills such as budgeting and balancing a checkbook. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

9452 Foundations of Math IV

5.0 Credits

Grade 12

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Students will continue to address topics related to individual post-secondary planning with skills such as budgeting and balancing a checkbook. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

9004 Mathematics

5.0 Credits

Grades 9-12

This is a functional math course geared for students whose accommodations and modifications focus specifically on the incorporation of functional math in daily life activities. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

2900 Independent Study Mathematics *5.0 Credits*

Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

2910S Independent Study Mathematics 2.5 Credits

Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

SCIENCE AND TECHNOLOGY

Advances in science and technology continue to dominate our changing world. Through a comprehensive curriculum based on an inquiry and investigative approach, the Science and Technology Department provides students the opportunity to acquire the knowledge, skills and processes necessary to function in a technologically advanced society. Emphasis is placed on incorporating an interrelationship of science concepts with technological applications.

3424 AP Biology

5.0 Credits

Grades 11-12

This course is designed for students who are highly motivated and interested in science. This will be a fast-paced, intensive study of selected topics in Biology as set forth by the College Board. The content of the course is structured around four "Big Ideas," with Enduring Understandings and Science Practice Skills that support each one: Evolution, Cellular Processes, Genetics and Information Transfer, and Interactions within Biological Systems. In addition to in-class discussions, laboratory experimentation, and independent learning, students will have an opportunity for peer share learning. The course will also emphasize techniques in preparation for the AP Biology exam. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The College Board recommends prior high school courses in biology and chemistry. Prerequisites: Course placement is based on teacher recommendation and past academic performance. Students will be required to complete summer homework prior to the beginning of the academic year.

3203 Biology Honors

5.0 Credits

Grade 9

This is a comprehensive course in biology that will progress at an accelerated pace. Some specific topics covered include cell biology, biological chemistry, bioenergetics, genetics, evolution, taxonomy and ecology. A greater emphasis will be placed upon individual investigations in both laboratory work and research topics. Students electing this course will be expected to demonstrate depth of knowledge of the various concepts presented. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3201 Biology (College Prep)

5.0 Credits

Grade 9

In this course students will study topics in cell biology, biological chemistry, bioenergetics, genetics, evolution and taxonomy. The purpose of the course is to familiarize students with the central concepts of the above topics and the associated terminology. The course serves as a foundation for all other life science courses.

3323 Anatomy and Physiology Honors 5.0 Credits

Grades 10-12

This course is intended for students who want to learn more about the structure and function of the human body and those interested in health sciences. The anatomy and physiology of body systems as well as human body pathophysiology (disorders/diseases) will be covered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course. A greater emphasis will be placed upon individual investigations in both laboratory work and research topics. Students electing this course will be expected to demonstrate depth of knowledge of the various concepts presented. Prerequisites: Course placement is based on the recommendation of the student's science teacher and requires successful completion of biology.

3321 Anatomy and Physiology (College Prep) *5.0 Credits* *Grades 10-12*
This course is intended for students who want to learn more about the structure and function of the human body and those interested in health sciences. The anatomy and physiology of body systems as well as human body pathophysiology (disorders/diseases) will be covered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course. Prerequisite: Students must pass Biology before enrolling in this course.

3614 AP Chemistry *5.0 Credits* *Grades 11-12*
This course is intended for students who wish to continue with their study of chemistry. After a brief review of first year chemistry, thermodynamics, bonding, redox and reaction kinetics will be covered in depth. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The College Board recommends that students should have taken prior high school courses in chemistry and Algebra II. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3313 Chemistry Honors *5.0 Credits* *Grades 10-12*
In this course, several major topics are covered, including the periodic table and the elements, equations and reactions, gas laws, atomic structure, periodic law, bonding, solutions, acids and bases, redox reactions and nuclear reactions. Students must have passed Algebra/Geometry I. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3311 Chemistry (College Prep) *5.0 Credits* *Grades 10-12*
In this course several major topics are covered including atomic structure, periodic law, bonding, solutions, acids and bases, redox reactions and nuclear reactions. Students must have passed Algebra/Geometry I.

3634 AP Environmental Science *5.0 Credits* *Grades 11-12*
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 and/or preventing them. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The College Board recommends that students should have completed two years of high school laboratory science—one year of life science and one year of physical science. They should also have taken at least one year of Algebra. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3533 Environmental Science Honors *5.0 Credits* *Grades 10-12*
Extensive environmental principles will be studied including, interactions of living and nonliving things in the major biomes of the world, water, soil & groundwater, natural resources, cycles in nature, energy, and community planning. Population dynamics, issues and policies and managing living systems will be the additional major areas of study. Sampling and analysis of soil and water around Grafton will be explored, community involvement will be encouraged and field work will be required. Students will be introduced to a few basic tools and instruments used in sampling and testing in an environmental field. Careers in an Environmental Science field will be discussed. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3531 Environmental Science (College Prep) *5.0 Credits* *Grades 10-12*
This course examines the interactions of living and nonliving things in the major biomes of the world, cycles in nature, human population growth, resources and energy, land use, and the types and causes of pollution. Students will also examine our responsibility to the environment both locally and globally. Laboratory and fieldwork will be done along with telecommunication projects of environmental testing on a regular basis. Prerequisite: Students must pass Biology before enrolling in this course.

3411S Understanding Climate Change**2.5 Credits****Grades 10-12**

This course will investigate the science, history, causes, impacts, and solutions to climate change. Particular emphasis will be placed on climate solutions with respect to technology, policy, economy, and citizen action. A major portion of the course will be a student designed project that investigates a selected climate change topic. Students will apply their research to support a planned climate action. Students will also be expected to keep informed about climate news through reading and discussing selected articles as well as reflecting on course work through regular journal writing. Student initiative and self-direction are essential for independent projects and course work. It is recommended that students should have taken a prior course in environmental science or chemistry. Prerequisites: Students must pass Biology before enrolling in this course. Course placement is based on teacher recommendation and past academic performance.

3644 AP Physics 1**5.0 Credits****Grade 11-12**

AP Physics 1 is the equivalent to a first-semester college course in algebra-based physics. Topics will include kinematics; Newtonian Mechanics (including rotational motion); work, energy and power; mechanical waves and sound; and introductory, simple electric circuits. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Students are required to have taken a prior course in physics. The College Board recommends that students should have completed geometry and be taking Algebra II or an equivalent course. AP Physics 1 includes basic use of trigonometric functions, but students can learn those in the concurrent math course or in the AP Physics 1 course itself. Prerequisites: Course placement is based on teacher recommendation and requires successful completion of Physics.

3643 Physics Honors**5.0 Credits****Grades 10-12**

This course offers similar content as Physics college prep, however students electing this course will be expected to demonstrate greater depth of knowledge of the various concepts presented. This course offers students an introduction to the fundamental ideas that support the laws and theories of both classical and modern physics. Topics will include mechanics, thermodynamics, waves and sound, optics, fluids, electricity and magnetism, relativity and quantum phenomena. It is recommended that students have successfully completed a course in Algebra/Geometry and are at least concurrently enrolled in Algebra II. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3641 Physics (College Prep)**5.0 Credits****Grades 10-12**

This course offers students an introduction to the fundamental ideas that support the laws and theories of both classical and modern physics. It is intended for students who wish to develop a conceptual framework through labs, research and hands-on investigations, rather than quantitative analysis and problem solving. Topics will include mechanics, thermodynamics, waves and sound, optics, fluids, electricity and magnetism, relativity and quantum phenomena.

3741S Extreme Ecosystems (College Prep)**2.5 Credits****Grades 10-12**

This course has been designed for students with a passion for and a strong foundation in the life sciences. Students will be introduced to topics of ecology and botany with a concentration on diverse New England ecosystems. Course work will include laboratory work, field study, research and the identification of flora and fauna of New England. Prerequisite: Students must pass Biology before enrolling in this course.

3501S Astronomy (College Prep)**2.5 Credits****Grades 10-12**

This course is designed to investigate the fundamental theories that provide the foundation of modern Astronomy. The students will explore a range of topics including the origin and early history of the universe, the evolution of galaxies and stars, the development and migrations of the planets and smaller bodies of the solar system, the Earth in space, the Moon and its history, and the past, present, and future of interplanetary travel. The classic perspectives of Copernicus, Galileo, Brahe, and others will be juxtaposed with cutting-edge problems facing modern astronomers in order to develop a comprehensive appreciation of the world above.

3521S Geology (College Prep) 2.5 Credits Grades 10-12
Topics for investigation include history of the Earth, rock cycle, the plate tectonic theory, earthquakes, volcanoes, fossil record and mass extinction events. The development of the Geologic Time Scale and the concept of "deep time" will also be covered.

3541S Oceanography (College Prep) 2.5 Credits Grades 10-12
This course will survey the complex systems that operate within the world ocean. Topics include ancient and modern exploration of the oceans, physical and chemical oceanography, open – ocean and deep water currents, waves, storms, tides, and coastal environments. Special emphasis will be placed on the coastlines of New England.

3561S Meteorology (College Prep) 2.5 Credits Grades 10-12
This course will provide the opportunity to examine the careful science behind the television weather forecast. Students will study the composition and structure of the atmosphere, global atmospheric circulation, world-wide weather patterns, cloud formation and precipitation, storm systems, including thunderstorms, tornadoes, blizzards, and hurricanes. Long-term and short-term weather forecasting, man's impact on climate, and the potential for catastrophic global warming will also be covered.

3751S Forensic Science (College Prep) 2.5 Credits Grades 10-12
This course explores the application of scientific principles to the examination of crime scene evidence. Students will gain experience in the major investigative techniques currently used by forensic scientists and crime scene investigators, and to develop an understanding of the scientific concepts that serve as the basis for these techniques. This course uses multimodal lessons and activities to explore a broad range of scientific topics, including but not limited to life sciences. Topics include crime scene investigation, analysis of evidence, forensic anthropology, and toxicology. Prerequisite: Students must pass Biology before enrolling in this course.

3571S/3573S Science Innovations I (College Prep/Honors) 2.5 Credits Grades 10-12
Innovations is a single semester, project driven course that combines technology and problem solving skills with the meaningful scientific exploration of community and global issues. This course is intended to cultivate leadership skills and a growth mindset as students choose their project topics based upon their passions. Students will gain valuable experience in research by observing problems, posing questions, and analyzing data to create solutions as they explore what it means to be an innovator. Students will utilize digital communication tools (social media platforms and blogs) to share their progress and collaborate with community members, experts, and learners around the globe. A student enrolling in this class should be a self-directed learner who is comfortable working independently and thinking critically. Students taking the course for honors credit will be expected to achieve advanced standards in digital media, research, and their final presentation. Placement requires successful completion of biology. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

3581S/3583S Science Innovations II College Prep/Honors 2.5 Credits Grades 10-12
Innovations II is a single semester project driven course that combines technology and problem solving skills with the meaningful exploration of community and global issues. This course is intended to extend the skills and experiences developed by students in Innovations I. Students in Innovations II will work in innovation teams, conduct original research by observing problems, posing questions, and analyzing data to create solutions. Additionally students will mentor students in the Innovations I course. Students will utilize digital communication tools (social media platforms and blogs) to share their progress and collaborate with community members, experts, and learners around the globe. A student enrolling in this class should be a self-directed learner who is comfortable working independently and thinking critically. Students taking the course for honors credit will be expected to achieve advanced standards in digital media, research, and their final presentation. Placement is based on successful completion of Science Innovations I. Prerequisites: Course placement is based on teacher recommendation and past academic performance.

9232 Foundations of Biology**5.0 Credits****Grade 9**

This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course designed to create awareness of scientific thought and problem solving. It will introduce concepts in biology by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. Some specific topics covered include cell biology, genetics, evolution, taxonomy and ecology. Prerequisite: Recommendation of special education team.

9032 Foundations of Science I**5.0 Credits****Grade 10**

This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course designed to create awareness of scientific thought and problem solving. It will introduce concepts in environmental science by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. This course examines the interactions of living and nonliving things in the major biomes of the world, cycles in nature, human population growth, resources and energy, land use, and the types and causes of pollution. Students will also examine our responsibility to the environment both locally and globally. Prerequisite: Recommendation of special education team.

9306 Foundations of Science II**5.0 Credits****Grade 11**

This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course designed to create awareness of scientific thought and problem solving. It will introduce concepts in anatomy by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. The anatomy and physiology of the various organ systems, the embryology of the human body, and human genetics will be considered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course. Prerequisite: Recommendation of special education team.

9006 Science**5.0 Credits****Grades 9-12**

This science course focuses on functional aspects of environmental activities such as weather, plans/cultivation and basic anatomy. The course is structured to include small group learning with frequent teacher interaction. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

3900 Independent Study Science**5.0 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3910S Independent Study Science**2.5 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3011S Architecture (College Prep) 2.5 Credits Grades 9-12
Students will explore engineering processes by planning and designing a house. Students will follow the design process to determine the needs and wants of a homeowner, material and financial limitations, state and town requirements, and the methods of modern construction. Using CAD, students will develop and present a set of working drawings for the home they have designed.

3021S Structural Engineering (College Prep) 2.5 Credits Grades 9-12
Students will utilize a variety of computer software to aid in planning and designing a variety of structures including bridges, towers, and buildings. Testing of structures, record keeping, and making predictions will build critical thinking skills and show why structures require engineering. Students will also work in groups in a hands-on laboratory setting, generating model structures to evaluate and present their work.

3841S Engineering Essentials 2.5 Credits Grades 9-12
Engineering Essentials is a semester course designed to be a high school student's first exposure to the PLTW (Project Lead the Way) Engineering program and is appropriate for students in grades 9-12. In Engineering Essentials, students explore the work of engineers and their role in the design and development of solutions to real-world problems. The course introduces students to engineering concepts that are applicable across multiple engineering disciplines and empowers them to build technical skills through the use of a variety of engineering tools, such as geographic information systems (GIS), 3-D solid modeling software, and prototyping equipment. Students learn and apply the engineering design process to develop mechanical, electronic, process, and logistical solutions to relevant problems across a variety of industry sectors, including health care, public service, and product development and manufacturing.

3031S Automotive Design (College Prep) 2.5 Credits Grades 9-12
Students will explore machine engineering by planning, designing, and constructing a scale model concept car. Using the design process, students will discover the limiting factors in automotive design and combine them with styling to create a new and exciting automobile. Starting with CAD drawings, students will develop their ideas, solve problems, and design an automobile. Upon completion of their design, students will construct a scale model of the vehicle following the same process used by auto manufacturers. Completed models will be presented in class.

3211S CAD/CAM (College Prep) 2.5 Credits Grades 9-12
Students will link CAD and the design process to CAM (computer aided manufacturing). Hands-on exploration of the manufacturing process and the integration of CNC (Computer Numeric Control) machinery will be included in classroom projects. Students will experience modern manufacturing by doing the thinking and letting the machinery do the work. Class will include work with local business partners as well as field trips and modern machine and manufacturing research.

3920 Independent Study CAD 5.0 Credits Grade 12
Students will apply their CAD knowledge to real life situations. Students will locate and build links with local companies and residents solving design problems. Projects may include planning and designing an addition to a home, a new home, a new product, or engineering or refining an existing product. Students will gain communication skills by working hand-in-hand with a customer or client. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3930S Independent Study CAD 2.5 Credits Grade 12
Students will apply their CAD knowledge to real life situations. Students will locate and build links with local companies and residents solving design problems. Projects may include planning and designing an addition to a home, a new home, a new product, or engineering or refining an existing product. Students will gain communication skills by working hand-in-hand

with a customer or client. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3560 Electricity and Electronics 5.0 Credits Grades 10-12
Students will explore the world of electricity in two common applications. Starting with low voltage DC power, students will see how the wiring system in a car works. Students will complete several projects like wiring in a stereo system, an alarm, and troubleshooting problems. Residential electricity will then be explored concentrating on safety and the application of state and local codes. Projects will include constructing and wiring a scale model home. Students will also explore the technology of computers by building a computer system. This hands-on course walks students through the process of computer electronics and allows them to experience the process and problems that occur in building a computer system. This course also offers students an opportunity to prepare for the A+ Certification, a nationally recognized certification in computer assembly, upgrade and repair.

3570S Manufacturing I 2.5 Credits Grades 9-12
Students will work in a simulated workplace lab and learn basic processes of design and modern manufacturing. Starting with safety and machine operation students will make connections to math and science and develop an understanding of the application of academics to the workplace. Students will choose a project of interest then prepare plans to apply their newfound skills and knowledge. Materials identification, transformation machining, product assembly, and understanding materials and machining limitations as well as product assembly and finishing will be explored.

3670S Manufacturing II 2.5 Credits Grades 10-12
Students may continue to explore deeper into manufacturing with more complex projects, different materials, and advanced processes. Utilizing a higher level of precision and process students can increase their accuracy and quality with a technical project such as multi-part furniture or basic instrument construction. Prerequisite: successful completion of Manufacturing I or teacher approval.

3770S Manufacturing III 2.5 Credits Grades 10-12
Students may continue to explore deeper into manufacturing with CNC (computer numeric control) and CAD (computer aided design) equipment and machinery will be introduced to provide experiences in automation. Using CAD software for layout and design, followed up with CNC machining capabilities, students can increase their accuracy and quality with a highly technical project such as intricate signs, complex inlays and furniture. Course is project based with student driving project choices. Prerequisite: successful completion of Manufacturing I or teacher approval.

3870S Manufacturing IV 2.5 Credits Grades 11-12
Students may advance even further by exploring 3, 3.5, and 4 axis CNC machining. This involves true three dimensional capabilities by rotating materials and using advanced axis processes. Now CNC (computer numeric control) and CAD (computer aided design) equipment and machinery will be advanced, increasing mathematical, geometric and science applications and tolerances. Course is project based with student driving project choices. Prerequisite: successful completion of Introduction to Manufacturing or teacher approval.

3580 Structures 5.0 Credits Grades 11-12
Students will learn to design, plan, construct and test load-bearing structures. Working in a hands-on shop, students will construct bridge, tower, truss and building structures. Projects will include both models and full size structures. Testing of structures, record keeping, and predictions will all build critical thinking skills and show how and why structures require engineering. State and local building codes will also be explored. Students will also work as part of a team in designing, planning and constructing a small structure such as a storage shed. In hands-on activities, students will be able to apply their knowledge of structures in

practical applications. Students may also visit local building sites to see first-hand how their experiences in the shop apply to real world situations.

3980 Ind. Study Manufacturing *5.0 Credits* *Grade 12*
Students will use all their knowledge and experience of the design process, manufacturing processes, material limitations, and problem solving by manufacturing a highly technical project. Projects may include guitars or other stringed instruments, skis, snowboards or boats. Students may work alone or in teams to complete projects. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

3990S Ind. Study Manufacturing *2.5 Credits* *Grade 12*
Students will use all their knowledge and experience of the design process, manufacturing processes, material limitations, and problem solving by manufacturing a highly technical project. Projects may include guitars or other stringed instruments, skis, snowboards or boats. Students may work alone or in teams to complete projects. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

SOCIAL STUDIES

The Social Studies Department recognizes the effects of cultural diversity in history and society and strives to create an understanding of history’s relevance and the importance of social studies in the process of developing active world citizens. Social studies is the study of social relationships in all their variations both past and present. It draws its substance from the disciplines of anthropology, economics, geography, government, history, sociology and psychology. The social studies program strives to develop independent thinking skills within students in order to help them make rational decisions consistent with basic democratic values in a rapidly changing world.

1213 World History (Honors) *5.0 Credits* *Grade 9*
This course explores the dynamic history of world civilizations, examining the people, places, and events that have shaped the modern world. Beginning with the Age of Absolute Power and Revolutionary Change, students will analyze political, social, economic, religious, scientific, and technological factors that have influenced global history. The course fosters critical historical thinking through skills such as analyzing primary and secondary sources, contextualization and comparing and contrasting perspectives. Students will also engage in discussions and collaborative work to deepen their understanding of historical themes. A variety of assessment strategies, including projects, essays, research reports, and presentations, are used to evaluate student learning. This course encourages active participation and promotes the development of literacy skills such as citing historical evidence, determining causation, and describing complex historical events. This course prepares students to think critically about the past, recognize its influence on the present, and approach the study of history as an ongoing conversation about humanity's shared experiences. At the honors level, students must be willing to work independently and in groups, must be willing to contribute to class discussions, and must demonstrate a work ethic that is compatible with the pacing of honors-level classes. **A teacher recommendation is required for this course.**

1211 World History (College Prep) 5.0 Credits Grade 9

This course explores the dynamic history of world civilizations, examining the people, places, and events that have shaped the modern world. Beginning with the Age of Absolute Power and Revolutionary Change, students will analyze political, social, economic, religious, scientific, and technological factors that have influenced global history. The course fosters critical historical thinking through skills such as analyzing primary and secondary sources, contextualization and comparing and contrasting perspectives. Students will also engage in discussions and collaborative work to deepen their understanding of historical themes.

A variety of assessment strategies, including projects, essays, research reports, and presentations, are used to evaluate student learning. This course encourages active participation and promotes the development of literacy skills such as citing historical evidence, determining causation, and describing complex historical events. This course prepares students to think critically about the past, recognize its influence on the present, and approach the study of history as an ongoing conversation about humanity's shared experiences.

1303 US Part I (Honors) 5.0 Credits Grade 10

This course explores key events, influential figures, and transformative ideas that shaped American history from the American Revolution to the dawn of the 20th century. Through engaging inquiries and document-based activities, students will analyze primary and secondary sources to develop critical research, writing, and thinking skills. Topics include the Revolution and Constitution, economic growth and development, 19th-century social reforms, the Civil War and Reconstruction, industrialization, urbanization, and the Progressive Era. Honors students must demonstrate independence, active participation, and a strong work ethic. A teacher recommendation is required for this course.

1301 U.S. History Part I (College Prep) 5.0 Credits Grade 10

This course explores key events, influential figures, and transformative ideas that shaped American history from the American Revolution to the dawn of the 20th century. Through engaging inquiries and document-based activities, students will analyze primary and secondary sources to develop critical research, writing, and thinking skills. Topics include the Revolution and Constitution, economic growth and development, 19th-century social reforms, the Civil War and Reconstruction, industrialization, urbanization, and the Progressive Era.

1333 US Part II (Honors) 5.0 Credits Grades 11-12

This course examines the United States' rise as a global superpower and its influence on world history from the Spanish-American War to the present. Through analysis of primary and secondary sources, students will explore key events, social movements, and political developments, including imperialism, the World Wars, the Cold War, civil rights, economic and technological change, and contemporary challenges. Emphasis is placed on developing research, writing, and critical thinking skills. Honors students must work independently and collaboratively, contribute actively to discussions, and meet the demands of an accelerated pace. A teacher recommendation is required.

1331 US History Part II (College Prep) 5.0 Credits Grades 11-12

This course examines the United States' rise as a global superpower and its influence on world history from the Spanish-American War to the present. Through analysis of primary and secondary sources, students will explore key events, social movements, and political developments, including imperialism, the World Wars, the Cold War, civil rights, economic and technological change, and contemporary challenges. Emphasis is placed on developing research, writing, and critical thinking skills.

9162 Foundations of World History 5.0 Credits Grade 9

This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. This course is an examination of people, places and events throughout world history. The course begins with the Age of Enlightenment and concludes with an analysis of post World War II societies and civilizations. The content will focus on the political, social, economic, religious, scientific and technological factors that have shaped world history. Students will also work on developing the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.

1324 AP United States History 5.0 Credits Grade 10-12

This course is intended for students who are ready for the challenge of a college level course. Designed to cover the American experience from Exploration through the post Vietnam era, a variety of approaches will be used. While political and economic perspectives are central, cultural and social approaches are integral in developing a balanced view of American history. Students making a commitment to Advanced Placement should expect the reading and writing demands appropriate to a college course. Successful completion of summer reading and assignments are mandatory for the course. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: Teacher recommendation and successful completion of World Civilization CP/H and/or US History Part1 Students who successfully complete this course have fulfilled the curriculum requirements equivalent to US History Parts 1 and 2

9372 Foundations of United States History I 5.0 Credits Grade 10

This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. The course is part one of a two-year survey course of United States History. It is designed to enhance the students' knowledge of various aspects of American society from Colonial and Revolutionary America through Reconstruction. Students will study the causes and consequences of the American Revolution, the crisis that led to the development of the Constitution, the early national period, the reform movements of the 1800s, the expansion of the West, and the causes and consequences of the Civil War. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events, determining causal relationships between events as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.

9382 Foundations of United States History II 5.0 Credits Grade 11

This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. This course is part two of the United States History survey course. It is designed to enhance the student's knowledge of American society from the Second Industrial Revolution through modern times. The course will focus on many topics such as technology and its impact on the quality of life in America, progressive reforms, immigration, civil rights, the consequences of an uneven distribution of wealth and America's role in world conflicts. Students will continue to develop literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.

9007 Social Studies 5.0 Credits Grades 9-12

This course focuses primarily on functional geographical locations pertaining to the student's local community. The emphasis is on students' local neighborhoods, towns and surrounding areas in Massachusetts. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

1544 AP U.S. Government and Politics *5.0 Credits* *Grades 10 - 12*
AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project. Students enrolled in the course are expected to take the College Board exam in May. Prerequisite: There are no prerequisite courses for AP U.S. Government and Politics. A teacher recommendation is required.

1561 Psychology (College Prep) *5.0 Credits* *Grades 11-12*
This course will allow students to acquire a greater understanding of human behavior and the mind. Students will utilize critical thinking skills and develop a better understanding of themselves and the forces acting upon them.

1563 Honors Psychology *5 credits* *Grades 11-12*
This course is designed for students willing to accept the challenge of a more rigorous Psychology course. This course will allow students to practice the reading and writing demands of an undergraduate level course. Students will be introduced to the systematic study of the behavior and mental processes. Students will be exposed to psychological facts, principles, theories, and phenomena associated with each major school of thought and subfield of psychology. Diverse learning strategies and assessments will be utilized.

1204 AP European History *5.0 Credits* *Grades 10-12*
AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisites: A teacher recommendation is required.

1511S Law (College Prep) *2.5 Credits* *Grades 9-12*
This course is designed to provide the student with an understanding of your rights and responsibilities, knowledge of everyday legal problems and the ability to analyze and evaluate legal disputes. This course will give the student a working knowledge of the Constitution and amendments. Students will study the lawmaking process to examine how a law is made, who makes the laws, who influences the laws and will focus on the emphasis of the Supreme Court's role. Students will also study the various types of crime and the structure of federal and state law systems. This knowledge will be put to direct use as students study the investigative phase of a crime followed by the trial process. The semester will end on two topics that are relevant to today's society: Race in law and consumer law.

1521S Sociology (College Prep)**2.5 Credits****Grades 9-12**

This course examines the effects of mass reactions to current problems, possible alternatives to contemporary problems, and the relationships between varying groups in our society. The socialization process, institutional structure of society, race relations and social change are some of the topics that are studied.

1541S American Government (College Prep)**2.5 Credits****Grades 9-12**

This course is designed to introduce concepts that allow students to become involved citizens, after they leave Grafton High School. Special attention will be given to a citizen's role at the local, state and federal levels of the American system of government. The structure and operation of our government, the role of elections and the impact of voter behavior on the formulation and foreign policies are made and implemented. Comparisons will be made between democratic and other forms of government, while discussing our modern government's role at the local, state and federal levels.

1571S Echoes and Reflections: The Holocaust (College Prep)**2.5 Credits****Grades 9-12**

Echoes and Reflections is a semester-long multimedia course that goes beyond the historical fact that six million Jews and other innocent victims of the Nazis and their collaborators were systematically murdered in World War II Europe. The course is a comprehensive study of events before and during the Holocaust. The course will provide students with opportunities to realize the relative ease with which fundamental human and civil rights can be denied. Students will understand the ramifications of stereotyping, prejudice, discrimination, and scapegoating.

1551S History of Sports and Society**2.5 Credits****Grades 9-12**

This course will address the development and impact of sports on American society. The course will focus on sports as both a historical and current entity in the United States. The class will help students make connections between sports and our society; from economics to gender and race, the course will address the impact of sports on American social, economic and political trends. The course will also place an emphasis on the examination of historical and contemporary issues and controversies that have emerged as a result of sports.

1661S Social Movement and Culture Change (CP)**2.5 Credits****Grades 9-12**

This semester-long course is about how people act collectively to challenge the status quo of powerful political, social, economic, and cultural systems. Social movements that challenge such systems vary widely in terms of their group identities, social locations, strategies for action, particular demands, and tactics. Students will look at specific social movements such as Anti-Vietnam War protests, women's rights', LGBTQ+, and civil rights movements. Students will analyze how and why social movements begin and their impact on cultural/societal changes. Students will make connections between historical and present-day movements with an emphasis on civic engagement and students' own role in impacting the future.

1900 Independent Study Social Studies**5.0 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

1910S Independent Study Social Studies**2.5 Credits****Grade 12**

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

Introduction to Psychology*3 QCC Credits/5 GHS Credits**Grade 11-12*

In this survey course, the student becomes aware of and appreciates the various influences upon behavior. The topics covered include, but are not limited to, the nervous system, sensation and perception, motivation, learning, emotion, and personality. Through an investigation of these areas, within a multiplicity of cultural contexts, the student understands the diversity of the human condition. Successful completion of the course will provide students with five (5) GHS credits and three (3) college credits. Parents/students are responsible for the cost of \$250 for the college course plus any textbook expenses. Prerequisite: Students must have a 2.7 GPA or better and a guidance counselor or teacher recommendation for this course.

WELLNESS/FAMILY & CONSUMER SCIENCE

The goal of the Wellness/Family & Consumer Science Department is to help students develop into responsible and productive adults by introducing them to life-related skills that they need to succeed in society. The courses cover all traditional topics but also stress current topics such as self-esteem, health and wellness, career information, options to resolve conflicts, parenting and family economics. The skills gained in certain courses may be cultivated into careers. Students can pursue higher education in areas such as early childhood education, dietary science, food service, fashion design, interior design, and consumerism. Personal wellness is to allow students to view health issues from a holistic perspective in which all interrelated aspects of human growth are considered: physical, emotional, social, environmental and cognitive. Course work provides students with the knowledge and the opportunity to explore ways to take positive actions towards their own health and wellness and to develop skills that will allow them to resist peer pressure, to resolve conflicts and to manage stress effectively. The Physical Education portion of these programs is designed to have the students learn and put to use the practices of a healthy lifestyle. Through hard work, sportsmanship (socially accepted practices), teamwork and honesty, students will have the opportunity to develop self-confidence, friendships and leadership skills. DESE requires four semesters of structured learning time in Wellness--both physical education and health courses apply.

8540S Creative Crafts*2.5 Credits**Grades 9-12*

This project-based course is designed to stimulate the students' interests in different aspects of creativity. Students are encouraged to explore a wide variety of crafts for career, philanthropic, and/or wellness opportunities. Some of the crafts may include eco-friendly and upcycling projects, quilting, needlework, scrapbooking or other crafts. The psychological, social, cultural, historical and environmental aspects of crafting are explored. Local artisans will be guest speakers and students will have the opportunity to visit local places of business.

8530S Foods and Nutrition*2.5 Credits**Grades 9-12*

This is an introductory course where students will develop basic food preparation techniques, analyze personal food choices, and explore food and nutrition-related careers. Individual nutritional needs and menu plans are analyzed. Emphasis is placed on safety and sanitation as well as promoting a healthy lifestyle. Collaborative lab experiences include preparation of a variety of baked products, vegetables, fruits, eggs and grains.

8630S American Regional Foods*2.5 Credits**Grades 10-12*

This course introduces students to regional cuisines across America. Students will explore the cultural and geographical influences that shape regional foods and fusion cuisines through collaborative, cross-cultural research, menu planning and meal preparation. Emphasis will also be on healthy lifestyles and nutrition. Prerequisite: Teacher recommendation.

8640S International Foods*2.5 Credits**Grades 10-12*

This course introduces students to global cuisines and to the diverse contribution each makes to the rich fabric of food selection, customs and preparation. Students will explore current

trends in ethnic foods, fusion cuisines and the international food industry through collaborative cross-cultural research and food preparation. Prerequisite: Teacher recommendation.

8560 Early Childhood I

5.0 Credits

Grades 9-12

This project-based course is designed to prepare students for the important responsibilities of parenting. Pregnancy and prenatal care, birth, and the physical, emotional, social and intellectual development of young children will be explored. Contemporary issues affecting young children, such as two income families, childcare, child abuse and teen parenting, will also be addressed. Opportunities for observation of children are provided both in class and in community settings.

8660 Early Childhood II

5.0 Credits

Grades 10-12

This course is designed to build on the concepts taught in Early Childhood I, while giving students interested in early childhood education the opportunity to further explore the developmental needs of preschool and school age children. Opportunities for work in a variety of community settings such as family daycare, infant centers, social agencies, and local kindergartens and daycare centers are an important part of this observation and participation-based course. Logs of student experiences are kept and shared in class. In class students will learn to create a developmentally appropriate and safe environment for preschool children as they evaluate early childhood education as a potential career. Prerequisite: "C" average in Early Childhood I or teacher approval.

8910 Ind. Study Family & Consumer Science

5.0 Credits

Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

8920S Ind. Study Family & Consumer Science

2.5 Credits

Grade 12

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

8210S Health

2.5 Credits

Grade 10

Students will learn goal setting, decision making, inter-communication, and advocacy skills in this course. Throughout the course, students will explore topics such as personal health and fitness, human sexuality, relationships, disease prevention and control, substance use and abuse, and mental health. Students will participate in a variety of collaborative assessments to enhance each unit. Some of the assessments include a service learning project, role-playing, and creating a Public Service Announcement. The aim of the course is to empower students to make healthy choices and develop behaviors that contribute to the well being of self and others.

8310S Personal Fitness

2.5 Credits

Grades 9-12

Physical fitness is to the human body what fine-tuning is to an engine. It enables us to perform up to our potential. Fitness can be described as a condition that helps us look, feel and do our best. More specifically, it is: "The ability to perform daily tasks vigorously and alertly, with energy left over for enjoying leisure-time activities and meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue, and is a major basis for good health and well-being." Personal fitness includes the basics of strength training, cardiovascular exercise, and core training using the human body. Students will be creating their own

workouts in class based off what they learn at the beginning of the class. They will also be setting SMART Goals that they will be looking to meet over the duration of the class time.

8320S Team Sports

2.5 Credits

Grades 9-12

Students will be involved in a variety of team sports to develop a working knowledge of each sport, to gain cardiac fitness, coordination, spatial awareness, social skills, and tactical skills. Students will focus on skills based units rather than sports based. Some sports covered may include softball, ultimate disc, soccer, lacrosse, rugby, and/or flag football, volleyball, basketball, and team handball, and badminton.

8330S Lifetime Activities

2.5 Credits

Grades 9-12

Students will be involved in a number of activities that they can participate in throughout their lives. Fundamentals of each activity will be taught hoping that the student can develop an interest in many of the activities. Activities for first semester include: walking, disc golf, tennis, aerobics and yoga. Activities for the second semester include: aerobics, yoga, badminton, disc golf and tennis.

8340S Adaptive Physical Education

2.5 Credits

Grades 9-12

Adaptive Physical Education is a diversified program of physical education having many of the same goals and objectives as regular physical education, but modified when necessary to meet the unique needs of each individual. This course is designed to provide students who may be facing a physical challenge with a variety of leisure time experiences including recreation games and fitness activities. This course will be taught by one teacher with the assistance of several peer tutors. The peer tutors will provide the students with the opportunity for individualized instruction as well as providing the opportunity for interaction with their general education peers. Prerequisite: Recommendation of special education team.

WORLD LANGUAGE

The World Languages Curriculum is based upon the communication skills of reading, writing, listening and speaking. Specifically, the curriculum provides instruction in the three modes of communication: interpersonal, interpretive, and presentational in thematic context. Proficiency gains are accomplished via the use of 21st century technology, authentic reading and listening resources, oral presentations, and writing assignments.

4501 French I (College Prep)

5.0 Credits

Grades 9-12

This course is designed for students with little or no previous background in the French language. The thematic approach to the course emphasizes the development of the four language skills: speaking, listening, reading and writing. French will be used frequently in the classroom by the teacher and the students.

4513 French II Honors

5.0 Credits

Grades 9-12

This course is designed for highly motivated students with an interest in continuing the study of advanced French throughout their high school career, who have successfully completed French 1. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4511 French II (College Prep)

5.0 Credits

Grades 9-12

This course is designed for students continuing the study of French, who have successfully completed French 1. The thematic approach to the course emphasizes the continued

development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of French 1 or teacher approval.

4623 French III Honors *5.0 Credits* *Grades 10-12*
This course is designed for highly motivated students with an interest in continuing the study of advanced French throughout their high school career, who have successfully completed French 2. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4621 French III (College Prep) *5.0 Credits* *Grades 10-12*
This course is designed for students continuing the study of French, who have successfully completed French 2. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Requires teacher recommendation.

4631 French IV (College Prep) *5.0 Credits* *Grades 11-12*
This course is designed for students who have successfully completed French III or French III Honors with an interest in continuing the study of advanced French. Through a thematic approach, students will be exposed to different grammatical structures, vocabulary, literature, idiomatic expressions and Francophone cultures. Prerequisite: Requires teacher recommendation.

4633 French IV Honors *5.0 Credits* *Grades 11-12*
This course is designed for highly motivated students with an interest in continuing the study of advanced French and who have successfully completed French 3. It includes an in-depth coverage of grammatical points, vocabulary, literature and idiomatic expressions. Class discussions and compositions are important elements at this level. French will be used exclusively in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4643 French V Honors *5.0 Credits* *Grade 12*
This course is designed for highly motivated students who want to strengthen their language proficiency and have successfully completed French 4. Emphasis will be placed on an in-depth study of the French language and Francophone culture as well as authentic literary writings. French will be used exclusively in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4551 Spanish I (College Prep) *5.0 Credits* *Grades 9-12*
This course is designed for students with little or no previous background in the Spanish language. The thematic approach to the course emphasizes the development of the four language skills: speaking, listening, reading and writing. Spanish will be used frequently in the classroom by the teacher and the students.

4583 Spanish II Honors *5.0 Credits* *Grades 9-12*
This course is designed for highly-motivated students with an interest in continuing the study of advanced Spanish throughout their high school career, who have successfully completed Spanish I. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4581 Spanish II (College Prep) *5.0 Credits* *Grades 9-12*
This course is designed for students continuing the study of Spanish, who have successfully completed Spanish I. The thematic approach to the course emphasizes the continued

development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish I or teacher approval.

4571 Spanish II -Advanced (College Prep) 5.0 Credits Grades 9-12

This course is designed for students continuing the study of Spanish, who have successfully completed a two year Spanish I curriculum. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish I and teacher approval.

4653 Spanish III Honors 5.0 Credits Grades 10-12

This course is designed for highly motivated students with an interest in continuing the study of advanced Spanish throughout their high school career, who have successfully completed Spanish II. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4651 Spanish III (College Prep) 5.0 Credits Grades 10-12

This course is designed for students continuing the study of Spanish, who have successfully completed Spanish II. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4663 Spanish IV Honors 5.0 Credits Grades 11-12

This course is designed for highly motivated students with an interest in continuing the study of advanced Spanish and who have successfully completed Spanish III. It includes an in-depth coverage of grammatical points, vocabulary, literature and idiomatic expressions. Class discussions and compositions are important elements at this level. Spanish will be used exclusively in the classroom by the teacher and the students. Prerequisite: Requires teacher recommendation.

4661 Spanish IV (College Prep) 5.0 Credits Grades 11-12

This course is designed for students who have successfully completed Spanish III CP or Spanish III Honors with an interest in continuing the study of advanced Spanish. Through a thematic approach, students will be exposed to different grammatical structures, vocabulary, literature and idiomatic expressions and Hispanic culture. Prerequisite: Requires teacher recommendation.

4683 Spanish V Honors 5.0 Credits Grade 12

This course is for highly motivated students who wish to strengthen their language proficiency. Students are expected to demonstrate increasing proficiency in the skills of listening, speaking, reading and writing. There is a great emphasis on reading and the ability of careers to summarize, discuss and analyze in the language. More complex grammatical structures and vocabulary will be introduced. Spanish culture and varied literature selections will also be studied. Requires teacher recommendation.

4674 AP Spanish Language & Culture 5.0 Credits Grade 12

The AP Spanish Language & Culture course should help prepare students to demonstrate their level of Spanish proficiency across three communicative modes (Interpersonal [interactive

communication], Interpretive [receptive communication], and Presentational [productive communication]), and the five goal areas outlined in the *Standards for Foreign Language Learning in the 21st Century* (Communication, Cultures, Connections, Comparisons and Communities). The course is meant to be comparable to third year (fifth or sixth semester) college and university courses that focus on speaking and writing in the target language at an advanced level. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: Requires teacher recommendation.

4900 Independent Study World Language *5.0 Credits* *Grade 12*
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills, and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

4910S Independent Study World Language *2.5 Credits*
Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills, and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

OTHER

0000 Directed Study *0 credits* *Grades 11-12*
Directed Study is an opportunity for students to independently complete school related work during a specified period in the rotating schedule. All students may opt to register for 1 (one) semester of directed study per school year. This is a non-credit bearing option and has no grade assigned. Students will discuss the option to register for a directed study section with their guidance counselor in order to ensure all graduation requirements are met.

FOUR-YEAR COURSE PLANNING WORKSHEET

The My Career and Academic Plan worksheet will assist you in planning your academic course of study and career plans. In collaboration with your school counselor, document successful completion of each course and graduation requirement. List the courses taken under the appropriate Grade (9, 10, 11, 12). Then list the courses that will be taken in each grade for the remaining years in high school. Label each course that satisfies a graduation requirement. Every year a student must register for 35 credits worth of work.

Potential Career Path: _____

Postgraduate Education Plan:

- ☐ Community College: 2 year program
- ☐ College/university: 4 year program
- ☐ Certification/Technical/Skills Trade program
- ☐ Direct entry to workforce: internship/work based learning program
- ☐ Military

Career Research Findings

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

GRADE 9			
Course Title	Level	Credits	Graduation Requirement
English 9		5.0	Yes
World History II		5.0	Yes
Biology		5.0	Yes
Math		5.0	Yes
World Language		5.0	Yes
Elective			
Elective			

Notes:

GRADE 10			
Course Title	Level	Credits	Graduation Requirement
English 10		5.0	Yes
US History I		5.0	Yes
Science		5.0	Yes
Math		5.0	Yes
World Language		5.0	Yes
Health		2.5	Yes
Elective			

Notes:

GRADE 11			
Course Title	Level	Credits	Graduation Requirement
English 11		5.0	Yes
US History II		5.0	Yes
Science		5.0	Yes
Math		5.0	Yes
Elective			
Elective			
Elective			

Notes:

GRADE 12			
Course Title	Level	Credits	Graduation Requirement
English 11		5.0	Yes
Math		5.0	Yes
Elective			
Elective			
Elective			
Elective			
Elective			

Notes:

APPENDIX:

GRAFTON HIGH SCHOOL PATHWAYS OF RECOGNITION - DETAILED DESCRIPTIONS

Business Studies Pathway Recognition

The Business Studies Pathway Recognition allows students to participate in a unique, focused program that includes Math and Business courses for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in Business related fields and to develop the creativity, critical-thinking, and problem-solving skills needed for the workforce.

To distinguish the consistent efforts of our students, and to reward those with initiative, we would like to recognize students' efforts with special recognition. There are three levels of recognition: (1) Business Studies Certification, (2) Business Certification with Honors, and (3) Business Studies Certification with Distinction. Students with Certification or Certification with Honors will be recognized through the college and/or career application process that includes professional recommendations. Those students who successfully complete all components of Business Studies Pathway will receive additional special recognition on their transcripts and at the graduation ceremonies.

Program Requirements

The following are components that must be achieved, and the criteria that must be met, in order to obtain ***Business Studies Pathway Recognition***:

I. Academics - Courses of Study

A. Business Studies Certification will be awarded based on the following guidelines:

- Minimum of 45 credits taken in progression, with at least 20 coming from Mathematics and at least 20 coming from Business Studies

Some courses that may be taken as Pass/Fail are listed in the GHS Program of Studies or per request for consideration by the Principal.

The pass/fail option is administered as follows:

- *Pass/Fail requirement maximum of one class per semester or one year-long class for a total of five credits. Pass/Fail courses provide no GPA impact.*

B.. Business Studies Certification with Honors will be awarded based on the following (in addition to #1 above):

- No classes taken Pass/Fail (excluding Community Service)
- Minimum weighted average of 80 in all Mathematics and Business Studies classes

C. Business Studies Certification with Distinction will be awarded based on the following (in addition to #1, #2, and #3 above):

- Participation for at least one year in DECA, completion of an entry into an approved academic competition or service project with a Business Studies focus.
- Capstone Project
- Resume/Portfolio

II. Independent Student Work Expectations

A. Capstone Project

- Students must engage in active research that explores a minimum of two distinct aspects of Business advancement.
- The research project may be done as an independent study in the junior or senior year under the guidance of a faculty member.
- Research activities may include, but are not limited to, research paper/project, community research, or participating in collegiate-level coursework.

B. Business Studies Resume/Portfolio

- The resume must document all Business Studies-related activities, skills acquired, and personal achievements.
- The portfolio will include a log of all academic coursework, projects, and research completed toward the satisfaction of this distinction.

III. Distinction

Each graduating senior that meets the standard will be recognized in four ways upon his/her commencement from Grafton High school

- A special notation will be put next to the student's name in the Commencement program;
- A form of distinction (i.e. decal or sticker) will be placed on the student's official diploma;
- The student's transcript will include a notation that the student has graduated with the specific certification, as many post-secondary educational institutions look favorably upon applicants with a record of Business Studies focus and success;
- The student will wear, along with his/her Cap & Gown, a Business Studies Competency Distinction cord, which will be presented to the student at Scholarship and Awards night.

Sample Program: Business Studies Pathway & Diploma of Distinction *Pending course availability

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	English 9	English 10	English 11	English 12
Mathematics	Algebra/Geometry I	Algebra/Geometry II	Algebra/Geometry III	Pre-Calculus
Science	Biology	Environmental Science	Chemistry	Computer Science
Social Studies/Elective	World Civilization II	US History I	US History II	<i>Macroeconomics (QCC)/Independent Study</i>
World Language/Elective	Spanish I	Spanish II	Spanish III	Spanish IV
Elective	Lifetime Activities/Team Sports	<i>Career Planning/Health</i>	Digital Literacy <i>Personal Fitness</i>	<i>Entrepreneurship</i>
Elective	<i>Intro. to Business</i>	<i>Accounting I</i>	<i>Marketing/Sports Management</i>	<i>Statistics</i>

Creative Arts & Communication Pathway

The Creative Arts and Communication Pathway allows students to participate in a unique, focused program that includes courses in language, presentation, and the arts for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in the Media, Fine, Visual, and Performing Arts.

To distinguish the consistent efforts of our students, and to reward those with initiative, we would like to recognize students' efforts with special recognition. There are three levels of recognition: (1) Creative Arts & Communication Certification, (2) Creative Arts & Communication Certification with Honors, and (3) Creative Arts & Communication Certification with Distinction. Students with Certification or Certification with Honors will be recognized through the college and/or career application process that includes professional recommendations. Those students who successfully complete all components of Creative Arts & Communication Pathway will receive additional special recognition on their transcripts and at the graduation ceremonies.

Program Requirements

The following are components that must be achieved, and the criteria that must be met, in order to obtain ***Creative Arts & Communication Pathway Recognition:***

I. Academics – Course of Study

A. Creative Arts & Communication Certification will be awarded based on the following guidelines:

- Minimum of 65 credits taken in progression, with at least 40 coming from Humanities (20 coming from English, 20 coming from Social Studies, or additional 5 from World Language), 10 coming from Fine Arts, and 10 coming from Performing Arts.

Some courses that may be taken as Pass/Fail are listed in the GHS Program of Studies or per request for consideration by the Principal.

The pass/fail option is administered as follows:

- *Pass/Fail requirement maximum of one class per semester or one year-long class for a total of five credits. Pass/Fail courses provide no GPA impact.*

B. Creative Arts & Communication Certification with Honors will be awarded based on the following (in addition to #1 above):

- No classes taken Pass/Fail. (excluding Community Service)
- Minimum weighted average of 80 in all Humanities, Fine Arts, and Visual Arts classes.

C. Creative Arts & Communication Certification with Distinction will be awarded based on the following (including #1, #2, and #3 above):

- Community Service
 1. Students must complete 30 hours of community service that utilizes their communication competencies. These opportunities will expose students to a community agency that requires their support and expertise in terms of proofreading, copy-editing, art design, etc.
 2. Students must complete their service project outside the regular school day. Community service projects may include experiences done in conjunction with an extracurricular activity.
- Capstone Project

1. Students must engage in active research that explores a minimum of two distinct types of media.
2. The research project may be done as an independent study in the junior or senior year under the guidance of a faculty member.
3. Research activities may include, but are not limited to, reading books, watching films and/or documentaries, creating original media, or participating in collegiate lectures.

II. Distinction

Each graduating senior that meets the standard will be recognized in four ways upon his/her commencement from Grafton High school:

1. A special notation will be put next to the student's name in the Commencement program;
2. A form of distinction (i.e. decal or sticker) will be placed on the student's official diploma;
3. The student's transcript will include a notation that the student has graduated with the specific certification;
4. The student will wear, along with his/her Cap & Gown, a Communications Competency Distinction cord, which will be presented to the student at Scholarship and Awards night.

Some courses that could meet those requirements:

Humanities	Fine Arts	Performing Arts
<ul style="list-style-type: none"> • AP Language & Composition • 3rd or 4th year of World Language • Creative Writing • Law • History of Sports & Society • English Composition (QCC) 	<ul style="list-style-type: none"> • Drawing • Ceramics • Painting • 2D Design • 3D Design • Advanced Studio/Portfolio • CAD • TV/Video • Independent Study 	<ul style="list-style-type: none"> • Chamber Choir • Concert Band • Jazz Workshop • Guitar • Independent Study

Sample Program- Creative Arts & Communication Competency courses in italics.

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	Grade 9 ELA	Grade 10 ELA	Grade 11 ELA	English Composition 101 (QCC)
Mathematics	Alg/Geo I	Alg/Geo II	Alg/Geo III	Precalculus
Science	Biology	Anatomy/Physiology	Chemistry	--

Social Studies	World History	U.S. History I	US II	<i>Law</i>
World Language	Spanish I	Spanish II	<i>Spanish III</i>	<i>Jazz Workshop</i>
PE/Elective	PE/Drawing <i>I</i>	PE/Health	PE/ <i>Painting</i>	PE/ <i>Art Ind. Study</i>
Elective	<i>Chorus</i>	<i>Guitar</i>	<i>Creative Writing/ TV-Video</i>	<i>Independent Study Music</i>
Elective	--	--	--	<i>TV/Video Independent Study</i>

STEAM Pathway Recognition

The STEAM Pathway Recognition allows students to participate in a unique, focused program that includes Math, Science, Technology, and Arts courses for all four years of high school. The ultimate goal of the program is to prepare students for college and career opportunities in science, medicine, engineering, and mathematics and to develop the creativity, critical-thinking, and problem-solving skills needed for the workforce.

To distinguish the consistent efforts of our students, and to reward those with initiative, we would like to recognize students' efforts with special recognition. There are three levels of recognition: (1) STEAM Certification, (2) STEAM Certification with Honors, and (3) STEAM Certification with Distinction. Students with STEAM Certification or Certification with Honors will be recognized through the college and/or career application process that includes professional recommendations. Those students who successfully complete all components of the STEAM Pathway will receive additional special recognition on their transcripts and at the graduation ceremonies.

Program Requirements

The following components must be achieved, and the criteria that must be met, in order to obtain a **STEAM Pathway Recognition**:

I. Academics - Courses of Study

A. STEAM Certification will be awarded based on the following guidelines:

- Minimum of 70 credits taken in progression, with at least 20 coming from mathematics, at least 20 coming from science, and at least 20 coming from technology and art, and an additional 10 from the STEAM electives.

Some courses that may be taken as Pass/Fail per request for consideration by the Principal.

The pass/fail option is administered as follows:

- *Pass/Fail requirement maximum of one class per semester or one year-long class for a total of five credits. Pass/Fail courses provide no GPA impact.*

B. STEAM Certification with Honors will be awarded based on the following (in addition to #1 above):

- No classes taken Pass/Fail. (excluding Community Service)
- Minimum weighted average of 80 in all STEAM classes.

C. STEAM Certification with Distinction will be awarded based on the following (including #1, #2, and #3 above):

- Participation for at least one year on the math team, completion of an entry to an approved science fair or academic competition, or other approved academic or service project with a STEAM focus.
- Capstone Project
- Resume/Portfolio

II. Independent Student Work Expectations

A. Capstone Project

- Students must engage in active research that explores a minimum of two distinct aspects of technology and/or scientific advancement.
- The research project may be done as an independent study in the junior or senior year under the guidance of a faculty member.
- Research activities may include, but are not limited to, lab experimentation, research paper/project, community research, or participating in collegiate-level coursework.

B. STEAM Resume/Portfolio

- The resume must document all STEAM-related activities, skills acquired, and personal achievements.
- The portfolio will include a log of all academic coursework, projects, and research completed toward the satisfaction of this distinction.

III. Distinction

Each graduating senior who meets all STEAM Pathway requirements will be recognized in four ways upon his/her commencement from Grafton High school:

- a) A special notation will be put next to the student's name in the Commencement program;
- b) A form of distinction (i.e. decal or sticker) will be placed on the student's official diploma;
- c) The student's transcript will include a notation that the student has graduated with the specific certification, as many post-secondary educational institutions look favorably upon applicants with a record of STEAM success;
- d) The student will wear, along with his/her Cap & Gown, a STEAM Competency Distinction cord, which will be presented to the student at Scholarship and Awards night.

Sample Program 1:*Manufacturing/Engineering Pathway (STEAM Competency courses in italics)*

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	English 9	English 10	English 11	English 12
Mathematics	Algebra/ Geometry II	Algebra II	Precalculus	AP Calculus
Science	Biology	Chemistry	Physics	<i>Science Innovations I & II</i>
Social Studies/Elective	World Civilization II	US History I	US History II	<i>2D Design/3D Design</i>
World Language/Elective	Spanish I	Spanish II	<i>Manufacturing I</i>	<i>Structural Engineering</i>
Elective	Personal Fitness/ <i>Art Fundamentals</i>	<i>Architecture/ Health</i>	CAD/CAM Team Sports	<i>Manufacturing II</i>
Elective	<i>Computer Science</i>	<i>Computer Science II</i>	<i>Structures</i>	<i>Statistics</i>

Sample Program 2:*Life Sciences Pathway (STEAM Competency courses in italics)*

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	English 9	English 10	English 11	English 12
Mathematics	Algebra/ Geometry II	Algebra II	Precalculus	Calculus AP AB
Science	Biology	Chemistry	AP Physics	<i>Science Innovations I & II</i>
Social Studies/Elective	World Civilization II	US History I	US History II	<i>Statistics</i>
World Language/Elective	Spanish I	Spanish II	<i>Anatomy & Physiology</i>	<i>Environmental Science</i>
Elective	Lifetime Activities/ <i>Art Fundamentals</i>	<i>Harmony & Theory/Health</i>	<i>Foods and Nutrition Team Sports</i>	<i>Extreme Ecosystems</i>

Elective	<i>Concert Band</i>	<i>Concert Band</i>	<i>Concert Band</i>	<i>Concert Band</i>
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Sample Program 3:

General STEAM Program (STEAM Competency courses in italics)

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	English 9	English 10	English 11	English 12
Mathematics	Algebra/ Geometry II	Algebra II	Quantitative Reasoning	<i>Statistics</i>
Science	Biology	Environmental Science	<i>CAD/CAM</i>	<i>Oceanography/ Meteorology</i>
Social Studies/Elective	World Civilization II	US History I	US History II	Law/ Sociology
World Language/Elective	Spanish I	Spanish II	<i>Electricity & Electronics</i>	<i>Accounting I</i>
Elective	Lifetime Activities/ <i>Drawing I</i>	<i>2D Design/Health</i>	<i>Painting I</i> Personal Fitness	<i>Architecture/ Structural Engineering</i>
Elective	<i>Real Life in the Digital World/Web Design</i>	<i>Computer Science</i>	<i>Computer Science II</i>	<i>Guitar I Creative Journals</i>

Global Studies Pathway Recognition

The Global Studies Pathway Recognition is designed to promote global awareness in our graduates and to foster an appreciation of the interconnected, worldwide political, economic, and social relations. For our graduates, this would encompass the knowledge, skills, and habits of mind necessary to understand the global environment; similarly, we want our students to participate actively and constructively with global issues both individually, through their community, and in international contexts.

To distinguish the consistent efforts of our students, and to reward those with initiative, we would like to recognize students' efforts with special recognition. There are three levels of recognition: (1) Global Studies Certification, (2) Global Studies Certification with Honors, and (3) Global Studies Certification with Distinction. Students with Global Studies Certification or Certification with Honors will be recognized through the college and/or career application process that includes professional recommendations. Those students who successfully complete all components of Global Studies Pathway will receive additional special recognition on their transcripts and at the graduation ceremonies.

Program Requirements

The following components must be achieved, and the criteria that must be met, in order to obtain a Global Competency distinction:

I. Academics – Course of Study

A. Global Competency Certification will be awarded based on the following guidelines:

- Students must take four years (20 credits) in the same Foreign Language during high school and maintain at least a C average for each of the four years.
- Students must take and earn an additional minimum of 17.5 credits in the categories of Cultural Literacy, Economics and Research, and Ethics.

Some courses may be taken as Pass/Fail per request for consideration by the Principal.

The pass/fail option is administered as follows:

- Pass/Fail requirement maximum of one class per semester or one year-long class for a total of five credits. Pass/Fail courses provide no GPA impact.

B. Global Competency Certification with Honors will be awarded based on the following (in addition to #1 and #2 above):

- No classes taken Pass/Fail. (excluding Community Service)
- Minimum weighted average of 80 in all Foreign Language approved Global Competency elective courses.

C. Global Competency Certification with Distinction will be awarded based on the following (in addition to #1, #2, #3, and #4 above):

- Successful completion of all Community Service and Capstone Project expectations and at least one (1) element of IV. Foreign Travel Experience.

Below are course examples that could fit the Global Competency elective requirement.

Cultural Literacy (3 courses)	Economics and Research (2 courses)	Ethics (1 course)
<ul style="list-style-type: none">• Band/Chorus/ Chamber Choir• Harmony & Theory• AP Literature & Composition• Art Journals• Documentary Filmmaking• Study of a 2nd Foreign Language	<ul style="list-style-type: none">• Law• Statistics• Echoes & Reflection: The Holocaust• Creative Writing• Principles of Macroeconomics (QCC)	<ul style="list-style-type: none">• Environmen tal Science• Science Innovations• AP Biology• Psychology• Sociology

II. Community Service

- Students must complete 30 hours of “global” community service. These opportunities will expose students to a global issue such as world hunger, disaster relief, human rights, environmental stewardship, energy conservation, cross-cultural education, or international relations and, ideally, enable students to practice world language skills.
- Students must complete their service project outside the regular school day. Global community service projects may include experiences done in conjunction with foreign studies or travel.

III. Capstone Project

- Students must engage in active research that explores a minimum of two distinct aspects of a foreign country or region’s culture, political system, history, geography, economy, and/or scientific advancement.
- The research project may be done as an independent study in the junior or senior year under the guidance of a faculty member.
- Research activities may include, but are not limited to, reading books, watching films and/or documentaries, attending cultural events, or participating in collegiate lectures.
- The Capstone project can be connected to the service project, the foreign travel experience, or the hosting of an international student attending Grafton High School.

IV. Foreign Travel Experience

- Students must participate in one international experience in which they can gain confidence in being self-sufficient world travelers, connecting to the culture and the people, and, ideally, practicing their world language skills.
- Students may elect to travel with a GHS school-approved trip, with a travel organization, or with family.
- The financial commitment of the student is required. However, if financing international travel is prohibitive, a student may seek approval from a non-international, inter-cultural experience, which may involve immersion in another culture and/or foster global awareness in the United States. Substitutions will be reviewed and approved by the Principal.
- An option to this requirement could also be the hosting of an international student who is enrolling at Grafton High School.

V. Global Competency Resume/Portfolio

- The resume must document all global competency related activities, skills acquired, and personal achievements.
- The portfolio will include a log of all academic, service projects, and international studies completed toward the satisfaction of this distinction.

VI. Distinction

- To be eligible, the supporting documentation must be submitted accurately and completely to a student’s school counselor by the start of school on May 1 of the senior year.
- Each graduating senior that meets the standard will be recognized in four ways upon his/her commencement from Grafton High school:
 - A special notation will be put next to the student’s name in the Commencement program.
 - A form of distinction (i.e. decal or sticker) will be placed on the student’s official diploma.
 - The student’s transcript will include a notation that the student has graduated with Global Competency Distinction, as many post-secondary educational institutions look favorably upon applicants with a record of international success.

- The student will wear, along with his/her Cap & Gown, a Global Competency Distinction cord, which will be presented to the student at Scholarship and Awards night.

A Sample Program, with the courses that would satisfy the diploma in italics, shows that a student can meet the needs of the program beyond the required courses.

Year/Course	Grade 9	Grade 10	Grade 11	Grade 12
ELA	Grade 9 ELA	Grade 10 ELA	Grade 11 ELA	<i>AP Literature & Composition</i>
Mathematics	Algebra/Geo I	Alg/Geo 2 H	Algebra II	<i>Statistics</i>
Science	Biology	Anatomy/ Physiology	Chemistry	<i>Environmental Science</i>
Social Studies	World Civ. II	U.S. History I	U.S. His II	<i>Macroeconomics (QCC)</i>
World Lang.	<i>Spanish I</i>	<i>Spanish II</i>	<i>Spanish III</i>	<i>Spanish IV</i>
PE/Elective	PE/Criminal Justice	PE/Health	PE/Art I	PE/Art II
Elective	<i>Band</i>	<i>Band</i>	<i>Band</i>	<i>Band</i>

Community Service Pathway Recognition

Every year, many students graduate from Grafton High School having given a great deal of themselves in service to their school and area community. In addition, Grafton High School offers an array of programs, both curricular and extracurricular, that supports the needs of school and community. Our school community would also like to foster an environment in which students give back to the surrounding community on a consistent basis, bridging across academic years, and providing opportunities for students to collaborate, all while demonstrating our core values in the community at large.

To distinguish those consistent efforts of our students, and to reward those with initiative, we would like to recognize these students' efforts with special distinction at graduation.

Parameters

A graduating senior would be eligible for a "Service Distinction" diploma at graduation if s/he accumulated a minimum of 100 hours of school/community service throughout his/her four years at Grafton High school.

What counts:

- Hours spent fundraising for non-profit organizations or charities may be applied toward a student's 100 hours.
- Hours volunteered on a student's own time to benefit an organization, school, community agency, etc. will count.

What does not count:

- Service must be voluntary, with no financial remuneration or compensation of any kind, for the student, and it must be verified by an adult supervisor. Acts that are completed for the direct benefit of one's family (i.e. babysitting, household chores, etc.) do not satisfy these requirements.
- Volunteer service involving academic requirements for a class will not count (i.e. the community service class or a service learning project done for a grade).

- The service a student provides outside of school hours while an active member of a school-based group such as National Honor Society, Student Council, or another campus organization, may be used toward the satisfaction of this distinction.
- Service hours performed as a result of any legal proceedings or school disciplinary consequences may not be applied toward a student's 100 hours.

Some examples:

- Organize a clean-up of a local park or neighborhood;
- Engage in a school or religious organization's activities that involve a service project;
- Collect food for a local food bank;
- Volunteer at a soup kitchen;
- Volunteer services at a local elementary school, hospital, humane society, etc.

Distinction

To be eligible, the 100 hours and supporting documentation must be submitted accurately and completely to a student's school counselor by the start of school on May 1 of the senior year.

Each graduating senior that meets the 100-hour standard will be recognized in four ways upon his/her commencement from Grafton High school:

- A special notation will be put next to the student's name in the Commencement program;
- A form of distinction (i.e. decal or sticker) will be placed on the student's official diploma;
- The student's transcript will include a notation that the student has graduated with Service Distinction, as many post-secondary educational institutions look favorably upon applicants with a record of volunteerism;
- The student will wear, along with his/her Cap & Gown, a Service Distinction cord, which will be presented to the student at Scholarship and Awards night.

Orientation

Students who wish to pursue a "service distinction" program will be asked to attend an orientation program, to be held in September or October. To allow the greatest number of students to attend, one meeting will be held after school, and a second will be facilitated in the evening. Parents/guardians will be encouraged to attend.

The orientation will review:

- Finding sites willing to provide community service opportunities
- How to document service hours/maintaining a service log
- General expectations for students performing acts of service or pursuing this "service distinction"

Logistics

As community service opportunities are available and/or vetted, the school will maintain a bulletin board to communicate those opportunities to students. The virtual space will also contain the downloadable form/log. Students will assume responsibility for coordinating transportation, hours, and tasks with the service outlets, and students will also assume responsibility for documenting their hours.

As students participate, we expect students to be responsible for updating the board and notifying counselors and administrators as to potential service outlets for others.

Grafton High School assumes no financial responsibility for transportation or any related costs associated with student participation in community service initiatives. Parent/guardian(s) assume all liability associated with student participation in, and performance of, community service.

Phase-in Process

Knowing that all current Grafton High School students will not have a full four years to accumulate the 100 hours based on a potential approval this fall by the Grafton School Committee, a phase-in process could be implemented.

For the graduating class of 2023, twenty (20) hours would be required for distinction.
For the graduating class of 2024, forty-five (45) hours would be required for distinction.
For the graduating class of 2025, seventy (70) hours would be required for distinction.
For the graduating class of 2026 and all subsequent classes, the full one hundred (100) hours would be required for distinction.